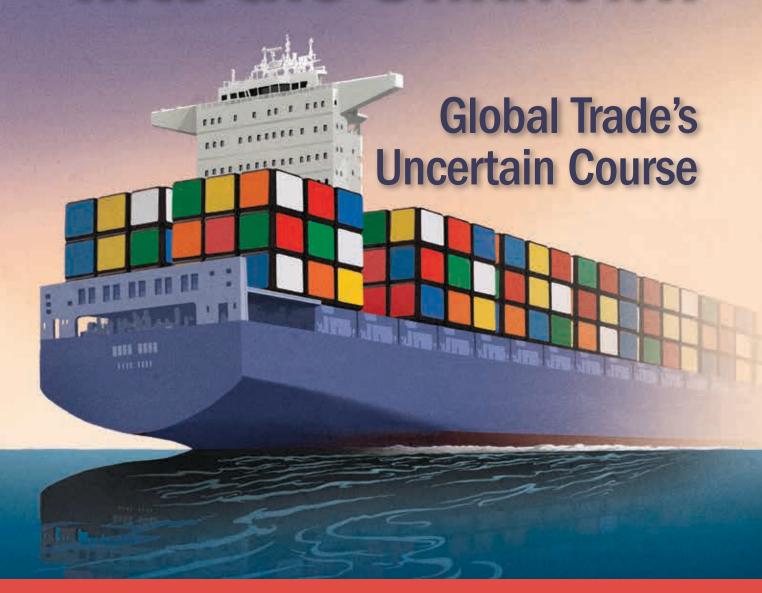


Jagdish Bhagwati on Trade NYU Business School Dean Peter Henry Profiled Paul Collier on Managing

Expectations

Into the Unknown



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Beetle Mania

saw my first VW Beetle in the early 1970s, when a neighbor pulled up in a little yellow car with a distinctly round shape. At the time, the roads in western New York were filled with American muscle—slab-shaped land yachts from Detroit—and the little car from Wolfsburg, Germany, with the rear-mounted engine and trunk in front, captured the neighborhood's attention.

I was young at the time and didn't appreciate how global trade was transforming the U.S. auto market. Smaller, more fuel efficient cars—built from the ground up at factories in Germany and Japan and shipped to the United States—were quickly taking market share from Detroit. The VW Beetle was an emblem of this era, and its rise was powered by global trade.

Fast-forward to August 2013. I pull out of the car rental lot at Seattle-Tacoma airport in a black "New Beetle." The new version of this iconic car features a more aerodynamic and aggressive design. But that's not the only difference. The new Beetle, like most automobiles manufactured today, is the product of the globally integrated supply chain, where parts are produced by hundreds of suppliers located in dozens of countries and shipped "just in time" to a plant for final assembly.

This global supply chain, as Bernard Hoekman explains in "Adding Value" in this issue of $F \not \Leftrightarrow D$, is one of the most powerful—and promising—forces in global trade today, offering new opportunities for poorer countries to become part of the global factory.

How to facilitate the expansion of the global supply chain is just one of the subjects we tackle in this issue of F&D, which focuses on the future of global trade. Others include trade in financial services, where Stijn Claessens and Juan Marchetti examine how the global financial crisis affected international banking and financial services. Thierry Verdier looks at another critical aspect: how governments regulate the creation, dissemination, and movement of intellectual property across borders.

Of course, the movement of intellectual property—as well as goods and services—across borders is subject to multilateral "rules of the game," which are hammered out by countries during global trade talks. Eminent trade economist Jagdish Bhagwati brings us up to speed on the latest multilateral negotiations and offers a spirited argument for multilateralism.

Elsewhere in this issue, Maureen Burke profiles Peter Blair Henry, the youngest dean of New York University's business school, whose work on debt relief challenged conventional wisdom. Other articles tackle inequality in Asia, transparency and the transmission of financial shocks, managing citizen expectations in the face of natural resource booms, fiscal policy in the run-up to elections, and the anatomy of a country's currency reform.

As always, we aim to provide engaging and thought-provoking coverage of the evolving global economy. We'd love to hear what you think of F&D in a letter, via email, or on Facebook at www.Facebook.com/FinanceandDevelopment.

Jeffrey Hayden Editor-in-Chief

IN BRIEF



Afghan children collecting recyclables for money.

Too many poor children

The number of people living in extreme poverty around the world has declined sharply over the past three decades. But in 2010 it still included roughly 400 million children, or one-third of those living in such abysmal conditions, according to a new World Bank report, *The State of the Poor*,

which provides an in-depth profile of the poorest people in the world.

The report found that 721 million fewer people lived in extreme poverty—defined as living on less than \$1.25 a day—in 2010 compared with 1981. But it also concluded that a disproportionate number of children were among them: children accounted for one in three of those living in extreme poverty around the world in 2010, compared with only one in five of those living above the poverty line. In low-income countries, the percentages were even worse, with half of all children living in extreme poverty.

"The finding that over 400 million children live in extreme poverty and children are more likely to be poor than adults is disturbing, since this can exacerbate child labor and create intergenerational poverty traps," said Kaushik Basu, World Bank Chief Economist and Senior Vice President.

While extreme poverty rates have declined in all regions, the world's 35 low-income countries—26 of which are in Africa—registered 100 million more extremely poor people today than three decades ago.



Old city of Sanaa, Yemen.

Joining the club

Yemen's 13-year pursuit of a seat at the World Trade Organization (WTO) is set to end successfully with the country's formal entry into the global trade club early next year.

Members of the Working Party on the Accession of Yemen agreed September 26 on the terms of WTO membership for Yemen. The accession package will be presented to a ministerial meeting in Bali December 3–6 for a formal decision by ministers, opening a three-month window for Yemen to ratify it.

Yemen first applied to join the WTO in April 2000 and will be its 160th member.

Its accession will be a boost for a country that is struggling to recover from the turmoil brought by pro-democracy protests in 2011, which forced the president to step down, took the country to the brink of civil war, and dealt a blow to its already struggling economy.

Being part of the Geneva-based body, whose members are bound to follow global trading rules, may help shore up confidence in its impoverished economy.

A grain of salt

The global cereal supply in the 2013–14 marketing season will surpass the 2012 level by nearly 8 percent despite downward adjustments to forecasts for world cereal production and closing stocks, according to the latest quarterly *Crop Prospects and Food Situation* report from the UN Food and Agriculture Organization (FAO).

At 2,744 million tons, the FAO's current forecast for world cereal production in 2013 is marginally lower (by 3 million tons) than reported in September, mainly reflecting poorer prospects for the South American wheat crop following bad weather.

The report projects an 8 percent increase in world cereal production this year compared with 2012 mainly because coarse grains output is expected to increase 11 percent, to about 1,420 million tons.

The United States, the world's largest corn producer, will account for the bulk of the increase, with a projected record crop of 384 million tons, 27 percent higher than the previous year's drought-reduced level.

The report also highlights food insecurity hotspots in the Central African Republic, the Democratic Republic of the Congo, North Korea, northern Mali, and Syria.





Oil platform, Java Sea.

Powerful demand

Cross-border power exchanges can play a central role in helping the Asia and Pacific region meet its booming demand for power, which is set to sharply outpace that of the rest of the world over the next two decades, says a comprehensive new report from the Asian Development Bank (ADB).

Energy Outlook for Asia and the Pacific notes that fossil fuels will continue to dominate the energy mix in the coming 20 years. The demand for coal is set to rise by more than 50 percent, or nearly 2 percent a year, led by consumption in China and a pickup in use in southeast Asia as countries look for low-cost options to diversify existing supply sources.

Oil demand will also grow by 2 percent a year, driven by the transportation sector, as newly affluent south Asians buy

Events in 2014

January 22–25, Davos, SwitzerlandWorld Economic Forum Annual Meeting

April 11–13, Washington, D.C.Spring Meetings of the IMF and the World Bank

May 2–5, Astana, Kazakhstan Asian Development Bank Annual Meeting

May 19–23, Kigali, Rwanda

African Development Bank Annual Meeting

May 29-30, Maputo, Mozambique

Africa Rising Conference hosted by the Mozambique Government and the IMF

June 4–5, Sochi, Russia G8 Summit

more motor vehicles. Demand for natural gas will expand faster—4 percent annually—than for other fuels because of its lower environmental burden and ease of use.

The region's reliance on fossil fuels presents major pricing, energy security, and environmental challenges, with the Asia and Pacific region's carbon dioxide emissions set to double by 2035 to more than half the world's total output. "Countries cannot meet these huge power requirements all on their own, so the region must accelerate cross-border interconnection of electricity and gas grids to improve efficiencies, cut costs, and take advantage of surplus energy," said S. Chander, Special Senior Advisor, Infrastructure and Public-Private Partnerships, at the ADB.

Riding along

Six of eleven cities polled for a new study on cycling use in Latin America have either launched or plan to implement bike share programs, underscoring the growing popularity of cycling as a transportation choice in the region. The cities are Mexico City, Lima, Buenos Aires, Bogotá, Montevideo, and Cuenca.

The Inter-American Development Bank worked with a team of students from American University in Washington, D.C., to investigate the scope of bicycle-friendly infrastructure, policy, and activism in some of the region's largest cities.

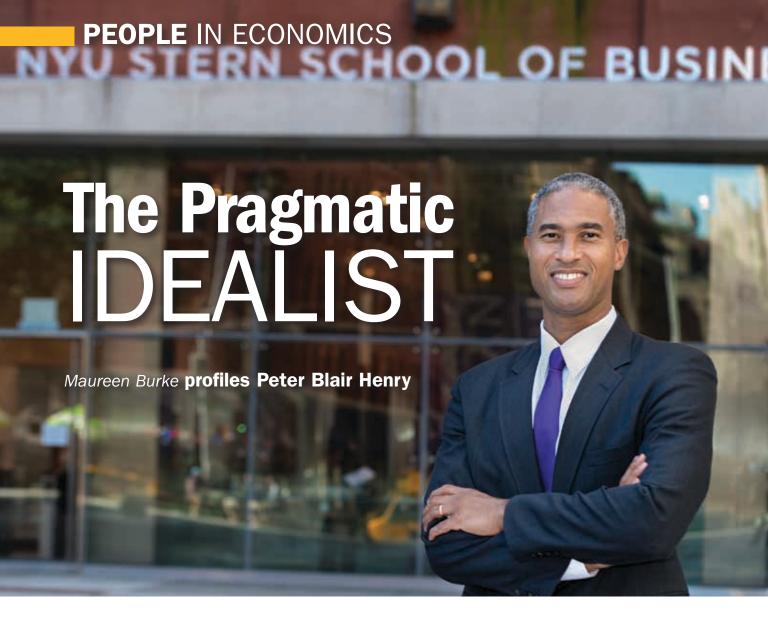
Between 0.4 percent and 10 percent of the population use a bicycle as their primary mode of transportation in the sampled cities. In intermediatesized cities, total daily bike trips averaged between nearly 2,000 and 48,000. The daily average ranged from 84,000 to 1 million trips a day in the region's largest cities, with Mexico City leading with the most daily trips.



Bicycle sharing in Mexico City.

The *biciudades 2013* study found that cities have limited cycling infrastructure but are nonetheless looking to promote this alternative. However, public sentiment toward cycling is mixed. While many praise its benefits, bicycles are seen by some as a symbol of low socioeconomic status, and there are concerns about safety and fear of theft, among others.

The study identified a strong and growing push at the community level to make cities more bicycle friendly.



S a child in Jamaica, Peter Blair Henry would watch in quiet puzzlement as a woman from the neighborhood came to his grandmother's gate from time to time, asking for food. He wondered why his family always had enough to eat while this woman, with her matted hair and distended belly, did not.

This contrast between the haves and the have-nots became even starker a few years later, when Henry emigrated with his parents to the United States, landing in the comfortable Chicago suburb of Wilmette. Seeing only affluence around him, the nine-year-old Henry was deeply stirred by the fact that people were so much better off in the United States than they were back home. This fundamental question of development—why standards of living vary from country to country and what can be done about it—has been a "personal obsession" ever since, Henry says.

Now dean of the Leonard N. Stern School of Business at New York University (NYU) in the heart of New York City, Henry has come a long way from the rural Jamaica of his youth.

Striding into NYU's Henry Kaufman Management Center across the street from Washington Square Park on a beautiful fall morning, he displays an easy rapport with security

guards, students, and professors alike. As he passes through the lobby, he eschews the elevator and takes the stairs to his office instead. All 10 flights.

Institutions versus policies

The youngest dean in the Stern School's 113-year history, Henry, 44, has devoted much of his career to studying the impact of economic reform on the lives of people in developing countries. His research has sometimes challenged conventional wisdom—whether on debt relief, international capital flows, or the role of institutions in economic growth.

His study "Institutions versus Policies: A Tale of Two Islands," coauthored in 2009 with Conrad Miller, is a good example.

The study chronicled the widely divergent economic performance of Barbados and Jamaica. "It may be tempting for readers to regard this paper as a quaint tale of two exotic islands better known for their beaches, music, and Olympic sprinters than their significance in the global economy," the authors write. "On the contrary, we think that important general lessons lie at the heart of this Caribbean parable."

"A Tale of Two Islands" set out to disprove the hypothesis that institutions play a decisive role in a country's development. That theory—advanced, among others, by economists Daron Acemoglu, James Robinson, and Simon Johnson in a 2000 paper—holds that prosperity is created by incentives, and incentives are created by institutions. In 2012, Acemoglu and Robinson developed that premise at length in a best-selling and highly acclaimed book *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*.

Henry and Miller, both then at Stanford University, challenge this view, making the case that policies—not institutions, geography, or culture—are the determining factor in why some countries are rich and others poor. Comparing Barbados and Jamaica, two former British colonies that inherited almost identical political, economic, and legal institutions, they argue that the sharp divergence in the two countries' standards of living was attributable to something else—namely, the government's economic policy choices.

The former colonies followed widely divergent paths in the 40-year period following their independence in the early 1960s. The Jamaican government during the 1970s and 1980s ran large budget deficits, restricted international trade, and intervened extensively in the economy. By contrast, Barbados achieved fiscal discipline, kept state ownership to a minimum, and embraced open markets.

The result is striking. In 1960, real income per capita was \$3,395 in Barbados and \$2,208 in Jamaica. Today, the picture looks far different. Barbados is much wealthier than Jamaica, with income per capita of \$15,198 compared with \$5,358.

"Henry and Miller are, of course, right that one should pay attention to the independent effects of macroeconomic policies," wrote Acemoglu and Robinson recently in their blog. "But economic policies don't just drop out of the blue. They are chosen by governments and politicians whose incentives are determined by political institutions." So the argument that policies but not institutions distinguish Jamaica from Barbados is not compelling, they say.

Though not everyone is convinced, many people find Henry and Miller's study intriguing because it is a near-natural experiment on what factors determine economic success or failure.

No room for millionaires

Henry spent the first eight years of his life in Jamaica, which is why "A Tale of Two Islands" has special significance for him. "When I was a kid, I remember listening to the speeches of Michael Manley," Henry reminisces, recalling Jamaica's former prime minister as an intelligent, caring leader—one who wanted to make life better for all, especially the poor.

"But Manley went about doing this in a way that was inimical to the market—and to growth, in hindsight—embarking on a series of economic experiments that threw the country very deeply into debt and led to essentially eight straight years of extraordinary contraction in the economy," Henry explains.

In a 1977 speech, Manley declared that "Jamaica has no room for millionaires. If you want to be a millionaire, there are five flights a day to Miami." This was seen as an open attack on business, Henry says.

A lot of Jamaicans took Manley at his word—among them Henry's parents. Although they had no intention of trying to become millionaires—Henry's father was a chemist and his mother a botanist—they found it increasingly difficult to thrive in Manley's Jamaica, so they resettled with Peter and his three young siblings near Chicago.

Out of his comfort zone

As an undergraduate at the University of North Carolina at Chapel Hill (UNC) in the late 1980s, Henry got hooked on

We have to have a different way of thinking about the role of business in society.

economics, which seemed to offer him a perfect way to combine his love for math, science, and problem solving with his interest in social issues.

Henry attended college on a Morehead Scholarship (now called the Morehead-Cain Scholarship), a full, four-year merit scholarship for UNC students. Inspired by the Rhodes Scholarship, the program selects students based on their moral force of character, scholarship, physical vigor, and leadership.

The scholarship included a summer enrichment program that allowed participants to pursue fully funded work or study experiences anywhere in the world. At his mother's urging, Henry sought, and won, a summer job as a research assistant for a professor at Oxford University's St. Anthony's College who was researching the role of free economic zones in the Soviet Union's economy just years before it disintegrated. After graduating with a B.A. in economics in 1991, he found himself back at Oxford as a Rhodes Scholar, studying for a second undergraduate degree, this one in mathematics.

"The Rhodes experience was a great way to get out of my comfort zone," Henry says.

Accustomed to the frenetic schedule of a typical U.S. college student, he discovered that life at Oxford unfolded at a different rhythm altogether. It was the era before cell phones, and most students didn't even have landlines. Students would communicate mainly by "pigeon post," an ancient system whereby the colleges' porters would hand-deliver messages around campus. The pace at Oxford "really forced me to slow down and read for a degree, which gave me the chance to think more deeply," Henry says.

Henry went on to enter the doctoral program in economics at the Massachusetts Institute of Technology (MIT), where he had been granted deferred admission while still at UNC. It was another summer research gig that led Henry to his Ph.D. thesis topic, and perhaps ultimately to a career in business education.

Henry asked the late Rüdiger Dornbusch, one of his professors at MIT, if he could do a summer research project for him on the debt crisis that engulfed Latin America in the 1980s. Dornbusch suggested instead that Henry gain some real-life experience by working with K. Dwight Venner, Governor of the Eastern Caribbean Central Bank. Venner was looking to

develop long-term capital markets in the eastern Caribbean and wanted to avoid the problems that had plagued countries like Chile and Argentina. Offered a small stipend and a place to live, Henry headed off to St. Kitts for the summer of 1994. The paper he wrote for Venner ended up forming part of the intellectual basis for the Eastern Caribbean Currency Union's first securities exchange.

That experience got Henry thinking more and more about the relationship between capital markets and development. Should an emerging market economy open its capital markets to foreign investors? What are the consequences of doing so—will it make the cost of capital go down? And is there a link with economic growth? His 1997 doctoral thesis centered on these questions, using data from the large emerging markets in Latin America and Asia.

Ants and grasshoppers

Today, Henry remains deeply interested in emerging market development, the topic of his first book, *Turnaround: Third World Lessons for First World Growth*, published in March. The book's premise is that former "third world" nations have pulled off a historic economic turnaround, becoming the emerging markets that now drive global growth.

"It seemed important to me that they did this [turnaround] with three decades of economic reforms that were pushed on them by the first world—nations now battered by crises, but whose governments appear loath to take their own prescriptions," Henry told Dan Schawbel of *Forbes*.

Turnaround says that emerging markets were able to achieve remarkable economic success through the application of three key principles: discipline—a sustained commitment to a pragmatic growth strategy that is vigilant, flexible, and values what is good for the country as a whole over what's good for any individual or interest group; clarity—in other words, a clear commitment by the country's leaders to a change of direction; and trust—between citizens and their government, for example, or between two countries.

To illustrate what he means by discipline, Henry points to Aesop's fable "The Ant and the Grasshopper," in which the grasshopper spends the warm months singing while the ant stores up food for winter. When cold weather arrives, the grasshopper finds itself dying of hunger and begs the ant for food.

The United States, Henry says, is an advanced economy grasshopper. During the flush times when the country had a fiscal surplus, President George W. Bush decided in 2001 to give it away in the form of tax cuts rather than saving it. As a result, when the financial crisis hit later that decade, the country didn't have the cushion it needed to soften the blow.

Chile, on the other hand, can be seen as an emerging market ant. After Andrés Velasco became Chile's finance minister in 2006, the country's treasury swelled with money from booming copper prices. Even in the face of popular protests, Velasco resisted the urge to spend the windfall. His strategy of saving for a rainy day paid off—when the country was slammed by the financial crisis, the Chilean government had the financial wherewithal to offer its citizens a \$4 billion tax cut in 2009 to blunt the impact.

Is debt relief good or bad?

As a student, Peter Henry strongly believed that debt relief for poor countries was a good idea. But after examining the evidence, he changed his mind.

In his research, he set out to see if debt relief would stimulate economic growth in highly indebted countries. He was familiar with the notion that excessive external debt deters investment in a country; high levels of debt imply high future tax rates, because more tax revenues are needed to service the debt. According to this "debt overhang" theory, writing off debt generates more investment and higher growth, with positive results for the country.

Henry studied the data, and found that for middleincome developing economies—particularly those in Latin America that were granted write-downs of bank debt in the 1980s—debt relief actually did create value.

But the low-income countries that received debt relief later under the joint IMF–World Bank Heavily Indebted Poor Countries Initiative did not have much of a market for private capital. As a result, he discovered, writing down the debt of these countries did not spur growth. Unlike in the middle-income Latin American countries, the main economic difficulty for poor countries is not debt overhang but the absence of functional economic institutions that provide the foundation for profitable investment and growth.

Such initiatives are thus not going to do much to help poor countries. In fact, they may actually hurt. "To the extent that more resources are part of the solution, you'll see that debt relief has not resulted in more resources, on net, going to poor countries," Henry notes, saying that multilateral institutions simply reduce the overall aid envelope available to these countries by an equivalent amount. So debt relief effectively results in more bilateral aid—which Henry says is generally less effective than multilateral aid because it is often politically motivated.

Henry's native Jamaica has struggled for decades with high debt, and he's taken a lot of heat for his position on the topic. But, he says, "if we want to really help countries do what's efficient as opposed to making ourselves feel good," we should look at the evidence.

"If we would only have the humility to observe the lessons that much of the third world provides, there'd be a more prosperous future for us all," Henry says.

Emerging market economies have indeed made remarkable progress over the past two decades. They now account for more than half of world GDP (in purchasing power terms), compared with less than a third in 1990. Moreover, these economies did so well during the past decade that, for the first time, emerging market and developing economies spent more time in expansion and had smaller downturns than advanced economies, according to the IMF's October 2012 World Economic Outlook.

But there are signs that dramatic growth in emerging market economies is drawing to a close. Their average growth is 1½ percentage points lower than in 2010 and 2011, the IMF says. Growth in advanced economies, on the other hand, is picking up.

In addition, certain emerging economies have experienced market turmoil in recent months. Brazil, India, Indonesia, South Africa, and Turkey—Morgan Stanley's "fragile five"—were seen at risk for a currency crisis after their currencies fell by between 13 percent and 23 percent between May and August 2013. While some of the turmoil can be explained by cyclical factors, many economists see these countries' large current account deficits, high inflation rates, and high corporate and household leverage as troublesome—and perhaps also the result of bad policy.

So do recent developments invalidate Henry's thesis? No, he says: "It's important to separate the cycle from the trend."

"There's been a narrative in the financial papers in recent weeks saying that the BRICS [Brazil, Russia, India, China, South Africa] are falling and the advanced economies are back on the rise. That suggests a zero-sum game—a sort of hegemonic world, which I think is the wrong way to think about things," he muses. "Growth in the emerging markets is good for growth in the advanced economies."

"A big part of the reason why emerging economies have emerged over the last two decades is because of their hardwon reforms," he adds, acknowledging that there is still much to be done.

Greater voice

"Peter really does think a lot about developing countries, and he always has, from the moment I met him," says Serkan Arslanalp, an IMF economist who studied under him at both MIT and later at Stanford University's Graduate School of Business. Henry's intellectual outlook has been shaped by his background—sometimes in ways that surprise (see Box). "I was born in Jamaica but was educated by, and now serve, prestigious first-world institutions, so I believe that I have a unique, dual perspective," he told *Forbes*.

It was likely because of this unique perspective that then-U.S. President-elect Barack Obama asked him in 2009 to lead a transition team that studied international financial institutions such as the IMF and the World Bank.

Henry was a strong advocate for a greater emerging market voice in the IMF then, and still is. The transfer of voting shares from advanced European economies to emerging market and developing economies in recognition of the global economy's changing dynamics is a fundamental step, he says. "It's key that they be recognized for the strides that they've made." (The IMF quota reform that would sanction this shift was approved by the Group of Twenty in 2010, but at the time of this writing, it had not received the necessary ratification by the United States, the IMF's largest shareholder.)

When he was tapped by Obama, Henry was the Konosuke Matsushita Professor of International Economics and Associate Director of the Center for Global Business and the Economy at Stanford's business school, which he had joined 12 years earlier as a freshly minted Ph.D.

Then NYU came knocking.

"I never thought I would leave Stanford, to be honest," he says, expressing appreciation for such Stanford colleagues as Anne Krueger and John Taylor, who he says pushed him on his ideas. But the new opportunity was just too seductive. So he moved across the country with his four young sons and his wife, Lisa, a Yale-educated child psychiatrist.

"NYU Stern is a great business school that has even greater aspirations, with a world-class finance faculty that made huge contributions during the financial crisis," Henry says.

And the feeling was mutual. "After some time, one can read the body language of a dean's search committee. Seldom—if ever—have I seen greater certainty or more enthusiasm for a candidate for a deanship," said NYU President John Sexton of Henry in a 2009 statement. "And when I met with him, it was immediately apparent why: [he is] a superb and highly productive economics scholar, a natural leader, a community builder, and a manifestly good person."

Doing well and doing good

At NYU since January 2010, Henry says he is particularly enthusiastic about the recent international expansion of the university, which opened branches in Abu Dhabi in 2010 and Shanghai earlier this year. Although the business school does not have its own campuses in these places, it is beginning to expand its offerings abroad. In Shanghai, Stern has just started up an innovative master's program in business analytics, and other initiatives are in the works.

This new international dimension has helped Henry lure top-notch professors such as former Stanford colleagues Michael Spence (a 2001 Nobel laureate) and Paul Romer. Yuxin Chen returned to Stern this year after several years at Northwestern University.

"There is a whole host of problems that are fundamentally global in nature, but that require the additional tools of business to be applied with a broader lens," Henry says. "What role does finance play in helping us figure out how to allocate capital efficiently around the world? What role does marketing play in helping us think about how we reach poor consumers through digital media? How do we think about luxury consumers as not just high-income people in the United States and Europe, but also newly salaried female entrepreneurs in Nigeria and Indonesia?"

In an interview earlier this year, the *New York Times* suggested to Henry that he might be better off heading an NGO than as dean of a business school if he wants to help people in developing countries. "Things that drive up shareholder value can actually be very good for society at large," Henry responded. "We have to have a different way of thinking about the role of business in society."

Others would agree—among them World Bank President Jim Yong Kim, who recently noted that global official development assistance amounts to only about \$125 billion a year, the equivalent of the infrastructure needs in Africa alone. "If you have high aspirations for the poor," Kim said, "you've got to really think hard about the role of the private sector."

That is something Henry has long believed. "One of the big lessons that I take away from the Manley years in Jamaica is that you can't help the poor by bashing business." ■

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Dawn of a New System





An eminent trade economist worries that the global trading system is at risk of degenerating into a series of regional agreements



Jagdish Bhagwati

UPHORIA replaced despondency in 1995 when—after eight years of multilateral trade negotiations—the Uruguay Round was successfully closed and the General Agreement on Tariffs and Trade (GATT) became the World Trade Organization (WTO). After repeated, failed political attempts, its resolution was indeed cause for celebration. The GATT was an agreement on tariff reduction with an improvised set of arrangements on trade issues rather than the international trade organization many had wanted but failed to secure as the "third" element of the international superstructure designed at Bretton Woods. The WTO emerged as that missing institution.

The postwar multilateral trading system, by liberalizing trade, has played an important part in creating prosperity and, in turn, reducing global poverty, since growth both raises the incomes of those below the poverty line and generates revenue for social spending on health and education, which also helps the poor (Bhagwati and Panagariya, 2013). After much debate, this nexus between trade and growth, and in turn between growth and poverty reduction, is now widely accepted.

But failure to conclude the Doha Round of multilateral trade negotiations by the final November 2011 deadline—and the simultaneous emergence of bilateral and regional trade negotiations as the preferred option of major powers like the United States and the European Union—has cast a shadow over the future of the multilateral trading system. Lester Thurow, former Dean of the Massachusetts Institute of Technology Sloan School of Management, famously proclaimed at the 1989 Davos conference that "GATT is dead," a declaration that seemed vastly exaggerated at best. Today the question might be "Is WTO dead?"

As action on trade liberalization has shifted from multilateral trade negotiations to bilateral and regional preferential trade agreements, the question before us is whether a role for the WTO can be salvaged. What are the prospects for the world trading system as it enters this problematic phase? And how can we make the best of the situation we now face?

What happened to Doha?

The Doha Round of multinational trade negotiations began in Qatar's capital in 2001 and aims for major reform of the international trading system through the introduction of lower trade barriers, such as tariffs, and revised trade rules. It was seen by advanced economies as a response to those who opposed the international economic order, which included postwar trade liberalization. Developing economies, on the other hand, were convinced that their interests had been disregarded during the GATT trade talks and, under the so-called Doha Development Agenda, vowed not to let that happen in the Doha Round.

In fact, the GATT was intended to be biased in favor of not against-developing economies, through special and differential treatment provisions. Developing economies enjoyed automatic extension of any tariff reductions without having to offer reciprocal trade concessions. The result was that, contrary to the common assertion that the world trading system was unfairly stacked against developing countries, the average manufacturing tariffs were higher there than in the advanced economies. Ironically, the fact that tariffs in advanced economies were generally lower for products of interest to themselves and higher for traditional exports of developing economies was the result of this "nonreciprocity" enjoyed by the developing countries. Although aid is often given on an unrequited basis, most countries insist on reciprocal concessions in trade. So, faced with automatic extension of their trade concessions to developing economies that were not required or expected to reciprocate, the advanced economies "fixed" the problem through product



selection bias: they reduced tariffs only on products of interest to themselves. If the developing economies had been able to make reciprocal concessions, this product-selection bias would have largely disappeared.

Despite this product-selection bias, however, the developing countries profited from the trade liberalization by advanced economies. As advanced economies liberalized and increased their prosperity, the export markets of the developing countries grew too. The seven multinational trade negotiation rounds between World War II and 1986 helped the developing economies that took advantage of the growing markets resulting from advanced economies' trade liberalization. Outward-oriented countries like Korea and others in east Asia managed to develop growing markets abroad and registered remarkable growth rates of exports and income, which in turn hugely reduced poverty. Others-India, for example—failed to do so. This contrast underscores the point that trade provides an opportunity for countries to profit, but they have to seize that opportunity if they are to benefit. Often the failure to do so stems from autarkic policies that make foreign markets less profitable than domestic markets.

In the end, however, it was not the bulk of the developing countries that prevented Doha from being closed in 2011.



Rather, the negotiated concessions—so-called Doha Lite were unacceptable to U.S. business lobbies, which felt that the more successful developing economies, such as India (in agriculture) and Brazil (in manufacturing), ought to make more concessions. They argued successfully in Washington that there was not enough benefit to warrant U.S. acceptance. Many felt that this was a myopic view. After all, minor, politically feasible adjustments—such as concessions in agriculture by both the United States and India, which had squared off against each other-would have sufficed to secure a win for Doha and its important breakthroughs, including an agreement to end agricultural export subsidies. In fact, U.S. President Barack Obama was urged by many world leaders, including Australian Prime Minister Julia Gillard, U.K. Prime Minister David Cameron, and German Chancellor Angela Merkel to settle Doha in this way. (Cameron and Merkel, in 2010, went so far as to appoint an expert group cochaired by me and the first WTO director-general, Peter Sutherland, to explore this question). But to no avail.

If one goes by his inaction on Doha, Obama was unwilling to confront the U.S. business lobbies, which held out for major new concessions by the bigger developing economies, asking for what has been called Doha Heavy. This was

impractical and would have required serious new negotiations. In the end, such demands could not be met and Doha did not make it in 2011.

What next on Doha?

We have two options. If we treat Doha as dead, that would distress many governments, whose negotiated benefits, however small, would disappear. It would certainly imply an end to any future multilateral trade negotiations. And it would definitely damage the WTO. Or we could settle Doha at the Bali Ministerial in December this year— $F \not\sim D$ will have gone to press before the event—with a minimum agreement, such as trade facilitation, which has been studied in depth by the Organisation for Economic Co-operation and Development (2013). Compared with Doha Lite and Doha Heavy, I call this Doha Lite and Decaffeinated. This last option is not exciting but is preferable for those who would like to minimize damage to the WTO and the multilateral trading system.

To see what damage the elimination of any prospects for new multilateral trade negotiations implies requires viewing the WTO as a three-legged stool. The first leg is multilateral trade negotiations. Doha was the first such negotiation under WTO auspices, whereas there were seven successive rounds under the GATT. The second leg is rule making—for example, setting antidumping and subsidy rules. The third leg is the dispute settlement mechanism, the definitive achievement of the 1995 agreement ending the Uruguay Round, which makes dispute resolution binding on member governments.

The issue before us is what impact the weakening—or even breaking, if Doha is killed—of the multilateral trade negotiation leg will have on the other two legs. Rule making, which has taken place largely during multilateral trade negotiations, would now be freestanding or shifted elsewhere. The dispute settlement mechanism would also be weakened if disputes are resolved in other bilateral and regional forums instead of in the WTO.

In the face of failure to conclude Doha, the damage to multilateralism has been compounded by a substantial push, led by the United States (for the Trans-Pacific Partnership, or TPP) and the European Union (for the Transatlantic Trade and Investment Partnership, or TTIP), toward discriminatory, preferential "regional" trade initiatives. The Pacific Alliance of Chile, Colombia, Mexico, and Peru is far less significant than the other two.

Across the Pacific

The TPP, now in its 19th round of negotiations, and with 12 members on board, is essentially a U.S.-led initiative that represents 30 to 40 percent of global trade. Around the turn of the millennium, the United States opted to pursue regionalism with South America, bypassing the more dynamic east Asia. East Asian countries were excluded from the proposed Free Trade Agreement of the Americas and, as a result, Asian trade initiatives typically excluded the United States.

The United States was therefore seeking a way to get back into trade with east Asia. The sense of the smaller countries, such as New Zealand, Singapore, and Vietnam, that the United States would be a counterweight to Chinese foreign policy in east and south Asia allowed the United States to reestablish its presence in the region. The TPP appears therefore to have been inspired by commercial motives and not by a desire to contain China as has sometimes been asserted.

Let's look at some important examples:

Cultural exception: France wants a cultural exception. The United States has never liked this idea, which it views as a poorly disguised demand for protection. But in fact almost 50 countries, not just France, have ministers of culture who see a need to protect their culture from homogenization (often



Dispute settlement in bilateral or regional forums must allow the views of nonmembers who belong to the WTO to be heard.

But U.S. lobbies stepped in with a variety of demands that were only tangentially related to trade liberalization, describing their demands in self-serving fashion as elements of a "trade agreement for the 21st century." How could anyone object to a "modern," "high-standard" trade agreement? For example, the lobbyists sought to include labor union demands, even though only 11 percent of the U.S. labor force is unionized today. Attempts to incorporate such demands have met with resistance at the WTO by influential and democratic countries, such as Brazil and India. And even though demands for intellectual property protection were included in the agreement on trade-related aspects of intellectual property rights in 1995—see "Smart Trade," in this issue of F&D—the TPP reportedly seeks WTO protection substantially beyond what is already in place among WTO members.

If accepting these demands remains a precondition for joining the TPP, it is a safe bet that the partnership will fragment Asia into TPP, China, and India. That is hardly desirable. The correct policy must allow accession to the TPP provided a country liberalizes trade, without these side conditions that are unrelated to trade and without undesirable WTO demands. Acceptance of such demands should not be a prerequisite for joining the TPP. Put it this way: If I want to join a golf club, I need to play golf. But I should not have to go to church and sing hymns with the other club members.

Transatlantic Trade and Investment Partnership

The TTIP—a trade agreement proposed by U.S. President Obama, European Council President Herman Van Rompuy, and European Commission President José Manuel Barroso in June 2013 and currently under negotiation by the United States and the European Union—faces very different problems from those of the TPP. For one thing, the two markets are gigantic, whereas the TPP was essentially imposed on the small countries of Asia and only afterward were bigger countries, such as Japan and Korea, invited. Unlike in the TPP, U.S. lobbies have little influence on the European Union. And even within the European Union there are serious disagreements on several issues, which will slow down the negotiations.

U.S. influences, as it happens). The appropriate response is to grant the cultural exception but to insist that it be done through subsidies rather than import quotas. Subsidize Renoir but then let him compete with Spielberg. Protecting French cinema from competition and hence encouraging it to enjoy "monopoly rents" and a life of leisure is exactly the wrong way to go.

Genetically modified foods: Here again, the main difference of opinion is that many Americans see the technology as solving problems while Europeans tend to see it as creating problems. A cartoon in my book *In Defense of Globalization* shows an American customer telling the waiter to take away his tasteless broccoli and have it genetically modified. Unfortunately, objections by critics who call genetically modified foods "Frankenstein foods"—despite the conclusion by the World Health Organization that these foods have no adverse effect on human health (WHO, 2010)—are a threat to agricultural productivity enhancement, including in many poor countries whose citizens face starvation. Fear of an improbable Frankenstein is leading to the certain prospect of the Grim Reaper.

Tobin tax: France is deeply committed to this currency transaction tax—proposed by Nobel Prize—winning economist James Tobin to reduce the volatility of capital flows—whereas the United Kingdom and the United States have historically been against it. In France, it is also seen by many simply as a way to raise revenues. Others argue that banks seem to get bailouts while the poor do not get help with their sinking mortgages. So soaking the banks on their capital flow transactions seems eminently fair and a coup for the proletariat. It can hardly be expected that the TTIP will somehow reconcile quickly, if at all, various countries' arguments for and against such a tax.

The challenge ahead

Trade economists generally agree that preferential trade agreements are a pox on the world trading system. The vastly increased trade in intermediates, so-called value chains—a misleading term since intermediates into a product go in many directions and bend back as well: France may import

steel from Japan, but Japanese steel uses intermediates from around the world, including from France, and the problem afflicts each intermediate import—requires synchronized rules that cannot be achieved with bilateral and regional agreements (see "Adding Value," in this issue of $F \not \Leftrightarrow D$).

Indeed, outgoing WTO Director General Pascal Lamy openly condemned the proliferation of preferential trade agreements, as did former Director General Sutherland. Ironically, the leadership in Washington, long the champion of multilateralism, has shifted its focus overwhelmingly to preferential trade initiatives.

But economic policymaking has to be an exercise in the theory of second best. Given that bilateral and—especially—big regional agreements are emerging, what should be the role of new WTO Director General Roberto Azevedo? I suggest that it must be to ensure that, with the multinational trade negotiations leg practically broken, damage to the other two legs—rule making and dispute settlement—be avoided. Azevedo must exhort the leadership of the TPP and TTIP to make rules and manage dispute settlement in these regional arrangements in a way that reflects lessons learned at the multilateral level. Rule making must not be exclusive to these forums. It must not exclude those that are not members of

the regional arrangements on the pretext that the U.S. lobbies know what is best for everyone. Similarly, dispute settlement in bilateral or regional forums must allow the views of nonmembers who belong to the WTO to be heard.

This is a huge project. But unless Azevedo makes it his top priority in a new world where multilateral trade negotiations have probably vanished and preferential agreements are the only game in town, the steady corrosion of the WTO's leadership will continue. And that would be a pity.

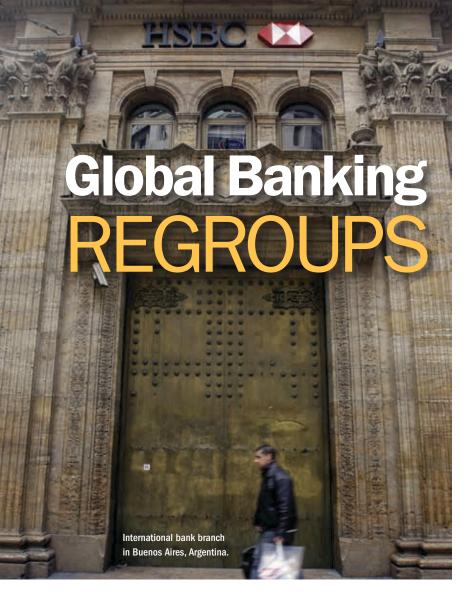
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Stijn Claessens and Juan A. Marchetti

The global financial crisis has prompted increased scrutiny of the risks and benefits of international financial services, especially international banking

little added value but generated many risks.

Nowhere can this reevaluation be observed more clearly than in international banking. After two decades of rapid expansion across borders, global banking is retreating. After peaking in the first three months of 2008 aggregate foreign bank lending dropped sharply. The decline was especially large in direct cross-border loans; lending through foreign affiliates has been more stable. This retrenchment was driven largely by market forces, as undercapitalized banks reduced

servers believe had grown too big and too com-

plicated and whose products, such as complex

securitization and derivatives, seemed to offer

HE global financial crisis led to a reevaluation of the benefits and risks

of finance-including international

financial services—which many ob-

their balance sheets. But some domestic regulatory changes have added to the desire to retreat to their home base.

The retrenchment reflects in part shortcomings in the global financial architecture—those mechanisms that facilitate global financial stability and the smooth flow of financial services and capital across countries. The crisis showed how the problems in one nation can be transmitted extensively to others, and how limited coordination among financial regulators complicates crisis management and the resolution of failing banking groups that do business in more than one country. Moreover, incentives to monitor and support banks and their foreign affiliates can differ between home and host country authorities. In many central, eastern, and southeastern European countries, for example, affiliates of western European banks were of systemic importance to the host country, but small relative to the parent bank's global operations. Only close international coordination—through the so-called Vienna Initiative—prevented major problems for host countries when foreign banks were hit by shocks at home or in their global operations. In some other cases, when a bank's activities were large relative to the home country's economy, that country was not always in a position, or willing, to support the parent bank, let alone its affiliates.

Growth in globalization

During the two decades before the global financial crisis, financial globalization increased considerably, reflecting mainly

- a large rise in direct cross-border bank lending, foreign direct investment, and other forms of capital flows, such as equity and bond portfolio investments; and
- foreign-owned financial institutions, in particular banks, setting up shop in other countries and doing business there.

The sharp rise in bank and other debtcreating financial flows occurred across a broad range of countries. Between 2002 and 2007, gross capital flows rose from about 8 percent to almost 25 percent of the GDP of advanced economies and from about 2.5 percent to more than 12 percent of the GDP of emerging market economies. While financial globalization helped spread risk among countries, it also increased the likelihood that an adverse shock in one major financial center would be transmitted across countries. And that is what happened. After peaking in early 2008, global gross capital flows



plummeted to 1.3 percent of global GDP in 2009, affecting advanced economies as much as emerging market economies. Flows recovered somewhat in 2010, but fell again as the European sovereign debt crisis intensified. In 2012, flows were only 3.6 percent of global GDP.

Similarly there was a large increase in the local presence of foreign banks and other financial institutions prior to the crisis. In the preceding two decades, banks enlarged their global footprint by establishing operations in many countries through branches (direct extensions of the bank) and subsidiaries (which are locally chartered and capitalized). Over the period 1995-2009, some 560 foreign bank investments took place, increasing the average number of foreign banks from 20 percent of total banks operating in local markets to 34 percent (see chart). With a local charter and physical presence, banks can raise funds locally and lend to host country firms and households more easily; they can also use capital from their parent bank or fund themselves in international capital markets. Being closer to the final customer offers important advantages to banks and other providers of financial services—notably, a better assessment of growth opportunities and risks.

In some countries, especially many emerging market economies in Latin America and in central and eastern Europe, foreign banks now dominate and sometimes comprise virtually the whole banking system. In other countries, including many advanced and Asian economies, foreign banks play smaller roles. The differences in importance reflect many factors—such as general financial reforms, including the degree of opening up to foreign competition; the privatization of state-owned banks that occurred during the transition from centrally planned economies in eastern Europe; and even previous financial crises, which often resulted in the sale of troubled banks to foreign entities. Since the recent

Foreign banks grow Foreign bank shares of local markets grew sharply between 1995 and 2009, especially in emerging market and developing economies. (share of foreign banks in local market, percent) 60 1995 2009 50 40 30 20 10 ECA Source: Claessens and Van Horen (forthcoming). Note: OECD = Organisation for Economic Co-operation and Development—all core country members included. OHI = other high-income economies, which includes all high-income economies that are not members of the OECD. EM = all countries included in the Standard & Poor's Emerging Market and Frontier Markets Index in 2000. DEV = developing economies and remaining economies. EAP = East Asia and Pacific. ECA = Europe and Central Asia. LAC

Latin America and the Caribbean. MENA = Middle East and North Africa. SA = South Asia.

SSA = sub-Saharan Africa. All the regional classifications follow the World Bank standard.

crisis, new foreign bank investments have slowed, however, and in some cases reversed as foreign-owned operations were sold to local financial institutions.

Although the global financial crisis led to a reevaluation of the risks and benefits of international banking and a tightening of domestic financial regulation, it did not discourage countries, in particular emerging market economies, from further opening up their financial sectors. In fact, restrictions on market access and discriminatory measures (which favored domestic over foreign firms) have declined in banking, securities, and insurance markets, and previous reform efforts have been consolidated (see Table). In addition, countries have continued to enter preferential trade agreements, which give financial institutions in those countries easy access to one another's markets. Some 52 such agreements have become effective since the onset of the crisis, two more than between 2000 and September 2008. And although the so-called Doha Round of global trade negotiations has made little progress in increasing market access and reducing barriers to trade in financial services, several initiatives have emerged recently that support liberal trade in financial services. Three of those initiatives hold the promise of further—and possibly significant—liberalization: the 13-nation Trans-Pacific Partnership; the Transatlantic Trade and Investment Partnership between the European Union and the United States; and the Trade in Services Agreement, which involves 21 economies and the European Union.

Two sides of trade in financial services

There are benefits and risks to trade in financial services in general and the presence of foreign financial institutions specifically. Empirical research shows that the presence of foreign-owned banks is in general associated with increased efficiency and competition in local banking sectors, with lower net interest margins, reduced excess profits, and lower cost ratios (Cull and Martinez Peria, 2010; WTO, 2011; Claessens and Van Horen, 2013). These gains appear to vary with the size of foreign bank presence, however. There have been large competitiveness gains for Latin America and eastern Europe, for example, where foreign presence is big, and less clear gains for Asia, where foreign banks are fewer. The effects of foreign presence on access to finance—whether in terms of overall credit, lending to small- and medium-sized enterprises, or access to deposit and payments services—are more ambiguous. They differ across countries, depending on the extent of foreign participation, the degree of competition in the domestic banking sector, the country's level of development, and foreign banks' ability to compensate for a lack of information through lending techniques that, among other things, include collateral and rely on credit scoring.

In terms of financial stability, recent research points to differences in how countries are affected by shocks, depending on the relative size of foreign bank presence, the distance of affiliates from their parent banks, and the extent to which foreign banks raise funds domestically rather than from foreign sources. The research has found two major, somewhat opposite, effects:

Changing trade terms

Since 2006 countries have, for the most part, further opened up financial services.

	-		
Country	Sector	Measure	Year
Chile	Insurance	Allowed direct branching by foreign companies	2007
China	Insurance	Allowed foreign companies to provide compulsory third-party automobile insurance	2012
	Securities	Expanded scope of activities eligible for joint ventures	2012
	Securities	Relaxed foreign ownership limits on securities firms	2012
	Financial leasing	Eliminated restrictions on foreign investment	2012
	Banking & insurance	Eliminated restrictions on direct branching	2009
Colombia	Finance	Allowed full foreign ownership of nonbank finance companies	2010
India	Financial advice	Allowed foreign investment advisors and portfolio managers	2010
Israel	Insurance	Allowed offshore companies to establish a	2009
isiaci	mourance	physical presence onshore	2003
Malaysia	Banking & insurance	Relaxed foreign equity limitations	2009
	Banking	Allowed direct branching in wholesale banking	2010
Nepal	Banking	Permitted takeovers of domestic banks by foreign institutions	2010
Nigeria	Insurance	Permitted full foreign ownership	2006
Pakistan	Insurance	Increased limit on foreign shareholding	2012
Russia	Insurance	Eliminated economic needs test prior to licensing	2007
Samoa	Insurance	Relaxed foreign equity limits for insurance brokers	2011
Saudi Arabia	Securities	Allowed nonresident foreigners to buy and sell exchange-traded funds	2010
Thailand	Banking	Allowed direct branching by foreign banks	2006
	Banking	Relaxed limits on the number of sub-branches opened by foreign bank branches	2010
	Banking	Relaxed limits on number of branches opened by foreign bank subsidiaries	2012
Ukraine	Banking	Allowed foreign branch banking	2006
United Arab Emirates	Banking	Limited number of foreign bank branches	2010
Vietnam	Banking	Allowed full foreign ownership and direct branching by foreign banks	2007
Source: World Trade Organization/World Bank Integrated Trade Intelligence Portal Services.			

- Lending provided by local affiliates, which raise much of their funds locally, was generally more stable than cross-border lending. Foreign banks reduced lending more than domestic banks did in eastern Europe, but in the largest Latin American countries no significant differences were found. In Latin America, there were fewer branches and more locally chartered affiliates than in eastern Europe, partly because of the preferences of Latin American regulators.
- When hit by shocks, global banks often rebalanced their portfolio away from international markets. Although global banks transmitted shocks from advanced economies to emerging markets (as they reallocated liquidity within the organization), foreign banks operating in crisis-affected advanced economies also reduced their local lending, repatriating funds to help absorb shocks at home.

Regulatory responses

The general regulatory reaction following the global financial crisis has been a mix of national and internationally coordinated policies aimed at reducing the risk of cross-border

transmission of shocks and at dampening the effects of those shocks. These efforts include improving the way regulators deal with troubled global institutions—whether restoring them to health or guiding their unwinding process. New international standards for banks, such as those requiring higher levels of capital and better liquidity management (the recent, so-called Basel III accord among key regulators), have been agreed. Colleges of regulators have been set up to coordinate supervision of global systemically important banks. Some improvements have been made with regard to information sharing across jurisdictions and disclosure of financial exposures, possibly helping supervisory agencies detect risks earlier and allowing for more market discipline. Assessments of systemically important financial systems are conducted more frequently, and financial surveillance has been enhanced, notably regarding international spillovers from one country to others (IMF, 2012). Other important reforms concern rules for credit rating agencies, over-the-counter derivatives markets, and shadow banking (see "What Is Shadow Banking," in the June 2013 F&D), although progress has been slower (FSB, 2013).

Although the functioning and stability of the international financial system have improved—and a global and open system with largely unrestricted trade in financial services preserved—supervisory agencies in both emerging market and advanced economies have been scrutinizing and regulating the local activities of foreign banks more intensely. Host country regulators, for example, have been encouraging banks to keep more capital and liquidity locally and/or convert foreign bank branches to subsidiaries to make it harder for banks to move capital and liquidity freely within their global operations and easier for authorities to limit local banks' engagement in international activities. Supervisory agencies have focused more intensely on how liquidity and capital are shared between banks and their foreign affiliates.

Some new home-country regulations also seek to limit proprietary trading activity (when banks buy and sell securities on their own account, exposing the institutions to market volatility) and to separate such activity from, among other things, retail deposit taking. Such ring-fencing measures could limit how much one operation in a banking group is exposed to other operations within the same group as domestic and foreign operations of affiliated entities become legally more separated, but could also give rise to inefficiencies in international banks' internal operations.

Next steps

To protect domestic economies and taxpayers and to reduce—if not eliminate—the negative effects that might arise from the interdependence of financial systems, the regulation and supervision of international financial activities must be improved. Despite better coordination of regulation during the early days of the crisis, financial regulation and supervision remain largely national. Preserving the benefits and reducing the risks of globally integrated financial markets call for additional policy efforts—including dealing with the wind-down of troubled global institutions and its most important aspect: which country's taxpayers should pay, and how much.

Ultimately, it is the fear of the costs involved in winding down a failed institution (and dealing with its subsidiaries and branches abroad) that has reinforced regulators' national focus. For example, the Swiss regulatory authorities recently proposed a scorecard approach to determine whether Swiss

Failures are not the only impediment to developing coordination among national authorities.

banks with global operations and foreign banks operating in Switzerland are organized in a way that facilitates resolution in a crisis while protecting the systemically important functions of those banks within Switzerland.

It is important to develop arrangements that specify how governments share and contribute to the financing needed to deal with a weak institution that operates across borders, how assets and liabilities are allocated if an institution is resolved or liquidated, and how any final costs (including deposit insurance, guarantees for liabilities other than insured deposits, and other forms of government support) are shared among jurisdictions. Although still a work in progress, the Banking Union in the European Union, with its supporting reforms, is an attempt to develop, codify, and institutionalize such arrangements.

The problems of dealing with failures are not the only impediment to developing coordination among national authorities. Conflict can arise between home and host supervisory authorities of a cross-border financial institution when a bank or affiliate runs into financial stress and authorities seek to retain capital and liquidity locally-or when the financial cycle is on an upswing in one country but on a downswing in another, creating the need to coordinate tools and their application across jurisdictions. Moreover, a lack of national action can have negative spillover effects on other countries. Some mechanisms recently agreed at the Financial Stability Board and between U.S. and U.K. regulators—partially address this problem. But many issues remain unaddressed. For example, it will be difficult to ensure that the moderating influences of countercyclical capital buffers—an element of the Basel III accord that presses banks to add more capital in good times and less in bad—are not negated by banks and other financial institutions in jurisdictions not subject to such rules.

Ideally, every country should have a regulatory framework for the entry and operation of foreign financial institutions that is origin neutral—with the proviso that the home country has both adequate regulation and supervision and the capacity to support its institutions if needed. However, the proliferation of preferential trade negotiations means that special access and advantages can be granted to foreign financial institutions from specific countries. This can foster a concentration of financial services and suppliers from a limited number of jurisdictions. It can encourage situations such

as those experienced in some east Asian countries in 1997 where Japanese banks were big lenders or, more recently, in central and eastern European countries where the presence of banks from a few western European countries became systemically significant. In those cases problems in the home countries triggered retrenchment and added to the problems in the supply of credit in the host countries. Multilateral trade liberalization could help forestall the concentration problem by allowing the entry of sound foreign banks from as many countries as possible. By allowing undistorted competition supported by sound regulatory and supervisory frameworks, regulators could not only ensure that the healthiest and most efficient foreign banks are allowed in, but also reduce the risk of shocks in one home country adversely affecting the whole host country market.

Global financial integration generally benefits host countries by increasing efficiency, competition, product availability, and the transfer of know-how and technology. But the recent crisis has shown that it can also expose countries to new risks and challenges. While foreign institutions have for the most part been stable providers of external financing during episodes of local financial turmoil, greater financial sector openness can amplify the effects of financial stress in other parts of the world on domestic financial systems. This can be a problem not only for emerging markets but also for more developed financial systems and economies.

These issues do not overturn the rationale for international financial integration. They do, however, call for enhanced awareness and a wise combination of national and international policy responses to ensure that financial integration takes forms that minimize its risks and maximizes its benefits for all countries. Open financial borders are an important aspect of this approach. Together with further supportive efforts, open borders can ensure both efficient international delivery of financial services and minimization of the risks associated with it.

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The cross-border flow of intellectual property comes under 21st century economic scrutiny

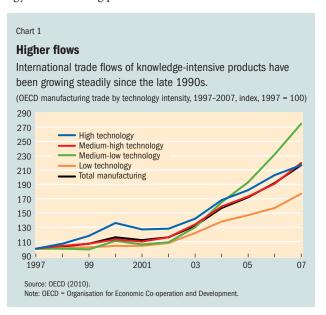
Thierry Verdier

shipment containing the generic drug losartan potassium, used to help reduce arterial hypertension, leaves India bound for Brazil. While the shipment is in transit through the Netherlands, Dutch customs authorities, acting on an allegation of patent infringement, seize and hold it for 36 days before eventually releasing and sending it back to India. The December 2008 event was part of a wave of seizures of generic medicine on key transit routes through Europe. It renewed concerns about the international trade of pharmaceutical products and again cast light on the issue of access to affordable and essential medicines by the poor in a globalized world.

Also on the intellectual property stage, the large international digital music services iTunes, Spotify, and Deezer expanded their global presence in the past two years from about 20 countries to more than 100. In 2012, the revenues of record companies' digital divisions surged to more than a third of total music industry revenues—a 9 percent rise from the previous year. That same year thousands of protesters rallied across Europe against an international antipiracy agreement (the Anti-Counterfeiting Trade Agreement), fearing that it would encourage Internet surveillance and curb their freedom to download movies and music for free.

These examples illustrate two facets of the same phenomenon: ideas, information, and knowledge are increasingly tradable assets, taking many forms in their creation, dissemination, and movement across borders. They are now at the center of the 21st century global economy. Indeed most of the value created in new medicines and high-technology products resides in the amount of innovation, research, and testing involved in bringing these products to fruition. Along

the same lines, movies, music recordings, books, and computer software are essentially traded and consumed because of their embedded information and creativity. Even standard manufacturing products and commodities such as clothing and plants may now include a high proportion of invention and design in their value. International trade flows of knowledge-intensive products have grown steadily since 1997 (see Chart 1). But trade in these goods is not uniformly distributed throughout the world (see Chart 2). Some countries clearly tend to export more high- and medium-high-technology manufacturing products than others.





The previous examples also highlight how the diffusion of knowledge through international transactions, whether traditional goods shipments or digital downloading, generates serious tension across countries and among individuals. That producers of knowledge have the right to prevent others from using their inventions, designs, and creations and can negotiate payment in return for their use by others is the subject of intense debate and friction between governments, firms, and civil society organizations. So-called intellectual property rights take a number of forms: copyrights for creative and cultural works, patents for innovative manufacturing products, and trademarks for design and fashion items. The legitimacy and extent of protection of such rights vary widely around the world and involve social, cultural, humanitarian, and political considerations. Here, we focus on the economic dimension of the problem: the role of intellectual property rights in international trade and the global economy, their impact on development and global welfare, and how to lessen the tension they generate across the world.

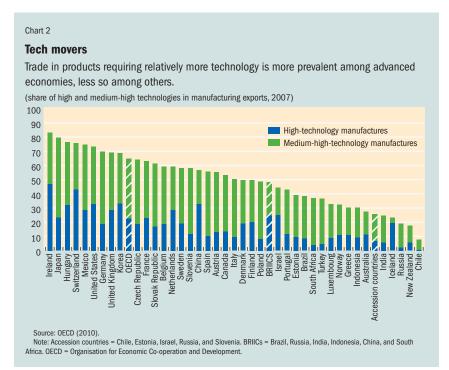
Intellectual property is based on information and knowledge, which have two specific economic properties. First, one person's use of information or knowledge does not diminish another's use. Consider a song, a computer program, or a fashion design: each may be used or enjoyed simultaneously or sequentially by several individuals. Unlike goods such as apples or cars, information is a *nonrivalrous* good; that is, more than one person can consume the product at the same time. So, once created, these works can and should be largely diffused through wide access.

Second, it is generally hard to stop others from using, imitating, or consuming information without authorization. Hence, use of intellectual property may not be prevented by individual private action. When information is costly to produce, individuals prefer to wait for others to create it and then enjoy its benefits freely. This "free-rider" problem in turn kills the incentive to invest resources and effort in creativity and innovation, which deters growth and development. Such a problem can be remedied by the definition and implementation of ownership structures on the right to use

and consume the information.

This remedy often takes place through public intervention that reflects fundamental trade-offs. On the one hand, economic efficiency requires significant diffusion of information through wide access to intellectual property. On the other hand, efficiency requires incentives—through strong protection of intellectual property rights—to create new information whose value exceeds its cost for society. The problem is even more complex given that knowledge creation is a sequential process that builds on itself: information is an essential input for the production of further information. These trade-offs are resolved through the patent and copyright system: in exchange for disclosure of all the invention's information, the government gives inventors exclusive rights and a legal monopoly for a limited period of time.

In an international context, additional trade-offs arise from the fact that the cre-















ation and diffusion of knowledge are not geographically uniformly distributed. Most inventions with commercial potential come from companies based in advanced economies and a few emerging market economies. But the logic of international trade and foreign direct investment implies that knowledge tends to spread and be used where production costs are low—namely, in low-income countries. Economic theory gives some insight into these trade-offs and the role of intellectual property rights in the global economy.

Economics of knowledge creation

For innovating advanced economies, strong protection of intellectual property rights reduces imitation and allows innovators to capture a larger share of the benefits of their creative activities. This encourages innovation and higher productivity growth. With international trade, however, intellectual property rights affect the diffusion of knowledge and thus the location of production between innovators in high-cost countries and knowledge users in low-cost regions. Economic reasoning then suggests that additional indirect effects can counterbalance the previous positive ones: better protection of intellectual property rights allows goods to be produced with a longer life span in the innovative advanced economies. In the long run, this implies a need for resources such as skilled workers, engineers, and financial resources to be reallocated into physical production and away from research and development activities in the innovating advanced region. This may as a result slow both innovation and growth in the world economy.

For most low-income countries, intellectual property rights are closely related to the issue of technology transfer and diffusion, a process that occurs through a number of channels in the global economy. International trade in goods and services-specifically imports of capital and intermediate goods—are important avenues of technology transfer. This works through reverse engineering-discovering the technology behind an object by taking it apart—but also through the cross-border learning of production methods, as well as product and organizational design. A related channel is foreign direct investment, as multinational firms share technologies with their subsidiaries, which then spread into the local economy. Finally, technology diffusion can also take place through international licensing, which requires the purchase of production and distribution rights for a product, as well as the knowledge required to make effective use of these rights.

As for innovation, economic theory suggests that the impact of stronger intellectual property rights protection on technology diffusion is not clear-cut and typically depends on a country's characteristics. Stronger intellectual property rights protection restricts the spread of technology because patents prevent others from using proprietary knowledge. And the increased market power of foreign intellectual property rights holders shifts profits to foreign monopoly firms and away from domestic firms and consumers, causing higher prices, more expensive imports, and lower domestic output, which can impede the dissemination of knowledge. But intellectual property rights can also play a positive role in

knowledge diffusion, since the information available in patent claims is necessarily made available to other potential inventors in the country rather than kept strategically hidden by the innovator. Moreover, strong intellectual property rights protection may stimulate technology transfer to low-income countries through trade in goods and services, foreign direct investment, and technology licensing. Indeed when innovations are better protected against imitation and counterfeiting, innovators may be more likely to export, invest, and

TRIPS is supposed to strike a balance between the benefits and costs of intellectual property rights protection.

license their technologies and designs across borders. Such increased flows of transactions in knowledge-intensive items eventually result in beneficial spillover effects as information spreads throughout knowledge-using economies.

While there are good theoretical presumptions that stronger intellectual property rights protection benefits innovating countries, the result for developing economies, where innovation is limited or nonexistent, is much less obvious. More precisely, intellectual property rights protection is expected to enhance growth in countries that move toward free trade and have a comparative advantage in innovative technology-intensive activities. For countries without such advantages, such protection may simply mean increased monopoly power for foreign firms and reduced domestic welfare—specifically in countries with little or no innovative capacity that would otherwise enjoy a free ride on foreign innovations.

Given the theoretical ambiguities related to intellectual property rights in the global economy, we need to turn to the empirical evidence. A United Nations Industrial Development Organization study (Falvey, Foster, and Memedovic, 2006) looks at the role of intellectual property rights in innovation, growth, and technology transfer. The study concludes that intellectual property rights have different effects in different countries. Stronger protection is shown to promote domestic innovation and growth in countries with significant domestic capacity for innovation (as measured by GDP per capita or stock of human capital) and more openness to international trade flows. Conversely, it has little impact on innovation in low-income countries with less innovative capacity.

Similarly, the effect of intellectual property rights on technology diffusion through international trade, foreign direct investment, and licensing depends on a country's characteristics. The evidence shows that these channels are important sources of diffusion only in countries that have reached a certain capacity to adapt, use, or build on knowledge created abroad. In such cases, stronger intellectual property rights protection contributes to the spread of technology by stimulating trade flows, though not necessarily in goods and sectors considered high tech or knowledge intensive. This simply reflects













the fact that for many high-tech industries, such as electronics and telecommunications, aerospace, and nuclear energy, intellectual property rights protection is not relevant to competitiveness. Products in such industries are often too sophisticated for imitation in low-income countries. And some firms may implement strategies such as industry secrecy to exploit their innovation. Stronger protection is also important for technology diffusion through foreign direct investment, but again only in specific industries—mostly chemicals and pharmaceuticals. And such protection matters more for foreign direct investment flows at certain production stages—component manufacturing, final production, and research and development—that are more sensitive to knowledge protection than other stops on the global production line.

The broad conclusion from the research is that the role of intellectual property rights in growth and welfare in an integrated global economy varies strongly across countries and sectors. Protection encourages domestic innovation and growth in countries with significant domestic capacity for innovation, and it promotes technology diffusion—but only in countries with a sufficiently educated population and an intellectual infrastructure that can use and productively adapt new technologies. Moreover, the benefits of such protection are more likely in economies that are more open to international trade and more advanced and whose larger markets mean less power for foreign firms.

Global approach

Given their strong differences across countries and sectors, it is no surprise that intellectual property rights generate intense debate, controversy, and tension among corporations, governments, and advocacy groups. At the multilateral level, the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement is the most important attempt to narrow the gaps in how intellectual property rights are protected across countries. Within the framework of the World Trade Organization (WTO), the agreement aims to harmonize intellectual property rights under common international rules to protect patents, copyrights, trademarks, and design. It establishes minimum levels of protection among WTO members and adheres to the basic nondiscrimination principle of the multilateral trading system.

TRIPS is supposed to strike a balance between the benefits and costs of intellectual property rights protection across innovating countries and countries that do not (yet) have the capacity to innovate, with the expectation that it will encourage domestic innovation and international technology diffusion. But since its adoption it has been strongly criticized by nongovernmental organizations and global movements. Critics argue that it reflects the lobbying pressure of a few northern multinational corporations imposing the intellectual property systems of the most advanced, innovating economies on low-income countries with limited resources and infrastructure. There is indeed evidence that the so-called North-South technological gap has continued to grow (Correa, 2001), raising doubts about TRIPS' ability to benefit the world's poorest countries.

The trend for advanced economies is not toward relaxation of TRIPS but toward stronger intellectual property rights

protection. The recent Anti-Counterfeiting Trade Agreement is an example, as are a number of bilateral investment treaties and free trade agreements signed in the past decade between advanced and less advanced economies. These agreements include explicit intellectual property rights protection obligations that exceed current TRIPS standards.

What will improve the balance of economic trade-offs associated with intellectual property rights and lessen underlying international tensions? Flexibility is a key underlying principle, and this has some clear policy implications. First, policy should vary according to a country's level of development and its level of imitative or innovative capacity. For poor countries, with weak institutions and limited research and development capacity, intellectual property rights do not seem relevant. It is more important to improve the investment environment and implement trade policies that promote imports of technology embodied in goods. These countries may not be required to apply and enforce strong intellectual property rights obligations. Under certain conditions (such as UN classification as a least developed country) they should have access to mechanisms that reduce the cost of importing goods protected by intellectual property rights. For other intermediate-level, developing economies with higher capacity for imitation and innovation, harmonization of protection as required by TRIPS can stimulate domestic firms to switch from imitation to innovative activities and encourage the spread of technology through international trade and foreign patenting from other innovating regions. To offset the adverse effects from lost imitative opportunities, however, this process must include improved access to international markets, in particular to advanced economies' domestic markets.

But bilateral trade agreements do not seem to be moving in that direction: the rules on intellectual property rights in the agreements reflect mainly the concerns of advanced economies. One way therefore to move closer to the policy outcomes outlined above would be to use the flexibility under TRIPS, which allows for exceptions and transition periods that help tailor the design of intellectual property rights regimes to each country's needs in a multilateral and more balanced context. Such a process would facilitate international trade in smart things—such as medicines and digital entertainment—that save lives or just make life more pleasant.

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Employee on Volkswagen Beetle production line in Puebla, Mexico.

Adding Value

Bernard Hoekman

Companies
have split the
production
of goods
and services
among many
countries,
creating
supply chains
that reduce
overall costs

HE average car has thousands of components that are produced by hundreds of suppliers located in dozens of countries. For example, a Volkswagen might have an engine made in Germany, Mexico, or China; a wiring harness from Tunisia; and an exhaust filter system from South Africa.

Declining trade, transport, and communication costs have allowed companies to splinter their production lines geographically. Not only does each stage of production occur in a different facility, but each facility is often in a different country. This type of production, which results in the movement of goods and services from country to country through a supply chain, is a major reason that global trade in goods and services has grown so fast. Since 1950, the volume of world trade in goods and services has grown 27-fold, to about \$20 trillion, three times faster than global GDP. Much of that growth has been in intermediate products and services that move from country to country in a company's international supply chain. Value is added to a product in each of the countries that are part of the chain (a process called vertical trade or vertical specialization).

By locating activities and tasks in different countries according to their comparative advantages, the total costs of production can be reduced.

Developing countries in Asia, transition economies in Europe, and a number of other countries, such as Mexico, have become active participants in supply-chain trade—not only for cars, but for such products as computers, cell phones, and medical devices. Overall, the share of manufactured goods in the total exports of developing economies has increased from 30 percent in 1980 to more than 70 percent today, with parts and components representing a substantial portion of the increase.

Supply-chain trade can bring great benefits but also new risks and policy challenges, as seen in 2008 when the volume of international trade collapsed during the financial crisis. The dramatic reduction in credit and demand caused by the crisis disproportionately hurt countries that were heavily dependent on supply-chain trade. An unexpected shock in a country that processes products used by plants in economies located "downstream" may have major negative repercussions—floods in Thailand in 2011, for example, affected a wide range of products, such as electronics, cars, and shoes.

Helps poorer economies

The supply chain allows poor countries to engage in manufacturing for the global market, because firms can locate labor-intensive and low-skill tasks in those economies—for example, the assembly of laptop computers and cell phones in Cambodia or Vietnam.

Although the share of the value of a product that is added by the processing activities in a low-income country will generally be small, the employment and income that are created can generate significant benefits. Over time, as countries increase their engagement in such trade, they may be able to increase the share of total value that is generated locally. China and other developing economies that are big players in supply-chain trade have been generating an increasing share of global manufacturing value added (see Chart 1).

Most of Africa and much of Latin America and the Middle East have not shifted toward the vertical specialization and supply-chain trade that have helped drive trade growth in east Asia, North America, and Europe. Fostering greater participation in such trade



by more developing economies is important. Supply-chain trade offers countries the opportunity to exploit their comparative advantages without having to develop vertically integrated industries that provide the producers of final goods with the intermediate inputs they need.

One reason for the skewed pattern of supply-chain trade is that the costs associated with international transactions—such as transportation, infrastructure, trade barriers, and border policies—are much higher in low-income countries than in richer ones (see Chart 2). In part, this reflects geography, but in many cases it is also a result of policies—such as product regulation—that raise trade costs. Reducing trade costs and improving connections to regional and global markets are preconditions for expanding investment in supply-chain activities and involve not just trade facilitation (such as reducing delays at border crossings), but also improving transport-related infrastructure services and the operation of regional transit regimes (WEF, Bain & Co., and World Bank, 2013; Arvis and others, 2012).

Supporting supply-chain trade

The expansion of supply-chain trade and the associated flows of foreign direct investment in production facilities have greatly reduced countries' incentives to use trade policy instruments like tariffs. Supply-chain specialization requires that firms be able to import products and services that they then process and export. Significant levels of import protection would increase costs and make firms uncompetitive.

The fear of losing competitiveness helps explain the trend toward lower import tariffs in supply-chain-intensive coun-

tries and the differences in the participation in supply-chain trade across countries. Many of the countries that participate much less in this type of specialization have higher barriers to trade—reflected not only in average tariff levels, but also in the use of measures to restrict exports of natural resources that are "upstream" inputs into global value chains. More generally, however, domestic policies that increase trade costs may hurt the efficiency of supply chains or impose costs on firms in other countries that are located either upstream or downstream along the supply chain and preclude supply-chain investment in a country.

Governments may not necessarily be aware of the effect of policies on investment incentives and operations. Existing trade agreements and similar forms of international cooperation usually are not designed with supply-chain trade in mind. But dealing with policies that affect such trade has implications for the design of trade agreements and trade cooperation—for both advanced and developing economies. Policies that raise the cost of international flows of goods, services, knowledge, and professionals—all core elements of supply-chain trade—are increasingly of a regulatory nature. Among them are

product safety and health regulation, licensing requirements, and assessment procedures. It is hard to achieve international cooperation on regulatory policies because regulators worry that such efforts will impede regulatory objectives. Matters are complicated further because many agencies may have a role in setting and enforcing product and process regulations that, generally, were designed without consideration of how they might affect supply-chain incentives.

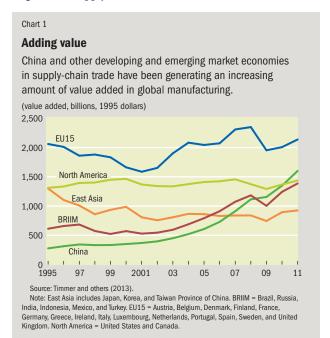
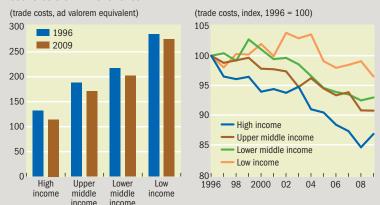


Chart 2 Costs count

One reason for the skewed pattern of supply-chain trade is that the costs associated with international transactions are much higher in low-income countries than in richer ones.



Source: Arvis and others (2013).

Note: The bars in the left panel represent the average trade cost for each country with its top 10 trading partners, reflected as an implicit tax on the value (ad valorem). The right panel represents the trend in trade costs over time. Trade costs are the difference between the costs observed for domestic transactions and those observed for international transactions and reflect such factors as geographic distance, trade barriers, border policies, and infrastructure or ease of international transportation. The costs are derived from trade and production data for each of the 178 countries in the sample. Countries are grouped according to World Bank income classifications based on annual per capita income: low income \$1,035 or less; lower middle income, \$1,036-\$4,085; upper middle income, \$4,086-\$12,615; and high income, \$12,616 or more.

From the perspective of supply-chain trade, international trade negotiations are less effective than they could be in facilitating trade because they deal with specific policy areas—such as product standards, customs valuation, and

A key task for supply-chain councils would be devising a plan to address the most detrimental policies.

import licensing—in isolation. But for a supply-chain operation, what matters are *all* the regulatory policies that affect the chain as a whole. An item-by-item approach may leave some important policy areas unaddressed, suggesting that trade officials should do more to "think supply chain" when designing trade agreements (Hoekman and Jackson, 2013).

Public-private partnerships

A first step to putting in place a broader approach would be to select a half dozen or so supply chains and create a mechanism—a supply-chain "council"—that brings together businesses, regulators, and trade officials from the countries concerned to identify the policy constraints that most hurt their operations. Active involvement and participation by businesses is critical because regulators and officials generally will not understand how a supply chain works and how policies affect it.

Regulatory policies presumably have a rationale, such as ensuring human health and safety. But it may be that there are redundancies in the regulations and overlapping requirements from different agencies that do not communicate with each other. For example, a chemical company that imports acetyl—used in making aspirin and paracetamol (also called acetaminophen)—into the United States must, on average, comply with similar regulations from five different agencies that often fail to coordinate and communicate effectively with one another. As a result, one out of three shipments is delayed—at a cost to the company of \$60,000 for each day of delay (WEF, Bain & Co., and World Bank, 2013). By focusing on the supply chain, the council could help identify such redundancies and possibilities for consolidation.

A key task for supply-chain councils would be devising a plan to address the most detrimental policies. The participation of the relevant regulatory bodies and those in government responsible for economic policy is necessary for the council to decide what can be done to reduce compliance costs for business without derailing regulatory objectives. The business community can help identify potential solutions.

These public-private supply-chain partnerships should establish a *policy performance baseline* for each supply chain to allow monitoring of the effect of changes in policies. This baseline would be based on data on specific outcomes—such as delays, variability in clearance times, and the use and efficiency of dispute-resolution mechanisms. Measurement is

important because removing one source of duplicative or redundant regulatory cost may not help if other policies continue to impose excess costs. Businesses must contribute the data needed for performance monitoring.

A number of issues must be addressed to make these suggestions work.

- Firms may not want to provide relevant data because of competitive concerns and generally will be disinclined to incur additional costs associated with collecting data that they do not already compile. Thus, the more the performance indicators build on data that firms already gather, the more straightforward it will be for supply-chain councils to monitor outcomes over time.
- Governments may not trust data provided by firms, while enterprises may worry about providing information that could be used by competitors. This calls for aggregating data so that individual businesses cannot be identified as the source of information. There are good models—such as those that have been developed for firm and household surveys—that can be used to address such concerns. The data must be compiled and processed by an organization that is technically competent and independent of industry.

Supply-chain trade offers new opportunities for low-income countries to become part of the "global factory." Facilitating such trade requires more than reducing domestic trade costs, although that is a critical precondition for participation in many types of such trade. International cooperation is needed to reduce the trade-impeding effects of duplicative regulatory policies. Whether in the context of the World Trade Organization, regional trade agreements such as the Transatlantic Trade and Investment Partnership being negotiated by the European Union and the United States, or agreements involving developing economies, a new approach that is based on closer partnership between the public and private sectors can help enhance the relevance of trade cooperation in supporting supply-chain trade.

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Homeless woman and shopper outside store, London, England.

Davide Furceri and Prakash Loungani

NCOME inequality is at historic highs. The richest 10 percent took home half of U.S. income in 2012, a division of spoils not seen in that country since the 1920s. In countries that belong to the Organisation for Economic Co-operation and Development, inequality increased more in the 3 years up to 2010 than in the preceding 12. The recent increases come on top of growing inequality for more than two decades in many advanced economies.

What explains this rise? A number of factors are at play (Milanovic, 2011). Technological change in recent decades has conferred an advantage on those adept at working with computers and information technology. Global

supply chains have moved low-skill tasks out of advanced economies. Thus the demand for highly skilled workers in advanced economies has increased, raising their incomes relative to those less skilled.

Our recent research uncovered two other contributors to increased inequality. The first is the opening up of capital markets to foreign entry and competition, referred to as capital account liberalization. The second source is policy actions by governments to lower their budget deficits. Such actions are referred to as fiscal consolidation in economists' jargon and, by their critics, as "austerity" policies.

These results do not imply that countries should not undertake capital account

Capital account liberalization and fiscal consolidation confer benefits but also lead to increased inequality

liberalization or fiscal consolidation. After all, such policy actions are not taken on a whim, but reflect an assessment that they will benefit the economy. What the research suggests is that these benefits should be weighed against their distributional impact. In many cases governments may

There are many channels through which opening up the capital account can lead to higher inequality.

have the flexibility to design the policy actions in a way that mitigates the distributional impact. IMF Managing Director Christine Lagarde (2012) urges a "fiscal policy that focuses not only on efficiency, but also on equity, particularly on fairness in sharing the burden of adjustment, and on protecting the weak and vulnerable."

Open to inequity

The past three decades have been associated with a steady decline in the number of restrictions that countries impose on cross-border financial transactions, as reported in the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions*. An index of capital account openness constructed from these reports shows a solid increase—that is, restrictions on cross-border transactions have been steadily lifted. At the same time, there has been an increase in income inequality in advanced economies—as measured by the Gini coefficient, which takes the value zero if all income is equally shared within a country and 100 (or 1) if one person has all the income (see Chart 1).

To uncover whether there is a link between the two developments, we studied episodes of large changes in the index of

Chart 1 Does openness hurt? Capital account liberalization and inequality in advanced economies have increased at a similar pace over the past two decades. (capital openness index) (Gini coefficent) 2.0 47 45 15-— 43 1.0 Capital openness of advanced - 39 economies (left scale) 0.5 -Gini coefficent (right scale) -3735 1985 89 93 97 2001 05 09 Sources: Chinn-Ito (2008) for capital account openness; Solt (2010) for Gini coefficent. Note: Average across 17 economies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Portugal, Spain, Sweden, United Kingdom, and United States.

capital account openness, which are likely to represent deliberate policy actions by governments to liberalize their financial sectors. Using this criterion, there were 58 episodes of large-scale capital account reform in 17 advanced economies.

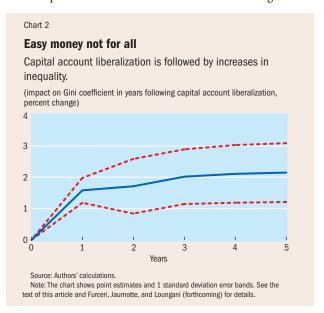
What happens to inequality in the aftermath of these episodes? The evidence is that, on average, capital account liberalization is followed by a significant and persistent increase in inequality. The Gini coefficient increases by about 1½ percent a year after liberalization and by 2 percent after five years (see Chart 2).

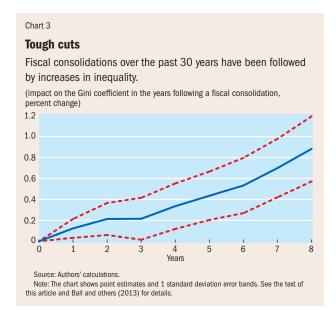
The robustness of this result is documented extensively in our research (Furceri, Jaumotte, and Loungani, forthcoming). In particular, the impact of capital account liberalization on inequality holds even after the inclusion of myriad other determinants of inequality, such as output, openness to trade, changes in the size of government, changes in industrial structure, demographic changes, and regulation of product, labor, and credit markets.

There are many channels through which opening up the capital account can lead to higher inequality. For example, such liberalization allows financially constrained companies to borrow capital from abroad. If capital is more complementary to skilled workers, liberalization increases the relative demand for such workers, leading to higher inequality in incomes. Indeed, there is evidence that the impact of liberalization on wage inequality is greater in industries that are more dependent on external finance and where the complementarity between capital and skilled labor is higher (Larrain, 2013).

Who gets hurt?

Fiscal consolidation—a combination of spending cuts and tax hikes to reduce the budget deficit—is a common feature of government actions. So history offers a good guide to studying the impact of these policies on inequality. Over the past 30 years, there were 173 episodes of fiscal consolidation in our sample of 17 advanced economies. On average across





these episodes, policy actions reduced the budget deficit by about 1 percent of GDP.

There is clear evidence that the decline in budget deficits was followed by increases in inequality. The Gini coefficient increased by 0.2 percentage point two years following the fiscal consolidation and by nearly 1 percentage point after eight years (Chart 3).

One explanation for these results could be that while fiscal consolidations coincide with inequality, it is actually a third factor that is responsible for movements in both. For example, a recession or a slowdown could raise inequality and at the same time lead to an increase in the debt-to-GDP ratio, thus raising the odds of a fiscal consolidation. However, the impact of fiscal consolidation on inequality holds even after controlling for the impacts of recessions and slowdowns. Other tests of the robustness of these results are reported in two recent IMF papers (Ball and others, 2013; Woo and others, 2013).

Fiscal consolidation can raise inequality through many channels. For instance, cuts in social benefits and in public sector wages and employment often associated with fiscal consolidation may disproportionately affect lower-income groups. The impact of fiscal consolidation on long-term unemployment is another possible channel, since long-term unemployment is likely to be associated with significant earnings losses (Morsy, 2011).

Policy lessons

Both capital account liberalization and fiscal consolidation confer benefits. The former allows domestic companies access to pools of foreign capital, and often—through foreign direct investment in particular—to the technology that comes with it. It also allows domestic savers to invest in assets outside their home country. If properly managed, this expansion of opportunities can be beneficial. Likewise, fiscal consolidation is generally undertaken with the aim of reducing government debt to safer levels. Lower debt in turn

can help the economy by bringing down interest rates—and over time, with a lighter burden of interest payments on the debt, the government can also cut taxes.

However, at a time when rising inequality is a source of concern to many governments, weighing these benefits against the distributional effects is also important. Awareness of these effects might lead some governments to choose to design policy actions in a way that redresses the distributional impacts. For instance, greater resort to progressive taxes and the protection of social benefits for vulnerable groups can help counter some of the effect of fiscal consolidation on inequality. By promoting education and training for low- and middle-income workers, governments can also counter some of the forces behind the long-term rise in inequality.

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An Achilles' Heel

Ravi Balakrishnan, Chad Steinberg, and Murtaza Syed

Inequality threatens Asia's growth miracle

VER the past 25 years, Asia has grown faster than any other region of the world, leading many to label the coming years the "Asian Century." With the region's successful integration into the global marketplace and its large middle class increasingly coming to the fore, there are good reasons to think that the world economy will increasingly shift toward Asia in the coming decades.

However, Asia's fortunes are threatened by a surge in inequality that has accompanied that quarter century of growth. Paradoxically, the same growth that reduced absolute poverty has created a widening wedge between haves and have-nots. This polarization has not only tarnished the region's economic achievements but, left unaddressed, could leave Asia's promise unfulfilled. As a consequence, policymakers throughout the region are looking for ways to arrest rising inequality and make growth more inclusive.

We look at what lies behind this worsening income distribution, why it matters, and what can be done to make Asian economic growth more inclusive.

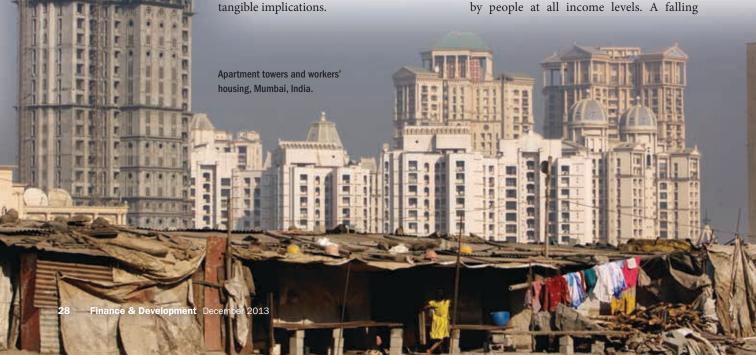
Inclusive growth matters

Society should be interested in confronting inequality of income and wealth not just for ethical reasons but because it also has more tangible implications.

For a given growth rate, rising inequality typically means less poverty reduction. A growing body of research also shows that income disparities are associated with worse economic outcomes, including lower growth and greater volatility. At a fundamental level, income inequality is now widely thought to retard growth and development, for such reasons as limiting the accumulation of human capital in a society (see "More or Less," in the September 2011 F&D). Recent work by Berg and Ostry (2011) also argues that unequal societies are less likely to sustain growth over a long period.

The most commonly used summary measure of income distribution is the Gini index. It varies from zero, which signifies complete equality because everyone has the same income, to 100, where there is total inequality because just one person has all of it. The lower the Gini index, then, the more equitably income is distributed among the various members of society. Relatively egalitarian societies like Sweden and Canada have Gini indices between 25 and 35, whereas most developed economies are clustered around 40. Many developing economies have Gini indices that are even higher.

Changes over time in a country's Gini index can help demonstrate whether economic growth has been "inclusive"—that is, whether its benefits are increasingly shared by people at all income levels. A falling



Poverty and inequality in India and China

Poverty in China and India has been considerably reduced since the two largest countries began their economic takeoffs—three decades ago in China, two in India.

China's poverty fell fastest during the early 1980s and mid-1990s, spurred by rural economic reforms, low initial inequality, and access to health care and education opportunities. In 1981, China was one of the world's poorest nations with 84 percent of the population living on less than \$1.25 a day—then the fifth-largest poverty incidence in the world. By 2008, 13 percent were in poverty, well below the developing economy average. India has also reduced poverty, although at a slower rate than China. In 1981, 60 percent of Indians lived on less than \$1.25 a day,

Gini index would suggest that the distribution of income is becoming more even.

More narrowly, we could home in on the most vulnerable—say, for example, the bottom 20 percent of the population—and see how much of the fruits of growth accrue to them. For example, we could ask how a 1 percent increase in national income affects them. If their incomes rise by at least 1 percent, growth can be said to be inclusive. But if the incomes of the poor rise by less, growth is *not* inclusive, because it leaves them relatively worse off.

Asia's blemished record

Over the past two and a half decades, growth in most Asian economies has been higher, on average, than in other emerging markets. This growth has enabled significant reductions in absolute poverty—the number of people living in extreme poverty (on less than \$1.25 a day) was almost halved, from more than 1.5 billion in 1990 to a little over 850 million in 2008. Despite this impressive overall record in poverty reduction, Asia is still home to two-thirds of the world's poor, with China and India together accounting for almost half (see box).

Moreover, inequality has increased across Asia. This is a new phenomenon for the region and contrasts starkly with its dramatic period of economic takeoff in the three decades before 1990. "Growth with equity" was the mantra during this period, as Japan and the Asian tigers were able to combine fast growth with relatively low—and in many cases *falling*—inequality. Asia's recent dismal record on inequality is therefore a stunning turnaround.

From an international perspective, inequality has risen faster in Asia over the past 25 years than in any other region (see Chart 1). The rise has been especially pronounced in China and east Asia, leaving Gini indices in many parts of the region between 35 and 45. That is still lower than in most sub-Saharan African and Latin American countries, which typically have Ginis in the range of 50. But countries in Latin America and sub-Saharan Africa (as well as in the Middle East and North Africa) have on average bucked the global trend and reduced inequality in the past quarter century, shrinking the gap between them and Asia.

In particular, even as the purchasing power of Asia's citizens has grown, the incomes of the bottom 20 percent have

fewer than in China. By 2010, the share fell to 33 percent, but was two and a half times higher than in China.

However, inequality has increased in both countries. According to official estimates, China's Gini (where zero represents the most equal income distribution and 100 the most unequal) increased from 37 in the mid-1990s to 49 in 2008. India's Gini ticked up from 33 in 1993 to 37 in 2010, according to the Asian Development Bank (2012). There is also significant inequality based on gender, caste, and access to social services.

Between one-third and two-thirds of overall inequality in China and India reflects a widening of disparities between rural and urban areas, as well as between regions.

not risen as much as those of the rest of the population (see Chart 2). This is true both in relatively less developed economies, including China and much of south Asia, and in more advanced economies like Hong Kong SAR, Korea, Singapore, and Taiwan Province of China. Asia's experiences are a marked contrast to those of emerging market economies in other parts of the world, in particular in Latin America, where the incomes of the bottom 20 percent have risen by more than those of other sections of the population since 1990. So while Asia has undoubtedly led the globe in terms of *rates* of growth over the past 25 years, the *nature* of that growth has arguably been the least inclusive among all emerging regions.

Less inclusive

Rising inequality has been an almost global phenomenon over the past two and a half decades, with Gini indices generally ticking up across advanced and developing economies. Many analysts have attributed the rise at least in part to international forces beyond the control of any one country, such as globalization and technological change that favors skilled workers over unskilled ones.



The difference between the Asian experience and that of the rest of the world suggests that, in addition to global factors, there may be some specific features of Asia's growth that have exacerbated the rise of inequality in the region. Addressing these factors—which our analysis suggests

The redistributive impact of fiscal policy in Asia is severely restricted by lower tax-to-GDP ratios.

include fiscal policies, the structure of labor markets, and access to banking and other financial services—may hold the key to broadening the benefits of Asia's growth, and hence sustaining it. In particular, increases in spending on education, years of schooling, and the labor share of income, as well as policies that expand access to financial services, significantly increase the inclusiveness of growth—that is, how much the income of the poorest rises when average incomes increase. Asia has fallen behind in many of these areas.

Public spending on the social sector is low, as a result of policy choices: The relatively low amount of public spending on health and education in Asia points to an important potential role for fiscal (tax and spending) policy in strengthening inclusiveness (see Chart 3). In advanced economies, taxes and transfer policies (such as those dealing with welfare and unemployment) have been estimated to reduce inequality on average by about one-quarter, based on Gini indices. In contrast,

Chart 2 No relative improvement Although Asian growth results in a large reduction in absolute poverty, it is less effective at helping the relative position of the poor. (poverty reduction since 1990) (degree of inclusiveness) More inclusive South Asia (excluding India) All other emerging market economies China Brazil East Asia LAC (excluding Brazil) India Indonesia More pro-poor NIEs -1 Percent change Sources: Penn World Tables 7.0; World Bank, PovcalNet database; and IMF staff calculations. Note: The red bars are a measure of how pro-poor growth is-that is, how much absolute poverty (per capita income below \$2 a day) is reduced by a 1 percent increase in overall per capita income. There are no data for NIEs. The blue bars are a measure of the inclusiveness of

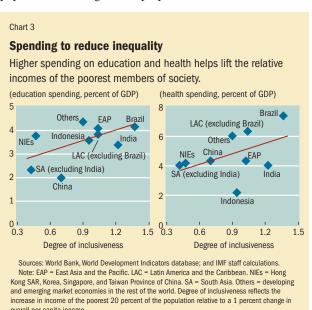
that growth—that is, how much the income of the poorest 20 percent changes in response to a 1 percent increase in overall per capita income. East Asia = Cambodia, Malaysia, Philippines,

Thailand, and Vietnam. LAC = Latin America and the Caribbean. NIEs = Hong Kong SAR, Korea,

the redistributive impact of fiscal policy in Asia is severely restricted by lower tax-to-GDP ratios, which average half of those in advanced economies and are among the lowest in developing regions (Bastagli, Coady, and Gupta, 2012). The result is substantially lower levels of social spending. Greater reliance on less progressive tax and spending instruments also adds to inequality. In Asia, indirect taxes, such as those on consumption of goods and services, account for half of tax revenue, compared with less than one-third in advanced economies. Such taxes are paid disproportionately by the poor.

The labor share of income has shrunk considerably: In the past two decades across Asia there has been a significant decline in labor's share of total income and an increase in the share that goes to capital, averaging about 15 percentage points, according to the Asian Development Bank (2012). This contributes to inequality because capital income tends to go to wealthier people, while poor people who work in the formal sector earn most of their income from wages. Technological change is part of the reason the capital share of national income has risen—and also part of the reason economic growth does not trigger as big an increase in demand for labor as it used to. But part of the changes in the capitallabor share of income may also be attributable to a deliberate bias toward industries that have a high capital-to-labor ratio in some parts of Asia. That tilt is reflected in their manufacturing and export-led policies, relatively low employment gains compared with their rapid growth rates, and the concentration of wealth in the hands of corporations rather than households. In addition, rising inequality is linked to the relatively weaker bargaining power of workers. Many workers in Asia toil in the mainly unregulated informal sector, which depresses wages. Moreover, even in the formal sector, lower-skilled workers have little to no bargaining power to raise relative wages.

Financial access is thin: Lack of access to finance is a major impediment in many parts of Asia, where more than half the population and a significant proportion of small and medium-



Singapore, and Taiwan Province of China.

sized enterprises have no connection to the formal financial system of banking, insurance, or securities. Research has demonstrated that financial development not only promotes economic growth but also helps apportion it more evenly. This is because lack of access to financial services and costs associated with transactions and contract enforcement take the biggest toll on poor people and small-scale entrepreneurs, who typically lack collateral, credit histories, and business connections. These deficiencies make it almost impossible for poor people to obtain financing, even if they have projects with high prospective returns. By fostering the development of financial markets and financial instruments—such as insurance products that make it easier for businesses and individuals to cope with shocks such as accidents or death—governments can both spur growth and help ensure that it is distributed more equitably.

Improving performance

Chart 4

Labor laws play a role

So, on this basis, what types of policies might help Asian economies redress the recent period of less inclusive growth?

Fiscal policies: Asian governments must increase spending on education, health, and social protection, while maintaining fiscal prudence. Part of this could be achieved by raising tax-to-GDP ratios, particularly through a more progressive tax system or by broadening the base of direct taxes to boost the redistributive impact of fiscal policy. At the same time, targeted social expenditures aimed at vulnerable households could be increased. Conditional cash transfer programs—which require a specific socially desirable action from a household, such as increased school attendance or vaccinations—are on the rise in low-income emerging market economies. Brazil's Bolsa Familia and Mexico's Opportunidades are two of the largest such programs and are considered successful in raising the incomes of the poor.

Labor market policies: Labor policies that enhance rural employment programs, increase the number of workers in

When employment protection is stronger and higher minimum wages are in place, the poor do relatively better. (minimum wage as percent of value (level of employment protection, index) added per worker) 0.4 China 🔷 Indonesia Indonesia 0.3 SA (excluding Brazil 0.5 India India) 0.2 SA (excluding India) 0.4 China 0.1 LAC (excluding Brazil) 0.3 0.2

Degree of inclusiveness Source: World Bank, Doing Business indicators.

1.0

0.5

Note: Employment protection index measures the protection of labor laws as the average of alternative employment contracts, the cost of increasing hours worked, the cost of firing workers, and dismissal procedures. EAP = East Asia and the Pacific. LAC = Latin America and the Caribbean. NIEs = Hong Kong SAR, Korea, Singapore, and Taiwan Province of China. SA = South Asia. Others = developing and emerging market economies in the rest of the world. Degree of inclusiveness reflects the increase in income of the poorest 20 percent of the population relative to a 1 percent change in overall per capita income

1.5

0.5

Degree of inclusiveness

1.0

1.5

the formal sector and reduce the size of the informal sector, remove impediments to labor mobility, and enhance worker training and skills could disproportionately help lower-skilled members of the labor force. In addition, the introduction of, or increases in, minimum wages has also been advocated in some countries to support the income of low-earning workers. For example, China's announcement in February 2013 of a 35-point plan to tackle income inequality included a provision to raise minimum wages to at least 40 percent of average salaries across most regions by 2015. In general, we found that inclusiveness is positively associated with the degree of employment protection and minimum wage levels (see Chart 4).

Financial access: Recommendations based on international experience include expanding credit availability by promoting rural finance, extending microcredit (modest loans to small entrepreneurial operations), subsidizing lending to the poor, promoting credit information sharing, and developing venture capital markets for start-up businesses.

Follow through

If Asian countries pursue policy measures to broaden the benefits of growth, notably enhanced spending on health and primary and secondary education, stronger social safety nets, labor market interventions for lower-income workers, and financial inclusion, they could stem the tide of rising inequality.

Many of these policies have the added potential to reduce the bias toward capital and large corporate entities, broadening the benefits of growth for household incomes and consumption. In this way, they could also facilitate the needed change in Asia's economic model from external to domestic demand that would prolong the region's growth miracle and support global rebalancing. The stakes are high. Without action to redress inequality, Asia may find it difficult to sustain its rapid rates of growth and take a position at the center of the world economy in the years to come.

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A Fair Assessment

Property taxes are an effective but unpopular way to reduce inequality

John Norregaard

N an upscale neighborhood in Cape Town, South Africa—a country that like many others has been challenged by increasing income inequality in recent years—a 1,600-square-foot apartment may have a price tag of about \$480,000, costing the owner about \$2,700 in annual property taxes to the local government at current rates.

In contrast, the owner of an apartment in a much less attractive area, valued at, say, onetenth of the first one, would not pay a tenth the property taxes, \$270 a year, but a proportionally much smaller \$150 a year.

Property taxes allow governments to redistribute from the rich to the poor, thus reducing inequality in their constituencies (although ideally the focus should be on the redistributive impact of all government taxes and expenditures combined). But governments generally do not make as much use of property taxation to address income and wealth inequality and raise revenue as they could. That is because property taxes are also an unpopular tax—perhaps because they are hard to evade—that can be difficult to administer.

The term "property tax" is often used in a broad sense to include a spectrum of levies. such as annual taxes based on the value (or size) of immovable property, taxes on sales of real property, net wealth taxes, taxes on inheritances and gifts, and taxes on transfers of securities. Here, we use the concept in the traditional and narrow sense of regular taxes on immovable property. These taxes have been used since ancient times-for example, in China and Greece (The Economist, 2013)—and luminaries such as Adam Smith, David Ricardo, and Winston Churchill have emphasized their benign features. Recently there has been a dramatic interest in boosting revenue from property taxes in countries as diverse as Cambodia, China, Croatia, Egypt, Greece, Ireland, Liberia, and Namibia (see Norregaard, 2013, for details).

Why this recent upsurge of interest?

Counting on taxes

Cross-country property tax collection varies sharply in high-income countries—from close to nil in Croatia, Luxembourg, and Switzerland to over 2 percent in countries including France, Japan, the United Kingdom, and the United States. Middle-income countries rely less on such taxes.

(proportion of countries, percent, 2010)

40

40

Middle-income countries

30

20

High-income countries

10

0 0 0.5 1 1.5 2 2.5 3 3.5 4

Tax revenue as percent of GDP

Sources: IMF, Government Finance Statistics; Organisation for Economic Co-operation and Development; and IMF staff calculations.



Beachfront neighborhood, Cape Town, South Africa.

Potential revenue

Property taxes on immovable property yield fairly modest amounts of revenue in most countries. Their average yield in advanced economies is about 1 percent of GDP. That is two and a half times the average level in middle-income countries, which garner 0.4 percent of GDP. (Little is known about their revenue importance in low-income countries.) And there are huge variations in revenue raised within the two groups, especially among advanced economies (see chart). These large disparities in tax yield doubtless reflect differing degrees of popular opposition to their use and technical constraints in their administration—but they also signal a large potential for enhanced use.

The highest level of revenue among middle-income countries, which could be taken as an ambitious general revenue target for these countries, happens to be the 1 percent of GDP that is the average for developed economies. Among high-income countries, a few—Canada, the United Kingdom, and the United States—raise more than 3 percent of GDP in annual property tax revenue, and a number raise over 2 percent of GDP (France, Israel, Japan, New Zealand). So a target of 2 to 3 percent of GDP seems a realistic long-term goal for high-income countries.

Property tax reform that broadens the tax base and raises tax rates is high on the policy agenda in many countries. The reason varies by country, but usually reflects the need to raise revenues to reduce deficits or support cuts in other taxes, as well as efficiency and fairness considerations. A few countries, mainly in Asia, have recently increased property taxation to quell strong property price appreciation.

Property taxes allow governments to redistribute from the rich to the poor.

Property taxes are generally considered to be more efficient than other (particularly income) taxes, in part because they are not believed to discourage work, saving, and investing, and they are harder to evade than most other taxes, primarily because of the immobility of property. Location-specific attributes are reflected in property values: a pleasant summer house by the lake is easy for a government to identify and impossible for an owner to hide in an offshore bank account.



There is growing consensus that the tax is borne predominantly by those with middle and high incomes.

Studies of the determinants of economic growth have generally found taxation of immovable property to be less harmful to growth than other forms of taxation, in particular compared with direct taxes (OECD, 2010). However, it is generally more efficient to tax residential property than business property because land and buildings are intermediate inputs in production. The exception is when the taxes serve as a rough form of payment for services.

Reform of property taxes tends to engender intergovernmental tension. It is common, and widely recommended, for tax revenues to be allocated to a subnational government level. After all, the quality of publicly provided local services is generally reflected in property values. Taxing at the local level can improve accountability and the effectiveness of political institutions, but may require some reduction of intergovernmental transfers. Agreement on minimum and maximum rates may also be necessary to limit tax competition between local governments (undercutting each other) and tax exporting (shifting too much of the burden to nonresidents).

Fair or not?

The fairness of property taxes—who bears the real burden has been intensely debated over the years. There is growing consensus that the tax is borne predominantly by those with middle and high incomes. This is why strengthening property taxation in many countries is now seen as a way to improve the fairness of the overall tax system given increasing levels of inequality. The progressivity of the tax can be enhanced by a variety of steps to reduce or eliminate tax liabilities for lowincome or low-wealth property owners. For example, one can tax only properties above some threshold value—and then gradually increase the rate; exempt the elderly and disabled from the tax or charge them at lower rates; or allow "mortgaging" or delayed payments of property tax liabilities for lowincome households. If a property tax is truly charged as what tax specialists call a benefit tax—equal to the value of services received—such changes would have no distributional impact. But this is rarely true in practice.

Economists tend to strongly favor increased reliance on (well-designed) property taxes owing to such attractive economic properties as less distortion and greater fairness than other taxes, but good revenue potential. Still, there is widespread popular resistance to their increased use stemming in

part from their transparency and the relatively limited potential for avoidance and evasion. In fact, even though the property tax has been called by its proponents the "perfect tax" (Webb, 2013), it is often maligned as the most hated among taxes (Cabral and Hoxby, 2012).

Not only are property taxes unpopular, they are also somewhat difficult to implement. Calculating a market value-based tax on land and buildings is challenging and requires substantial investment in administrative infrastructure. This includes establishing a comprehensive official register that records physical coordinates in addition to ownership and property value data. This is a data-intensive exercise that typically requires extensive cooperation and exchange of information among several entities, including tax authorities, local governments, courts, and mapping agencies. To ensure the buoyancy—that is, growth of the tax revenue in tandem with increases in property values-and fairness of the tax, an effective valuation system is required that accurately tracks market values through regular updates. Although the development of effective computer-assisted mass appraisal (CAMA) systems has simplified the valuation process considerably, many practical constraints remain, including the lack of well-qualified property appraisers in many countries.

Finally, in many countries property taxation is not effectively enforced, not only because it is politically unpopular, but also because historically it has not generated much revenue. In addition, there may be little incentive to collect the tax because the entity responsible is not always the one that ultimately receives the revenue.

There are strong economic arguments for strengthened immovable property taxation. But careful planning and execution, combined with improvements to the basic administrative infrastructure—and, in many cases, strong political will—are essential for successful property tax reform. And that translates into a tax system illustrated by our houses in Cape Town—one that both generates revenues and reduces inequality.

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This article is based on the author's 2013 IMF Working Paper "Taxing Immovable Property: Revenue Potential and Implementation Challenges."

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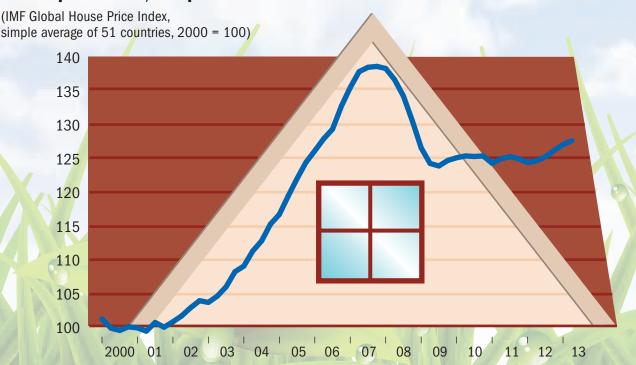
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Global House Prices INCHING UP The housing market is recovering, but real estate in many countries is still overvalued

LOBAL house prices rose another notch in the second quarter of 2013. This marks the sixth consecutive quarter of growth since the beginning of 2012. House prices rose in 32 of the 51 advanced and emerging market economies in the IMF's Global House Price Index, compared with increases in 9 countries in the second quarter of 2009, when the housing crisis was in full swing. Among Organisation for Economic Co-operation and Development (OECD) members, increases and declines are more evenly balanced. But in many OECD countries, the ratio of house prices to rents—a typical measure of house price valuation—remains above historical averages, leaving room for price corrections down the road. In Canada, for example, the ratio is 85 percent above the average.

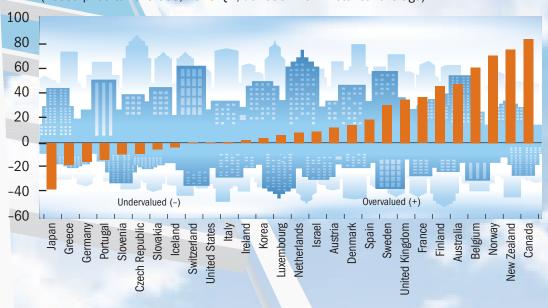


House prices rise, but pace is slow





(house-price-to-rent ratio, 2013:Q2, deviation from historical average)



Highest home price increases

Hong Kong SAR	+15%
0 - 0 -	

Ukraine +12%

Philippines +10%

Biggest home price decreases

Hungary -11%

Netherlands -11%

☐ Greece **−11**%

House prices around the world

(annual percent change, 2013:Q2)



Prepared by Hites Ahir and Prakash Loungani of the IMF's Research Department. The data are derived from the Organisation for Economic Co-operation and Development, Global Property Guide, and Haver Analytics. Unless noted otherwise, data are for the second quarter of 2013 or the latest available.



New Money

Åke Lönnberg

Introducing a new currency is a complex process— one that Turkmenistan completed successfully

popular destination for visitors to the IMF's Washington, D.C., headquarters has long been a 40-foot-long display of each member country's currency.

Most countries have their own currency, which is an important part of their national identity, though some belong to a monetary union and share a common currency with the union's members; others use that of another, often larger, country.

On occasion, a country must introduce a new currency. Turkmenistan, the former Soviet republic in central Asia, decided in 2008 to undertake a currency reform.

A major gap between the official exchange rate and the informal or market rate meant that Turkmenistan's price system had become complex and inefficient. This, in turn, created complexities in accounting and statistical reporting. So the government decided to introduce a new currency before launching market-oriented reforms. Currency reform was regarded as the foundation for further strengthening the macroeconomic framework, particularly monetary transmission: the more the population relies on the local currency rather than U.S. dollars, the more control the government has over macroeconomic policy.

The total and orderly overhaul of Turkmenistan's currency system in 2008–09 in many respects serves as a model for other countries.

Big decisions

The introduction of a new currency is not undertaken lightly. The motivation could be hyperinflation, exchange rate collapse, massive counterfeiting of the existing currency, or even war. Or it could be an intentional change—for example joining a monetary union, such as the European Monetary Union.

Changing a national currency is a highly political decision. Sometimes the existing currency does not meet the economy's needs. The typical economy in need of currency reform is cash based and highly dollarized, with multiple currencies circulating at the same time.

The single most important price in any economy is the price of its currency vis-à-vis other currencies. Countries that assign non-market-based exchange rates for different goods or services—or for imports versus exports—tend to have significant distortions in their economy. Over time, this usually leads to slower growth overall. Eventually, the general public, the business community, and politicians may start pressing for currency reform and the introduction of a new currency.

Currency reforms are typically complex and risky: global experience confirms that a successful outcome is never guaranteed. The main ingredient in the successful introduction of a new currency is a strong commitment by the central bank together with the government to take the steps needed to ensure that the new currency is perceived as stable by companies, the general public, and the international community.

Introduction of a new currency comprises four phases. First, the necessary *preconditions*—sound macroeconomic policies and strong financial sector legislation—should ideally be in place or under way. Next, careful *preparation* is required, setting up the policies and processes behind the reform and drafting a detailed budget for the entire currency reform (including the cost of printing and minting the new cash currency). Then comes *production* of the new currency, and finally the most challenging phase: *implementation*.

Setting the stage

A government facing currency reform often has limited ability to pursue macroeconomic policy. If the country is suffering from hyperinflation, its macroeconomic policies to date by definition were unsound. In some cases, a currency reform must be implemented despite a difficult macroeconomic situation. Currency reform alone is unlikely to resolve such problems and will yield its benefits only if underpinned by fiscal and monetary action. But psychologically, introducing a new currency can itself facilitate the stabilization of an economy. It is sometimes combined with exchange rate unification—to eliminate the complications of both an official exchange rate and unofficial market rate.

Turkmenistan was able to achieve favorable macroeconomic conditions before it implemented exchange rate unification and currency redenomination. During 2006–07, the economy was growing more than 11 percent a year, inflation was in single digits, and fiscal and external balances were strong.

A currency reform must be supported by financial sector legislation. Existing legislation—including the law establishing the central bank and regulation of banks and other financial institutions—should be reviewed to ensure consistency

with international best practices. A law and regulations on the specific currency reform are also necessary, and other legislation—for example, governing accounting and financial reporting—may require updating. This work can be sup-

The typical economy in need of currency reform is cash based and highly dollarized.

ported by technical advice from the IMF and other countries' central banks. Such technical assistance includes initial general guidance as well as detailed recommendations based on currency reforms in other countries.

In a crisis situation, the government has little, if any, control over the circulation of different currencies. For that reason, the economy tends to be highly dollarized—that is, many transactions are made with a foreign currency, often the U.S. dollar. Moving forward, the government should favor a currency regime that supports open trade and free markets—one that allows international competition and is not overly protectionist.

The central bank is the arm of the state responsible for introducing a new currency, but it is not necessarily in a position to do so. It may lack staff with relevant experience, or sufficient branches throughout the country from which to operate, or even the funds necessary to finance a reform. Strengthening the institutional capacity of the central bank and ensuring it has the resources needed are critical preconditions for currency reform.

Private banks also play a key role in currency reform. But the banking sector may be weak or, in some cases, virtually nonexistent. In some parts of the world, informal funds transfer systems such as *hawala* and *hundi* are more vibrant or have nationwide networks that surpass those of banks. In such cases, collaboration between the central bank and these payment system operators is critical to the success of the reform.

The central bank must assess the extent to which counterfeit banknotes circulate. Together with the ministry of finance and the commercial banks, it should formulate a strategy to avoid an increase in counterfeit currency during the critical implementation stages of the currency reform.

The central bank should prepare a budget for the entire currency reform early on and revise it as necessary over time. The IMF can offer technical advice on preparing such a budget.

Introducing a new national currency is a highly complex project, which requires a well-functioning accounting system. Throughout the various stages, tested systems must be in place for independent auditors to safeguard the integrity of the currency reform, by ensuring correct reporting and accounting of the currency exchange. Failure in this area is not only costly but also potentially devastating to the currency reform's reputation.

Important as all these preparations are, the success of a currency reform depends just as much on a successful public education campaign. The central bank needs to coordinate this campaign with other agencies, financial sector representatives, merchants, and the general public. A delicate balance must be struck between providing sufficient public information and the need for confidentiality to avoid releasing clues to counterfeiters that could be used to undermine the integrity of the new currency. The information campaign should encourage people to deposit their cash currency in accounts at banks. The campaign must make it clear that once the currency reform is initiated, account holders can withdraw their money in the form of new banknotes. A second important point for the public education campaign is timely information on the stages of the currency reform to discourage a run on banks with temporary liquidity problems.

In Turkmenistan, the central bank conducted a proactive public communications strategy that began early in the currency reform. The terms of the redenomination were carefully defined and announced in advance. An awareness campaign was carried out throughout the country. Booklets, illustrating the new banknotes to be distributed, were published in national and local newspapers along with explanatory articles. In addition, pocket-size cards comparing the denomination of old and new manat were distributed to the public. And the Central Bank of Turkmenistan set up a phone hotline to answer questions from businesses and the public.

Lights, camera, action

A new currency's name is a psychologically important decision for the government. One option is to emphasize continuity with the old currency by retaining the old name or adding "new" to it. Alternatively, the government may choose to underscore a break with the past by giving a completely new name to the currency to mark the start of a new monetary era.

In Turkmenistan, the government decided to keep the name "manat" for the redenominated currency. However, in line with an international convention among countries and central banks, the International Standards Organization changed the three-digit ISO 4217 code from TMM for the pre-2007 manat to TMT for the new Turkmen manat.

The banknote printer and the minter of coins should be selected competitively and in the international market. Even if domestic producers are available, they should be required to compete for the contract. It is not uncommon, by the way, for various banknote denominations to be produced by different international firms.

Turkmenistan's banknotes were printed by the British firm De La Rue, and the coins were minted by another U.K. company, the Royal Mint. De La Rue is now testing production of the banknotes from paper produced with local raw materials—Turkmen cotton, renowned since ancient times for its high quality.

Decisions on the artistic design of banknotes are almost always complex and time consuming. The design must be integrated with necessary security features: the higher the denomination, the more advanced security features are required. These often include watermarks, security threads, see-through registers, and hidden numerals. Decisions also need to be made on the size of banknotes—a uniform size as for U.S. banknotes or a different size for each denomination as for euro banknotes. Finally, the color scheme should be determined—again, uniform colors, like U.S. banknotes, or clearly different colors as for most other banknotes.

Hyperinflation and exchange rate collapse slash the value of a national currency, forcing the issuance of banknotes in ever higher denominations. In Yugoslavia in 1993, a banknote reached 500 billion dinars, and Zimbabwe's highest banknote issued was 100,000 trillion Zimbabwe dollars in 2008. In such situations, a redenomination of the currency is not only appropriate but also necessary. Redenominating a currency means administratively changing its face value. In itself, a redenomination makes no one richer or poorer. Technically most redenominations of currencies are undertaken by using factors of 10, 100, or 1,000 and simply moving the decimal point a certain number of steps to the left to establish a new value. Such a change is simple to explain to the general public and easy for companies to implement. It also represents a clear way of monitoring whether price gouging is taking place.

The first step in the Turkmen currency reform was to unify the exchange rate. In the past, because of a shortage of foreign exchange, there had been a dual exchange rate system made up of an official rate pegged at 5,200 manat per U.S. dollar and an informal parallel market rate of about 23,000 manat per U.S. dollar.

Later, the government devalued the official rate to 6,250 manat per dollar and introduced a commercial rate of 20,000 manat per dollar at which banks could trade freely with the public. The two markets were successfully unified on May 1, 2008—at the rate of 14,250 manat per dollar, a level consistent with the country's strong external position. Currency exchanges were located wherever customers might want to exchange dollars for manat, offering easy and official access at close to the informal rate, thus killing off demand for the informal market.

At the beginning of June 2008, the Turkmen government issued new foreign exchange regulations under which the Central Bank of Turkmenistan began providing banks and authorized currency changers ready access to foreign exchange, which in turn became available to the market-oriented private sector. Previously the central bank had been propping up the official, unrealistically low, exchange rate by restricting access to dollars. The provision of sufficient foreign exchange to an extensive network of exchange bureaus across the country eliminated the black market rate.

While unifying the exchange rate is important, the authorities must also modernize the national currency for a currency reform to be comprehensive. In Turkmenistan, the modernization entailed issuing a new family of banknotes that were smaller in size than the unnecessarily large old banknotes. It also included the reintroduction of coins. The Turkmen

economy had been cash oriented for a long time, and the U.S. dollar was extremely popular. The weakness of the manat to the dollar, which required thousands of manat in an exchange



There is generally a shift into coins from denominations that were issued in banknotes.

conversion, was deemed unacceptable. One way to correct this was to redenominate the national currency.

After the successful exchange rate unification, the authorities moved forward with the introduction of the new manat, revaluing the currency by a factor of 1 to 5,000. The pegged exchange rate of 14,250 manat per dollar resulted in an exchange rate of 2.85 new Turkmen manat to the dollar.

A presidential decree issued August 27, 2008, announced the introduction of the redenominated manat on January 1, 2009.

Even without redenomination, the denomination structure of a new cash currency is worth considering. Usually, lower denominations are eliminated and higher denominations added. There is generally a shift into coins from denominations that were previously issued in banknotes. Cultural and sociological preferences must be considered. For example, in some countries, such as Somalia and South Sudan, coins are not popular. In other countries, such as Germany, people want access to very high-denomination banknotes. A rule of thumb often applied in developing economies is to set the highest denomination of the national currency no lower than the equivalent of 20 dollars.

Money in hand

Turkmenistan issued six new banknote denominations on January 1, 2009: 1, 5, 10, 20, 50, and 100 new manat. This was a major expansion of the upper denominations—the previously highest denomination, 10,000 old manat, now corresponded to a mere 2 new manat. The six newly issued banknotes each differed in size and were all shorter and narrower than previous banknotes. The design of the front of the banknotes presented prominent historic Turkmen personalities. The reverse side, as in the past, portrayed new key buildings and monuments of modern Ashgabat, the Turkmen capital.

In parallel, new coins were issued in the following denominations: 1, 2, 5, 10, 20, and 50 tenge; and the following year, two more coins were circulated with 1 manat and 2 manat denominations. This represented a de facto reintroduction of coins after high inflation and intense exchange rate pressure had rendered the previously issued coins valueless.

Once the design and denominations of a new currency are selected, the central bank must decide how much to produce, based on research on the demand for money in general and on various cash currency denominations in particular. Data

on past orders of banknotes and coins should give reasonable estimates, which must be assessed in light of recent changes in public demand for the currency compared with other currencies. Technical advice is available from international banknote printing firms such as De La Rue and Giesecke & Devrient, and for coin denominations from mints such as the Royal Mint.

The next phase of currency reform is the conversion from old cash currency to new. The authorities must decide—at first privately—when the currency exchange will begin, when it will end, and whether or not to cap, in absolute terms, the amount to be exchanged. Then, decisions on the announcement of and publicity for the currency exchange must be made. Other essential decisions include the conversion rate and how financial assets, resident/nonresident accounts, and existing currency contracts will be treated in the currency exchange.

In addition to the guidance of the central bank and the ministry of finance, the views of the ministries of justice, commerce, and defense; the police force; the chamber of commerce; bank representatives and representatives of the informal payment system (if it plays an important role in the country); the general public; nongovernmental organizations; and key media outlets should be considered.

The key stakeholders, under the leadership of the central bank, should develop a detailed plan for distribution of the new currency. They must identify exchange points (places where the public can exchange the old money for new and where cash currency can be stored temporarily); establish facilities for more permanent storage of currency, such as vaults and strongboxes; and address various logistic issues, including exchange point staffing.

In its plan for the currency reform, the central bank must decide how to handle the soon obsolete cash currency. Old banknotes that have been exchanged for new currency should be immediately invalidated via ink markings or holes drilled in the currency. After a second counting, the then invalidated banknotes should be destroyed by shredding or burning. Routines should also be established for the collection and transportation of old coins, which may be sold by the central bank for scrap metal and ultimately melted down.

In line with common international practices, the Turkmen central bank allowed the two sets of banknotes to be circulated during 2009. By 2010, all banks were expected to exchange the old currency for new manat. And after that, the old currency was demonetized and retained only numismatic value.

The IMF's currency display was recently dismantled to allow for repairs to the building. If and when the display is restored and updated, there will be several new currencies for visitors to view, including the new Turkmen manat.

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What Is a Price?

Maybe more than one bargained for. The answer varies depending on the transaction

Irena Asmundson

T its most basic, a price is the amount of money that a buyer gives to a seller in exchange for a good or a service. When someone hands over \$2.00 and receives a pound of tomatoes, the price is straightforward observation: \$2.00 a pound. When an actual, observable transaction takes place, the price is sometimes called the traded price or the spot price.

But there are many other types of price. Some of them, such as the marginal price, are conceptual. Others are related to the timing of a potential transaction or to the relative power of the buyer and the seller. All of them, however, ultimately have some relation to the spot price.

Suppose that the tomato transaction takes a slightly different form. The seller might indicate a willingness to sell the tomatoes at a certain price, called the *selling price* or the *ask price*. The buyer may make it known that he is willing to pay a different price, which is called the *bid* price. Such a transaction can occur only if the seller values the tomatoes at \$2.00 a pound or less, and the buyer values the tomatoes at \$2.00 a pound or more. That is, the bid price must be at least as high as the ask price. If it is not, one or both of the parties would be better off keeping what they already had, whether it is tomatoes or money.

Clearing the market

Most of the time, when economists speak of price, they are referring to a *market-clearing price*—that is, the price at which the amount of a good or service supplied by all sellers in a market is equal to the amount demanded by all buyers. Generally, economists assume that demand decreases as prices rise, and supply increases with price. The point at which these two prices are the same, or intersect, is the market-clearing price (see chart). If a farmer raised prices to a level greater than the market-clearing price on tomatoes, she would not sell them all, and if she lowered prices, she would have to turn away customers because she would run out of tomatoes before the buyers ran out of demand.

But market-clearing prices are not set in stone. Supply and demand can change. For example, if all customers suddenly decided they liked tomatoes more than they used to and were willing to pay a higher price for the same amount, the market-clearing price would rise. It could also rise if the supply of tomatoes declined—because of, say, planting decisions or the weather. The clearing price could also decline with changes in demand or supply.

Many prices

The above examples assume a single price that everyone is charged for the same good or service. But in reality many different prices can exist in a market at the same time, depending on the conditions under which a sale takes place.

Suppose the local supermarket has a lot of tomatoes that are likely to go bad in a few days. The market's managers decide to reduce the price to attract buyers and move more tomatoes. One pound of tomatoes is still \$2.00, but if a buyer takes two pounds the cost is \$3.00. There is a difference between a *marginal price*—the cost of an additional unit of a good, in this case a pound of tomatoes—and the *average price*. If a buyer takes two pounds, the average price is \$1.50 pound. But the marginal price is \$2 for the first pound and \$1 for the second.

In perfect harmony The market-clearing price is the one at which demand for a good or service and the supply of the good or service are equal. High



Prices can also differ depending on when the actual transaction takes place and under what conditions. For example, suppose a customer wants to buy 10 pounds of tomatoes and pick them up the next day. The price for a transaction scheduled for the future is called a *forward* price. The farmer may be happy to set aside those 10 pounds for the customer. Or she may worry that the customer will forget, leaving her with unsold tomatoes. She may ask for payment in advance or perhaps for a partial payment as a deposit. If the customer pays in advance, he runs the risk that the farmer will forget to set aside the tomatoes, leaving him scrambling to find tomatoes. Once again, the price will depend on the relative values the farmer and the customer place on those tomatoes.

Paying for certainty

If the customer values the certainty of getting those tomatoes, he will be willing to pay a higher price. For example, the tomatoes could be for a birthday dinner for someone who loves tomatoes. But if the tomatoes are for a tomato-tossing game at a picnic, the customer could use water balloons or eggs instead.

Suppose the farmer has enormous fields, and 10 pounds of tomatoes represents a small amount of her daily sales. The value she places on knowing the customer will show up is relatively low. Moreover, there is little risk that she will run out of tomatoes before the customer shows up. Whether the customer buys from her does not matter to her pricing decision, and the customer's forward price should be the same as the expected spot price the next day. If that is the case, the customer might not even bother to settle on a forward price with the farmer. When the seller has the power to set prices and the buyer cannot bargain, the seller is said to be a *price setter*, and the buyer is said to be a *price taker*.

If, however, 10 pounds represents half the farmer's daily sales of tomatoes, the value the customer places on those tomatoes matters a great deal. If the customer wants them for his sister's birthday, he may be willing to pay a higher forward price, which the farmer will be willing to accept. If the customer does not care that much about the tomatoes, he may not be willing to pay enough to secure the supply. When there are many farmers from whom to buy, no individual seller is able to set the price; the sellers are said to be price takers.

When there are many buyers and many sellers, a single market-clearing price is most likely to prevail for everyone.

A final type of price relates to future options. One can buy the right to transact at a prespecified price in the future, paying what is called an *option* price. The prespecified price at which one exercises an option is called the *strike* price. This is the price that comes into play when there is a great deal of uncertainty about how the spot price might change.

Consider again the case of tomatoes, for example. They need hot, dry weather to ripen properly. If the weather is like that in the near future, tomatoes will be abundant, and their price should be relatively low. If, however, rain is forecast for the near future, buyers and sellers would antici-

pate fewer tomatoes will be ready for harvest, and the price should rise (assuming the same demand). In the latter case, the customer may be willing to pay a small amount now (the option price) to secure the right to buy 10 pounds in the

In reality many different prices can exist in a market at the same time.

future at a prespecified price (the strike price). If the spot price is higher than the strike price, the customer can exercise the option and buy the tomatoes at the strike price. If the spot price is lower, the customer pays the spot price and saves some money. The option price thus has to be both low enough to induce the customer to pay for the certainty and high enough to compensate the seller for honoring the strike price if it is lower than the spot price.

Values and prices

Because so many factors can influence a price, many people try to work out what a good price might be before testing a market. For example, suppose an engineer has invented a machine for picking tomatoes and she sets up a company to make them. She needs funds to build the machines, so she will try to sell stock in her company to raise the money. If she sets a price too high, some of the shares will be left unsold and she may not raise enough money. If she sets a price too low, a lucky buyer will turn around and sell to someone for a higher price. She has to carefully match the value with the price. What factors should she consider when setting the price?

Again supply and demand come into play. How many machines can the new factory produce in a year? At what price will they be sold? How many machines will tomato farmers buy? This will depend on the price of tomatoes, the price of wages paid to tomato pickers, and the price of borrowing the money to buy the machine. All these prices must be ascertained before the engineer can figure out the market-clearing price for her machines—which will determine the price of the stock in her company. The stock price will also depend on how investors expect the company to do in the future. Investors might believe she will be able to make a bean-picking machine next year. If one of the prices underlying the inventions moves—because of a bad harvest, or because bean farms start paying higher wages, or because a competitor invents a bean picking machine next year—the company's stock price will move too.

There are many types of prices, representing many types of transactions. Each price represents a bargain struck between a buyer and a seller. The motivations of each party, and the prices that arise, can be as unpredictable as the weather and change as quickly.

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The more forthcoming countries are, the more they can resist the ups and downs of global financial conditions Transparency MATTERS

Luis Brandão-Marques, Gaston Gelos, and Natalia Melgar

VER the past 20 years, emerging market economies have become increasingly integrated into world financial markets. For example, U.S. portfolio holdings of long-term securities (equities and long-term bonds) issued by entities from 27 key emerging market economies roughly tripled as a share of each country's GDP between 1994 and 2012 (see Table 1).

This increase in financial integration has brought emerging market economies tremendous benefits. It has reduced their cost of capital (which has expanded investment opportunities), improved risk sharing and portfolio diversification, sped up the transfer of technology, and contributed to the spread of best practices in investor protection and governance.

But deepening financial integration has come at a price for many of these economies: it has increased their vulnerability to the ups and downs of international financial markets. However, that increased vulnerability varies significantly—it is higher for some countries, lower for others. To devise policies to reduce the volatility that can accompany increased global integration, governments must understand how country characteristics shape the way global financial markets affect emerging market economies.

To that end, we examined the role that country transparency plays in the amplification of financial shocks emanating from global financial centers. We found that the more transparent economies—those that provide more data and in a more timely fashion and have better corporate disclosure standards, more predictable policies, and better governance—react less sharply to both improvements and deteriorations in global market conditions than do the more opaque emerging market economies that score worse on various dimensions of transparency.

Country transparency and capital flows

Many individual country factors influence the speed and intensity with which financial shocks propagate across economies. Financial linkages, such as common exposures by banks and mutual funds, play an important role in the transmission of common shocks and in financial contagion. It is also known that financial integration, the result of lower barriers to crossborder financial flows, generally facilitates the international propagation of financial shocks (Bekaert and others, 2011).

Less clear, however, is the role played by country-level transparency—that is, the availability of information that



allows investors to properly assess risks and returns associated with investing in a country. It is often asserted that more transparency can be beneficial both in attracting investment and in helping to avoid excessive volatility of capital flows. The argument is that more transparency enhances the orderly and efficient functioning of financial markets. Transparency reduces the occurrence of such phenomena as herding (where investors make certain decisions merely because they observe others making them), waves of investment flows driven by sentiment, and investor overreaction to news. The global financial crisis has drawn renewed attention to the role opacity plays in exacerbating financial shocks.

However, in principle, more transparency can actually result in higher volatility and, as a result, be destabilizing. For example, transparency might generate excessive provision of public information (through disclosures from governments or market participants), which could crowd out potentially more precise private information—reducing information efficiency and increasing volatility—especially when such information is confusing ("noisy," in financial parlance) or unrelated to fundamental conditions. For example, the timely

Table 1 **Buying in**

U.S. investors own an increasing amount of long-term securities issued by entities in emerging market economies, measured as a percent of the issuing country's GDP.

(percent)

	1994	2001	2007	2012	Change 1994–2012	Average TGP 2002-12
Hong Kong SAR	13.38	18.92	57.34	49.86	36.48	5.71
Taiwan POC	0.21	6.76	20.66	18.66	18.45	5.17
South Africa	3.81	6.63	18.54	22.12	18.30	6.12
Israel	5.94	17.23	32.44	22.39	16.45	4.58
Singapore	9.88	25.03	38.33	24.99	15.11	4.80
Korea	1.64	6.83	13.26	15.23	13.60	3.97
Turkey	0.67	3.05	10.16	13.54	12.87	3.94
Hungary	1.34	3.84	6.68	10.14	8.80	3.75
Brazil	2.20	6.04	13.82	9.75	7.55	3.71
Poland	0.09	1.63	3.26	6.73	6.64	3.22
Chile	4.84	8.22	7.41	10.22	5.38	4.97
Philippines	3.89	5.26	9.69	8.65	4.77	3.71
Colombia	0.68	2.81	3.26	5.38	4.70	4.15
Peru	1.03	3.10	4.05	5.56	4.53	3.70
Indonesia	1.22	1.15	4.25	5.13	3.91	3.51
India	0.41	1.46	6.87	4.25	3.85	4.40
Russia	0.01	3.33	6.23	3.33	3.32	3.14
Egypt	0.00	0.62	8.14	1.68	1.68	3.73
Czech Republic	0.99	0.75	2.96	2.22	1.24	3.69
China	0.37	0.23	2.78	1.60	1.22	4.32
Thailand	3.67	1.38	2.60	4.60	0.93	4.29
Mexico	12.22	7.84	10.58	12.73	0.51	3.89
Pakistan	0.44	0.25	1.23	0.51	0.08	3.38
Jordan	0.63	1.09	0.65	0.63	0.01	4.22
Morocco	1.20	0.98	0.60	0.99	-0.21	4.34
Malaysia	12.84	4.59	12.43	12.04	-0.80	4.98
Argentina	6.34	1.63	3.77	1.57	-4.77	2.80
Average	3.33	5.21	11.18	10.17	6.84	4.75

Sources: U.S. Treasury, International Capital System database; World Bank, World Development Indicators database; CEIC Asia database; and EMED Emerging EMEA database.

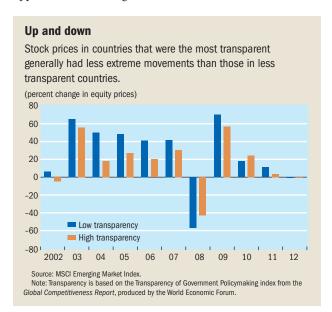
Note: The table records U.S. portfolio holdings of stocks and long-term bonds issued from 27 emerging market economies. TGP = Transparency of Government Policymaking index from the Global Competitiveness Report, produced by the World Economic Forum. The highest possible score is 7. POC = Province of China.

publication of preliminary (and imprecise) official data may lead market participants to overreact to such news, causing too much price volatility in financial markets (Morris and Shin, 2002). More transparency also contributes to financial integration (by reducing information costs and asymmetries) and can augment the simultaneous movement of prices across markets (Carrieri, Chaieb, and Errunza, 2013).

Although there is some evidence that supports the beneficial effects of country-level transparency (Gelos and Wei, 2005), the overall evidence is ambiguous. Moreover, existing empirical studies have focused largely on the transmission of financial shocks during crisis episodes.

We explored whether opacity at the country level amplifies the local impact of global market conditions over the business cycle by examining the behavior of bond and equity prices. The basic hypothesis is that when global financial conditions are benign, international investors become more prone to invest in markets whose underlying distribution of risks they understand less well ("ambiguous" markets) and then flee when global conditions deteriorate. Investors could behave this way for several reasons. They might become more comfortable with ambiguity when their other investments have performed well. Another possibility is that during difficult times fund managers face more scrutiny and more pressure to justify the asset composition of their portfolios and respond by reducing their exposure to assets whose risks are less well understood. Consequently, they are more prone to hold less transparent assets during good times than during bad times. Alternatively, ambiguity may make it harder for investors to separate fundamental shocks from pure noise shocks, inducing them to associate benign signals in the financial centers with good fundamentals in the ambiguous markets.

Whatever the reason (and the possibilities are not mutually exclusive), more opaque markets experience larger booms when financial market conditions are favorable, whereas the opposite is true during bad times (see chart).



Gauging transparency

Measuring country transparency poses significant difficulties. First, we need measures that capture some notion of the inability to pin down precisely how likely different events are. We are therefore interested in indices of opacity that gauge the availability of all relevant information the investor can use to assess the risks associated with investing in a given country. Second, we need indices that cover many countries and go back a long time. Therefore, we focused on indices measuring corruption, governance, corporate disclosure practices, accounting standards, and the transparency of government policies and statistics.

To quantify the impact of global financial shocks on asset prices from emerging markets, we used, as a proxy for liquidity conditions and risk aversion in financial centers, the VIX, which measures investor expectations of stock market volatility over the next 30 days. In doing so, we controlled for several different measures of country opacity (ranging from the degree of corporate disclosure and transparency of government policies to broader measures of opacity, such as perceptions of corruption). Using data for both stock and bond markets over the period 1997–2011, we consistently found that emerging markets that score worse on various dimensions of opacity measures react more strongly to global market conditions than economies that are more transparent.

It is significant that this result holds even when we controlled for a broad range of measures of risk, credit quality, and liquidity (Brandão-Marques, Gelos, and Melgar, 2013). In fact, according to our estimates, in response to a 10 percent increase in the VIX (considered a mildly negative shock), the countries with the most transparent government policies would experience an increase in sovereign bond spreads (the difference between the rate a country pays to borrow and the rate on U.S. Treasury securities) roughly 0.4 percentage point lower than that of the median country. By contrast, the least transparent country would have an increase in those spreads of 0.3 percentage point more than the median country. The "transparency gains" for more transparent countries amount

Table 2

Transparency counts

When investors anticipate volatility, bond spreads widen and equity prices decline in the emerging market economies that are least transparent and perform better in the most transparent economies. (percent, 2002-12)

	Least transparent	Most transparent	Transparency gains	Average weekly change
Change in bond spreads	0.32	-0.36	-0.68	-184
Change in equity prices	-0.16	0.18	0.34	244

Sources: EMBIG, weekly percent changes in bond spreads; MSCI, weekly percent changes in equity prices.

Note: The table measures how much bond spreads increase and equity prices fall in response to a 10 percent increase in the VIX index, which measures expectations of stock market volatility over the next 30 days, in low-transparency countries and high-transparency countries relative to a hypothetical median-transparency country. The least transparent countries are in the bottom 10 percent of all countries measured by the Transparency of Government Policymaking index from the Global Competitiveness Report produced by the World Economic Forum from 2002–03 to 2011–12. The most transparent countries are in the top 10 percent.

to roughly twice the average weekly change in spreads measured by the J.P. Morgan Emerging Markets Bond Index Global (an index that follows total returns of debt instruments issued to foreign buyers by emerging market economies). For equities, the gain is more significant and reaches almost two and a half times the average weekly increase in

Emerging markets are not helpless when it comes to responding to the ups and downs of global markets.

the MSCI Emerging Market Index, which measures the performance of about 1,600 stocks globally (see Table 2). This is roughly three times more than the increase in exposure that a country would get from doubling its international portfolio flows. Qualitatively, this result holds not only for government policies, but also for the other measures of transparency mentioned above.

Policy challenge

Our research implies that emerging markets are not helpless when it comes to responding to the ups and downs of global markets. Countries that wish to benefit from financial globalization can reduce its unpleasant side effects by becoming more transparent—that is, by providing more data and in a more timely fashion, improving corporate disclosure standards, increasing the predictability of policies, and, more generally, improving governance. In other words, increasing transparency may be an effective instrument for countries to consider before resorting to other measures aimed at reducing the adverse consequences of capital flows.

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Christian Ebeke and Dilan Ölçer

CONOMISTS have established that erratic taxing and spending policies hurt long-term growth and the overall welfare of a society (Fatás and Mihoy, 2003; 2013).

One source of that policy volatility can be election related. As part of their reelection effort, incumbents can manipulate economic policy instruments. Among other things, they raise public spending and run budget deficits to increase overall demand and create jobs (even on a temporary basis)—and boost their election prospects.

But the preelection excess can be followed by a postelection hangover. Governments often have to go on an austerity plan to offset their free-spending preelection policies. This politically generated boom-bust cycle can hurt long-term economic growth and stability.

Preelection priming of the economy occurs mostly in developing countries (Shi and Svensson, 2006). We concentrated on low-income countries—those with annual per capita gross national product below \$1,175 and without durable and substantial access to international financial markets. Over a 21-year period, we found strong

evidence of such election-induced cycles in 68 low-income countries. In the year before the election, current spending and deficits grew. In the aftermath, to rebuild the buffers they depleted, governments cut investment spending and raised some taxes. We also explored two potentially important constraints on the ability of an incumbent to pursue a politically motivated fiscal agenda in an election year—fiscal rules, which set explicit targets for budgets, and IMF programs, which include explicit fiscal targets. We found that both significantly dampen the magnitude of the political budget cycle.

Political business cycles

Empirical studies of the political business cycle from the 1970s until the 1990s focused almost entirely on advanced economies, where generally researchers have not found statistically significant evidence of such cycles. More recent studies, however, that looked at current government expenditures, indirect tax revenues, and budget deficits found evidence of politically driven economic cycles in developing economies.

In low-income countries, heavy government spending before elections is often followed by debilitating austerity

Most of these studies did not explicitly focus on lowincome countries, but pooled together all developing countries—low and middle income. Moreover, although they studied what happens to specific variables during elections, they did not provide robust analysis of the composition of the postelection adjustment.

We focused on low-income countries because they are particularly vulnerable to election-related cycles. These countries' weaker institutional capacity and poor budget transparency pose greater risk that incumbents will use fis-

Postelection years are characterized by an effort to partially rebuild fiscal buffers, but at a price.

cal policy to help them get reelected. By depleting their fiscal buffers during election years, low-income countries further increase the vulnerability of their economies to adverse developments and limit their ability to deal with external shocks, such as a sudden change in commodity prices. Therefore, it is important to better understand the composition of election-related budget cycles in low-income countries and to explore ways to mitigate related fiscal policy volatility.

We conducted empirical studies of a large number of lowincome countries over the period 1990-2010. In analyzing the effects of elections on fiscal variables of interest, such as spending and deficits, we took into account the effects of other determinants of fiscal performance in low-income countries and of some types of elections not required by national constitutions. We used various sources, including election data from Hyde and Marinov (2012), a data set that covers 68 low-income countries over 21 years. About 50 of these countries had at least one election during that period. We found that in low-income countries there are political budget cycles in which governments tend to increase current expenditures during election years—by 0.8 percentage point of GDP. As a result, the overall fiscal deficit swells. Postelection years are characterized by an effort to partially rebuild fiscal buffers, but at a price. Public investment is reduced by about half a percentage point of GDP (see Chart 1). Although we did not study it explicitly, this form of postelection fiscal retrenchment in investment can seriously retard economic growth. Productive government investment is an important driver of economic growth and must be stable. For example, an austerity program that leaves a welldesigned road construction project half done after an election is not only wasteful but impedes economic activity.

Tax collections rise

We also noted significantly larger overall government tax-collection efforts in the years following an election—but in a way that can hurt the economy. We broke down total tax revenue into its components and found that in low-income countries, revenue from trade taxes (whether imports or exports) increases after elections as governments seek to rebuild eroded fiscal

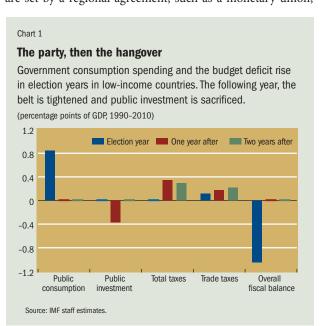
buffers. Trade tax revenue grows even though the end of heavy preelection spending often results in decreased demand for imports. This focus on trade taxes may reflect the relative ease of collecting them in low-income countries—where raising revenue, especially domestic tax revenue, tends to be more difficult than in advanced and emerging market economies. But significantly raising trade taxes could jeopardize a country's external competitiveness, which ultimately lowers long-term economic growth. Our findings are solid even when we account for the possibility that incumbents can manipulate the timing of elections to take advantage of good economic conditions.

We know of no empirical work that examines the effects of fiscal rules and IMF programs on the likelihood, size, and composition of political budget cycles in low-income countries.

Experts have often doubted the effectiveness of fiscal rules for low-income countries. We therefore tested the extent to which national fiscal rules matter in low-income countries, using the recently published IMF data set on fiscal rules (Schaechter and others, 2012). National fiscal rules are not widespread in low-income countries, although their use has been growing. Among the countries that have adopted national rules to anchor their fiscal policy are Armenia, Cape Verde, Kenya, and Nigeria.

There were also IMF programs in a number of low-income countries over the past decades. The degree of constraint imposed on incumbents' election-year extravagances by the conditions of the loans connected with those programs is an important consideration as well.

We distinguished between a domestic institutional constraint on fiscal policy (such as a fiscal rule established by law) and participation in an IMF program. National fiscal rules may dampen electoral fiscal manipulation if the rules prevent fiscal extravagances by an incumbent around the time of national elections. Among low-income countries, fiscal rules agreed to by the country itself are more effective and more widely enforced than supranational fiscal rules—which are set by a regional agreement, such as a monetary union,



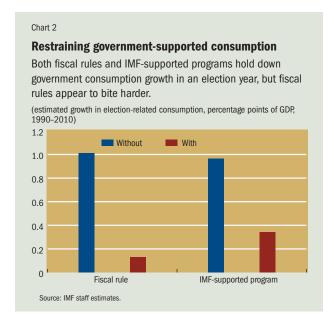
and imposed equally on all members of the agreement. The empirical results show that for low-income countries without national fiscal rules, the effect of the political budget cycle on government consumption is about 1 percent of GDP. However, when countries have put in place explicit national rules, the fiscal expansion during election years shrinks to only 0.13 percentage point of GDP (see Chart 2).

IMF agreements

Chart 3

Waiting until later

Furthermore, we tested whether countries engaged in programs with the IMF are less likely to experience a political budget cycle because those low-income countries are sub-



Governments are more likely to wait until after an election to enter into an IMF-supported program, which generally constrains a government's spending and borrowing. (number of IMF-supported programs in effect in low-income countries, 1990-2010) 120 100 Election year Nonelection vea 80 60 40 20 n Election year 1 year before an 1 year after an Other nonelection election election Source: IMF staff estimates.

Note: The bars reflect the number of times low-income countries had an IMF-supported program during an election year, the year before an election, the year after an election, and in other nonelection years between 1990 and 2010. For example, a typical program for a low-income country lasts three years. If it began the year before the election it is counted once for the election year, once for the year before the election, and once for the year after. If a country had more than one IMF-supported program during the period each program is counted

ject to IMF conditionality. One key component of programs' conditionality is the requirement that countries adopt sustainable macroeconomic policies. As a result, if implemented, conditionality constrains government finances, making it more difficult for governments to engage in expansionary fiscal policies during elections.

Some scholars have argued that governments prefer not to be under IMF agreements during elections, and research has shown that they are more likely to enter into such agreements after elections (see Chart 3). But even after accounting for that government reluctance and controlling for other factors correlated with the decision to request a program with the IMF, the empirical results show that IMF programs constrain the political budget cycle in low-income countries. In the absence of an IMF program, government consumption grows by about 1 percentage point of GDP during national elections, whereas that deviation drops to 0.34 percentage point of GDP in the presence of an active IMF program. Our findings are solid even when we take into account that a country's decision to enter into an IMF-supported program is not made independently of its economic conditions nor of its electoral cycle.

We found that national elections are an important source of fiscal volatility (changes in expenditures and taxes) in low-income countries, with potential adverse effects on long-term economic growth. Fiscal rules and IMF programs dampen the magnitude of the political budget cycles. But relatively few low-income countries have adopted explicit national fiscal rules so far, and it is difficult for many of them to do so credibly because they are subject to frequent shocks (such as natural disasters and commodity price changes) that can have a far more devastating effect on budget discipline than in larger, better-off economies. Neither IMF programs nor fiscal rules are substitutes for genuine political commitment to budget consistency.

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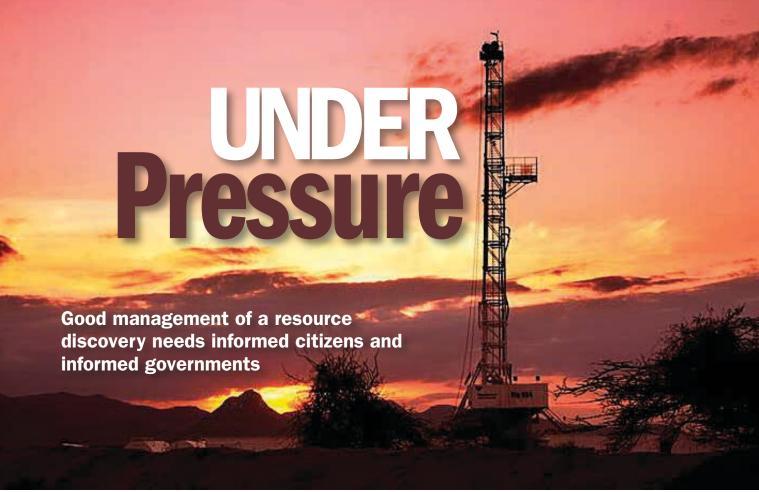
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Oil rig, Turkana County, Kenya.

Paul Collier

ANY past resource booms in poor countries have failed to improve the lot of those countries substantially, leaving them almost as poor as before those resources were discovered.

During the past decade, there has been a new wave of resource, mainly oil, discoveries in low-income countries, and international organizations have undertaken three complementary campaigns to try to ensure that the new resource booms do not repeat history:

- The IMF and other economic agencies conduct training programs to help build technical understanding and capacity in governments.
- The Group of Eight industrial economies (G8), the Group of Twenty advanced and emerging market economies, and the Organisation for Economic Co-operation and Development have been tightening rules on international companies to curtail tax avoidance and bribery.
- Nongovernmental organizations, in a campaign now also taken up by the G8, are empowering citizens to scrutinize public revenues.

The responsibility for the failures is shared by the governments that controlled the rights to natural resources and the companies that extracted them, and these campaigns reflect a realistically critical view of the capacities and motivations of governments and companies. But they are incomplete.

The chain of economic decisions necessary for resources to be harnessed for development is long and complex. That, indeed, is why governments need so much specialized capacity building. But if governments need to strengthen their understanding, so do citizens—beyond just being able to scrutinize the numbers. In the absence of understanding, citizens can pressure governments to dissipate new resource wealth in populist gestures. A common populist response to resource discoveries is pressure for public sector wage increases. In 1974, Nigeria was one of the first poor countries to experience an oil boom. The following year, as a result of an explosion in citizen expectations, the government was pressured into raising public sector wages by 75 percent. In 2012, Kenyans reenacted these events.

Another form of resource populism is the provision of cheap gasoline to the middle classes. In 2012, when Nigeria's economic reformers tried to end the fuel subsidies that had built up as concessions to popular sentiment, the country erupted. In 2013, the same thing happened in Sudan. Some commentators have so much confidence in ordinary people's ability to make good decisions that they advocate distribution of resource revenues to citizens as handouts. This approach was adopted in Mongolia and triggered resource populism of dramatically damaging proportions. Voters pressured the political parties to compete in offering the largest handout, with the result that half of national income was distributed—far more than the government had received in resource revenues.

As these examples suggest, citizens do not automatically become informed about good management of a resource

discovery. In countries that are small and poor, the media generally lack the specialized economic journalism that could help build such understanding. So governments have to build it themselves. Just as it is the responsibility of citizens to scrutinize how governments use resource revenues, so it is the responsibility of governments to build citizen understanding of the distinctive economic decisions required for the good management of those revenues.

Over the past decade, efforts to build citizen scrutiny of government have received enormous attention. The Extractive Industries Transparency Initiative and the legal obligation of companies to report their payments to governments are two landmark achievements of this effort. Yet no equivalent attention has been given to the distinctive challenge of government communication efforts to build citizen understanding, even though many governments lacked the capacity to undertake such an important effort. Communication is an essential role of political leadership. But a politician in office when oil is discovered normally lacks national experience on which to draw. Moreover, although leaders can tap into extensive global expertise on the economics of managing an oil discovery (see Box), there is no established body of international expertise on building citizen understanding. The professional economic policy advice of the international financial institutions (such as the IMF and the World Bank) is pitched mainly by technocrats to technocrats, with little to no concern for how it might be communicated to citizens. Meanwhile, the professional communication advice that public relations firms provide to politicians generally focuses on short-horizon politics, rather than on the long-term economics of natural resource management.

Here are some basic principles that policymakers might find useful in helping their citizens gain a realistic understanding of the effect of an oil discovery on their own and on national well-being.

Spreading understanding

Mass communication of *news* is straightforward: a press statement that announces "we've struck oil" will spread quickly. But mass communication of *understanding* is more difficult. Many adult citizens, long away from the classroom, will lack the patience to digest a lecture. So both crafting the content of a message and ensuring that it spreads are challenges as demanding as technical economic decisions. A communications fashion among governments in many poor countries is to present a *vision*. But while visions can instill

After the discovery

Four decades of academic research have established what policymakers need to do following an oil discovery. Revenues from oil and other natural resources are distinctive: they are volatile—resources deplete—which means that revenues will end. To cope with volatility, some revenue should be saved when times are good to cushion spending when times are bad. To prepare for depletion, other assets should be accumulated so that by the time the natural asset runs out, the country can maintain spending thanks to the extra income generated by these new assets.

an ambition, they do not instill understanding of the process by which it can be achieved. That is done through a *narrative*. Visions are static; narratives are stories—the mental vehicles by which people understand a process of change.

Harnessing an oil windfall responsibly depends on doing things that poor societies find difficult, such as saving for the future. Good leaders can capture tough messages in stories.

An oil discovery often triggers an explosion of unrealistic expectations.

During the Second World War, the United Kingdom needed to grow more food. Prime Minister Winston Churchill explained this with a simple narrative: "Dig for victory." Once Botswana discovered diamonds, its people faced an equally important challenge. Its leader, Sir Seretse Khama, also found a brilliantly effective narrative.

Narratives have to be disseminated, and governments cannot reach all their citizens at once. Stories spread through networks. Experts have found that success in spreading a narrative will often depend on reaching a relatively small group of influential people. Who these people are varies among societies and with the content of the narrative. Building a critical mass of citizen understanding about an oil discovery, then, is not achieved through press statements, but by crafting narratives and understanding networks.

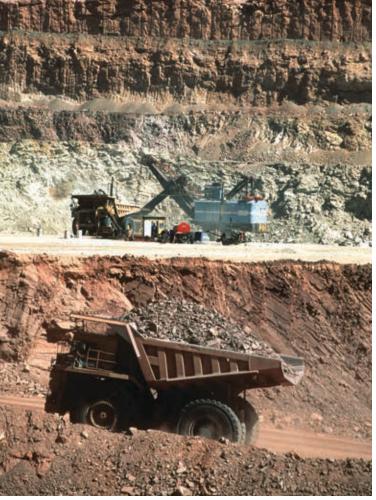
Oil and gas (which is often found with oil) have three characteristics that make effective communication about them much more important than about most economic issues:

- A discovery can evoke glamorous images of achieving wealth without effort.
 - The fossil fuels have no natural owners.
 - The resources will eventually run out.

An oil discovery often triggers an explosion of *unrealistic expectations*. Such expectations are not confined to poor societies. When the United Kingdom discovered oil in 1966, the satire magazine *Punch* carried a prescient cartoon depicting a future scene: two tramps sitting together, one saying to the other: "and then we discovered North Sea oil and there didn't seem much point in working anymore."

Such unrealistic expectations can rapidly become a problem for governments. In March 2012, an oil company prospecting in northern Kenya announced that it had struck oil. At that stage there was no way to know whether the discovery was commercially viable—and even in the best scenario, it would be at least four years before oil would start to flow. Yet by the next month the public sector unions had made an ambitious wage demand.

Such lack of realism can be countered by smart presentation of the basic facts. Psychologists have discovered that how facts are presented, or "framed," makes a big difference in how people react to them. For example, in 2013 ExxonMobil Corporation paid the government of Liberia \$50 million for prospecting rights. To ordinary Liberians,



Jwaneng diamond mine, Botswana.

\$50 million sounded like the onset of fabulous wealth. But there might have been a more realistic discussion of what the money could buy if the bonus had been reported as the amount each Liberian would receive—the equivalent of \$12. Framed in this way, Liberians might have been able to see that the Exxon payment would not be life changing.

In Kenya, the essential fact that needed to be communicated was not the amount per person but the long lags and uncertainties that remained. Someone needed to respond to the premature wage demands by saying: "Don't count your chickens before they're hatched!"

No owners

Another characteristic of oil that makes a communications strategy important is that natural assets do not have natural owners. No one can claim the ownership of oil by right of having put it under the ground. Yet, because oil is valuable, there has to be some agreed basis for ownership. Psychology has demonstrated rigorously what is painfully evident from experience: people are overly inclined to accept arguments that best serve their interests. Unless it has been clearly established prior to discovery, ownership of any natural asset is, in principle, up for grabs. So people will adopt whatever basis for an ownership claim best fits their circumstances. Those living near the discovery will claim local ownership, while others will claim national ownership. In some societies, the rules of ownership are already beyond dispute, but in many poor countries a relatively recent national identity clashes with ancient and strongly held local identities.

Take the case of Tanzania, where, thanks to founding President Julius Nyerere, the country has a stronger sense of shared national identity than most of Africa. Local loyalties have been played down, and people from different ethnic groups have long learned to cooperate. Furthermore, when the Tanzanian government opened up prospecting for gas, the rights that it sold were only for offshore blocks. With Tanzania's strong sense of national identity and no onshore prospecting, the government reasonably assumed that it would be evident that any gas discovered would belong to the nation.

In 2012, oil companies found gas far out at sea off the coast of the southeastern Mtwara region. Citizen reactions demonstrated why even in a country with a strong national identity, a preemptive communications strategy is important. Local people learned of the discovery not from government announcements but via Twitter from the publicly traded companies, which were legally required to make their strikes public immediately. As news reached Mtwara, trillions of cubic feet became trillions of dollars. Expectations exploded: out of nowhere, a rumor spread that each household would receive an envelope containing \$200 a month. Like the hoboes in the Punch cartoon, local youth quickly started claiming that they no longer needed to work. More disturbingly, residents of Mtwara asserted ownership and became angry that the gas was to be used for the national benefit. Indeed, people in the locality were so passionate in their belief that their imagined rights were being violated that they rioted: in May 2013, four people were killed. If offshore gas in Tanzania gives rise to these problems, then few poor societies are likely to be immune to them.

A vital aspect of a communications strategy, then, is to anticipate and resolve the ownership issue, beginning at the start of the exploration process. By acting preemptively, governments can probably guide public sentiment. Because valuable natural resources can be anywhere in the country, it should be possible to reach a consensus that whatever is found belongs to everyone.

Success in Botswana

Botswana, which is a rare success in natural resource management, showed how this can be done. Its first president, Khama, devised a message that was starkly simple: "We have nothing, so let's agree that anything we do find belongs to everybody." In tandem with the message came astute dissemination through a network. Khama toured the country, getting all the clan chiefs to accept the message. Such a consensus can be reached only behind the "veil of ignorance" that exists before discovery. If people have not explicitly agreed to this ownership rule prior to discovery, self-interest is likely to take over if there is a strike, provoking genuine outrage when local and national claims collide.

The third characteristic of oil that makes a communications strategy important is that *it is nonrenewable*. Because extraction depletes an asset, revenues can be short lived. In the discoveries typical in Africa, depletion occurs in approximately one generation. Moreover, rapid population growth reduces the per-person endowment. For example, suppose that steady

extraction would deplete the oil in 50 years. If the population grows at 2 percent annually, after only 25 years the per capita endowment will have declined by 70 percent. Moreover, the future value of oil depends on its price. Because of climate consequences, global policies may so curtail carbon emissions that within a few decades many deposits could become "stranded assets"—worthless because of taxes or regulations.

As with any temporary source of revenue, some of it should be used to accumulate other assets so that spending can be stretched beyond the period of extraction (see "Extracting Resource Revenue," in the September 2013 F&D). With natural assets, the ethical case for saving revenues is even stronger because the oil does not belong exclusively to the present generation. If the current generation squanders the oil revenues on unsustainable consumption, the next generation will have reason to complain that their parents were irresponsible custodians. This is why the "we don't need to work anymore" narrative is so pernicious and must be discredited. In a poor country, new, effortless wealth does not reduce the need to work. Rather, oil presents people with a unique opportunity to grow the society out of poverty by investing the revenues. When diamonds were discovered in Botswana, the government swiftly introduced a counternarrative that became pervasive: "We're poor and therefore we must carry a heavy load." The consensus of opinion about the need to carry a heavy load enabled the government to invest a far higher proportion of its income than had been possible in the rest of Africa. Botswana went from among the poorest to among the richest countries in the region. This is the task now facing the governments of many poor countries. Through effective communication, as in Botswana, they can bring their citizens to see themselves as stewards of their children's opportunities, not lucky invitees to a party. The narrative that does this is, in essence, "good stewardship."

To be effective, a narrative must be matched to a process that spreads it across a network of citizens. Sometimes the most suitable strategy is determined by the structure of authority, as with the clan chiefs of Botswana. But sometimes it is determined by the content of the message. The narrative of good stewardship resonates with many religious teachings. In most poor societies, religion is well organized and plays a prominent role in people's lives. The narrative of responsible stewardship of an oil discovery therefore lends itself to dissemination through a nation's churches and mosques.

A prudent government will prepare the ground for a resource discovery by purposefully building a critical mass of citizen understanding through narratives and networks, thereby resolving ownership in advance of prospecting and puncturing fantasies by presenting facts that are easy to grasp.

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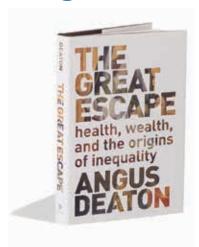
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Aiding and Abetting



Angus Deaton

The Great Escape

Health, Wealth, and the Origins of Inequality

Princeton University Press, Princeton, New Jersey, 2013, 360 pp., \$29.95 (cloth).

Princeton University economist Angus Deaton has written an elegant, wide-ranging, and fascinating book on the history of U.S. and global progress in health and material well-being from prehistory to modern times.

The Great Escape of the title is the escape from poverty and ill health that some of the world's population has already largely achieved, most of the world is undergoing, and an unfortunate few have yet to begin. The book is an accessible and enjoyable journey narrated by a world authority on global health and income data, and the discussion of the assumptions, biases, and flaws of such statistics makes for a wonderful read. Much of the book amounts to a warning: there are unavoidable uncertainties and compromises in all economic and health data, so don't believe any of it too much.

With that caveat, Deaton concisely outlines the history and extent of global progress, as well as its major causes. Not least, he argues that the escape from high mortality was only weakly connected to the escape from poverty. In the West, it was not primarily greater private wealth that led

to improved health. Instead, better public services such as water and sanitation were the proximate causes. In developing economies over the past 50 years, the answer to the question "Do faster-growing countries have faster rates of decline in infant mortality?" is clearly "No." Perhaps the book should have been titled *The Great Escapes*.

Along the way to progress, Deaton points out, unnecessary evils were committed in the name of international population control. This highlights yet another great escape: all countries have exited the Malthusian trap of the preindustrial era, when population growth was routinely associated with lower incomes and worse health.

Returning to Deaton's focus on the limits to our understanding, those looking for simple policy pointers on promoting income growth in countries at the wrong end of global divergence or on sustaining worldwide health progress will be disappointed. Writing of the foolishness of searching for a "key to growth"—or indeed, a key to stagnation—Deaton suggests that such efforts attempt to "make fatuous generalizations based on coincidence. Etruscan and Roman haruspices did the same with entrails of chickens." Still, Deaton does argue that institutions tailored to the elite are "inimical to growth"-one reason for the book's focus on inequality.

The Great Escape does elaborate on one policy recommendation for helping the world's poorest: cut aid budgets. Aid, Deaton suggests, doesn't promote growth. Copious aid is in fact "a roadblock to development" that can corrode institutions—allowing rulers to rule without consent because they do not need to tax their citizens. He does support some aid and ways of providing it: financing the development of new technologies, including drugs, for example. He also notes that "external aid has saved millions

of lives in poor countries"—especially by lowering childhood deaths from infectious disease. But even aid's role in health is limited by the fact that it does not help build basic health systems.

It is hard indeed to make the case that aid, on average, has done much for economic growth in poor countries. As Deaton suggests, other more powerful world policy tools do more to support such growth, including migration, trade liberalization, and subsidy reform. Much—perhaps most—aid has been wasted in the past.

But evidence of the *negative* impact of aid is not that strong, either. Recent IMF staff analysis (IMF Working Paper 12/186) suggests that in poor countries with weak institutions, aid substitutes for taxes about one for one, but in the average recipient country, a dollar of extra aid reduces taxes collected by the government by only nine cents. And there is evidence that even in poorly governed assistance-dependent countries, aid can sometimes help build basic health systems. From 2004 to 2010, life expectancy in Afghanistan increased from 42 to 62 years, thanks in no small part to a program funded by the U.S. Agency for International Development and run through the ministry of health. This program delivered basic health services to 90 percent of the population.

The millions who are saved by aid and the successful aid projects across many sectors in many countries—despite many failures—are reasons to reform, not retrench, the aid system. Such reform—alongside more migration and more equal trade—could help millions more join the great escape from penury and ill health that Deaton's research and writing have illuminated so well.

Charles Kenny

Senior Fellow, Center for Global Development Author, Getting Better: Why Global Development Is Succeeding and How We Can Improve the World Even More

Recycling a Better Future



Adam Minter

Junkyard Planet

Travels in the Billion-Dollar Trash Trade

Bloomsbury Press, New York, 2013, 304 pp., \$27.50 (cloth).

s we know from horror movies, vampires turn their victims into new vampires by biting them. Adam Minter's book contains an analogous example of environmental damage transforming innocent citizens into polluters. In his trash travelogue, which examines the global scrap industry, he visits Wen'an, China. Wen'an is the center of the Chinese plastic scrap industry. Plastic waste, not just from China but from the United States and Europe, is recycled here—a process that endangers the health of the local people. Reclaiming plastic releases toxins, and strokes, high blood pressure, and low life expectancy abound in the district.

The people of Wen'an remember when theirs was a green and pleasant land famous for its peach trees and clear streams. Industrial pollution brought by an unregulated oil industry poisoned the soil and dirtied the streams, farmers could no longer grow their crops, and the population took to dealing with plastics to survive economically. Minter notes that it is probably the most polluted place he has ever visited, and much of the plastic comes from his home

country, the United States.

The son of a Minnesota scrap dealer, Minter, a journalist based in Shanghai, loves junkyards and takes obvious pleasure in his career covering waste disposal. While some would conserve whales and bears, he defends junkyards as part of the beauty of our planet. However, while Junkyard Planet isn't a tale of environmental horror, neither does it belong to the genre that touts green business as a solution to all our ills. It is a thoughtful examination of recycling, showing that while recycling is vital and is a practice that draws in creative entrepreneurs, it is also inevitably dirty and destructive.

Recycling materials saves energy. Substances such as aluminum, for example, are hugely energy intensive to produce from ores, but require far less power if reclaimed from scrap. Minter also notes that mining for metals often displaces communities and wrecks local ecosystems. Most controversially, perhaps, he rejects the idea that shipping U.S. and European waste to China is intrinsically exploitative. Chinese companies are eager to take scrap because it provides a raw material for their vast manufacturing base, he argues. Despite examples such as Wen'an, both regulation and better techniques of recovery are making the industry less damaging.

Nonetheless, while Minter's affection for the varied scrap merchants he interviews and travels with is obvious, he notes that recycling is never environmentally cost free. (When we place cans in a recycling box we feel virtuous, but he notes that we are merely outsourcing to others our waste handling. Worse, he cites scientific studies that show that recycling leads us to be more wasteful.)

Reusing is better than recycling, and not using in the first place is best of all. While *Junkyard Planet* might be read as a celebration of the market, it is also critical of unbridled capitalism. For every entrepreneurial recycler,

there is a product that should not be thrown away in the first place—but it is profitable for manufacturers if we do. Minter argues passionately

Most controversially, perhaps, he rejects the idea that shipping U.S. and European waste to China is intrinsically exploitative.

that manufacturers need to make technological products that last longer and can be refitted rather than thrown away, if we are to significantly reduce our collective damage to the environment.

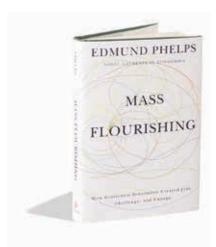
Adam Minter reminds me of the late Elinor Ostrom, the first female Nobel Prize winner in economics (see F&D's September 2011 profile). She studied the so-called tragedy of the commons and found that, far from being a tragic story, common land was often carefully conserved by local people. Instead of believing in a metaphorical model of environmental doom, she went out of her way to study the creative ways people deal with ecological problems. Minter, while not an academic, has an Ostrom-like eye, asking people how they get things done, rejecting preconceived ideas in favor of practical knowledge, and noting that easy solutions are often simplistic.

Junkyard Planet is an enjoyable and fascinating read. More like a novel than a dry tome, it is full of subtle insights. Neither incineration nor landfill is a sustainable solution to our apparent addiction to waste, but neither is recycling always the green alternative it appears to be.

Derek Wall

International Coordinator, Green
Party of England and Wales
Author of The Sustainable
Economics of Elinor Ostrom

Classical Advice for Modern Economies



Edmund Phelps

Mass Flourishing

How Grassroots Innovation Created Jobs, Challenge, and Change

Princeton University Press, Princeton, New Jersey, 2013, 392 pp., \$29.95 (cloth).

■ dmund Phelps intends his unusual and bold book as a tract **⊿** for our times, an alternative capitalist manifesto. The tone is sometimes inspiring, sometimes cantankerous and provocative. He celebrates Aristotelian virtues and principles, and the belief that the ultimate goal of a modern economic system should be eudaimonia—often translated as happiness but, in the opinion of many modern writers, more a sophisticated flourishing. Also central to the book is vitalism, the drive for innovation fundamental to what Phelps considers a modern economy.

Phelps sees first 20th century Europe and then the United States after the 1960s as suffering from a proliferation of what he terms corporatism: an expanded public sector, increased transfer and welfare programs, and powerful unions that conspire with powerful employer groups and big corporations. The result is bureaucracy and a way of life that increasingly disdains innovation. At one stage, he makes the exaggerated claim that America is suffering the same problems as contemporary Greece.

The most obvious analogy for this book would be to Joseph

Schumpeter's gloomy Capitalism, Socialism and Democracy (1942). As with that book, Mass Flourishing defies easy classification on a conventional political spectrum. It is sympathetic neither to left-wing advocacy of the welfare state nor to traditional values, by which Phelps seems to mean attachment to older, noncommercial values, such as altruism. In an empirical section, Phelps attempts to show how, for instance, traditional societies correspond to lower job satisfaction. He depicts the persistence of traditional values as a source of a dangerous proclivity for corporatism in advanced economies.

Each part of the book provides a different angle on the human capacity for innovation: a survey of economic history illuminates the "venturesome" basis of the speed of economic growth over the past two centuries; a more economics-focused part analyzes the performance (especially job satisfaction) of the three contrasting systems of capitalism, socialism, and corporatism; and finally, a more philosophical, or theoretical, section identifies a different ethos of capitalism or modernism and contrasts this with traditionalism.

Traditionalists fear change and crisis, Phelps says, and are overrepresented in government and in international organizations. At one point, he argues against policymakers and commentators who want "balanced growth." He tells the IMF not to worry about global imbalances or focus on crisis prevention: thinking otherwise shows that "the IMF has lost sight of the rationale for a well-functioning modern-capitalist economy."

Phelps's argument centers on culture and how it can be measured to explain economic growth. But he sees a lag: "modern thinking" began in 1500, the modern economy only after the Napoleonic wars. His argument is that only a new orientation, in which many people (not just a few entrepreneurs) pursue adventure and innovation, can account for modern economic growth.

Phelps launches a polemic against Adam Smith (who in 1776 could not really appreciate the possibilities for technical advance), German historical economics (for too much focus on institutions), Max Weber (for more interest in asceticism and savings than in "experimentation, exploration, daring and unknowability"), Schumpeter (for focusing on heroic entrepreneurs, in the German institutionalist tradition), and Joel Mokyr (for insisting too much on science and the origins of the Industrial Revolution). In line with the consensus of modern economic historians, the world before 1800 is seen as largely static, with little substantial income growth. But oddly, he ignores the most common modern explanation for the shift after 1800—the replacement of human and animal energy with energy derived from natural resources, above all fossil fuel.

Phelps finishes with a striking and uplifting conclusion that allows a multiplicity of value systems. Some will choose to live with a modernist ethos (which should include some redistribution to ensure a just outcome), but others will prefer traditionalism (devotion to families or communities). The latter should not benefit from any notion of redistributive justice. Those who want to pursue what Phelps believes is a non-Aristotelian concept of the good life should be excluded from a principle of redistribution based on John Rawls's arguments for social equality (because they are "not collaborators in the production of a redistributable social surplus"). This unusual twist aims to show how tradition can still be accommodated in a world that is modern. But it does not fit well with the more general impression the book leaves, an update of Schumpeter's reflection on the self-destructive dynamic of the modern economy.

> Harold James Professor of History and International Affairs Princeton University

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