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Economics and Morality

How Much Debt Is Too Much?

Riding the K-Wave

ASIA Reaching for the Top



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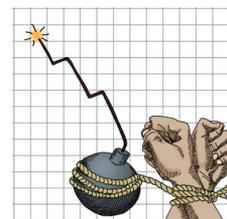


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June 2014 • Volume 51 • Number 2

FEATURES

ASIA REACHING FOR THE TOP

- 6** **Asia: Achieving Its Potential**
The region's success is not guaranteed
Changyong Rhee
- 10** **Sino Shift**
China's rebalancing opens new opportunities for developing Asia
David Dollar
- 14** **Asian Style**
Cultural products are playing an increasing role in the region's economy as disposable incomes rise
Alan Wheatley
- 18** **The Future of Asian Finance**
As Asia leads the world in growth, will its financial systems lead too?
James P. Walsh
- 22** **Point of View: Asia's Resilience**
The region survived the global crisis and must now cope with a significant worldwide financial and economic transition
Zeti Akhtar Aziz
- 24** **Governance Unbundled**
By focusing on the biggest hurdles to growth and development, countries in Asia are more likely to see their governance reform efforts succeed
Shikha Jha and Juzhong Zhuang
- 28** **A Turn to Asia**
To sustain its rapidly rising prosperity, Australia should seize on the changing export opportunities in its nearest neighbors
Alison Stuart
- 32** **Picture This: Kimchi, No Longer Solely Korea's**
Kimchi's place as a uniquely Korean dish is being threatened by China's exploding exports of the spicy dish
Yusun Lee
- ALSO IN THIS ISSUE**
- 34** **Economics and Morality**
Economists may prefer to be value neutral, but many critics find fault in the relationship between economics and virtue
Timothy Taylor
- 39** **No Magic Threshold**
There appears to be no clear point above which a nation's debt dramatically compromises medium-term growth
Andrea Pescatori, Damiano Sandri, and John Simon
- 43** **The Cost of Tying One's Hands**
There are benefits to pegging the exchange rate—but without a flexible rate, external adjustment can be tough
Atish R. Ghosh, Mahvash S. Qureshi, and Charalambos Tsangarides



47 A Broader Mandate
Central banks are feeling pressure to expand their inflation brief to include politically charged goals such as employment and growth
Luis Jácome and Tommaso Mancini-Griffoli

51 Not Your Father's Service Sector
Services are gaining newfound respect as the basis of modern global trade
Prakash Loungani and Saurabh Mishra



DEPARTMENTS

2 People in Economics
Labor Rewarded
Prakash Loungani profiles Christopher Pissarides, winner of the 2010 Nobel Prize for work on unemployment and labor markets



55 Book Reviews
Capital in the Twenty-First Century, Thomas Piketty
The Tyranny of Experts, William Easterly
The Road to Global Prosperity, Michael Mandelbaum

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Asia's Promise

WHAT is Asia? The question came up again and again as we put together this issue of *F&D*. At first blush, the answer seemed simple: Asia is the locomotive of the world economy, posting impressive growth numbers for the past several decades.

Indeed, the region appears poised to make history: if current trends continue, the “Asian” economy will be larger than that of the United States and Europe *combined* in less than two decades—a prospect that has prompted some to dub the 21st century the “Asian Century.”

But a closer look revealed stunning diversity. Once you get past the headlines, the picture is complex and richly textured. “Asia” is home to countries of all sizes—from tiny Pacific islands to India and China, the world’s two most populous nations—and at all stages of economic development, from “frontier” economies scrambling up the economic ladder out of poverty to powerhouse emerging markets to advanced economies.

Some Asian countries offer sophisticated financial markets and are centers for technological innovation, while others are largely agricultural.

The region is home to 700 million poor people, about 65 percent of the world’s poor—a figure that stands in stark relief against Asia’s economic strength and growing prosperity.

Certainly, Asia is no monolith. This issue of *F&D* looks at Asia from a variety of angles, seeking to provide insight into the region’s economic present—and future. We begin with an overview by the IMF’s Asia department head, Changyong Rhee, who argues that Asia will need to deal with five important challenges if the region is to continue on its amazing economic journey.

David Dollar looks at the rebalancing of China’s economy—from investment toward consumption—and the implications of that shift for developing economies in the region. Shikha Jha and Juzhong Zhuang examine the role strong institutions and good governance can play in Asia’s future, and James Walsh offers a glimpse into the future of Asian finance. Malaysian central bank governor Zeti Akhtar Aziz offers her view on Asia’s resilience and how the region can cope with financial and economic transitions in the rest of the world. Articles on Australia, kimchi (the Korean staple), and the global reach and economic impact of rapper Psy and other Asian cultural exports round out the package.

Elsewhere in this issue, three researchers, Andrea Pescatori, Damiano Sandri, and John Simon, take up one of the more pressing and controversial economic questions of the day: at what point does a nation’s debt compromise its medium-term growth?

Prakash Loungani profiles Christopher Pissarides, whose pioneering work on unemployment and labor markets earned him the Nobel Prize in 2010. Finally, and not to be missed: Timothy Taylor’s take on economics and morality. The managing editor of the *Journal of Economic Perspectives* delves into the rich and sometimes tortured relationship between economics and virtue.

Jeffrey Hayden
Editor-in-Chief



Labor REWARDED

Prakash Loungani profiles
Christopher Pissarides,
winner of the 2010 Nobel
Prize for work on
unemployment and
labor markets

NOBEL Prize awards for economics sometimes contain a touch of whimsy: they honor people with opposing views—such as the 1974 award to the left-leaning Karl Gunnar Myrdal and the libertarian Friedrich August von Hayek—or reach back to recognize academic achievements long forgotten. The 2010 award was given to a like-minded group: it recognized Peter Diamond, Dale Mortensen, and Christopher Pissarides, whose research coalesced in the 1990s into a workhorse model of unemployment and the labor market. And the time was right. In the aftermath of the Great Recession, 200 million people across the globe were unemployed, and getting them back to work was the most urgent economic policy task.

For Pissarides, a Cypriot of Greek descent, understanding unemployment has been his life's work since the 1970s. It took 20 years of academic toil before the impact of his research started to transform the way economists think about unemployment—and then for its influence to seep through to policy. IMF chief economist Olivier Blanchard, a noted scholar of unemployment himself, says: “Chris persevered. And history has proven him right. There is an important les-

son to researchers here. When you think you are right, don't listen too much to others.”

Today, with everyone listening to him, Pissarides can use the bully pulpit afforded by the Nobel Prize to help address the unemployment crisis in Europe. He has supported some policies of the so-called troika of lenders—the European Commission, European Central Bank, and International Monetary Fund—but has been an outspoken critic of others (see box). He has been particularly active in his home country of Cyprus, where as head of the national economic council—akin to the Council of Economic Advisers in the United States—he advises the president on issues ranging from bank restructuring to the business model for Cyprus in the future. “Cyprus has some 10 TV channels,” says Pissarides, “and they are all chasing me for my views. Sometimes I want to retreat to my university office and lock the door. But I know if I do that, I will regret it. This is the time to help.”

Prelude

Growing up in Nicosia, Pissarides excelled in primary and secondary school, according to his mother, Evdokia: “His teachers used to say he was top of his maths class. He worked

for a long time.” Despite that excellence, Pissarides was turned down by five of the six British universities to which he applied, getting an undergraduate degree in economics at the University of Essex. Among those that rejected his application was the London School of Economics (LSE), where he eventually was admitted to do a Ph.D. in economics and now

Pissarides worked on understanding better the process through which workers were matched to jobs.

teaches. Pissarides is philosophical about the rejection: “I’m probably better off having gone [to Essex] because it was a smaller place and they paid a lot of attention to us. At LSE, I probably would have got lost very easily.”

With Ph.D. in hand, Pissarides returned to Cyprus to work in the research department of the central bank. But the fates conspired to move him back to the United Kingdom. While he was on a trip to visit his prospective in-laws in Athens in 1974, the government in Cyprus was overthrown, and the ensuing political turmoil prevented his return. He turned to his former teachers in the United Kingdom for help and within a year was ensconced as a faculty member at LSE. “I moved to London in 1976. I have not moved since,” Pissarides wrote in his 2010 Nobel lecture.

Matching game

The philosopher Thomas Carlyle once wrote: “Teach a parrot the terms ‘supply and demand’ and you’ve got an economist.” Too much supply of a commodity should lead to a fall in its price, boosting demand and eliminating the excess supply. When applied to the labor market, this classical view implies that wages will fall when there is an excess supply of labor, eliminating unemployment. The persistence of mass unemployment, as was the case during the Great Depression of the 1930s, flew in the face of this view.

In the 1960s, economists—among them Diamond and Mortensen—began to recognize that the search for a job was akin to that for a spouse or a house. The housing market, for instance, has a large number of buyers and sellers. The two sides go through a search process to find a good match that makes both sides happy. Price is one aspect of the deal but not the only one because buyers care about other attributes of houses. The search is time consuming, so some houses remain unsold for a while. Applied to the labor market, this “search theory” seemed to provide a much more satisfactory view of why there was unemployment than did the classical paradigm.

Pissarides met Mortensen in the early 1970s as he was finishing up his studies at the University of Essex. Mortensen strongly recommended that Pissarides pursue search theory during his Ph.D. work at LSE. Mortensen doesn’t recall the meeting but wrote later that “it was obviously one of the best pieces of advice that I gave any student.” During the 1970s and 1980s, first as a student and then as a faculty member at LSE, Pissarides worked

on understanding better the process through which workers were matched to jobs. Charles Bean, former deputy governor of the Bank of England and LSE faculty member, says Pissarides’s thesis was notable for its emphasis on the importance of incomplete information. Employers were not fully sure of the abilities of potential workers and workers were not fully informed about job opportunities, which led to “essential frictions in the way the labor market operated.”

Pissarides’s key contribution in the work that followed his dissertation was to develop the concept of the matching function. Economists use a concept known as the production function to express the relationship between inputs and outputs; technological progress can deliver more output for the same input, and sometimes adverse circumstances or bad policy choices can clog the process through which inputs are turned into outputs. Likewise, Pissarides thought of the number of unemployed people and the number of vacancies as inputs that go into the production of jobs. How well the inputs translated into jobs depended on the extent of incomplete information, on government policies, and on shocks hitting the labor market. Bean says that “although superficially a ‘black box,’ [the matching function] could be justified by a variety of microeconomic stories. It could be estimated on actual data.” Pissarides also used ideas from the field of game theory to determine how the surplus from a successful match was split between workers and employers. This, says Bean, provided “a simple but powerful theory of wage determination.”

Euro angst

The response to the 1992 launch of the euro was different on the two sides of the Atlantic Ocean. On September 21, 1992, four famous Massachusetts Institute of Technology professors—Olivier Blanchard, Rüdiger Dornbusch, Stanley Fischer, and Paul Krugman—took part in a discussion at which they agreed that “a common European currency would have unfavorable economic repercussions.” Among many Europe-based academics, in contrast, there was euphoria: “I was completely sold on the idea,” Pissarides has written. He joined the Monetary Policy Committee of the Central Bank of Cyprus “to help bring the euro to my home country.” Earlier he had worked on teams in Sweden and the United Kingdom on the implications for their labor markets of adopting the euro.

But now, he says, the adoption of the euro has “backfired: it is holding back growth and job creation; and it is dividing Europe.” The setting of macroeconomic policies may be appropriate for Germany and some northern members of the union, but it is “far too tight” in his view for the southern members of the union. Fiscal austerity in particular is “creating a lost generation of educated young people . . . The troika [European Commission, European Central Bank, and International Monetary Fund] and national governments should be softer on austerity.” Pissarides says the euro should either be dismantled or the leading members of the union should allow for looser monetary and fiscal policies to restore growth and employment creation in the south.

Diamond and Mortensen were engaged in similar efforts, but Pissarides was not fully aware of their work: it was “before the electronic era,” he wrote in his Nobel lecture. Closer to home, some of his colleagues at LSE—notably Richard Layard and Stephen Nickell—were also working on their own approach to understanding unemployment. While certainly aware of their work—and even on occasion a collaborator—Pissarides stuck to his own path. Blanchard recalls “meeting Chris in the late 1980s at LSE. At the time, the school was intensely focused on unemployment issues.” Pissarides was “toiling largely in parallel. His models looked rather exotic and complex, relative to the biblical simplicity of the Layard-Nickell model . . . I would not say that people thought Chris should move on and work on more relevant stuff, but he was not at the center of the [LSE] team.”

Enabling act

Pissarides’s work on the matching function led to a revival of interest in the Beveridge curve, the relationship between unemployment and job vacancies. The relationship itself had been observed by the British economist and social reformer William Beveridge in the 1940s: when the economy was booming, unemployment was low and vacancies were high, and the converse was true in a slump. Pissarides not only provided a theoretical foundation for the curve but helped interpret movements around it—known as “loops”—when the economy was coming out of a recession. As U.S. and other labor markets struggle today to shake off the effects of the Great Recession, there are loops around the Beveridge curve, just as Pissarides predicted (see Chart 1).

Another practical implication of Pissarides’s work is its support for policies that help the unemployed get back to work.

These policies, known as “active” labor market policies, affect workers’ motivation to search for and accept jobs. Economists agree that workers should receive income support during periods of unemployment, but Pissarides wrote in his Nobel lecture that policies should also “provide incentives for more intensive job search, [which] can shift the Beveridge Curve toward the origin, and improve the performance of the labor market in matching workers to jobs.” Without such active policies, the duration of unemployment ends up being very long, which further “disillusions the unemployed . . . and disenfranchises workers from the labor force.”

These findings have made their way into policy circles and have influenced how governments react to downturns in the labor market. In the United Kingdom for instance, Pissarides told *F&D*, active policies “played an important role in containing long-term unemployment” during the Great Recession. In contrast, he says, the United States did the right thing by providing unemployment benefits but did not put enough effort into getting the unemployed back into jobs through active labor market policies, leading to a worrisome increase in U.S. long-term unemployment. George Akerlof, a 2001 Nobel Prize winner and also known for his work on unemployment, says that “the emphasis Chris put on the loss of skills as spells of unemployment lengthen—and hence the need to keep unemployment from becoming long term—is one of his lasting contributions.”

Go with the flow

Imagine that you are setting the table for a holiday dinner and realize that you’ve set three too many places. What would you do? Remove the extra plates, right? You would think it silly if someone advised you to first add two more place settings and then remove five, thereby eliminating the excess of three. Yet the labor market in advanced economies seems to repeat just such a waste of effort every month. Consider August 2010, when the U.S. economy shed 100,000 jobs. This net reduction in 100,000 jobs was accomplished by creating 4.1 million new jobs and destroying 4.2 million existing jobs. In the jargon of economists, the net change in the number of jobs is dwarfed by the gross flows from unemployment to employment (“job creation”) and from employment to unemployment (“job destruction”).

These facts about the enormity of gross flows were just becoming known in the 1990s, thanks largely to the work of Harvard’s Kim Clark and Lawrence Summers, Chicago’s Steven Davis, and the University of Maryland’s John Haltiwanger. It inspired the work of Mortensen and Pissarides by showing that the labor market was indeed as they viewed it—a dynamic place where a lot of job matches were created and destroyed every month. And it challenged them to build an explicit model that would be consistent with the size of these gross flows and how they changed over the course of the business cycle.

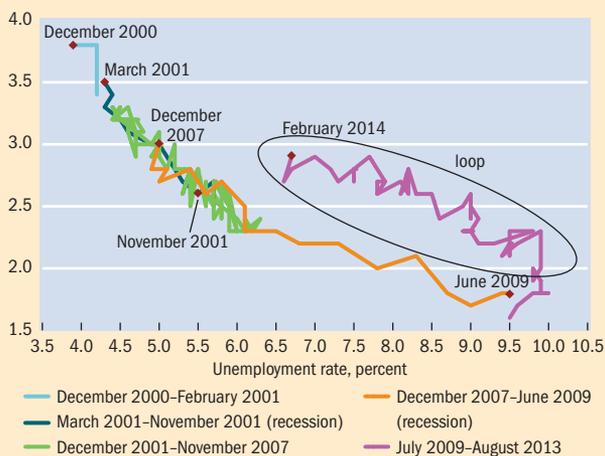
Unlike the work on the matching function, the development of this model was a joint effort by Mortensen and Pissarides in an extraordinarily fruitful decadelong collaboration in the 1990s. A central feature of the model is the assumption that once jobs are created, they cannot adapt easily to new technologies. The labor market is constantly being

Chart 1

Jobs galore, till you need one

The Beveridge curve shows that during a slump, unemployment is high and job vacancies are low. After the Great Recession there was the expected “loop” around the curve in the United States.

(job opening rate, percent)



Source: U.S. Bureau of Labor Statistics.

hit by technological and other developments that change the profitability of existing jobs. Such “idiosyncratic shocks” lead to a destruction of jobs—and to unemployment—until new jobs are established elsewhere to take their place. Job creation and job destruction are also affected by economy-wide

For young workers, it is particularly important that they be given the opportunity to job shop.

booms and slumps. The work by Mortensen and Pissarides combined all these elements into a model that was consistent with the enormous size of gross flows and how they varied over the business cycle. Recognizing the contributions that Diamond had made earlier to its development, the model is now known among economists as the “DMP model” after the initials of its creators’ last names. Blanchard says the DMP model “has proven to be both a theoretical wonder and an incredibly useful one with which to look at data.”

‘Protect workers, not jobs’

The DMP model has also proven to be very useful in thinking about the design of labor market policies. Many countries seek to shield workers from unemployment through administrative procedures that cost employers time and money when they let a worker go—essentially a tax on dismissals. Such employment protection legislation does indeed lower the size of the gross flow into unemployment, by limiting job destruction. But the legislation also hinders job creation. “When the firm is creating a job it expects to have to pay the [high dismissal] tax in some future date if it has to dismiss the worker. Job creation falls as a result,” Pissarides explained in his Nobel lecture. With lower job creation, the flow from unemployment to employment also becomes lower.

In sum, a policy designed to protect workers from unemployment can have the paradoxical effect, over time, of actually raising the duration of unemployment through a chilling effect on job creation (see Chart 2). These implications of the DMP model provide support for what has by now become a mantra: “protect workers, not jobs.” Trying too hard to protect existing jobs through excessive restriction of dismissals can stop the churning of jobs that is necessary in a dynamic economy. It is better to protect workers from the consequences of joblessness through unemployment benefits and other income support—accompanied by active policies to get the unemployed back to suitable jobs before their skills and confidence deteriorate.

Excessive employment protection can also lead to high youth unemployment. Young people do not yet know what they are good at or what they would like to do, and employers are unsure of how well they will perform. For young workers therefore, it is particularly important, says Pissarides, that they be “given the opportunity to job shop. Just as they are not expected to marry their first boyfriend or girlfriend, they should not be expected to take their first job and stick with it forever.” He says that employment protection legislation helps older “male workers . . . but hurts other workers, like women and youths, who go in and out of the labor force” more frequently.

Service with a smile

Over the past decade, Pissarides has expanded the scope of his work to include issues of structural change. As economies move toward the service sector, he says, it is important that the “sector be seen as a hope [for] rather than as a drag [on productivity and growth].” For many emerging markets, too much reliance on manufacturing is a danger, he thinks, as “much of the low-cost work in manufacturing will provide workers with neither the high-tech skills nor the interpersonal skills” that will be needed in many of the jobs of the future (see “Not Your Father’s Service Sector” in this issue of *F&D*).

In Europe, Pissarides told *F&D*, “most job shortfalls are in jobs that provide services to the public and companies.” More flexibility and better employer incentives could generate jobs in retailing, hotels, and automobile services and could “employ a lot of youths and women.” For this it is essential that minimum wages be kept low so that employers will take a chance on new workers. What is also needed, he says, is some change in attitudes about service sector work: “It does not diminish you to give better service to your customer.”

Pissarides himself is known for his easy manner and modesty. Bean says that “Chris’s unassuming style and easy approachability always made him a favorite with students.” Over the years he has supervised a large number of Ph.D. students, among them Reza Moghadam, head of the IMF’s European Department. When the Nobel Prize was announced, Pissarides was away from his LSE office. But, Bean says, “his office door was a mass of multicolored Post-It notes carrying messages of congratulations from students . . . That represents as good a testament as any” to his life’s work. ■

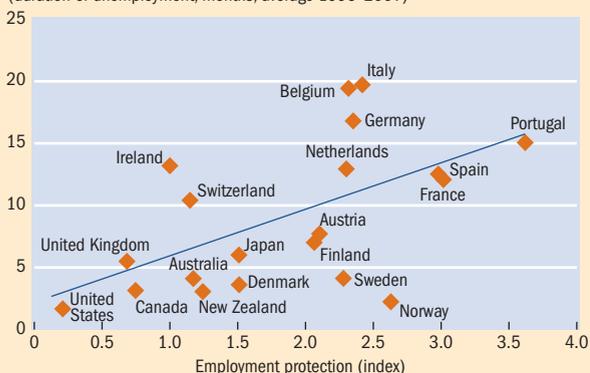
Prakash Loungani is an Advisor in the IMF’s Research Department.

Chart 2

A chilling effect

Policies designed to protect workers from unemployment can lengthen the duration of unemployment by inhibiting job creation.

(duration of unemployment, months, average 1995–2007)



Sources: International Labour Organization; and Organisation for Economic Co-operation and Development.

ASIA

Achieving Its Potential

The region's success is not guaranteed

Changyong Rhee

Celebration of 1,000-year anniversary, Hanoi, Vietnam.



ASIA has led global growth for the past several decades, with an average rate of close to 6 percent since 1990. If the current trend continues, Asia's economy will be larger than that of the United States and the European Union combined in less than two decades.

While Asia's future appears bright, its success is not guaranteed. It depends crucially on choosing the right policy mix to contain risks and secure growth.

In the near term, the region faces some emerging vulnerabilities and may continue to be buffeted by volatility in global markets.

And over the medium term, all parts of this diverse region must confront challenges:

- Asia still has close to 700 million poor people—65 percent of the world's poor, defined as an income of less than \$1.25 a day—and income inequality is growing.
- The region's emerging markets face the task of moving beyond middle-income status and joining the ranks of advanced economies.
- Several of Asia's industrial economies have embarked on the difficult process of transforming their growth model.

Resilience and growth

The year 2013 witnessed several spells of global financial volatility, leading to a pull-back in capital flows from emerging markets, including in Asia. But Asia has remained broadly resilient to global risk, even as some of its economies' buffers have been tested by the retreat of external funding. Swift actions taken to address vulnerabilities are starting to bear fruit, and the growth momentum is set to continue.

Asia is projected to grow at 5.5 percent in 2014 and 5.6 percent in 2015, retaining its global growth leadership. Exports will pick up as the recovery continues in advanced economies, while domestic demand across the region will be supported by healthy labor markets and strong credit growth.

With continued tightening of global liquidity as tapering of the U.S. fiscal stimu-

lus proceeds, Asia will face somewhat higher interest rates and bouts of capital flow and asset price volatility, but overall financial conditions should remain broadly supportive.

There are, as always, risks to this prognosis. Further tightening of global financial

Asia is projected to grow at 5.5 percent in 2014 and 5.6 percent in 2015, retaining its global growth leadership.

conditions remains a threat. And the impact of higher global interest rates could be amplified by rising household and corporate debt in some parts of the region.

If things slow down in China more than expected, other countries in the region will pay the price (see "Sino Shift" in this issue of *F&D*). In Japan, there is a risk that Abenomics-related measures—based on Prime Minister Shinzo Abe's "three arrows" economic plan—will be less effective in boosting growth than envisaged, particularly if structural reforms in labor and product markets fall short of expectations and fail to raise consumer and investor confidence. Domestic and global political tensions could also hamper trade or weaken investment and growth across the region.

If these risks came to pass, they would likely moderate, rather than halt, momentum in the region. But deeper structural challenges could create more difficult hurdles for countries across the region as they pursue sustained growth.

Asia faces five particular challenges: overcoming the middle-income trap, improving its institutions and governance, coping with an aging population, curbing rising inequality, and promoting financial development.

Overcoming the middle-income trap: After several decades of success many Asian economies are at a stage of development at which, historically, sustained rapid growth becomes difficult—the so-called middle-income trap. Think of Latin America in the 1980s, or middle-income Asian economies themselves in the wake of the Asian crisis of the late 1990s, which led to a “lost decade” for income convergence in Indonesia, Malaysia, and Thailand.

Research published in the IMF’s April 2013 *Regional Economic Outlook: Asia* suggests that the odds of a sustained slowdown lasting at least a decade are about 50 percent higher for middle-income economies than for their low- or high-income counterparts. And, indeed, after a decade above historical trends, potential growth appears to have declined in emerging markets in Asia, possibly by as much as 2 percentage points over just the past few years.

How can countries avoid the middle-income trap? In a nutshell, this research sees solutions in sound macroeconomic policies that effectively counter boom-bust cycles, healthy demographic trends, adequate education and infrastructure—roads, ports, telecommunications—strong governance and institutions, and trade integration. Middle-income Asian economies perform better than their counterparts in other regions in most of these areas.

But there are a number of roadblocks to sustained growth that must be addressed to varying degrees and in different ways across the region—four in particular.

Improving institutions and governance: In much of Asia, institutions and governance have not caught up to those of advanced economies as quickly as other facets of economic development (see “Governance Unbundled” in this issue of *F&D*). Indicators of the rigor of regulations (in product, labor, and credit markets) and the rule of law in emerging Asia show that several of these economies trail their Latin American counterparts (Aiyar and others, 2013). Reforms will be needed in these areas for emerging Asia to continue moving up the value-added ladder and maintain strong growth.

Strengthening the rule of law will enhance resource allocation and productivity. Relaxing stringent product market regulations—high barriers to entry, in particular—could boost innovation and efficiency. In a number of cases, this will require tackling the dominance of state-owned enterprises—as planned for instance in China and Vietnam. Easing overly tight job protections for regular workers while

putting together an unemployment safety net, for instance in India and Indonesia, could help stimulate job creation in the formal labor market.

Prudent policies can help blunt the adverse effects of demographic trends. Asian policymakers should both adapt and fight back.

Coping with an aging Asia: A demographic transition in east Asia contributed substantially to the region’s economic miracle in the second half of the 20th century. But having benefited from favorable demographics earlier, many Asian economies will see a substantial rise in the dependency ratio over the next few decades, which will tend to reduce growth and raise governments’ spending burdens (Das and N’Diaye, 2013). This will affect high- and middle-income economies alike: Hong Kong SAR, Japan, Korea, and Singapore will age rapidly, but so will China: at just 0.6 child a woman, Shanghai’s fertility rate is now one of the lowest in the world.

India, in contrast, will enjoy a demographic dividend—its dependency ratio is projected to fall by 8 percentage points by 2030—as it will in the Philippines and lower-income Asian economies. These countries will face a different challenge: finding good jobs for the rapidly growing pool of workers and ensuring that the dividend does not instead become a burden.

Prudent policies can help blunt the adverse effects of demographic trends. Asian policymakers should both adapt and fight back. They can adapt by building age-proof pension systems to ensure that retirees are protected by an adequate social safety net and to encourage labor force participation by seniors. They can fight back with productivity-enhancing reforms and by mobilizing untapped labor resources, for instance in agriculture and in large informal sectors.

Women are perhaps the greatest untapped pool of labor resources in Asia. Five of ten women are not in the labor force compared with only two of every ten men. In the richer aging societies, such as Japan and Korea, enhanced access to child care, more generous maternity and paternity benefits, and tax reform for second earners can draw



women to the workplace. In poorer parts of Asia, greater access to education will bring women into the formal labor force, allowing societies to reap fully their own demographic dividend. As IMF Managing Director Christine Lagarde said earlier this year at the World Economic Forum's annual meeting in Davos, Switzerland, "When women do better, economies do better."

Curbing rising inequality: Finally, rising inequality is both an important social *and* economic issue. In fact, recent IMF research suggests that high levels of inequality can crimp overall growth.

Inequality in Asia is still generally below what it is in Latin America and sub-Saharan Africa, but incomes in Asia are diverging faster than in these other regions. While these other regions saw a reduction in inequality, in Asia the disparity has widened over the past two decades. Moreover, inequality—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—in many Asian economies is now close to or above 40. That level is generally considered elevated and has been met or exceeded in China, India, Indonesia, Malaysia, the Philippines, and Thailand, as well as in Singapore and Hong Kong SAR, two of the most income unequal advanced economies in the world.

The right policies can help curb rising inequality without jeopardizing Asia's growth model—as was the case in Asia during the three decades leading up to the 1990s. Policies to ensure more equal access to public services—notably education and healthcare, enhance public infrastructure, and broaden access to finance can raise growth and improve equity.

In emerging markets in Asia, labor market reforms could contribute to a shift away from informal labor markets toward formal employment, raising productivity and reducing inequality. In lower-income and emerging Asian economies, a move from inefficient and inequitable energy subsidies to targeted cash transfers could support both growth and income distribution objectives. Ongoing reforms in India, with the prospect of better-targeted cash transfers through use of the new biometric uniform identification system (*Aadhaar*), are particularly encouraging.

Promoting financial development: With its impressive array of assets—sound macroeconomic policies, high saving, rising education, still untapped labor resources, and fast technological progress—Asia has the right ingredients for sustaining growth.

But to combine these ingredients effectively, there is an urgent need to promote capital market development and reduce the heavy reliance on bank-based financial intermediation (see "The Future of Asian Finance" in this issue of *F&D*). Important steps include diversifying the domestic investor base in the region through the expansion of pension and insurance funds, enhancing financial literacy, and improving disclosure and accounting standards within the region.

A move from inefficient and inequitable energy subsidies to targeted cash transfers could support both growth and income distribution objectives.

With successful implementation of these steps, Asia's financial sectors will be ready to meet the demands of the real economy. These include urbanization and the growing middle class in south Asia, with its need for improved infrastructure to support urban amenities and utilities, and an aging population in north Asia, which calls for effective investment of pension funds to ensure that retired workers do not outlive their assets.

An Asian century?

Some say that the 21st century will be an Asian century. And there are good reasons to think this. But simply extrapolating from the strong economic performance of recent decades can be misleading. To achieve their full potential, Asian countries will need to clear a number of major hurdles. ■

Changyong Rhee is the Director of the IMF's Asia and Pacific Department.

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Sino Shift

Chinese migrant worker attaches cables, Beijing, China.

David Dollar

China's rebalancing opens new opportunities for developing Asia

Of all the World Bank projects carried out in China during my years as Country Director, one small project stands out.

The World Bank gave a very modest grant to a nongovernmental organization that was trying to help “left-behind children” in rural Sichuan. Both parents of these children had left for better economic opportunities—the mothers often to work in labor-intensive factories in the areas surrounding Hong Kong SAR, the fathers more typically to work construction in cities throughout the country. Children were left behind in rural villages with their grandparents.

The project brought in college kids on weekend visits from the provincial capital to help the children with computer and Internet skills they could not learn from their grandparents. Under new policies unveiled at the recent National People's Congress, and driven very much by the country's demographics, the nature of rural-urban migration in China is set to change. The kind of manufacturing and construction employment that migrant workers sought in the past has already peaked, so

future migrants are likely to work in the service sector. And it will be increasingly easy for migrants to bring their families and become permanent urban residents, benefiting from a full range of urban services.

These shifts reflect the rebalancing of China's economy away from a growth model that relied heavily on investment and exports toward a new model that relies more on innovation as a source of growth and on consumption as a source of demand. The extent to which China succeeds in this rebalancing will have a large effect on the global economy, and on developing economies in particular.

The old growth model

China has been growing extremely rapidly for a long time, but an important shift in this growth pattern occurred at the time of the global financial crisis.

Before the crisis, during the six years ending in 2007, China's GDP grew at an average rate of 11 percent, with investment of 41.5 percent of GDP. That investment expanded the housing stock, manufacturing capacity, and infrastructure such as roads and rail. The country's

current account surplus (exports minus imports) was rising in this period, reaching more than 10 percent of GDP. In the six years since the global crisis, the external surplus fell sharply to 2 to 3 percent of GDP; the shortfall in demand was made up almost completely by an increase in investment, reaching more than 50 percent of GDP in recent years. China's growth has been impressive compared with the rest of the world, but lost in the admiration is the fact that the growth rate has slowed to less than 8 percent, more than 3 percentage points slower than in the precrisis period. Thus, China has recently been using a lot more investment to grow significantly more slowly than in the past.

This pattern of growth manifests three problems. First, technological advance as measured by total factor productivity (TFP) growth has slowed. TFP measures how much an economy is getting from its capital and labor. Second and closely related, the marginal product of capital is dropping—it takes more and more investment to produce less and less growth. The real-world indicators of this falling capital productivity are empty apartment buildings, unused airports, and idled factories in important manufacturing sectors such as steel—excessive investment that generates little additional GDP. And third, consumption is now very low, especially household consumption, at only 34 percent of GDP.

The earlier experiences of Japan, Korea, and Taiwan Province of China provide some useful historical guidance about China's current stage of development. When those economies were at this level of per capita GDP in the 1970s and 1980s, their investment, averaging 35 percent of GDP, was high by global standards but 15 percentage points below China's recent level. They were still experiencing rapid TFP growth so they grew about as quickly as China is now, but using less capital. Those economies tended to have current account deficits until this stage of development, after which they went through a gradual decline in investment as the return to capital diminished, and they shifted from trade deficits to trade surpluses. Their average household consumption rate at this stage was 52 percent, 18 percentage points higher than China's now.

China's leaders are aware that the country faces a unique challenge of rebalancing: it needs to bring down the ultrahigh investment rate while stimulating greater consumption. The recently completed Third Plenum outlined a series of reforms to stimulate innovation and productivity growth, rein in wasteful investment, and raise household income and consumption.

China's reform agenda

The resolution that came out of the Third Plenum sketched out dozens if not hundreds of reforms. Those that are likely to have the most effect on rebalancing fall into four areas: liberalization of the household registration system (*hukou*); intergovernmental fiscal reform; financial liberalization; and opening up China's service sector to competition.

Under China's *hukou* system 62 percent of the population is registered as rural residents, and until now it was extremely difficult for a person to formally change this designation. The result of this system naturally has been to slow rural-urban

migration. China has one of the highest urban-rural income divides in the world: the average urban dweller makes more than three times as much as a rural resident. Many peasant families, if permitted, would move to cities. Despite the restrictions, many young rural residents come to cities as migrant

The kind of employment migrant workers sought in the past has already peaked, so future migrants are likely to work in the service sector.

workers. Even including these migrants, though, China's urbanization rate—52 percent of the population lives in cities—is low given its level of development.

One key feature of the system is that while migrants can come as workers, they cannot bring families and truly become citizens of the cities (hence the “left-behind children” in Sichuan and other interior provinces). The migrant worker system provides low-cost labor for construction and exports while suppressing domestic demand by leaving families behind in poor rural areas with few public services. Reforming the *hukou* system would affect rebalancing in several ways. An important source of productivity growth is the movement of labor from small-scale farming to higher-paying jobs in manufacturing and services. Relaxing restrictions on mobility should lead to higher productivity growth, higher incomes for people who are now registered as rural residents, and greater government expenditure on social services.

This vision could become a reality: in his report to the National People's Congress on March 5, 2014, Premier Li Keqiang set a target of “granting urban residency to around 100 million rural people who have moved to cities.”

One reason local governments have resisted *hukou* reform is fear that they will not have sufficient fiscal resources to fund the increased social services required by migrant families who come to their regions. China overall has ample fiscal resources, but is characterized by a mismatch between the central government, which collects most of the revenue, and local governments, which bear most of the responsibility for expenditures.

In response to this reluctance by local governments, the Ministry of Finance announced the following general plans for fiscal reform to support rebalancing:

- **Introduce measures to bolster local government revenue.** A nationwide property tax, for example, could become a stable source of finance for local governments and discourage the hoarding of apartments, one form of excessive investment in China.
- **Increase the share of state enterprise profits that must be paid into the public budget.** Because state enterprises in the aggregate are profitable, increasing the dividend rate at both

the local and central levels would reduce some bias toward investment and help ensure resources for public spending on education, health, and environmental protection.

- *Allow municipalities to issue bonds to fund their infrastructure projects*, rather than relying on shorter-term off-budget bank loans to local government infrastructure companies.

- *Change the incentives of local officials to align with rebalancing*. Changing incentives may be the most difficult fiscal reform of all. Local officials are generally rewarded for their ability to provide investment and growth and are less successful at meeting other, more socially oriented, objectives such as clean air, food safety, and quality education and health services.

Liberalization of China's repressed financial system is another reform prescribed by the Third Plenum, and it has a significant potential impact on rebalancing. China's bank-dominated system has kept interest rates below or near the inflation rate, and these close-to-zero real interest rates act as a tax on household savers and a subsidy for investment by firms and local governments that are able to borrow from the banking system. Although real interest rates have been near zero almost everywhere in the world in recent years, China's case is unusual because such rates there go back more than a decade. The government has taken some initial steps to raise deposit and lending rates and to allow a shadow banking system—whereby nonbank financial institutions engage in services traditionally provided by banks—to develop, with better returns for savers and higher-cost loans for riskier clients.

But most shadow banking wealth products are now marketed by commercial banks and are therefore erroneously perceived by households as low risk. Total shadow banking lending has grown explosively in recent years and, unsurprisingly, some of the funded investments are starting to go bad. Investments as diverse as coal mines in Shanxi, solar panels in the Shanghai area, and real estate in second-tier cities are going bust, and the companies involved are defaulting on their loans. The first corporate bond default in modern Chinese history occurred earlier this year. It is good for investors to see that risky shadow banking products can go bust, but at the same time the government does not want the public to lose confidence in the financial system overall.

The announcement of plans to formally introduce deposit insurance this year is an important step in separating a cautious commercial banking sector from a risky shadow banking sector. Central Bank Governor Zhou Xiaochuan recently announced that interest rate liberalization would be completed within one to two years. Recent moves to liberalize the bond and stock markets to give private firms better access to capital markets are also a step in the right direction, as was the recent widening of the band within which the exchange rate can move.

The IMF assesses that China's exchange rate has gone from "substantial undervaluation" to "moderate undervaluation" in recent years, so it should not be too difficult for the authorities to further reduce their intervention to allow a more market-determined rate. Opening up the capital account should be the last step in this process of financial reform.

Finally, China's service sector must be exposed to competition from private firms and the international market. State-owned enterprises continue to dominate modern services—in finance, telecommunications, media, and logistics, to name a few. The rebalancing from investment toward consumption means that manufacturing will grow less rapidly than in the past while the service sector expands. China will need more productivity growth in the service sector, which is hard to achieve in a protected economy, but its plan to sell shares in more services firms (partial privatization) should help if it is accompanied by more openness and competition in these markets.

Implications for developing economies

Successful rebalancing in China will be a mixed blessing for other developing economies. Compared with "business as usual," rebalancing is likely to lead to a slowdown in growth in the immediate future as wasteful investment is reined in. But over time it is likely to lead to modestly faster growth because it will alleviate the diminishing returns of the old growth model. Most important, the composition of China's growth will change under rebalancing—with less investment, more productivity growth, and more consumption.

For other developing economies, China's rebalancing means a diminished appetite for minerals and energy imports. As a driver of high metal prices for the past decade each surge in China's investment pushed metal prices higher with a short lag; those prices are 200 percent higher now than a decade ago (see Chart 1). Reining in investment in China is already leading to softer commodity prices. When the IMF's *World Economic Outlook* assumes moderate rebalancing in China, it projects correspondingly moderate declines in energy and materials prices of 3 to 4 percent a year.

While it is notoriously difficult to predict commodity prices, they are likely to fall in response to more aggressive rebalanc-

Chart 1

Investing in metals

Each surge in China's investment has driven world metal prices higher with a short lag; they are now 200 percent higher than a decade ago.



Sources: CEIC; IMF Commodity Price System; and IMF staff calculations.
Note: Commodity metal price index includes copper, aluminum, iron ore, tin, nickel, zinc, lead, and uranium price indices.

ing in China. U.S. dollar interest rates are rising (owing to the recovery of the U.S. economy and normalization of the Federal Reserve's monetary policy) as commodity prices moderate in

Rebalancing from investment toward consumption means manufacturing will grow less rapidly while the service sector expands.

response to China's slowdown, which will mean problems for commodity-exporting developing economies, especially those that have borrowed imprudently. While China's appetite for commodities is likely to moderate, rebalancing can be expected to increase its demand for manufactures and services from other developing economies. In recent years China's real wages have been rising nearly 15 percent a year, far faster than elsewhere in Asia, where low single digits have been the norm (see Chart 2). Add in the real effective appreciation of China's exchange rate, and the result is a China that is a high-wage producer among Asian developing economies.

This means China is losing its comparative advantage in labor-intensive activities such as manufacturing of garments and footwear and electronics assembly. Lower-wage developing economies can now step in and seize some market share from China, either exporting directly to final markets in the United States and Europe or exporting to China as part of a supply chain (see "Adding Value" in the December 2013 *F&D*). Since China still has a large surplus and is moving up the value

chain, this loss of market share in labor-intensive activities is a healthy development that mirrors the earlier transitions of economies such as Korea and Taiwan Province of China. This transformation is already occurring and should be a powerful incentive for nearby developing economies to improve their investment climate and maintain sound macroeconomic policies so that they get the maximum benefit.

On the services side, developing Asian economies are dramatically increasing tourism services to China. Last year 100 million Chinese tourists traveled abroad, the vast majority within Asia.

In a successful rebalancing, China's external surplus is not likely to grow as a share of its GDP, but is projected to remain about 3 percent of a rapidly growing GDP—an absolute increase. At the moment the counterpart to China's current account surplus is primarily reserve accumulation. But it's not hard to imagine a scenario several years from now in which China has a large net outflow of foreign direct investment and no longer intervenes in the currency market in a significant way. China is rapidly emerging as a major source of foreign direct investment. Initially much of this was in the energy and mineral sectors, where it is now a large importer. But recently Chinese foreign investment has tended to expand toward different sectors and geographic areas. Some of the connection to Chinese supply chains will certainly come through outward investment by Chinese manufacturers.

China's rebalancing presents disadvantages for other developing economies, but opportunities as well. A world without Chinese rebalancing, on the other hand, is likely to be more volatile. In the short run, commodity prices would likely stay high as China's investment continues apace. But most observers deem investment of 50 percent of GDP unsustainable: the already evident excess capacity in housing, manufacturing, and infrastructure would become increasingly acute. At some point China's commercial investment will have to drop in response to poor returns; this already seems to be happening in the first half of 2014. And government-backed investment faces the problem that the overall ratio of government debt to GDP, while not yet alarming, has been rising rapidly.

The hitch would be a simultaneous sharp drop in investment in China and abrupt slowdown in growth. Commodity prices would then fall more steeply than in a rebalancing situation. This is also a setting in which a market-driven Chinese exchange rate might depreciate: if investment drops sharply without a commensurate rise in consumption the exchange rate would likely depreciate and the trade surplus widen. China would then be hanging on to labor-intensive manufacturing exports rather than opening up space for other countries.

China's successful rebalancing presents a much more attractive scenario for the world's developing economies. ■

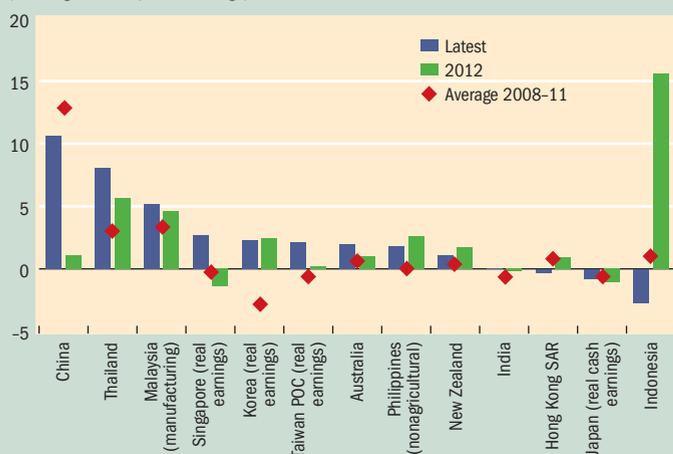
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Chart 2

Lucrative labor

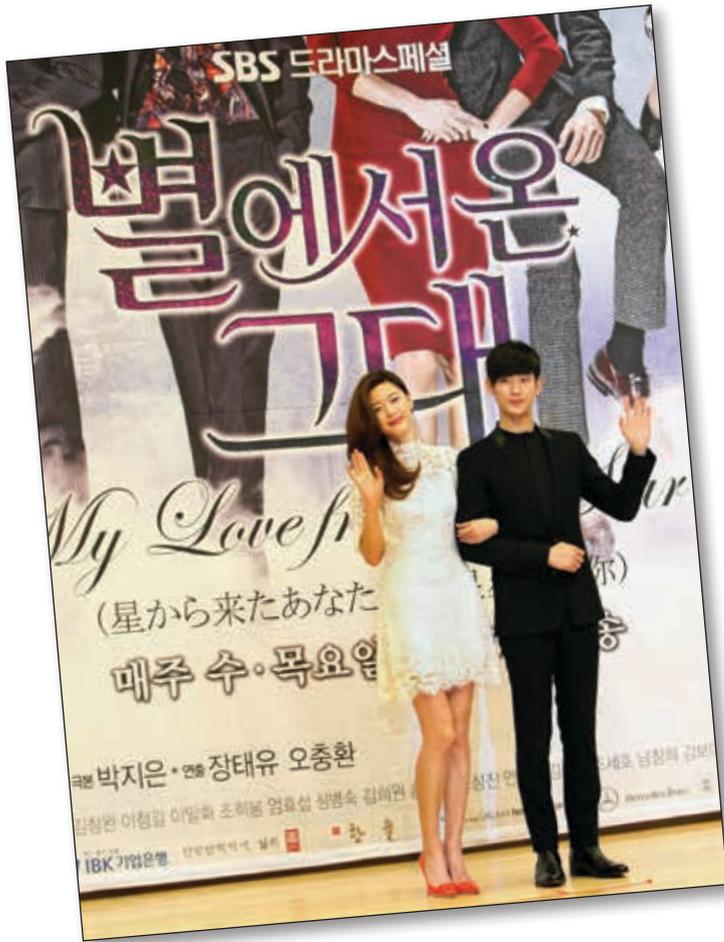
China's wages have been rising nearly 15 percent a year, far faster than in the rest of Asia.

(real wage, annual percent change)



Sources: CEIC; Haver Analytics; and IMF staff calculations.

Note: Annual growth is based on latest monthly observations where available (November 2013), and the remainder is based on latest available quarterly data (2013:Q3 or latest available). India's data are the average of monthly cotton textile earnings in Bangalore, Ahmedabad, Mumbai, Chennai, Indore, Kanpur, and West Bengal deflated by the wholesale price index.



ASIAN Style

Alan Wheatley

Cultural products are playing an increasing role in the region's economy as disposable incomes rise

THE love story of a 400-year-old alien and a pop diva who chows down on fried chicken and guzzles beer sounds like an unlikely harbinger of a new phase in Asia's growth.

Not so fast: The phenomenal success of the Korean television drama *My Love from the Star* has underscored the potential for cultural products, from computer games to contemporary art, to play a much bigger role in the regional economy as disposable incomes rise.

The series has attracted more than 2.5 billion views online (Korea.net, 2014), and when the final episode was broadcast in Korea on February 27, 2014, Chinese viewers were able to watch it in real time, a first in the history of Chinese television.

Chinese newspapers extensively analyzed the success of the show. Wang Qishan, one of the Chinese Communist Party's seven top leaders, acknowledged that it had taken China by storm. A committee of the country's political advisory body even spent a session agonizing over why China cannot make high-quality soaps of its own.

"If you listen to policy addresses, cultural industries generally get mentioned

fairly frequently. Governments like to feel it's part of moving up the economic development ladder," said Marcel Fenez, global leader of entertainment and media practice at PricewaterhouseCoopers (PwC), based in Hong Kong SAR, in an interview with *F&D*.

Granted, a blossoming of modern Asian culture is not about to turn the economy on its head. Even in rich countries, spending on culture averages no more than about 5 percent of GDP. Asia will largely remain synonymous with manufacturing things that people can see and touch (van der Pol, 2007).

A compelling opportunity

"We make semiconductors, autos, cell phones and ships. Of course, the cultural stuff will grow, but it won't be as big as those sectors," Kevin Jin, an analyst with Hyundai Securities in Seoul, told *F&D*.

However, cultural industries represent a compelling opportunity for growth-hungry governments, especially when demand for their traditional exports is still sluggish following the global financial crisis. What's more, unlike steel production, pop music and smartphone gaming apps do not pollute

much and gobble relatively little in the way of costly natural resources. And cultural smash hits project a positive picture of a country, allowing other exporters to piggyback on their success and attracting tourists.

Until recently, many foreigners associated Korea with the Korean War and the unpredictable, authoritarian government in Pyongyang, North Korea, Jin argued. But the Korean Wave of entertainment and pop culture, known as *hallyu*, has ushered in a modern, fun image typified by the tubby rapper Psy, whose *Gangnam Style* dance video has been viewed nearly 2 billion times on YouTube—a record.

“It’s not a matter of money. It helps people to look at us in a different way. The effect is priceless,” Jin said of Korea’s cultural rebranding.

After Daesang Corp, one of Korea’s biggest food companies, hired popular girl band Kara to model in its advertisements in Japan, its sales in the second half of 2011 were 15 times higher than in the first half of the year, according to Min-Soo Seo with the Samsung Economic Research Institute in Seoul (Seo, 2012).

He cited an estimate by the Korea Foundation for International Culture Exchange that put the economic benefits from the surge in Korean pop exports at 5 trillion won (about \$4.3 billion) in 2010.

“K-pop’s stature now transcends economic terms; it has become a strategic asset with halo effects on Korea’s brand and its products,” Seo said in a report.

What is it worth?

Statistics about cultural products need to be taken with a bucketful of salt. Weighing the worth of cultural data is almost as subjective as appreciating a work of art. Tastes and perspectives vary greatly.

Despite the ubiquity of cultural goods, they are largely neglected in economic studies. The U.S. *Journal of Economic Literature* classifies them under “Other Special Topics” (Chang, 2012).

Hendrik van der Pol, director of the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, frames the problem nicely: the cultural sector exploits an infinite raw material—creativity—that proves difficult to trace in physical form.

For instance, current statistics do not accurately capture copyright flows and other intangible assets. Definitions and categorizations vary, often making information incomparable, and data are frequently scarce or at best incomplete, van der Pol laments.

“Furthermore, there is a widespread lack of resources and expertise to ensure high quality statistical work, especially in the developing world, as data collection on the creative sector remains a low priority area for many countries,” he wrote in 2007 (van der Pol, 2007). That remains the case today, according to UNESCO (2013).

The United Nations Conference on Trade and Development (UNCTAD) also bemoans the lack of effort to develop a universal measurement system. However, that has not prevented the agency from taking a stab at gauging the magnitude of the global creative economy—a broad concept that captures not only cultural goods and services but also

things such as toys and games as well as research and development (UNCTAD, 2013).

By this measure, world trade in creative goods and services totaled a record \$624 billion in 2011. Developing and emerging market economies now account for half of global trade in creative goods, and China represents more than half of that share. According to UNCTAD, China sells into the global market over three times more creative goods than the United States, the second-biggest exporter.

But it is not that UNCTAD has suddenly stumbled on a Chinese arts and crafts industry of unimaginable proportions. Rather, its categorization of creative goods includes “design,” which it defines as functional creations that deal with the form, specifications, and appearance of products.

Design goods, including interior design products, fashion, and jewelry, make up fully two-thirds of UNCTAD-defined creative-goods exports.

As the agency acknowledges, it is not possible to isolate the design input from the final product. Thus, its export figures reflect the total value of the final goods, not the design content. And, in any case, it is foreign companies, not China, that design most made-in-China products.

In contrast to the \$125 billion in creative-goods exports that UNCTAD attributed to China in 2011, Beijing itself reckons its exports of “cultural goods” in 2012 rose 16.3 percent from a year earlier to \$21.73 billion, or about 1 percent of total exports (\$2,048.93 billion—*China Daily*, 2013). Exports of visual art accounted for 65 percent of China’s cultural exports, underlining the record prices for the country’s contemporary art.

For what it’s worth, the proportion of cultural exports in the case of Korea is roughly similar. They rose 7.2 percent in 2012 to \$4.61 billion, according to the Korea Creative Content Agency. The total has almost doubled since 2008, testifying to the power of the Korean Wave, but these products make up only 0.8 percent of the country’s overall exports (\$559.7 billion).

In short, the figures from UNCTAD and national statistics agencies measure different things but they are consistent in depicting a sector that is growing rapidly. And governments are pitching in to sustain that growth.

Official support

China has elevated culture to the status of a pillar industry in its current five-year economic plan. The government, which is targeting annual growth in the sector of 15 percent between 2011 and 2015, is providing preferential financial, tax, and land policies for cultural enterprises and has promised to open the door to more private capital (ChinaCulture.org, 2013; Nip and Choi, 2012).

“The strength of a country and a people lies in the flourishing of its culture as a support. The power and competitiveness of its culture is an important goal of a strong and prosperous nation,” said Mei Song, director-general of the Beijing Cultural and Creative Industry Promotion Center.

The Japanese government set up a 30 billion-yen (about \$300 million) “Cool Japan” fund in November 2013 with the aim of promoting a broad range of cultural goods and services, including animation, fashion, and food, to project

soft power and help drive economic growth (Ministry of Economy, Trade and Industry, Japan, 2014).

The ministry hopes that Japan, faced with a shrinking population at home, will have cultural-goods exports of 8 to 11 trillion yen (\$80–\$110 billion) by 2020, or about 1 percent of a global market that it estimates will by then have reached \$9 trillion. The country now exports cultural products valued at 2.3 trillion yen (about \$23 billion).

In setting up a fund to support companies investing overseas, Japan is emulating Korea, whose current success is due in part to steady government support over more than a decade.

Seeking to build on that success, Korean President Park Geun-hye in February unveiled plans for 17 innovation centers for the creative industries that she said would be critical to the overhaul of an economic growth model that had reached its limit (Korea.net, 2014).

One-stop finance

Not to be outdone by its bigger neighbors, Korea keeps expanding its official financial help. The Korea Export Import Bank last year modified its lending programs to provide what it called a “one-stop finance solution” to promote exports from creative industries (Korea Exim Bank, 2013).

By dint of their size or sophistication, it is north Asian countries that have the greatest potential to increase exports of cultural goods. Southeast Asian economies are largely importers. Still, that has not prevented governments from jumping on the cultural soft-power bandwagon.

Indonesia introduced a ministry of tourism and creative economy, arguing that culture, arts, heritage, and the economy are inextricably linked. Thailand made the creative economy a priority sector of its 10th national economic and social development plan, emphasizing that creativity and innovation are critical to sustained economic stability.

In India, by contrast, the concept of the creative economy is not yet well integrated into national strategies, according to a 2010 UNCTAD report.

Hollywood has outsourced visual effects and animation to India, the world’s largest movie producer. The film and television industries contributed \$8.1 billion to the country’s economy, representing 0.5 percent of 2013 GDP, according to a report from financial services firm Deloitte and the Asia Pacific office of the Motion Picture Association (MPA).

But the 2008 movie *Slumdog Millionaire*, directed by a Briton and set and filmed in India, is one of the few films to have grabbed a big international audience.

“In terms of pure content that goes beyond the Indian

diaspora, the examples are few and far between. It’s still a work in progress,” said PwC’s Fenez.

One of the brakes on Asian exports of cultural goods is the rampant theft of intellectual property (IP) in China. The MPA has estimated that 9 out of 10 DVDs sold in China are bootlegged, and piracy rates for downloaded films are almost certainly as high or higher. China itself reckons that bootleg DVDs raked in \$6 billion in 2010, four times box office takings (Levin and Horn, 2011).

Many Japanese companies long ago gave up on China, dismayed by rampant piracy of their music, movies, and games, or have devised business strategies to compensate for it, such as developing in-game purchases.

Korean entertainment companies are also wary. “The Chinese have very limited ideas on copyright. So we try to sell not too many albums but focus on concerts or TV shows which cannot be copied or faked,” said Jin, the Hyundai analyst.

My Love from the Star proves the point. China’s Jiangsu Satellite TV paid 1 billion won (about \$1 million) for Kim Soo-hyun, who plays the alien, to appear on a variety show in Nanjing in March, according to the Korean media. Kim earned a 400 million-won appearance fee (around \$400,000); the rest went for associated expenses, including hiring 600 security guards to protect the star (Korea.net, 2014).

Fenez said he is only slightly more optimistic about China’s readiness to protect intellectual property.

By contrast, Jayson Chi, a McKinsey & Company partner who heads the consulting firm’s global gaming practice, told *F&D* he expects China’s big Internet companies to crack down on pirated content so they can negotiate official digital distribution licenses for the next wave of online games. That would lure Japanese and other cultural-products exporters back to China.

“There’ll be a cleansing going on in the next couple of years that will see a lot of foreign players with IP who will finally be able to reap the benefit of IP in China with proper licenses,” said Chi, who is based in Tokyo. But will the next wave of Asian creative content be worth protecting? As with cultural data, it’s all in the eye of the beholder.

China’s culture minister, Cai Wu, has grumbled that China lacks works of “profound ideas” and “unique styles” (*China Daily*, 2010). McKinsey’s Chi agreed that China could not be called a cultural powerhouse; while the creative environment should improve as IP protection is strengthened, far too many narratives, even for mobile games, are still derived from Chinese stories that are hundreds of years old, he said.

Global culture

Given that today’s creative economy straddles technology and business as well as traditional arts, it pays to take a broader perspective in assessing how cultural products originate nowadays.

India, for instance, stands out for its prowess in information technology services, while IMF Managing Director Christine Lagarde has lauded China for its innovation. China is currently among the top three countries in the world in filing patent applications and topped the global rankings for creative exports—products based on exclusive trademark registrations in China—she said in a speech in Beijing in March (Lagarde, 2014).



John Howkins, whose 2002 book *The Creative Economy* helped popularize the phrase, sided with Lagarde. The Chinese e-commerce company Alibaba does more business every day than U.S. giants Amazon and eBay combined, Howkins told the BBC World Service (BBC, 2014).

Tencent, a Chinese company that provides mass media, entertainment, Internet, and mobile phone value-added ser-

In practice, bridging the gap between national cultures is hit and miss. Success can be ephemeral.

vices and operates online advertising services, is as innovative as Google, he added.

“It doesn’t have the same wide range of scope as Google, but in their area of online activities they are as inventive in coming up with new products and services as Google,” Howkins said.

The rapid rollout of broadband across much of Asia is a clear advantage in the modern creative economy. But making a wholesale shift from being producers of hardware to providers of software and Internet-based services is still a daunting task.

“The cultural goods economy is different from the hardware sector, where the rules are clearer and more tied to costs,” Chi said. “In the creative world it’s a roll of the dice. You know someone is going to win the lottery; you just don’t know who it will be.”

Japan’s Sony stands out as an example of a company that has struggled to match in the content field the global success it enjoyed with iconic consumer electronics products, including the Walkman.

Andy Yee, an Asia-Pacific policy analyst for Google based in Hong Kong SAR, said he fears Taiwanese manufacturers lack the skills to make the transition from supplying global brands with specialized technology to developing consumer-based services such as e-commerce platforms.

“Today, Taiwan is at a crossroads,” Yee wrote in a post for the East Asia Forum. “The key to its reinvention depends on whether it can get plugged into the Internet age” (Yee, 2014).

Plugging into the Internet made a YouTube sensation of an obscure Korean rapper and enabled Rovio Entertainment, a small Finnish computer game developer, to turn *Angry Birds* into the world’s most popular video game.

In principle, then, global culture knows no boundaries. In practice, bridging the gap between national cultures is hit and miss. Success can be ephemeral.

Pokémon, Dragon Ball, and Super Mario stand out as examples of Japanese manga, anime, and games that won large, lucrative international audiences. However, Japanese content makers are finding it increasingly tough to export their wares. Overseas sales of anime peaked at 16 billion yen (\$138 million) in 2006—the United States and France were especially big markets—but had fallen to 9.2 billion yen (about \$100 million) by 2010 (Nagata, 2012).

Chi of McKinsey traced the problem back partly to the Japanese market’s increased preference for niche subgenres

that do not hold the same appeal for foreigners. “It’s getting harder to create a hit in the U.S.,” he said. “A lot of production has gone offshore to try to bridge that cultural gap.”

In *My Love from the Star*, the alien, Do Min-jun, bridges much bigger gaps of time and space before his unlikely romance—surprise, surprise—draws to a happy ending.

Asian content producers can only hope for the same outcome. Thanks to geographic proximity and shared cultural sensibilities, they are well placed to tap growing regional demand. But cultural success is hit and miss. There is no guarantee that Asia’s creative economy will be a powerful new engine of growth.

“It doesn’t just happen because somebody says it’s a good idea. It’s not like building an airport,” said Fenez of PwC. ■

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The FUTURE of Asian Finance

James P. Walsh

As Asia leads the world in growth, will its financial systems lead too?

IN spring 1988, a bank in the Shenzhen Special Economic Zone, established eight years earlier in southern China near the border with Hong Kong SAR, began to buy and sell shares in local companies to investors. A few other financial institutions quickly noticed a lucrative business and became involved. Two years later, the Shenzhen Stock Exchange was founded.

Today, Shenzhen is among the world's 20 largest stock exchanges, and the companies listed there have a total market capitalization of about \$1.1 trillion, comparable to the stock markets in Switzerland and Madrid. Across Asia, the rapid growth of financial sectors is an important part of the growth miracle that has made Asia the world's most dynamic region. Analysts look closely at the financial risks that Asia faces today, but sometimes it's interesting to look farther forward. So with this dynamism expected to continue, what will Asian financial sectors look like in the future?

As countries get richer, their consumers demand more financial services, from mortgages to credit cards, and the financial needs of their businesses, from buying property for new stores to financing equipment for new factories, grow as well. Asia's growth has thus facilitated an equally dizzying expansion of the region's financial sectors.

Between 2000 and 2012, the total value of companies listed on India's stock markets rose from one-third to two-thirds of GDP, and those in Indonesia from one-sixth to almost one-half. The total volume of loans provided by banks rose from 75 percent of Korean GDP in 2000 to 169 percent in 2012, while in

Shenzhen stock exchange building, Shenzhen, China.

Vietnam, it rose from 33 percent to 105 percent. The financial markets in these countries, combined with the global financial hubs of Hong Kong SAR and Singapore and the large and developed markets in Japan, Korea, and Australia, make for an extensive financial sector in Asia as a whole.

Different from others

Asian countries tend to have larger financial sectors than countries in other regions at similar levels of income. But Asia is a diverse place, and while financial sectors in its dynamic emerging markets are large, they are not yet as large or as sophisticated as those of Asia's advanced economies. For example, while bank lending among Asia's emerging markets—105 percent of GDP at the end of 2012—tends to be a larger share of GDP than in emerging markets in other regions, the share among Asia's advanced economies is 194 percent.

Asian financial sectors differ in other ways from those in the rest of the world, too. Banks dominate the financial sector in most Asian advanced and emerging markets, as they do in Europe, but unlike in the United States, where equity and bond markets have a larger role.

Asian banks also tend to be more focused on the traditional bank businesses of deposit taking and consumer lending to households and companies, and rely less on lending to other banks and on selling products such as swaps and other derivatives. This was an advantage during the global financial crisis, when dependence on borrowing from other banks created problems across the United States and Europe as markets seized up.

This reliance on traditional banking is why shadow banking—whereby nonbank financial institutions engage in services traditionally provided by banks—is a relatively new phenomenon in most Asian economies, even though such activities are widespread in many markets in Europe and North America. And while shadow banking and other nontraditional financial services are grabbing headlines and growing quickly in places like China and the Philippines, the base from which they have grown so rapidly was small 10 years ago.

Another area in which Asia's financial sector differs from the rest of the world is its capital markets. Stock markets in Asia tend to be highly volatile compared with those in other regions, though they often enjoy higher returns. Although Asia's advanced economies have relatively sophisticated and deep equity markets, the region's emerging markets have not been able to rely as much on equity capital and thus have focused more on bank intermediaries.

Similarly, Asian countries' budget deficits, with some exceptions, tend to be relatively small. As a result, the development of bond markets has been somewhat slow: without a government yield curve, it is more difficult for investors to price the bonds of a country's corporations. Bankruptcy law and procedures are opaque in many Asian countries, which raises the risk to investors of buying bonds and further slows development. Despite these challenges, however, Asian equity and corporate bond markets remain similar in size to those in many other regions.

Government plays a bigger role in banking in many Asian emerging markets, especially in China and India, than in the rest of the world. In China, the five largest banks are controlled by the government, while in India, public banks account for about three-quarters of system assets. This extends to nonbank financial institutions as well: in India one of the world's largest life insurers, the Life Insurance Corporation of India, is controlled by the Indian government. Here, too, there is disparity across the region—public banks in countries such as the Philippines and Thailand comprise a much smaller share of total banking sector assets, and private institutional investors play a significant role in Malaysia.

Asian countries are very well integrated into the global trading system, trading extensively not only with advanced and developing economies outside the region, but also, as

The first challenge for Asia's financial sector will be to support rapid growth in the region.

manufacturing has become more regionally integrated, as part of an Asian supply chain connecting southeast Asia, China, Japan, and Korea. But financial integration has lagged. If we measure the share of GDP made up of domestic assets held by foreigners and foreign assets held by nationals, emerging markets in Asia tend to be less globally integrated than in other countries.

As always, there are exceptions. Malaysia, with a large and active institutional investor sector, is as globally integrated as any emerging market, but India and Indonesia are at the other extreme and have smaller international investment positions than emerging markets in other regions.

What's ahead

The first challenge for Asia's financial sector will be to support *rapid growth* in the region. Asia's emerging markets are expected to move from 30 percent of world GDP (measured at purchasing power parity) to 41 percent in 2023. As financial markets deepen, new IMF research suggests, the proportion of emerging Asia's financial assets could rise to 31 percent in 2023, from 18 percent today.

In addition to financing this rapid growth, Asian finance will also have to tackle two other significant challenges.

First is the region's *infrastructure deficit*. With more people living in cities, growing trade across the region, and rising demand for communications and travel, Asia will need to invest heavily to meet its infrastructure needs. Estimates of spending for clean water, telecommunications, highways, and other basics over the next 20 years vary widely, but in all cases the numbers are large. Ensuring that Asia's large pool of savings can be directed into long-term financing that will close these infrastructure gaps will be difficult. Infrastructure projects tend to require huge up-front investments that pay off only over a long period of time.

Construction of a new airport, electricity generation plant, or water treatment facility requires a capital provider willing to invest a lot for a long-term payoff. Since the global financial crisis, this type of financing, for various reasons, has become more expensive around the world, and in Asia it will be especially tough to develop.

The second challenge is *demographic change*. China, Japan, Korea, and other countries in Asia have among the world's most rapidly aging populations (see "The End of Cheap Labor" in the June 2013 *F&D*). As the working population ages in these countries, people must save more for retirement (see "The Price of Maturity" in the June 2011 *F&D*) and will need good investment opportunities to ensure those savings earn a good return. On the other hand, in countries such as India and Indonesia the working-age population is expanding rapidly, and there is a huge need for investment not only in infrastructure but also in new businesses, housing, and other areas. Given the high saving rates in many of Asia's aging economies, and the significant investment needs across the region, finding ways to match the two could help growth and address the region's demographic challenges. There are many ways to make this happen: individually purchased mutual funds could buy stocks in emerging Asian companies and pension funds could invest in those companies' bonds. Banks could lend funds from the savings accounts of their customers to banks in other regions, which could in turn finance new enterprises. But institutional investors are relatively small in most emerging markets in Asia, and barriers to investment across borders are still high, so this will be a difficult long-term process.

Larger, higher, stronger

These changes call for larger financial systems: higher incomes will lead to more demand for mortgages and cars, working capital for more companies, trade credit for Asia's increasingly global companies, and bonds to finance infrastructure and provide stable incomes for retirees. But all these changes will also make Asian financial systems more complex.

In many Asian financial systems today, margins between banks' lending and deposit rates are relatively high, meaning that banks can be quite profitable while focusing only on traditional business models. But once the low-hanging fruit of high-margin lending from consumers newly entering the market or from new lines of business is gone, banks will have to look farther afield. In some economies, such as Japan, where this process has already begun, banks are looking outward for profitable investments. As increased efficiency begins to whittle down interest margins in emerging Asia, banks may turn to new income sources, such as money management and securitizing consumer loans, and the prospects for more interbank lending could rise.

This complexity will not only be domestic. At least some of the savings in Asia's (demographically) older and richer economies will wind up in Asia's younger and poorer countries through bank borrowing across borders, increasingly interconnected equity and bond markets, and cross-border



Bank skyscrapers in Hong Kong SAR.

Asian financial systems are expected to become significantly larger, more complex, and more interconnected than they are today.

borrowing by corporations. All three channels will engender more complex financial systems as banks contend with larger foreign exposures, equity and bond investors demand increasingly sophisticated credit and exchange rate hedges, and corporations look to neutralize their own exposure to exchange and interest rate changes. The very process of greater regional integration will thus lead to greater provision of increasingly complex services by Asian banks.

An example of these changes can already be seen in Asia's increasingly sophisticated bond markets. Although many Asian emerging market economies have improved the size and liquidity of their bond markets in recent years, these markets remain dominated by low-risk issuers, including governments. Developing a market for riskier borrowers (such as the so-called high-yield segment), as other countries, especially the United States, have done, would do much to support two of Asia's financial goals. It would raise returns for pension funds and retirement savers, helping on the aging front, and would allow more savings to be channeled into infrastructure, addressing Asia's deficit in that area.

But this requires new tools. One option is for banks or insurance companies to provide protection by issuing credit default swaps to reduce risk for investors in new bond markets. Foreign investors may also want so-called plain vanilla interest rate or exchange rate swaps, but may try to lower their costs by hedging with more complex instruments. These services could be provided by foreign banks, but Asian banks will have the expertise and presence in key markets to make their own investment in these new areas highly profitable.

These new tools and the new sophistication of Asian financial systems will make financial institutions themselves larger and more complex. While advanced Asia is home to three global systemically important financial institutions—Mitsubishi UFJ, Mizuho, and Sumitomo Mitsui in Japan—

across the rest of Asia, only China, the world's second largest economy, hosts such institutions—the Bank of China and the Industrial and Commercial Bank of China. But as Asian companies move abroad, as Asian financial systems become increasingly connected with the rest of the globe, and as domestic investors become more numerous and more sophisticated, Asian financial institutions stand to grow rapidly in size and complexity. The financial markets of India and the countries of the Association of Southeast Asian Nations (ASEAN) may also soon host globally significant institutions, potentially sparking the same concern that arose across Europe and North America about banks that are “too big to fail.”

Even if Asia's financial systems develop differently and do not raise such concerns, the ongoing crisis in the euro area, combined with worldwide shifts in regulation, has already led to many kinds of financial changes. One such area is trade financing: European banks, in response to regulatory and economic changes that have pushed them to focus on core markets, have pulled away from Asia. In regions such as central Europe and the Middle East, these changes have led to a reduction in trade credit, while in Asia, regional banks, especially Australian and Japanese banks, have filled the void. Initially this decline seemed to be limited to low-margin short-term trade financing. But as the United States and the European Union contemplate tighter restrictions on banks in their jurisdictions and European banks try to shore up their domestic balance sheets, more expensive services, such as aircraft leasing and complicated long-term trade financing, have also been curtailed, and Asian banks are trying to take up the slack. With this innovation, however, comes the need for regulation and supervision.

Public banks

Because the largest banks in some Asian economies are controlled by the government, there is a question of how public involvement will change over time. In Hong Kong SAR and Singapore, as well as in Australia and New Zealand, public banks have a minimal role. But in Asia's other advanced economies, Japan and Korea, the public sector still looms larger than in many Western economies, especially the United States and the United Kingdom. On average across countries and over time, public banks have been less profitable and less innovative than private banks, which has meant riskier and less profitable balance sheets in many countries.

Public banks can be useful tools for government policymakers. But, on average, they also give rise to inefficient banking practices, continuous calls for more capital to maintain the share of public banking, and government bailouts. How policymakers across the region treat public banks will depend on the circumstances of each economy and each bank. But in the long run, financial systems dominated by government-controlled banks are unlikely to offer the competitive and efficient financial systems necessary for Asia's growth challenges.

Another key to the puzzle will be growing financial integration. Pairing the savings in more rapidly aging economies with investment projects in Asia's younger economies will require rapid growth in cross-border financial flows. Savers also want to diversify their risk, which could be achieved, for example,

by allowing Korean investors to spread their risk across their home market as well as those in India and Thailand. For now, most assets held abroad by Asian investors tend to be in developed economies, particularly in liquid government debt.

But this will have to change. We expect Asian economies to become more entwined, with investors more and more likely to buy assets in other countries over the next 20 years. This will be particularly true in southeast Asia, where ASEAN countries are cooperating to further integrate their economies.

Another key requirement will be a loosening of capital account restrictions in China and India. Today, India's and China's capital accounts are more closed than those in the rest of the region. But both countries have gradually loosened restrictions, and both governments have plans to continue this liberalization, which will help savers find more outlets abroad and allow foreign investors to diversify more effectively by buying Chinese and Indian assets. If China and India are as open in 2023 as some advanced economies are today, we estimate the total size of their financial sectors will be 10 to 30 percent larger than if they remain at current levels of openness.

Asian financial systems are expected to become significantly larger, more complex, and more interconnected than they are today. To ensure that these changes do not lead to a buildup in the kinds of risks that brought down some countries in the region during the Asian financial crisis and laid the global economy low during the global financial crisis, regulators and supervisors in Asia must stay on their toes. This applies also to the IMF, which hopes to work closely with Asian countries to identify and minimize risks before they materialize in order to avoid the mistakes of previous crises.

More interconnected financial systems can allow households and pension funds, among others, to diversify, thus reducing their risk, but can also allow bankruptcies and bank failures to spread across borders. Regulatory cooperation has become key as the world's financial sectors have become more integrated. Asia has an active role to play in international forums to ensure that this process can continue safely.

Fortunately, Asia is accustomed to change. After the Asian financial crisis, the region's governments, supervisors, and financial systems moved swiftly to address problems such as excessive leverage and unhedged foreign borrowing that exacerbated the damage of the crisis. Asian banks rapidly paid down their debts, while supervisors ensured that those imbalances didn't arise again. These changes helped the region better weather the global financial crisis and proved that Asia is nimble and able to change with the times.

As Asia continues to outpace the world in economic growth, the question will be how to make sure the world's fastest-growing financial system can also become its safest. ■

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Asia's Resilience

The region survived the global crisis and must now cope with a significant worldwide financial and economic transition

Zeti Akhtar Aziz

ASIA weathered the global financial crisis and its aftermath with a resilience it built steadily over the past decade. Today, that resilience is again being tested as a significant transition takes place in the global economic and financial landscape.

As the recovery in the major advanced economies strengthens, the end of unconventional monetary easing in these economies is an inevitability. While the prospect of a return to more conventional monetary policy reflects improved economic conditions, it has been accompanied by heightened volatility, with spillovers to the emerging market economies. Asia, with highly open economies and increasingly globally connected financial systems, is not insulated from these external developments. The region will benefit from the global recovery, and its strength and resilience will help it navigate this more volatile international financial environment.

Managing the transition

Almost six years of exceptional monetary accommodation in advanced economies—mainly through large-scale central bank purchases of assets to drive down long-term interest rates—has left the world in uncharted territory. Monetary policy normalization will present a challenging transition. Following the indications of a potential U.S. Federal Reserve scale-back in quantitative easing (its term for unconventional monetary policy) in May 2013, emerging market economies experienced large reversals of capital flows. Within eight months, approximately a quarter of the capital that had flowed into those economies during the preceding four years had reversed. Several economies—in particular those with deficits in both their fiscal and current account positions and high rates of inflation—experienced significant exchange rate depreciation and a decline in equity and bond prices.

Nonetheless, despite increased volatility in capital flows and financial markets, macroeconomic and financial stability in Asia was preserved. Financial intermediation—the linking of savers and borrowers—was not interrupted, and credit-worthy households and businesses had continuous access to financing. Economic activity in the region remained broadly unaffected by these volatile financial conditions.



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Asia's ability to intermediate large and volatile capital flows is the result of its strong economic fundamentals and sound banking systems, which have been reinforced by improved governance and risk-management practices and enhanced regulatory and supervisory oversight. Sources of financing are also more diversified following efforts to increase the size and offerings in the capital markets. Economies in the region have generally maintained favorable external positions—with flexible exchange rates, high international reserves, and less reliance on short-term external funding. Many Asian economies also have the policy space and thus the flexibility to implement countercyclical measures.

Since 2009, several Asian economies have also introduced preemptive measures to address the buildup of financial imbalances from capital inflows, which contributed to strong credit growth, high household debt, and rising property prices in the region. Macroprudential measures included limits on maximum loan duration and adjustment of loan-to-value ratios for property purchases, fiscal measures such as higher transfer taxes, and revisions to real property gains taxes.

Policymakers recognized that such preemptive measures would help address domestic vulnerabilities. Efforts have also been directed toward strengthening macroeconomic fundamentals, with greater focus on the current account and fiscal balances. Some economies have eased export rules, such as taxes and currency hedging regulations, while the management of foreign exchange liquidity has been improved to strengthen their external position. Tax and subsidy reforms were also undertaken to reduce government deficits and debt, and improved governance and medium-term fiscal targets enhanced the credibility of the measures.

The policy approach in several Asian economies is gradual, sequenced, and targeted. Given the fragile state of the global economic recovery, this approach will promote orderly adjustments and corrections in the affected sectors. Policymakers can also monitor the impact of these policies and preserve flexibility.

While national policies help strengthen domestic fundamentals, they are insufficient to maintain resilience in an increasingly integrated global economic and financial environment. Regional cooperation has therefore been enhanced, especially in the areas of cross-border surveillance and inte-

grated crisis management to address risks to regional macroeconomic and financial stability preemptively. Multilateral arrangements to support a country in a liquidity crisis, such as the Chiang Mai Initiative Multilateralization, as well as trade financing and settlement arrangements, will improve the region's ability to weather the more challenging environment. Frameworks are also in place for information sharing and collective policy response when a crisis is imminent.

Unlocking further growth potential

Asia is better prepared to meet the immediate challenges of the current global environment, but it is also focused on raising long-term economic potential.

Asia's demographic advantage is a key economic asset.

The region has become an important contributor to global growth. Since 2000, with the exception of the 2009 crisis year, Asia has grown at an annual rate of 7.5 percent, accounting for 44 percent of global growth. Home to 60 percent of the world's population, the region is a significant source of revenue for many global corporations. Based on Bank Negara Malaysia estimates, the region's final demand accounted for about 20 percent of global production in 2012, more than doubling since 2000.

In part, this has been achieved through more balanced and diversified sources of growth. The diversification has essentially taken place on two fronts. First, the economies moved from being export led to being more driven by domestic demand. Second, within that domestic demand, the growth drivers shifted from the public to the private sector. As a result of stronger domestic demand in the region, the nations have also diversified their external sectors, shifting from traditional export markets in the major advanced economies to markets within the region. While Asia's trade with economies outside the region has doubled since 2000, intra-Asia trade has tripled. More than 55 percent of Asia's exports are now to countries within the region. Similarly, intraregional investment activity has also increased significantly.

In the future, the region's growth potential will be sustained by several fundamental factors. In particular, Asia's demographic advantage is a key economic asset. During this decade, a young middle-class population has emerged, and it is growing in number and in affluence. The current middle class of more than 500 million people is projected to exceed 3 billion by 2030 (Kharas and Gertz, 2010). Urbanization and infrastructure development also enhance the region's growth potential. The increase in consumption demand and greater investment activity will thus anchor the growing importance of domestic demand in Asia.

In addition, Asia's diversity will continue to support regional economic integration. The region comprises economies at different stages of development that are endowed with a range of rich natural resources. This diversity has

enabled businesses and financial institutions to build a comprehensive vertical supply chain whose participants produce a wide range of products and services. Because development needs in the region are vast, there is ample opportunity for further trade and investment linkages, which will garner benefits from outside regional borders.

Importantly, financial institutions and markets will become significantly better integrated in the medium term. This will facilitate more efficient intermediation of funds within Asia through more effective recycling of surplus savings for productive investment. With one of the highest saving rates in the world, Asia has the capacity to meet the region's vast financing needs with the right institutional arrangements. Efforts toward greater financial integration will also enable further diversification of risk, and contribute to greater stability in the regional financial system. Despite the recent reversal of capital flows, a more developed regional financial system presents additional options for global investors and borrowers and allows for more efficient allocation of financial resources.

To further unlock the region's growth potential, reforms to generate sustainable, quality, and inclusive growth are also important. Several Asian countries are implementing wide-ranging economic policies to enable participation in more sophisticated links in the value chain and to raise productivity and deliver more inclusive economic growth. Efforts to improve social safety nets, pensions, health care, education, and financial inclusion are being intensified. These efforts contribute to more balanced growth and maintain social cohesion.

At the same time, growing consumption will place demand pressures on limited resources. The policy agenda must therefore address environmental damage, pollution, and climate change—for example, through sustainable financing.

Importantly, growing interdependence will present both benefits and risks. The challenge is to ensure that regional collective action, particularly the institutional arrangements for policy coordination, is evolving in line with the rapid global financial and economic integration.

Asia's future

Asia's resilience has withstood a major global financial crisis and its aftermath. As the world transitions to a new environment characterized by moderate growth, slower global trade, and greater uncertainty and volatility, Asia's response has been preemptive, marked by increased flexibility and greater foresight. A resilient Asia will benefit the global economy by being a vibrant growth center and a stabilizing force in the global financial system. Equally important, beyond economic progress and financial stability, Asia's contribution can extend to the global policy landscape with the right representation on global forums. ■

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Women line up to vote in Jaipur, India.

Governance UNBUNDLED

Shikha Jha and Juzhong Zhuang

By focusing on the biggest hurdles to growth and development, countries in Asia are more likely to see their governance reform efforts succeed

GOOD governance—which requires transparency, accountability, rule of law, and effective and legitimate institutions—is believed to be an important piece of economic development, while poor governance can hobble growth in an otherwise vibrant system.

But the rapid economic growth that helped developing Asia narrow the income gap with advanced economies and lift millions out of poverty occurred despite a governance scorecard that—according to standard criteria—has been poor and variable.

What explains this apparent contradiction? To figure out the role of governance in Asia's prosperity, we draw on a rich body of research and find that there is more to the question than good versus bad governance. Different elements may come into play at different stages of a country's development. And not all aspects of governance carry equal weight at a particular point in time. Governance reform priorities need to take into account cultural and institutional realities, by focusing on areas that address the biggest hurdles to a country's growth and development.

The Asian tigers

Asia's economic advance is well known. Following Japan's rapid recovery from World War II and expanding economic influence regionally, the economies of Hong Kong SAR, Korea, Singapore, and Taiwan Province of China became what is termed "newly industrialized"—they rose from poverty to high-income status within a generation. Then market reforms in China opened the way for its sustained rapid economic growth. In the past decade, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam emerged as Asia's newest tigers.

These changes have transformed the global economic landscape. Over the past three decades, developing Asia's per capita GDP in purchasing-power-parity (PPP) terms increased by a factor of 14—from \$497 in 1980 to \$6,844 in 2012, growing on average by 8.5 percent a year. Except for a dip during the 1997–98 Asian financial crisis, economic growth has largely been consistent, even after the recent global financial crisis. Developing Asia now accounts for about one-third of global GDP in PPP terms.

With higher growth, the region has made significant progress in reducing poverty (ADB, 2013). Between 1990 and 2010, some 700 million people were lifted out of extreme poverty. Among nonincome indicators of poverty, primary education for both girls (89 percent) and boys (91 percent) is now nearly universal; child mortality declined by half between 1990 and 2011; and more than 85 percent of households have access to safe drinking water today, up from about 75 percent in 1990.

But these remarkable achievements are not matched by similar progress on governance.

Measuring governance

The concept of governance is broad—but nearly always includes voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption.

Various sets of indicators use widely different approaches to quantify aspects of governance, but all tell a consistent story of persistent weak governance in Asia.

One set of indicators—produced by the *International Country Risk Guide* (ICRG) since 1980—suggests poor overall quality of governance in Asia relative to Organisation for Economic Co-operation and Development (OECD) countries with limited convergence (see Chart 1). Since 1993, indicators covering the rule of law and bureaucratic quality gained only slightly compared with average OECD scores. Following the 1997 Asian financial crisis, as the affected countries focused on measures to deal with the crisis, institutions and systems for containing corruption deteriorated considerably, and it took time for them to become effective again.

The Worldwide Governance Indicators (WGIs)—a World Bank data set—show results similar to ICRG indicators (Chart 2). OECD countries had the strongest scores among global regions on all indicators in 1996 and 2011. At the opposite end of the scale, the scores for sub-Saharan Africa were the lowest in 2011, with the exception of political stability and absence of violence and voice and accountability. For

all the indicators, developing Asia scored only moderately better than sub-Saharan Africa and close to the Middle East and North Africa—the two regions where the pace of growth and poverty reduction was much slower. Developing Asia's scores were generally lower than those of Latin America and the Caribbean, non-OECD Europe, and OECD countries. Among the six dimensions of WGIs, the region's scores in voice and accountability and control of corruption were particularly low in 2011. This pattern was persistent and did not change much between 1996 and 2011.

Developing Asia's overall ranking among global regions improves somewhat after controlling for income differences. This is shown by the average deviation of Asian countries' actual scores from the global benchmark, which indicates the global average scores at each level of per capita income for the corresponding WGI (ADB, 2013). Developing Asia scored above the global benchmark for political stability and absence of violence. But it fell short with respect to the other five indicators. In particular, after controlling for income differences, developing Asia ranks the lowest—excluding the Middle East and North Africa—on voice and accountability, controlling corruption, and regulatory quality. Not surprisingly, these three elements of governance also show the widest gap between developing Asia's average and that of the advanced OECD economies.

So developing Asia presents a paradox. Recent decades show consistently high economic growth despite relatively low ratings on governance. The region's relative economic success appears to contradict the intuitive principle that good governance accompanies development. According to this view, good governance enables more efficient division of labor, higher productivity of investment, and efficient implementation of social and economic policies, all important drivers of sustained economic growth.

Is Asia different?

Empirical evidence shows that, on the whole, better governance is correlated with higher growth and better development outcomes. To resolve Asia's conundrum, we consider four different ways of looking at that relationship.

First, by and large, there is a positive association between governance and economic development, and Asia is no exception. To illustrate the point, Chart 3 plots worldwide data for two WGIs—government effectiveness and voice and accountability—vis-à-vis a country's per capita GDP. In both cases, the governance score is positively correlated with per capita GDP. The red dots in Chart 3 refer to developing Asian economies and show a similar positive association. Analysis of other governance indicators—regulatory quality, control of corruption, political stability, and rule of law and their correlation with per capita GDP, not shown here—also confirms this positive relationship.

Second, the relationship between governance and economic development varies across the various dimensions of governance. Chart 3 shows that government effectiveness is more closely correlated with per capita GDP than voice and accountability. In fact, government effectiveness has

Chart 1

Weak governance

For Asia, rapid growth has helped narrow gaps with advanced economies in income, but not in governance.

(percent of average OECD score)



Source: Asian Development Bank estimates using data from Hulme, Savoia, and Sen (2014).

Note: OECD = Organisation for Economic Co-operation and Development.

the highest correlation with per capita GDP among the six WGI, and voice and accountability has the lowest. An Asian Development Bank study (ADB, 2013) uses a global data set to empirically estimate the relationship between GDP growth and governance quality. The results show that Asian countries that scored high (against a global benchmark, as explained earlier) on government effectiveness, regulatory quality, and control of corruption in 1998 grew faster—about 1.5 percentage points annually—during 1998–2011 than Asian countries that scored low. However, growth does not differ significantly between countries with high and low scores on political stability and rule of law, and in the case of voice, Asian countries that scored higher actually grew slower.

The same study reports results from a cross-country analysis between GDP growth and governance quality. The results show that all governance indicators have a positive and significant relationship with growth performance in the global sample of countries, and this relationship holds for Asian countries as well. However, government effectiveness and regulatory quality correlate much more strongly with growth in Asia than in the global sample. This suggests that Asian economies would benefit more by improving these two aspects of governance.

Third, the relationship between governance and economic development depends on a country's stage of development as well. An examination of the relationship for all six WGI shows that, by and large, correlation between governance

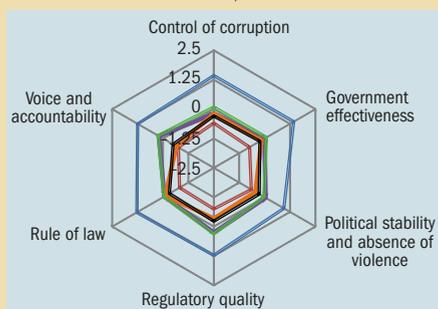
and development is weaker among lower-income than among higher-income economies. This is especially true for voice and accountability. For example, data points in Chart 3 are widely scattered along the benchmarks among low- and middle-income countries but tighten among higher-income countries. This is also true for Asian countries. Perhaps countries face different binding constraints at different stages of development, and governance reform will more likely help support growth and development when it alleviates those constraints (Rodrik, 2008). Thus, in low- and middle-income countries,

Chart 2

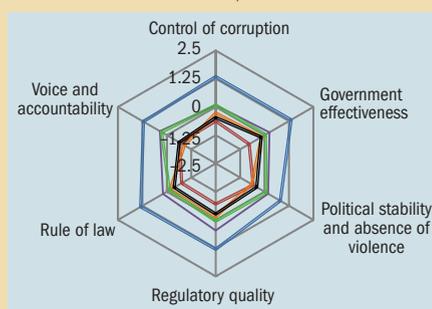
Global governance scorecard

Asia's scores in voice and accountability and controlling corruption were particularly low in 2011.

Worldwide Governance Indicators, 1996



Worldwide Governance Indicators, 2011



— Sub-Saharan Africa — Non-OECD Europe — Latin America and the Caribbean
— OECD — Middle East and North Africa — Developing Asia

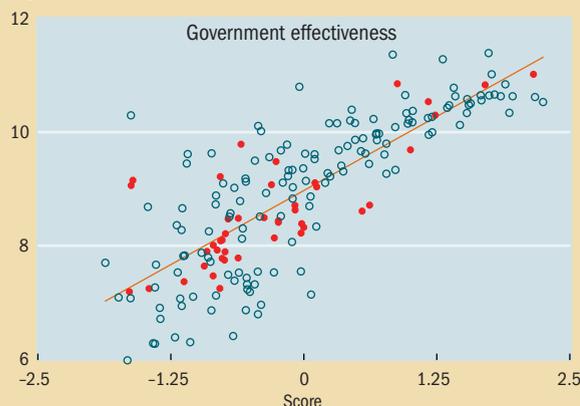
Sources: Asian Development Bank estimates using data from World Bank, Worldwide Governance Indicators online database.
Note: OECD = Organisation for Economic Co-operation and Development. Indicators range from -2.5 to 2.5, with higher numbers denoting better governance quality. Regional score is the simple average of the country scores.

Chart 3

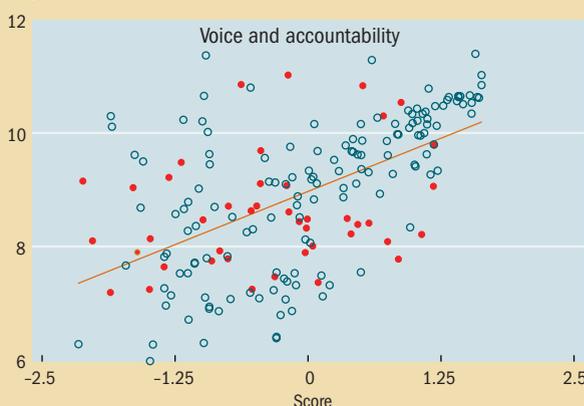
Government effectiveness rules

Asian economies with more effective governments have higher per capita GDP; voice and accountability has a lower correlation with economic development.

(log GDP per capita, PPP, current dollars, 2011)



(log GDP per capita, PPP, current dollars, 2011)



Sources: IMF, World Economic Outlook database; World Bank, World Development Indicators database and Worldwide Governance Indicators database.
Note: PPP = purchasing power parity. Red dots refer to developing Asia. Indicators range from -2.5 to 2.5, with higher numbers denoting better governance quality.



Weak governance holds back infrastructure development much more in Asia than elsewhere.

in addition to improving government effectiveness and regulatory quality, better implementation of rule of law and control of corruption take precedence. The associated governance reforms may push growth and development much more than other dimensions of governance. Although improvements such as voice and accountability have intrinsic value, they appear to have less of a role to play in supporting development outcomes when a country is at a low-income stage.

Fourth, the relationship between governance and economic development varies with individual indicators of development too. The ADB (2013) examines whether higher rankings on governance quality correlate with better development outcomes, and if the relationship holds equally well for developing Asia. Three mechanisms that transmit the benefits of good governance to development outcomes are considered: higher per capita income, especially for the poor; enhanced tax collection to enable more public spending on social development; and more effective social development spending and delivery of public services. The analysis yields two major results.

One, at the global level, better governance on most WGI indicators generally correlates with better development outcomes: lower rates of extreme poverty, a higher human development index, less gender inequality, lower maternal and under-5 mortality rates, better access to sanitation, higher levels of education, better infrastructure, and a more reliable electricity supply.

Two, the link between governance and infrastructure quality and reliability is stronger in Asia than in other parts of the world. In other words, weak governance holds back infrastructure development much more in Asia than elsewhere—a critical constraint to future development. Asia's relationship between governance, on the one hand, and some measures of human development, such as extreme poverty, under-5 mortality, and years of schooling on the other, resembles that in the rest of the world. However, the link between governance (especially voice and accountability and government effectiveness) and other measures of human development—such as gender inequality, maternal mortality, and access to improved sanitation—is weaker in Asia. This can perhaps be explained by deep-rooted cultural values and social norms. Thus, another explanation underlying the conundrum of remarkable achievements in development at the aggregate level that are not matched by improvements in governance may be found in the individual development indicators.

Policymakers must consider three issues

First, governance matters for growth and development. Worldwide data show that faster growth and better development performance are associated with better governance,

in particular with government effectiveness, regulatory quality, rule of law, and controlling corruption. The link between growth and two indicators—government effectiveness and regulatory quality—is stronger in Asia than elsewhere. However, it is more difficult to establish a causal relationship between the two. A plausible interpretation is two-way causality between better governance quality and higher development performance: one reinforces the other. Thus, it pays to improve both.

Second, the relevance of different elements of governance varies with a country's stage of development. Low-income countries should strive for more effective government, better regulatory quality and rule of law, and tighter control on corruption (for example, conflict prevention, support for human rights, and provision of essential public services). And graduating to higher income entails improving governance quality with respect to citizen participation and government accountability. Middle- and higher-income countries are likely to reap considerable rewards from their citizens' greater voice, political stability, and world-class institutions (for example, effective legal systems, high-quality health and education services, and well-developed financial systems).

Third, the payoffs to governance reforms vary with individual indicators of development. Corruption prevents public service programs from reaching the poor, while weak regulatory regimes and ineffective government throw a monkey wrench into businesses' growth and infrastructure investment much more in Asia than elsewhere. Moreover, social norms influence gender outcomes and sanitation practices in Asia. In countries that face widespread market failure, governments should focus on removing or reforming the most binding development constraints. Because countries with different initial conditions have different binding constraints, they will require tailored governance reform policies.

As development goals in themselves, all dimensions of governance should be pursued. Policymakers should focus not only on what is relatively easy to implement quickly but on steps with the most visible impact on development. High-quality institutions will help fast-growing economies avoid the middle-income trap and enable slow-growing economies to establish the conditions necessary for sustained economic growth. ■

Shikha Jha is Principal Economist and Juzhong Zhuang is Deputy Chief Economist of the Asian Development Bank's Economics and Research Department. This article is largely based on Part 2 of ADB (2013).

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Asian tourists visiting Sydney, Australia.

A Turn to Asia

To sustain its rapidly rising prosperity, Australia should seize on the changing export opportunities in its nearest neighbors

Alison Stuart

A STRONG increase in export prices and a boom in mining investment supported buoyant income growth and rising living standards in Australia over the past decade. Now, as mining investment begins to slow, Australia needs to generate higher productivity and broaden its export base to sustain that rapid improvement in prosperity.

Over the past decade a mining investment boom transformed Australia's economy into one that is more resource intensive than before and increased its export links with Asia. Australia benefited from Asia's rapid industrialization and urbanization, especially in China, which led to higher demand for products required for construction and other investment and led to sharply rising global commodity prices from the early 2000s through 2011.

Increased exports of commodities, whose prices can be volatile, have also made the Australian economy more sensitive to changes in the terms of trade—that is, the relative price of exports in terms of imports (see Chart 1). Because of high export prices for coal and iron ore, which started rising in the early 2000s, Australia's terms of trade reached a historic high in 2011. Since then, as the supply of commodities increased, prices have softened and Australia's terms of trade weakened, lowering income and reducing tax revenues.

Meeting demand

When commodity prices began to rise a decade ago, Australia, like other resource producers, ramped up mining investment and increased output. The country's mining investment rose from about 2 percent of GDP in 2002 to about 8 percent in 2013 (Arsov, Shanahan, and Williams, 2013). Investment was mainly in coal and iron ore early on, but more recently, liquefied natural gas (LNG) projects have increased to meet rising global demand for energy.

The mining investment boom has helped Australia's economy grow for 23 consecutive years—even during the recent global economic crisis. Between 2000 and 2012, real (after-inflation) incomes grew an average 2.5 percent a year per capita.

And mining will remain an important part of Australia's economy. The country's resources are diverse and plentiful and Australia is a low-cost and very competitive producer. In 2011 Australia had the world's largest reserves of gold, iron ore, nickel, rutile, and zircon. It also has bountiful reserves of a number of other minerals, including black coal (Australian Government, 2013), and is the world's third-largest LNG exporter (EIA, 2013).

Still, the future is uncertain. Over the next five years the export volume of iron ore and coal will increase as investment projects come onstream (mining export volume could rise by more than 30 percent in the next five years). But their prices are likely to decline as the global supply of bulk commodities rises. At the same time the boost to the economy from mining investment will ebb (see Chart 2). Mining-related investment, which accounted for almost half of GDP growth in recent years, is expected to drop sharply in the near term (see Chart 3).

To maintain strong growth over the longer run, then, the economy will need a pickup in productivity, higher nonmining investment, and manufacturing and services exports. The question for Australia is how to move to broader-based growth. The answer may lie partly in Australia's export links with Asia and whether its domestically oriented service sector—which accounts for 71 percent of its GDP and a large share of employment—can find and expand markets abroad.

Turning to Asia

Over the next decade Asia is expected to become an even more important engine of world growth than it is now. Its

Chart 1

Easing off

Australia's terms of trade hit a historic high in 2011 and have declined since, with falling commodity prices.

(terms of trade, index, 2000 = 100)



Sources: Australian Bureau of Statistics; and IMF staff calculations.
 Note: Terms of trade represents the relative prices of a country's exports of goods and services in terms of its import prices.

Chart 2

Drilling down

Mining investment, which accounted for nearly 8 percent of Australia's GDP in recent years, will decline sharply in the near future.

(mining investment, percent of GDP)



Sources: Australian Bureau of Statistics; Australia and New Zealand Banking Group; and IMF staff calculations.

demand patterns are changing as the region's middle class expands rapidly and consumption increases. According to the U.S. National Intelligence Council (2012), by 2030, two-thirds of the world's middle class will live in Asia. Asia's emerging markets are expected to increase their share of world GDP (measured at purchasing power parity) from 30 percent today to 41 percent in 2023. As their financial markets get bigger and offer more services, emerging Asia's banks are expected to increase their share of global banking assets from 18 percent today to 31 percent in 2023.

The shift in global activity to Asia will ease the "tyranny of distance"—the high costs Australia traditionally faced as an exporter far from the major economies of Europe and North America. The share of world output within roughly 6,000 miles

of Australia has more than doubled over the past 50 years to more than a third of global output and could rise to about half by 2025 (Australian Government, 2012). Because markets are closer, transportation and communication costs are lower, so Australia's profitable export opportunities should expand.

Chinese and Indian markets for Australia's service exports increased fivefold over the past decade.

Moreover its potential markets should also grow because it trades with growing markets such as China, India, Korea, Indonesia, Malaysia, Singapore, the Philippines, and Vietnam.

As Asia grows, industry and trade patterns are likely to shift. Many Asian economies are part of a multicountry production process called a value chain, in which final products are put together with inputs from various countries. As countries move up the value chain—that is, supply more technologically advanced inputs—they require a wider range of the kinds of sophisticated and niche products and services Australia can supply.

Moreover, Asia's rapidly expanding middle class will have different tastes and demand will shift to a broader range of products and services. The demand for dairy products, for example, is already increasing. Demographic trends in Asia are also likely to be important. Some countries, such as China, Japan, and Korea, have rapidly aging populations, which will increase demand for age-related goods and services such as health care. Other countries with rapidly expanding workforces, such as Malaysia and Indonesia, have growing infrastructure needs, which could increase demand for Australia's traditional export commodities.

Australia is already an Asia-oriented exporter. China, India, Japan, and other Asian neighbors account for more than 70 percent of Australia's merchandise exports. The potential for growth lies in trade in services. Chinese and Indian markets for Australia's service exports increased fivefold over the past decade. The recent introduction of direct trading of Australian dollars and Chinese renminbi should facilitate commerce between the two countries.

Seizing opportunities

Australia's economy, with its growing and highly skilled workforce and large service sector, is well positioned to offer trade in services to the emerging Asian middle class. A number of service sectors are potentially major sources of foreign income and contributors to economic growth (Australian Government, 2013). These include:

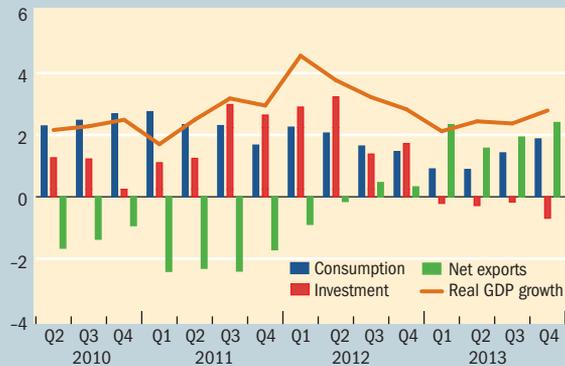
Higher education: Australia has the world's highest proportion of foreign students in its universities, is the third most popular destination for overseas students after the United States and the United Kingdom (OECD, 2013), and is already a leading and ever more popular destination for Asian students. As Asian prosperity rises, the number of students from Asia should increase as well.

Chart 3

Contributing less

The boost to Australia's economy from investment, the bulk of which is mining related, slipped in 2013.

(annual percent change)



Sources: Australian Bureau of Statistics; and IMF staff calculations.

Tourism: Asia is now Australia's biggest single source of tourists, and people from that region represent about 40 percent of foreign visitors. Even so, Asian tourists are a far smaller share of Australia's foreign visitors than in most Asian countries (BFA, 2012). More than 70 percent of arrivals in China, Hong Kong SAR, Japan, Malaysia, Korea, and Taiwan Province of China come from Asia.

Business services: Providers of professional services, engineering, design, and especially mining-related services are in a good position to sell their expertise to Asian markets.

Health care: Australia is well placed when it comes to pharmaceutical exports and well equipped to deliver professional training, including in the treatment of cancer and heart and liver disease (KPMG, 2012). Australian universities have developed medical research partnerships with a number of their Asian counterparts.

Financial services: Australia's direct financial market ties with Asia have developed more slowly than other relationships. Australian banks do relatively little business with Association of Southeast Asian Nations (ASEAN) countries—about 20 percent of their total foreign business—although ASEAN economies are now Australia's largest trading partners. There is potential for further financial integration, given the trade links.

Australia's prowess in the traditional areas of mining and mining support industries and agriculture and agribusiness will remain very important. The mining support industry often stimulates exports from other sectors, such as construction, manufacturing and mining services, and technology, which are needed to build production capacity. In agriculture, exports of specialized products have been growing—for example, wine sales to China are five times what they were half a decade ago. Agricultural innovation and technology and food security, already important areas in Australia, are of growing importance to Asian economies as well.

Because the country concentrates so much on resource exports, Australia's terms of trade will deteriorate further as commodity prices decline. But its floating exchange rate can help buffer the effect of declining commodity prices because

Australian universities have developed medical research partnerships with a number of their Asian counterparts.

the Australian dollar should depreciate when the terms of trade deteriorate. That will effectively lower the price and increase the competitiveness of other tradable goods and services. If the exchange rate moves broadly in line with the terms of trade, as it has in the past, it would help Australia rebalance its economy.

But it may take more than a rise in noncommodity exports to keep living standards growing at the pace of the past decade. Australia needs to generate gains in overall productivity—a difficult task.

Because Australia undertook large-scale reform of product, labor, and capital markets during the 1980s and 1990s, there is little the government can do now that will result in quick gains. But the government is building on the earlier reforms, by encouraging investment in nonmining sectors and by developing highway and freight rail projects in urban and regional areas to remove infrastructure bottlenecks. The government is enlisting the private sector to find new ways to finance infrastructure development and aims to help cut business costs through deregulation and a thorough review of competition laws to identify areas for reform. A review of the financial services sector is already under way, and the government has committed to an examination of the tax system as well. ■

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Kimchi

No Longer Solely Korea's

Kimchi's place as a uniquely Korean dish is being threatened by China's exploding exports of the spicy dish

FEATURED at every meal, kimchi is consumed daily by 95 percent of Koreans—2 million tons annually. But as exports of the dish from China expand, it is becoming a more international product.



Women making kimchi at charity event in Seoul, Korea.

2
MILLION
TONS

◀ **AMOUNT OF KIMCHI CONSUMED ANNUALLY IN KOREA**

13
heads of cabbage a person a year



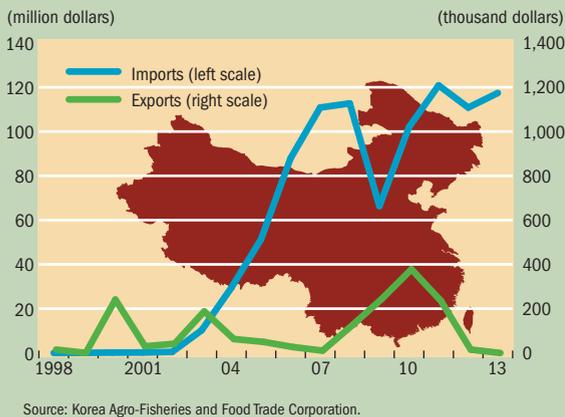
Competition from China

As the home of kimchi, Korea used to dominate global exports—mainly to Japan, the United States, Hong Kong SAR, and Taiwan Province of China. But in 2003 Korea began increasing its imports of kimchi from China. Because kimchi produced

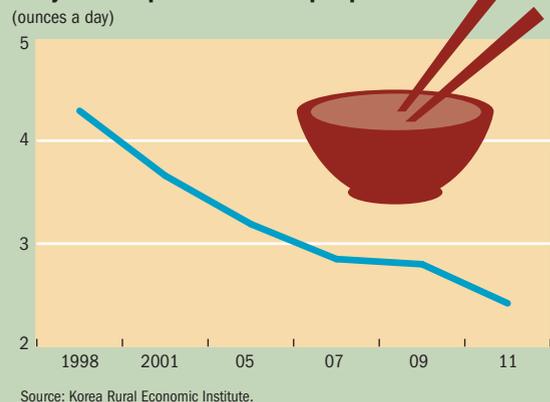
in China is cheaper, it has gained popularity, especially in the catering industry, whose consumers are often unaware of its source. Since 2006 Korea has run a trade deficit of the national dish every year—except 2009, when the value of imports decreased because of the strong Chinese renminbi.



Kimchi trade with China



Daily consumption of kimchi per person



Almost all Korea's imported kimchi comes from China, with the total value since 2007 exceeding \$100 million a year (except in 2009).

With fewer households making it at home and an increasing demand for cheaper kimchi from restaurants, the demand in Korea for the Chinese product is expected to grow.

On the other hand, Korea's kimchi exports to China, which peaked in 2010 at \$378,000, dropped to \$15,000 in 2012 and

to almost zero last year as a result of measures by the Chinese government to protect domestic producers.

On the home front, daily per capita kimchi consumption is gradually declining in Korea, especially among the young, who are increasingly moving to a westernized diet. But total consumption in Korea has risen in recent years because of a rising population; the kimchi market in Korea reached almost \$2.46 billion in 2013.

KIMCHI EXPORTS TO JAPAN FROM

KOREA

CHINA

FELL

FELL

22.1%

1.4%

BETWEEN 2012 AND 2013

Losing ground in Japan

Chinese kimchi is also crowding out Korean kimchi in Japan. As the world's second-biggest kimchi import market after Korea, Japan is Korea's top export destination, accounting for about 80 percent of Korean kimchi exports. But a weak yen and an increasingly strained relationship between the two countries caused Korea's exports to Japan to fall significantly in 2013, while China's declined only marginally.

"If there were no kimchi, I couldn't live."

If Korea has a national dish, kimchi is it. It would be unthinkable to serve a meal without this spicy side dish—made of fermented vegetables, usually cabbage. It is so celebrated in Korean cuisine that a song was composed in the 1960s with the chorus "If there were no kimchi, I couldn't live."

The spiciness of the dish comes from the red chili peppers, which also give it its deep red color. A seafood-based sauce promotes fermentation, which takes almost a month.

The origins of kimchi lie in the 7th century, when vegetables were pickled to provide nutrients and minerals during the cold winters devoid of fresh fruit and vegetables. When Korea was a largely rural society, the women of a village would gather on an agreed day during kimchi-making season, usually in November, to wash and season large quantities of cabbage and would share in the final product.

Traditionally, kimchi was stored in giant stone-ware crocks, buried in the ground, and left to ferment. Korea may have undergone rapid industrialization over the past century, with half of all kimchi now made commercially, but kimchi retains its iconic status and ubiquitous presence.



Prepared by Yusun Lee, who writes on Korean economic issues.

Economics and Morality

Economists may prefer to be value neutral, but many critics find fault in the relationship between economics and virtue

Timothy Taylor

ECONOMISTS prefer to sidestep moral issues. They like to say they study trade-offs and incentives and interactions, leaving value judgments to the political process and society.

But moral judgments aren't willing to sidestep economics.

Critiques of the relationship between economics and moral virtue can be grouped under three main headings: To what extent does ordinary economic life hold a capacity for virtue? Is economic analysis overstepping its bounds into zones of behavior that should be preserved from economics? Does the study of economics itself discourage moral behavior?

Capacity for virtue

After a rough day at work, or when the bills come due, many of us feel what Henry David Thoreau meant when he wrote in 1854: "The mass of men lead lives of quiet desperation."

Indeed, philosophers since the time of Aristotle have drawn a line separating economic life from a life that is virtuous or well lived. For example, Aristotle wrote in the *Nicomachean Ethics*,

"The life of money-making is one undertaken under compulsion, and wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else."

These philosophers note that people often work only to earn money for such necessities as food, shelter, and clothing. In contrast, they point to a range of freely chosen human activities that are better aligned with virtuous behavior: love and friendship, art and music, bravery in war, participation in the community, healing the sick, helping the poor, and so on.

But the compulsions and necessities of work life have other aspects, too. Thoreau's friend and fellow Transcendentalist philosopher Ralph Waldo Emerson said in 1844: "[W]hether thy work be fine or coarse, planting corn, or writing





**“The mass of men
lead lives of quiet
desperation.”**

Henry David Thoreau

epics, so only if be honest work, done to thine own approbation, it shall earn a reward to the senses as well as to the thought: no matter, how often defeated, you are born to victory. The reward of a thing well done is to have done it.” Do the job well, whether serving fast food to hungry customers, driving a cab, cleaning a hotel room, pouring concrete for road building, organizing an off-site miniconference for the office, or anything else. The work may be for pay, but in this view, honest work done well offers compensation beyond money.

Indeed, an alternative philosophical tradition about the relationship between economic life and moral virtue, with roots in the work of John Locke and explicitly opposed to the Aristotelian tradition, views work and economic activity not as the grim and amoral drudgery of wage slavery and money making, but as a way individual humans relate to the world around them and shape themselves.

Andrzej Rapaczynski (2013) described this perspective: “[W]hat labor produces is not just goods or commodities, but

the very autonomous human beings who now live the lives they themselves design and determine. Thus, labor, which is at the basis of economic life, far from enslaving those who engage in it, is the prime expression of human creativity, a true production of new reality governed by human intellect and imagination, in which we can recognize and shape ourselves in accordance with our own will.” While art, literature, and music, because of their “particularly sophisticated nature . . . may be more clearly recognizable as the primary artifacts of human culture . . . their place in human life is not in principle different from the other objects we produce both to consume and to define the fundamental conditions of our

Do the job well, whether serving fast food to hungry customers, driving a cab, cleaning a hotel room, pouring concrete for road building, organizing an off-site miniconference for the office, or anything else.

own existence,” the professor of law and philosophy wrote.

In a similar spirit, modern economist-philosophers have compiled a list of virtues that can be intrinsic within market behavior. Deirdre McCloskey (2006) wrote of seven virtues of middle-class economic life: love (benevolence and friendship), faith (integrity), hope (entrepreneurship), courage (endurance and perseverance), temperance (restraint and humility), prudence (know-how and foresight), and justice (social balance and honesty). Similarly, Luigino Bruni and Robert Sugden (2013) have suggested that participation in work and commerce is congruent with such virtues as

Who’s dismal?

The “dismal science” is the most prominent verbal hand grenade lobbed at economics. But economists who know the history of the wisecrack wear it as a badge of honor.

In an 1849 essay, the historian and essayist Thomas Carlyle wrote that the subject of political economy was “a dreary, desolate, and indeed quite abject and distressing one; what we might call, by way of eminence, the dismal science.” But Carlyle’s essay, titled “Occasional Discourse on the Negro Question,” is an argument that poor black laborers in the West Indies suffer from “the vices of indolence and insolence.” For them to achieve virtue, he argued, the “idle Black man in the West Indies” should “be compelled to work as he was fit.” Carlyle wasn’t only a racist. He believed that poor people around the world of all races “the whitest alike and the blackest” should

experience “the divine right of being compelled (if ‘permitted’ will not answer) to do what work they are appointed for.”

In short, Carlyle called economics a dismal science because it was built on ideas like “letting men alone” and “ballot-boxes,” or what we would call personal freedom and democracy.

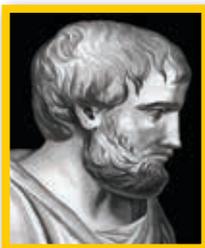
John Stuart Mill, the economist and political philosopher, published a scathing critique of Carlyle’s essay in 1850. Mill pointed out that the rich often oppressed the poor and that when the actions and attitudes of the poor seemed uncooperative or dysfunctional, it stemmed from the negative incentives caused by oppression rather than any defect of character. Mill ended with this thought: “Though we cannot extirpate all pain, we can, if we are sufficiently determined upon it, abolish all tyranny.” In the actual historical debate over the dismal science, the enlightened economist is the clear-cut winner.

self-help, enterprise and alertness, trust and trustworthiness, respect for the wishes of others, and perceiving others as potential partners in a mutually beneficial transaction.

Rather than focusing on philosophical abstractions about the moral content of work, consider a prototypical family: parents working, raising some children, friendly with coworkers and neighbors, interacting with extended family, involved with personal interests and their community. It seems haughty and elitist, or perhaps betraying unworldly detachment, to assert that people who work are condemned to live without virtue—unless they can squeeze in a bit of virtuous activity in their spare time. On the other hand, it seems bizarrely and unrealistically high minded to assert that daily work surrounds people every day with transformational opportunities for virtue. A middle ground might be to accept that while moments of grace and opportunities for virtue can occur in all aspects of life, including economic life, the range and variety of opportunities for virtue may vary depending on the characteristics of one's economic life.

Mission creep for economics

Even if economic life is not necessarily antithetical to morality and virtue, a related concern is whether the values of economic life may creep outside their appropriate zone.



“The life of money-making is one undertaken under compulsion, and wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else.”

Aristotle

For example, economic values may be useful when growing wheat, making smartphones, shopping for a refrigerator, or saving for retirement. But applying those values in other contexts may seem more dubious—at least to noneconomists who read about a type of “ecotourism” that charges hunters large sums to shoot elderly elephants and lions, ostensibly to elevate local incomes and discourage poaching; companies that buy permits that allow them to emit certain quantities of pollution; or some doctors and economists who advocate paid kidney and blood donors rather than volunteers.

At some level, the concern that economics may overstep its bounds is well founded. Even economists agree that it would be immoral to sell a child or enslave a human being. You can't purchase a true friend. And, as the Beatles sang, “Can't buy me love.” Most economists don't act as if mon-

etary value is all that matters: even economists give gifts on special occasions, not just cash.

Harvard philosopher Michael Sandel (2013) has been at the forefront of a movement to raise difficult questions about the expansion of economics into other areas. He wrote:

“[P]utting a price on every human activity erodes certain moral and civic goods worth caring about. . . . Should sex be up for sale? What about surrogate motherhood, or pregnancy for pay? Is there anything wrong with mercenary armies, and if so, how should military service be allocated? Should universities sell some seats in the freshman class in order to raise money for worthy purposes, such as a new library or scholarships for well-qualified students from poor families? Should the United States sell the right to immigrate? What about allowing existing U.S. citizens to sell their citizenship to foreigners and swap places with them? Should we allow a free market in babies up for adoption? Should people be allowed to sell their votes?”

Sandel is a model of philosophical caution. He asks questions, rather than asserting that he has answers, and leaves open the possibility that even if certain moral and civic goals are eroded, in some cases an expanded use of monetary prices may be acceptable. In a similar spirit of inquiry, it's worth remembering that our sense of what kinds of market transactions are repugnant has shifted over time. Here are some examples from the U.S. context, but other countries have certainly seen similar changes.

In 19th century America, buying life insurance was considered a morally unacceptable practice of gambling against God, until it was transformed—by a promotional campaign directed at churches—to become viewed as a prudent way of showing love for family. In early 20th century America, the sale of alcohol was morally unacceptable for 14 years, until the repeal of Prohibition in 1933. Until the 1960s, state lotteries were considered immoral in the United States; selling contraceptive products across state lines and even their use at home was illegal in many states. Paying ordinary soldiers a living wage was considered morally unacceptable in the United States until the end of the military draft and the beginning of the all-volunteer force in the 1970s. Allowing in vitro fertilization to be provided as a service in the health care market was highly controversial. Until the 1980s, it was morally unacceptable to allow professional athletes to participate in “amateur” events like the Olympic Games.

Paid blood donation is still unacceptable to many Americans. But blood plasma and sperm donors are commonly paid. A woman cannot receive money for donating a kidney, but she can be paid for her eggs or for bearing a child as a surrogate mother. Differences in where the price mechanism is allowed vary considerably across countries: for example, some have legalized prostitution and certain recreational drugs, while others forbid payment of interest on loans.

If a price incentive “erodes certain moral and civic goods worth caring about,” as Sandel suggests, then more radical proposals may be worth considering. Perhaps there should be little or no pay for workers in health care, education, social work, or government, because we would not wish to erode

the moral virtue of such jobs. Perhaps we shouldn't pay for recycling or installing energy insulation, because such activities should be undertaken for their environmental virtues rather than monetary reward. Charitable giving should be its own reward, because it would erode civic virtue to publicize donors' names or reduce their tax bill.

These suggestions are meant to provoke discussion, not to be serious proposals. But they do illustrate that economic incentives need not always be viewed as inconsistent with civic and moral virtue. And when we observe society's shifting attitudes about the morality of certain economic transactions, it is wise to refrain from assuming that today's boundaries will be the same tomorrow.

Indeed, when economic thinking has been expanded to areas outside its traditional scope, the results have often proven fruitful. For example, economists have built on the work of the late Nobel laureate Gary Becker and others to show how economic thinking can explain the dynamics of subjects previously not considered to be economic topics, such as marriage, child rearing, crime, and discrimination against particular groups of people. The idea that the armed forces should attract employees with pay, benefits, and career options, rather than compel service with a draft, is now a

It seems bizarrely and unrealistically high minded to assert that daily work surrounds people every day with transformational opportunities for virtue.

mainstream view. So is the notion that environmental problems can be fruitfully addressed by putting a price on pollution—for example, through deposits on cans and bottles, taxes on goods such as gasoline that contribute to pollution, and company purchases and sales of permits for certain pollutants, which provide an incentive to reduce pollution at a lower social cost.

It is tempting to seek to build a fence around moral and civic virtues to prevent the encroachment of economic values. But as the United States learned with its attempt to ban alcohol during the early 20th century, economic forces are not easily blocked, and a well-regulated marketplace often proves to be a more pragmatic way of balancing moral and civic values than laws that ban behavior based on moral arguments.

Corrupting influence

A standard complaint about studying economics is that the subject is "all about getting money and being rich." But this is a straw man argument that misrepresents what economics is about. Even basic introductory economics courses are focused on thinking about how to deal with the trade-offs that



“To restrain our selfish, and to indulge our benevolent affections, constitutes the perfection of human nature.”

Adam Smith

are inevitable in a world of scarcity. Such introductory courses discuss supply and demand and markets, of course, but also anticompetitive behavior, pollution, poverty, unemployment, and the pros and cons of globalization and trade. Those with a little more background in economics know that great economists—starting with Adam Smith, in his 1776 classic, *The Wealth of Nations*—have struggled for more than two centuries with the issues of inequality, fairness, the rule of law, and social welfare.

A sophisticated complaint about the study of economics maintains that because the basic economic model posits that people seek their own satisfaction (“maximize utility” is the term of art) and firms seek profits, those who study economics are more likely to morph into people who also believe that selfishness is virtuous. Just to be clear, economists themselves do not argue that greater selfishness is desirable. As Smith wrote in 1759, in his first monumental work, *The Theory of Moral Sentiments*, “[H]ow disagreeable does he appear to be, whose hard and obdurate heart feels for himself only, but is altogether insensible to the happiness or misery of others! . . . and hence it is that to feel much for others and little for ourselves, that to restrain our selfish, and to indulge our benevolent affections, constitutes the perfection of human nature; and can alone produce among mankind that harmony of sentiments and passions in which consists their whole grace and propriety.”

Economists can feel unfairly singled out by this complaint. After all, many academic subjects study unsavory aspects of human behavior. Political science, history, psychology, sociology, and literature are often concerned with aggression, obsessiveness, selfishness, and cruelty, not to mention lust, sloth, greed, envy, pride, wrath, and gluttony. But no one seems to fear that students in these other disciplines are on the fast track to becoming sociopaths. Why is economics supposed to be so uniquely corrupting? After all, professional economists run the ideological gamut from far left to far right, which suggests that training in economics is not an ideological straitjacket.

Some evidence suggests a link between the study of economics and less cooperative or empathetic behavior, although overall, the research that attempts to link an area of academic study to altered personality traits has not been especially rigorous. For example, a U.S. survey in the early 1990s found that academic economists were more likely to donate nothing to charity than were academics in other

fields, although the same study found that the median gift from economists was slightly larger (Frank, Gilovich, and Regan, 1993).

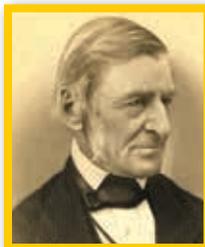
A number of studies compare students who have taken economics with those who haven't. One study surveyed students at Cornell University about how they would react, and how they would expect others to react, if they benefited from a billing error and wound up with 10 computers but had paid for only 9. After taking a class in economic game theory, students were less likely to say that they would report the error and less likely to believe that others would report it (Frank, Gilovich, and Regan, 1993). But another study used a "dropped letter" experiment in which stamped, addressed, unsealed envelopes containing \$10 and a brief note were left on the floor before classes in economics and other classes at The George Washington University. More than half the letters left in economics classrooms were sealed and dropped in the mail with the money included; less than a third of those on the floor in other classes were mailed back (Yezer, Goldfarb, and Poppen, 1996).

Of course, such comparisons may mean only that economics attracts people who are more likely to react in certain ways, not that the study of economics causes people to act

What this kind of study illustrates to me is not "beware of studying economics," but rather "beware of being overly influenced by how questions are framed and by the broader context of decision-making situations."

in this way. Indeed, a wave of social science research in the past few decades has confirmed the importance of "framing" or "priming" effects: how a researcher phrases a question or sets up a situation strongly influences the subjects' reaction. In yet another study, business executives were first given a task of unscrambling 30 sentences, some of which had economics words—like *continues*, *economy*, *growing*, *our*—while others had words like *green*, *tree*, *was*, *a* that were unrelated to economics. Next, the executives did role-playing exercises in which they wrote letters to an employee being transferred to another city or being disciplined for lateness. The researchers found that executives who had unscrambled the economics words expressed less compassion in these letters, both because they felt less empathy and because it felt more "unprofessional" to express it (Molinsky, Grant, and Margolis, 2012).

What this kind of study illustrates to me is not "beware of studying economics," but rather "beware of being overly influenced by how questions are framed and by the broader



"The reward of a thing well done is to have done it."

Ralph Waldo Emerson

context of decision-making situations." I have become wary over the years of questions framed in a way that seeks to pit economics against moral virtue in a winner-takes-all brawl.

No economist would recommend consulting an economics textbook as a practical source of transcendent moral wisdom. As the recent global economic crisis reminded anyone who needed reminding, economics doesn't have answers for all of the world's economic problems. But to be fair, moral philosophers don't have answers for all the world's spiritual and ethical problems.

In his famous 1890 *Principles of Economics* textbook, the great economist Alfred Marshall wrote that "economics is the study of people in the everyday business of life." Economists cannot banish the importance of moral issues in their field of study and should not seek to do so. But when moral philosophers consider topics that touch on the ordinary business of life, they cannot wish away or banish the importance of economics either. ■

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No Magic Threshold

There appears to be no clear point above which a nation's debt dramatically compromises medium-term growth

Andrea Pescatori, Damiano Sandri, and John Simon

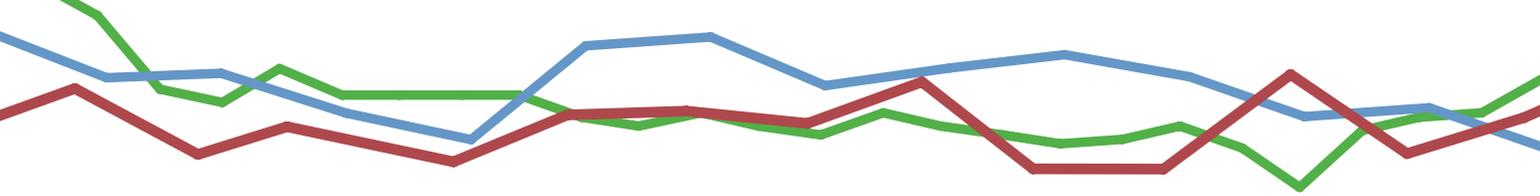
ECONOMISTS have debated whether there is a threshold in the level of government debt to GDP above which a nation's medium-term economic growth prospects are dramatically compromised. Whether there is such a tipping point is of critical importance not just because of the historically high level of public debt in many advanced economies, but also because of its implications for debt accumulation in all economies. If there is a level above which debt substantially lowers growth, then reducing debt below that threshold should be a high priority. On the other hand, if there is no point at which growth prospects start to decline dramatically, then policymakers may find it appropriate to give priority to increasing growth rather than reducing debt ratios.

There is no agreement on the issue among researchers. Influential papers such as Reinhart and Rogoff (2010) and Reinhart, Reinhart, and Rogoff (2012) argue that there is a threshold effect: when debt in advanced economies exceeds 90 percent of GDP there is an associated dramatic worsening of growth outcomes. Others dispute the notion that there is such a clear threshold and suggest that it is weak growth that causes high debt rather than high debt that causes weak growth (Panizza and Presbitero, 2012; Herndon, Ash, and Pollin, 2013). Using a new approach we found little evidence that there is any particular debt ratio above which growth falls sharply.

A new approach

The fresh approach we took utilizes a new and comprehensive IMF database on gross government-debt-to-GDP ratios, interest payments, and primary deficits that covers nearly all the 188 IMF members—for many of them from 1875 to 2011 (Abbas and others, 2010, 2011). We augmented the IMF data with real GDP data from Maddison (2003) and other data from Reinhart and Rogoff (2010). We focused on 34 advanced economies, reflecting the availability and coverage of the supplementary data. The average debt-to-GDP ratio in the 34-country sample was 55 percent, while the average real output per capita growth rate was 2¼ percent a year. Given that the sample encompasses two world wars and the Great Depression there is rich historical experience, but it also includes many unique circumstances that need to be borne in mind when analyzing the results.

We considered all episodes in which gross public debt rose above a certain threshold (we used a number of them) and looked at the real GDP growth per capita over the subsequent 1, 5, 10, and 15 years. An important difference in our methodology from that of Reinhart and Rogoff's 2010 paper is that we focus on the medium- to long-term relationship between today's stock of debt to GDP and subsequent GDP growth rather than on just the short-term relationship. The longer-term perspective should mitigate the confounding effects that temporary recessions or bursts of growth can have on the relationship between debt and growth in the short run.



Reinhart, Reinhart, and Rogoff (2012) used a longer-term methodology, but our approach also differs from theirs in two additional important aspects:

- We considered a broad range of debt thresholds, not just 90 percent.
- Instead of considering only the period when debt is above a certain level, we analyzed the growth performance of the episodes over a given period of time regardless of the debt outcome.

The advantage of this approach is that it avoids biasing the results toward countries that failed to reduce their debt, a problem that occurs when analysis focuses only on situations in which debt remains above a certain threshold. We included both countries that were able to reduce debt after it rose above a given threshold (the successes) and countries that were not (the failures). Studies that look solely at periods when debt is above a certain threshold are implicitly focusing only on failures.

We also stipulated that a new episode cannot begin until 15 years after the previous one to avoid double-counting of overlapping episodes. The choice of this long

period for our study reflects the fact that debt reduction is typically a long, drawn-out process. Nonetheless, the results were similar when we used a 10-year window.

We also required that each episode begin with debt crossing a given threshold from below. This implies that each country only has a relatively small number of episodes that are, importantly, weighted equally when computing averages.

The approach that Reinhart and Rogoff (2010) followed gave instead equal weight to each country independent of the number of years with high or low debt. As emphasized in Herndon, Ash, and Pollin (2013), different weighting can potentially lead to significantly different conclusions about the presence of a clear threshold effect.

The short term

We first focused on the short-run association between debt and growth, an approach similar to Reinhart and Rogoff's. Chart 1 shows the average real (after-inflation) GDP growth rate per capita in the year after the debt-to-GDP ratio rises above a given threshold. Consistent with Reinhart and Rogoff, we observed that GDP growth is particularly low in the year after the debt-to-GDP ratio exceeds 90 percent. Indeed, Chart 1 shows that GDP growth averages about 2 percent in countries with debt below 90 percent and tumbles to about -2 percent in countries whose debt ratio rises above that level. At the same time, the shaded area in Chart 1—which captures the degree of uncertainty around our estimates—reveals considerable diversity in the growth performance for countries whose debt rises above 90 percent.

It would be unwise, however, to look for a causal relationship between debt and growth in Chart 1 because of the

possibility that weak growth caused the debt increase—the reverse causation we discussed above. While it is possible that when the debt-to-GDP ratio exceeds 90 percent countries enter a state of distress that leads to a substantial reduction in growth, it is also possible that increases in public debt above 90 percent are driven by some other factor that reduces GDP and tax revenues—which, in turn, leads to higher debt.

Studies that look solely at periods when debt is above a certain threshold are implicitly focusing only on failures.

Furthermore, as suggested by the degree of uncertainty captured by the shaded area, these results are relatively fragile and unduly influenced by outliers. For example, the debt-to-GDP ratio in Japan increased from 133 percent in 1943 to 204 percent in 1944, and the subsequent growth rate in 1945 was -50 percent. This observation alone leads to a considerable reduction in the average growth of economies with debt thresholds above 135 percent of GDP.

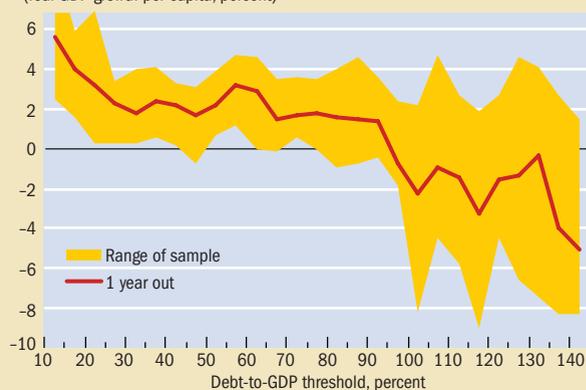
Extending the horizon of analysis allows us to lessen the bias induced by reverse causality and the effect of outliers such as the sharp growth decline in Japan in 1945, as well as by the effects of potentially omitted variables.

Chart 1

Short-run impediments

Over a one-year horizon GDP growth appears to slow as the debt-to-GDP ratio rises, falling sharply when the threshold reaches 90 percent.

(real GDP growth per capita, percent)



Source: Authors' calculations.

Note: The shaded band is a measure of how dispersed the individual results are. It represents the so-called interquartile range—that is, the range of the middle 50 percent of the sample. The sample covers 34 advanced economies from 1875 to 2011.

Omitted variables could include automatic stabilizers such as unemployment insurance or progressive income tax rates. During a period of low growth these stabilizers tend to lead to a deterioration of the primary balance (a nation's surplus or deficit before interest payments) and, as a result, an increase in debt over the short term. Similarly, and even more mechanically, a recession will raise the debt-to-GDP ratio because the denominator (GDP) decreases. If high debt (that is, debt above some threshold) operates as a drag on growth over anything but the short run, however, we would expect to observe weak growth not only in the year after the debt ratio exceeds the threshold, but also during subsequent years.

Longer views

Chart 2 shows the growth performance of the same episodes over longer horizons of 5, 10, and 15 years. Relative to the 1-year horizon, performance is less affected by higher debt at the 5-year horizon and much less affected at horizons of 10 and 15 years. Importantly, while higher debt is still associated with milder growth, there is no longer any clear debt-to-GDP threshold above which growth deteriorates sharply. What this suggests is that the effect observed at the 1-year horizon is temporary and, as such, much more likely to be indicative of poor growth leading to high debt than high debt leading to poor growth. This view is reinforced by the observation that the weakening relationship between growth and debt over longer periods of time does not reflect the fact that the debt-to-GDP ratio falls sharply after exceeding a high threshold. Indeed, while there is some tendency for the debt ratio to shrink when it reaches particularly high levels, the process is extremely slow.

Debt trajectory matters

So far we have considered only those episodes in which the debt-to-GDP ratio rises above a given threshold. But what about countries that have a high, but falling, debt ratio? To investigate this question we identified all episodes in which debt ratios fell below a certain level. Chart 3 compares the growth performance during these episodes with the previous ones. The left panel shows that the sharp reduction in the following year's growth that we observed in countries whose debt rose above 90 percent is no longer present for countries that have high but declining debt. In fact, even countries with debt ratios of 130 to 140 percent that are on a declining path have experienced solid growth. This suggests that high debt itself is not causing the low growth in these episodes. Furthermore, the right panel of Chart 3 shows that the initial debt trajectory remains important even after 15 years, with falling debt associated with higher growth. That is, the trajectory of debt appears to be an important predictor of subsequent growth, buttressing the idea that the level of debt alone is an inadequate predictor of future growth.

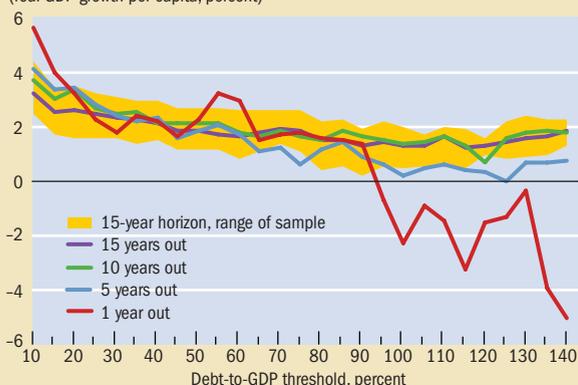
The episodes we considered occurred between 1875 and the end of the 20th century. Over this time, average growth varied substantially, from lows during the Great Depression of the 1930s to highs during the 1950s. Thus, it is possible that our results are distorted, for example, by the generally high growth experienced by all countries immediately after World War II. To control for this possibility, we compared an economy's average growth rate during an episode with the simple average of growth rates for all economies over the same period. Chart 4 replicates the right panel of Chart 3, replacing absolute growth for each episode with this measure of relative growth. What we found is that, in general, the growth performance of economies with high debt is fairly close to that of their peers with lower debt. The differences are less than ½ percent a year—except for economies with the lowest debt levels, for which the difference can be larger. Furthermore, we found that an economy's debt trajectory still matters. Among economies with the same debt levels, the growth performance over the next 15 years in countries in which debt is initially decreasing is better than that in countries where it is initially increasing. This difference is statistically significant across the whole sample. It is particularly striking for debt levels between 90 and 115 percent of GDP (for which average growth is ½ percentage point higher). Furthermore, there is no unique threshold that is consistently followed by a subpar growth performance. In fact, Chart 4 shows that economies with a debt level between 90 and 110 percent of GDP outperform their peers when debt is on a declining trajectory. At the least, this suggests that the debt level alone is insufficient to explain the growth potential of an economy. It also suggests that countries that have dealt with their budget deficits (as indicated by a declining debt level) may be well placed to grow in the future despite high debt levels.

Chart 2

Longer term looks better

When looked at 5, 10, or 15 years after crossing a debt threshold, growth is much better than after 1 year.

(real GDP growth per capita, percent)



Source: Authors' calculations.

Note: The shaded band is a measure of how dispersed the individual results are for the 15-year horizon. It represents the so-called interquartile range—that is, the range of the middle 50 percent of the sample. The sample covers 34 advanced economies from 1875 to 2011.

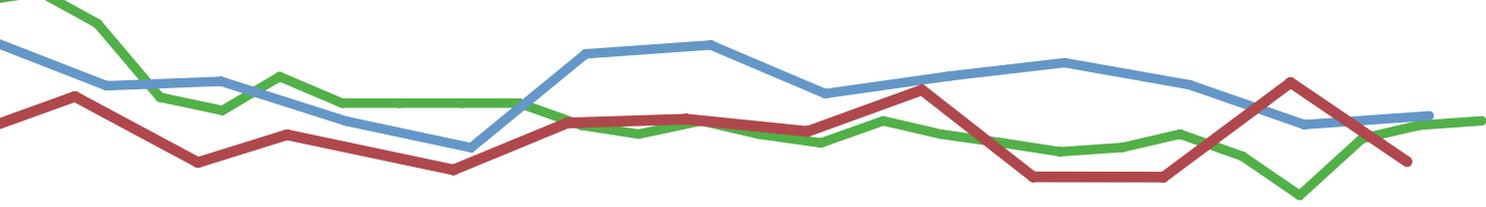
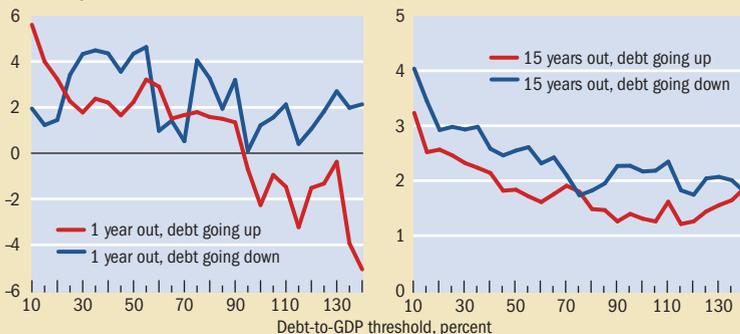


Chart 3

Direction matters

Whether 1 year after crossing a debt threshold or 15 years after, GDP performance is better when debt is declining rather than rising.

(real GDP growth per capita, percent)



Source: Authors' calculations.

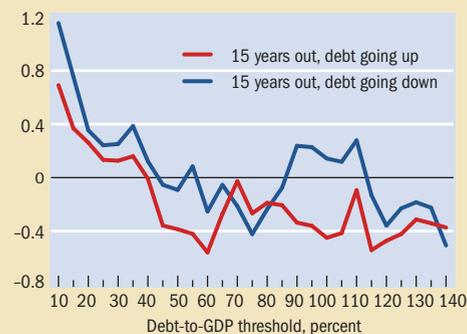
Note: The sample covers 34 advanced economies from 1875 to 2011.

Chart 4

All the same

The growth performance of economies with high debt is fairly close to that of their peers with lower debt.

(real GDP growth per capita, deviation from average)



Source: Authors' calculations.

Note: The sample covers 34 advanced economies from 1875 to 2011.

No simple threshold

Our analysis of historical data has shown that there is no simple threshold above which debt ratios severely undermine medium-term growth prospects. On the contrary, the association between debt and growth at high levels of debt becomes rather weak when the focus is on any but the shortest-term relationship—especially when compared with the average growth performance of country peers. Furthermore, we found evidence that the relationship between the level of debt and growth is, importantly, influenced by the trajectory of debt: countries with high but declining debt have historically grown just as fast as their peers.

Like the earlier studies, our analysis is subject to limitations that caution against drawing out policy implications that are too strong. For example, despite mitigating the short-term reverse causality problems (in which low growth leads almost mechanically to higher debt), our methodology is unable to clearly identify the structural relationship between debt and growth.

However, if we were to take our findings at face value, we would see some important policy implications. First, debt levels are weak predictors of growth outcomes, and policies that aim to strengthen growth should thus consider a variety of other factors. Second, the fact that high but declining debt does not negatively affect growth suggests a more optimistic assessment of the outlook for countries currently dealing with high debt. Third, the absence of a specific debt threshold above which growth prospects are severely impaired means that economies can focus on the net medium-term effects of stabilization policies rather than worry that a short-term excursion above a particular debt threshold will lead to large and negative results. This

should, at least, give policymakers greater flexibility when considering the best path toward an ultimate objective of declining debt ratios. ■

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The Cost of Tying One's Hands

Atish R. Ghosh, Mahvash S. Qureshi, and
Charalambos G. Tsangarides

MEETING in Mexico City in November 2012, the Group of Twenty finance ministers and central bank governors declared that “the weak pace of global growth also reflects limited progress towards sustaining and rebalancing global demand. . . . In this regard, we reiterate our commitments to move more rapidly toward more market-determined exchange rate systems and exchange rate flexibility to reflect underlying fundamentals. . . .”

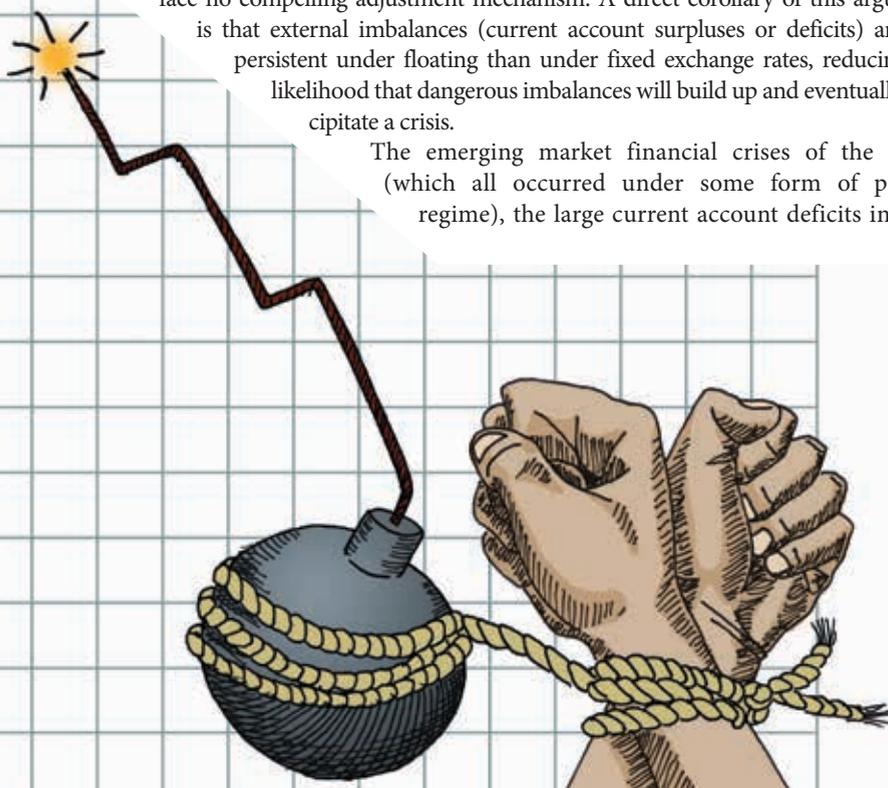
The importance of exchange rate flexibility in facilitating the adjustment of current account imbalances has long dominated international policy debates. Before the global financial crisis, the debate focused on global imbalances and how exchange rate policies of several large Asian and oil-exporting countries with external surpluses perpetuated those imbalances. Since the crisis, the challenges confronting many emerging market and advanced economies in Europe have rekindled interest in the relationship between exchange rate flexibility and external adjustment—on both the deficit and surplus sides.

Is there a connection between exchange rate flexibility and external adjustment? Writing in the heyday of the Bretton Woods system of monetary management, the influential economist Milton Friedman (1953) argued that under flexible exchange rates “changes in [the exchange rate] occur rapidly, automatically, and continuously and so tend to produce corrective movements before tensions can accumulate and a crisis develop.”

Thus, in deficit countries, the currency would depreciate, restoring competitiveness and narrowing the deficit; in surplus countries, the currency would appreciate, shrinking the surplus. Under fixed exchange rates, by contrast, the burden of adjustment in deficit countries would fall entirely on downwardly rigid goods and factor prices, while surplus countries would face no compelling adjustment mechanism. A direct corollary of this argument is that external imbalances (current account surpluses or deficits) are less persistent under floating than under fixed exchange rates, reducing the likelihood that dangerous imbalances will build up and eventually precipitate a crisis.

The emerging market financial crises of the 1990s (which all occurred under some form of pegged regime), the large current account deficits in east-

There are benefits to pegging the exchange rate—but without a flexible rate, external adjustment can be tough



ern European countries in the run-up to the global financial crisis, and the ongoing efforts of some euro area countries, such as Greece, Portugal, and Spain, all bespeak delayed and more difficult external adjustment under pegged exchange rates. In fact, it is striking that the majority of recent IMF arrangements are with countries that had some form of managed exchange rate regime on the eve of the crisis in 2007 (see Chart 1).

This pattern is consistent with the findings in several empirical studies of a strong association between pegged exchange rates and vulnerability to crises, abrupt reversals of the current account, and growth collapses (for example, Milesi-Ferretti and Razin, 1996; Ghosh, Ostry, and Qureshi, 2014). A natural inference is that the inflexibility of the nominal exchange rate prevents timely external adjustment until large imbalances build up, precipitating a crisis.

While this argument seems compelling, formal evidence that pegged exchange rates impede—and floating exchange rates facilitate—external adjustment is surprisingly scant and contradictory. For example, in a large cross-country study, Chinn and Wei (2013) find no empirically strong or robust relationship between the exchange rate regime and the rate at which current account imbalances are reversed. Focusing on the euro area countries, Berka, Devereux, and Engel (2012) argue that real exchange rate movements within the euro area have been at least as compatible with efficient external adjustment as those for the floating rate countries outside the euro area.

By contrast, some other studies—both of the euro area and more generally—find evidence that exchange rate flexibility *does* affect external adjustment. For example, for a set of central and eastern European countries, Herrmann (2009) finds that exchange rate flexibility significantly enhances the rate of current account adjustment. Similarly, for the euro area countries, Berger and Nitsch (2014) find that trade imbalances have widened and are more persistent since the introduction of the common currency. Focusing on a large panel of countries—including advanced, emerging market, and developing economies—Ghosh, Qureshi, and Tsangarides (2013) also find that exchange rate flexibility strongly matters for external adjustment.

It is fair to say, therefore, that the profession is far from a consensus on the role of flexible exchange rates in facilitating external adjustment.

Adjustment and exchange rate flexibility

So what gives? Why are existing studies unable to establish an unambiguous relationship between exchange rate flexibility and the ease of external adjustment? We conjecture that it's because studies generally rely on aggregate or composite measures of exchange rate regimes that do not differentiate between the degree of exchange rate flexibility across various trading partners.

The problem is well illustrated by the case of the United States. Clearly, the U.S. dollar floats, and existing regime classifications categorize it as such. But its exchange rate against many of its major trading partners—which accounts for much of the U.S. trade balance—does not adjust freely.

For example, the exchange rate volatility between the United States and China, which accounts for about 15 percent of U.S. trade, has been less than 0.5 percentage point over the past decade, but about 2½ to 3 percentage points against some of its

Trade imbalances under both direct and indirect pegs adjust significantly more slowly than imbalances under floats.

other top trading partners, such as Canada, Germany, Japan, and Mexico (see Chart 2, first panel). If exchange rate flexibility does matter, then the behavior of the U.S.-China bilateral trade balance should differ from that of other U.S. bilateral relationships. Indeed, this seems to be the case: U.S. deficits with other countries have tended to fluctuate, whereas the deficit with China has consistently worsened, almost tripling over the past decade (see Chart 2, second panel).

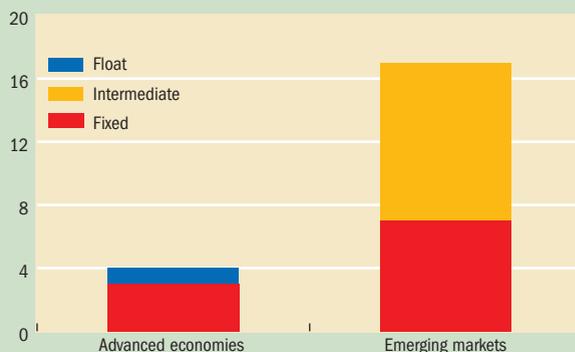
There are other examples too. For instance, euro area countries are classified in existing regime classifications either as having floating exchange rates (even though 60 percent of their trade is with each other) or fixed exchange rates (even though 40 percent of their trade is with countries against which they float). Countries that peg to an anchor currency are classified as having a fixed exchange rate, even though their exchange rates may fluctuate against those of their important trading partners. With such disparate relationships between various trading partners, it is hardly surprising that use of a single, composite exchange rate regime classification can yield misleading results.

Chart 1

Trouble adjusting

External adjustment is most difficult under pegged exchange rates. The vast majority of recent IMF arrangements are with countries that had some form of a managed exchange rate regime prior to their crisis.

(number of arrangements, September 2008–September 2012)



Sources: IMF's MONA database and Ghosh, Ostry, and Qureshi (2014).

Note: Excludes precautionary arrangements where IMF resources have not been drawn. Multiple arrangements with the same country over the period are counted once. Exchange rate regime is of 2007. Float = independent floats; Intermediate = basket pegs, crawls, horizontal bands, managed floats; Fixed = currency union, currency board, dollarized, single-currency peg.

To correctly identify the effect of pegged exchange rate regimes on external adjustment, it is therefore necessary to examine that relationship using data on trading partners against whose currency the country actually pegs. To this end, we fleshed out the exchange rate relationships across trading partners for 181 countries during 1980–2011 and examined the regime–external adjustment nexus through the prism of *bilateral* relationships between pairs of countries.

Our data set comprises a three-way bilateral exchange rate regime classification—*fixed*, *intermediate*, and *floating*—for each country vis-à-vis each of its trading partners (for more detail, see Ghosh, Qureshi, and Tsangarides, forthcoming). For fixed and intermediate exchange rate regimes (referred to collectively as “pegs”), we further differentiated between *direct* and *indirect* relationships between country pairs. Direct pegs are formed when one country pegs to another (anchor) country’s currency, while indirect pegs are formed between countries that either peg to a common anchor currency or to separate anchor currencies that are themselves pegged to a common anchor currency. Thus, for example, Lithuania is defined as having a direct pegged relationship with euro area countries since the anchor for its currency board arrangement is the euro, whereas it has an indirect peg with countries that also peg to the euro (for example, Bulgaria).

Among the various bilateral exchange rate relationships we examined, both nominal and—assuming sticky prices—real exchange rate flexibility are expected to be lower under fixed exchange rates than under intermediate regimes (and, of course, floats), because the latter imply greater movement in the nominal exchange rate. Between direct and indirect pegs, exchange rate flexibility is expected to be greater under indirect pegs (because, for example, if direct pegs imply stabilizing parity within plus or minus 1 percent, an indirect peg between two countries that directly peg to the same anchor currency could move by plus or minus 2 percent). Overall, therefore, exchange rate flexibility should be the least when one country

directly fixes its exchange rate to another and the greatest when the countries float against each other. This indeed appears to be the case empirically—under a direct fixed exchange rate regime, the volatility of the (bilateral) real exchange rate is the lowest, followed by a direct intermediate regime (see Chart 3). Real exchange rate flexibility is greatest when two countries have a floating relationship.

The upshot is that if Friedman’s hypothesis holds, external adjustment should be faster under a float than under a peg and faster when the peg is indirect than when it is direct (because indirect pegs allow relatively greater exchange rate flexibility).

What do the data say?

Combining the bilateral exchange rate relationships with information on bilateral trade balances, we obtained empirical results strongly consistent with Friedman’s hypothesis. Trade imbalances under both direct and indirect pegs adjust significantly more slowly than imbalances under floats. The speed of adjustment under indirect pegs is, however, faster than under direct pegs. Our results also reveal that

- Very large bilateral deficits and surpluses adjust significantly faster than smaller imbalances under floats, while pegs show no such tendency.
- The direction of the exchange rate movement under floats is consistent with the correction of imbalances. Thus, countries with bilateral trade deficits experience real depreciations of their bilateral exchange rate, while surplus countries experience real appreciations; but pegs show no such behavior.
- Greater capital mobility weakens the relationship between exchange rate flexibility and external adjustment since capital flows can sustain imbalances longer, even under flexible exchange rates. But the difference in the persistence of trade imbalances across exchange rate regimes remains statistically significant even for more financially open economies.

These results are supported by several “natural experiments”—cases of clearly exogenous changes in the exchange rate regime between countries and subsequent changes in their bilateral trade balance dynamics.

For example, when France adopted the euro in 1999, CFA franc area members automatically became pegged to all euro area countries. We find that the bilateral trade imbalances between CFA franc area and euro area members have since become more persistent.

Likewise, since Lithuania switched the anchor currency for its currency board arrangement in 2002 from the U.S. dollar to the euro, its trade imbalance with the United States has become less persistent but its imbalance with euro area countries has become significantly more so. Finally, even though the progression from the European Monetary System/Exchange Rate Mechanism

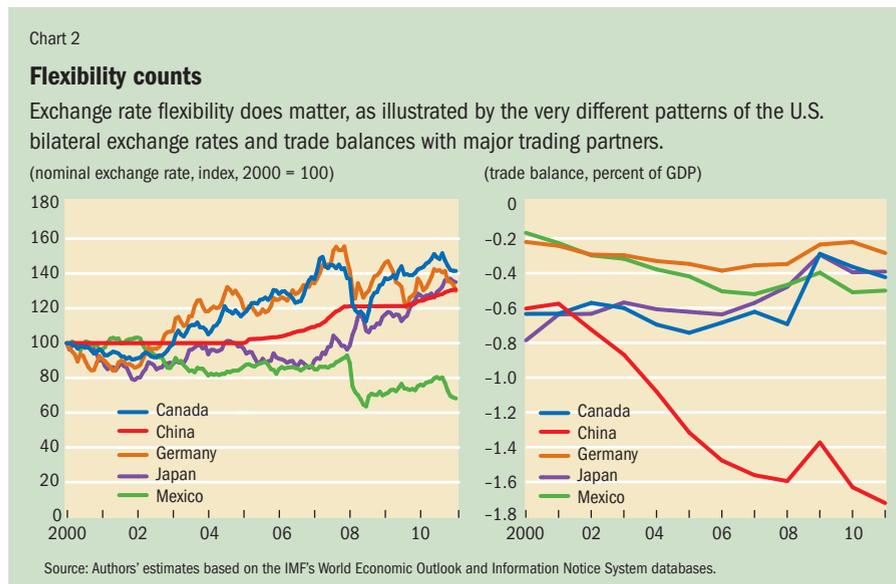
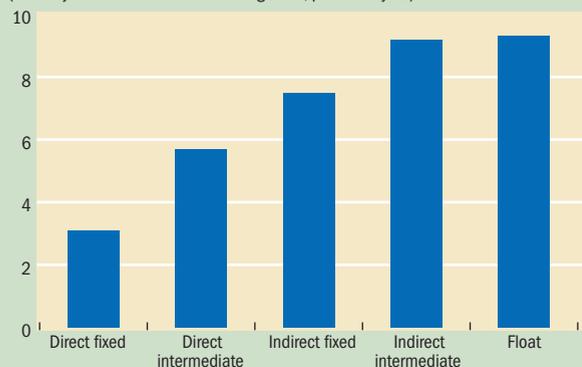


Chart 3

Limiting one's options

Exchange rate flexibility is least when one country directly fixes its exchange rate to the other, and greatest when the countries float against each other.

(volatility of the bilateral real exchange rate, percent a year)



Source: Authors' calculations.

to euro adoption did not usher in a substantial decrease in the volatility of these countries' bilateral exchange rates, we do find some evidence that the persistence of their trade imbalances has increased.

Overall, our results—based on panel data as well as on the natural experiments—underscore that pegged exchange rates impede external adjustment. Our findings also highlight the richness and complexity of exchange rate relationships across countries, and this needs to be taken into account in any examination of exchange rate flexibility and the speed of external adjustment. So, for instance, even though the U.S. dollar, New Zealand dollar, and euro are all floating currencies, our analysis suggests that external adjustment will be faster for New Zealand than for the United States, which in turn can adjust faster than euro area countries. This is because none of New Zealand's major trading partners pegs to its currency, but several U.S. trading partners peg to the U.S. dollar, and of course euro area countries—which trade extensively with each other—share a single currency.

Policy choices

For countries that want to maintain a pegged exchange rate for economic or political reasons, what policy choices are available to adjust and maintain competitiveness?

When nominal exchange rates are fixed, real exchange rate movement requires price flexibility. The key is therefore to remove structural rigidities in labor and product markets (for example, by introducing greater competition, and through fiscal reforms that encourage work) and to pursue prudent monetary and fiscal policies to help prevent overvaluation of the real exchange rate in the first place.

For countries with substantial external imbalances and external financing difficulties that urgently seek to restore their competitiveness, the choice is between “external” and “internal” devaluation of the exchange rate. External devaluation refers to a change in the nominal exchange rate parity

(for example, the CFA franc area's devaluation in 1994) that attempts to correct the relative prices of exports and imports, yielding an immediate depreciation of the real exchange rate. Internal devaluation, by contrast, mimics the effects of nominal exchange rate devaluation on the real exchange rate but through a decrease in the domestic price level (for example, the strategy pursued by Latvia and some euro area countries during the recent crisis). This is achieved through changes in the tax structure (by shifting taxes from labor to consumption, for example) or by lowering production costs (through wage reductions, for example).

External devaluation may be particularly challenging in the presence of “balance sheet” effects—large amounts of foreign currency-denominated debt held by the public or private sector—which could undermine economic recovery and ultimately force a country off its peg. And adjustment under internal devaluation is likely to be slow and painful, especially if the private sector is highly indebted and financially constrained.

Either way the choice is difficult. It calls for careful evaluation of benefits, risks, and policy options before tying one's hands in a pegged exchange rate regime. ■

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A BROADER Mandate

Luis Jácome and Tommaso Mancini-Griffoli

IN the decades leading up to the 2008 global financial crisis, country after country became persuaded that to achieve price stability, central banks should focus solely on that goal and operate independently of political authorities, who often have short-term horizons. But in recent years that consensus has frayed somewhat, as authorities and others have come to reassess the role that central banks should play.

A number of academics and analysts have suggested that central banks should embrace a broader mandate that adds to inflation aims. Perhaps the most concrete suggestion is that central banks play an active role in preserving financial stability, avoiding systemic financial crises by limiting excessive credit growth and borrowing. This would take the central bank beyond today's role of regulating individual banks. Some suggest that central banks should have a dual and equal mandate of controlling inflation as well as supporting full employment and growth. Under most current mandates, central banks

concern themselves with employment and growth only as far as they affect inflation.

But such a broader mandate would inevitably come to rub against political considerations, and unelected central bankers could see their independence constrained. We examine the channels through which independence could wane—and the associated costs. We argue that depending on the mandate, it may well be justified for central banks to have less independence, but that legal and institutional arrangements should protect the core of monetary policy independence—which has worked so well in containing inflation.

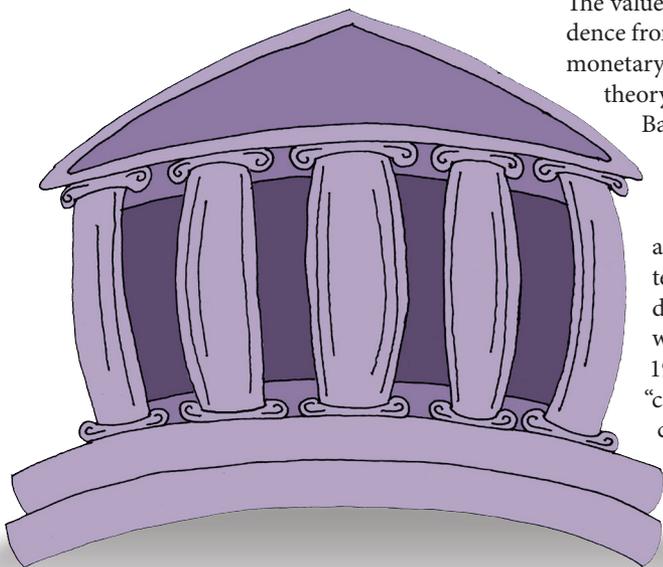
While some central banks could see their mandates expand, others might see them reduced. In an environment of potentially severe fiscal difficulties for governments, central banks could feel significant pressure to ease financing strains—for example, by keeping interest rates low. Central banks should prepare for this pressure.

Roots of independence

The value of granting central banks independence from government authorities in setting monetary policy is well rooted in economic theory. Kydland and Prescott (1977),

Barro and Gordon (1983), and Rogoff (1985) all showed that independent central banks tend to avoid the inflationary bias that occurs as a result of self-interested political intervention. In proposing to grant independence to the Bank of England when he became prime minister in 1997, Tony Blair said he became “convinced long ago that for politicians to set the interest rate was to confuse economics and politics.”

Central banks are feeling pressure to expand their inflation brief to include politically charged goals such as employment and growth



Central bank independence has largely proved effective in achieving and preserving low inflation. It has been extensively documented that higher independence and lower inflation go hand in hand (Cukierman, 2008). Latin America is a case in point. The region today has one of the lowest and most stable inflation rates in the world, although there are a few exceptions. That is in sharp contrast to its history of very high inflation—which reached more than 500 percent in 1990—before most Latin American nations granted independence to their central banks.

The case for making central banks independent is not self-evident. The public must have substantial confidence in the bank's ability to carry out its mandate and in the benefits that will accrue to society. On the face of it, it is unusual to concentrate significant control over the economy in an institution ruled by authorities who lack formal and broad popular support. Three key attributes of central banks seem to have facilitated their independence and contributed to their credibility:

A clear monetary policy framework: Central banks use specific instruments (a short-term interest rate) to target a measurable objective (inflation). This has allowed the public to monitor the actions of central banks and, importantly, evaluate their success in meeting their objective.

Performance: Central banks' successful track record in reducing inflation often appears to be a precursor to legal independence (see Chart 1). In turn, as suggested earlier, central bank independence also seems to have helped perpetuate low inflation by shielding central banks from political interference.

Accountability: In many countries, the goal of monetary policy is set by the government and is generally widely perceived to contribute to the social good for the most part. As such, central banks give up “goal independence,” but maintain “instrument independence” to the extent that they can freely define and manage the policy instruments they use to achieve that goal. Interestingly, whether central banks have instrument independence alone or both goal and instrument independence does not seem to have much effect on the achievement of their objectives (Bayoumi and others, 2014). Central banks frequently report their decisions and progress toward their objective to the government and congress.

Expanded mandates

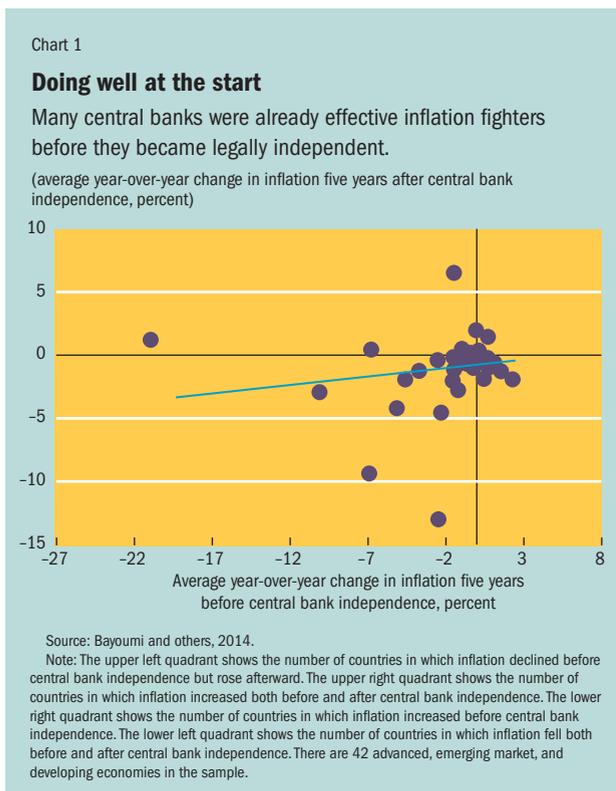
Central banks may see their mandates expand. They may be asked to play a more active role in supporting financial stability and may be required to respond more actively when output and employment deviate from their potential.

Central banks' responsibility to preserve financial stability may go well beyond the role of regulator and supervisor, which is the most common approach today and focuses on ensuring the health of individual financial institutions, such as banks. Central banks may become major players in the design and execution of so-called macroprudential policy, which aims to tackle risks to the system as a whole, not just to individual institutions (see “Protecting the Whole,” in the March 2012 *F&D*). And even if macroprudential policies are set outside the perimeter of the central bank, they must be taken into account by monetary policy and perhaps complemented with higher interest rates in good times to help slow credit growth and borrowing.

Whether central banks should care more about economic growth and employment than they now do is less obvious. Some argue a shift is warranted, citing a weaker trade-off than in the past between inflation and employment—the old Phillips curve proposition that higher employment is accompanied by higher inflation and vice versa. It is true that inflation decreased much less than expected during the recent crisis despite the extremely sharp recession, but we still do not know enough about why. The underlying causes could be temporary or specific to certain countries. Alternatively, inflation may be well anchored because of years of targeting the overall price level and placing less weight on growth and employment. If that is true, increasing emphasis on growth and employment because inflation has been stable could be self-defeating; it could undermine the very justification for doing so. Yet monetary policymakers are likely to be pressured to shift their attention toward growth and employment. Some of this pressure might come from self-interested political leaders who want short-term support from monetary policy to boost growth around election time.

Risk of undermining independence

A broader central bank mandate could erode each of the three features that facilitate central bank independence. In turn, this could weaken monetary policy's ability to preserve price stability.



The public could find it harder to monitor the central bank under a broader mandate. The inflation rate is easy to measure and compare against the central bank's objective. Financial stability, however, is inherently difficult to measure. What is measurable is instability—exactly what central banks want to avoid. In addition, there could be public confusion because instruments used to support systemic stability may change over time and may overlap with those used for monetary policy—for example, if interest rates, which are a monetary policy tool to affect inflation, are used to help stem credit growth as part of a financial stability effort.

Independence could come under scrutiny if the performance of central banks falters, which could happen under multiple mandates. There is no evidence that the regulatory role of central banks has had any effect on the success of monetary policy, in particular where there is a well-established monetary policy framework—such as inflation targeting (see Chart 2). But if mandates encompass financial stability, central banks could lose credibility—due to external shocks or contagion or through unforeseen channels—despite their efforts to contain a financial crisis.

Risks to central bank credibility from weak performance would be even greater if the central bank were held accountable for growth and employment. Clearly, monetary policy can affect economic growth in the short run, but the effect will wane significantly over time as other policies kick in, particularly those that affect labor markets and productivity. It would be very difficult to separate the effect of monetary policy from that of other factors when assessing central bank performance.

Using monetary policy to spur growth and employment would be even less effective in emerging market and developing economies, where economic performance is often influenced by external shocks (such as changes in commodity prices or U.S. interest rates). Moreover, expanding the mandate of central banks to include eco-

Failure to secure sustainable economic growth and high employment would undermine central bank credibility.

nomic growth could well take pressure off needed reforms in other sectors. In turn, failure to secure sustainable economic growth and high employment would undermine central bank credibility.

A broader mandate also risks undermining accountability. Decisions relative to financial stability may not always be seen as contributing to the social good because they directly and explicitly influence wealth redistribution, spending decisions, output, profits of the financial sector, and banking costs. For example, if a central bank decides to tighten loan-to-value ratios, the resulting higher down payment required for a house purchase would make it harder for low- and middle-income families to obtain credit in the short run. Of course, inflation also affects income distribution between savers and borrowers, young and old. But these effects are less directly observable when inflation is low and are clearly negative for society at large when inflation is high. It is thus easier to agree on a socially acceptable low inflation target than on a financial stability objective.

Government officials are likely to want to get directly involved in a broader central bank mandate. Members of the government may rightfully want to have a say, and even a seat on central bank decision-making committees that touch on economic growth and could have taxpayer or obvious redistributive implications—for instance, if the central bank is given responsibility for crisis resolution.

While greater political oversight of the central bank may be warranted for certain decisions, it will be important, at the least, to preserve the instrument independence of monetary policy. This will mean insulating monetary policy decision-making structures from political interference—for example, distinct decision-making committees with clear and separate objectives and, as much as possible, clear division between the instruments that fight inflation and those that support financial stability. Clear communication will also be essential, especially when a monetary policy decision affects or is affected by financial stability concerns. The task appears manageable, though challenging. But it would seem to be much more daunting if output and employment were explicitly added to the mandate mix.

Chart 2

All the same

In all inflation-targeting countries, whether the central bank's mandate included only inflation (left panel) or inflation and regulation/supervision (right panel), the inflation performance was roughly the same.

(average deviation from inflation target, 2000–06)



Source: Bayoumi and others, 2014.

Note: In the United Kingdom, the Bank of England's mandate later changed to include bank regulation/supervision and inflation. Financial stability includes regulation and/or supervision of banks. The average deviation from target for those aiming at price stability only was 3.16 percent; for central banks targeting price and financial stability it was 3.49 percent. The period is 2000 through 2006.

Surviving fiscal dominance

Probably the worst scenario for central bank independence is one in which a crisis in public finances subordinates monetary policy objectives and operations to the need to support government coffers—a situation called fiscal dominance. In this extreme case, monetary policy loses independence; it is relegated to keeping interest rates low to reduce government borrowing costs.

When fiscal dominance prevails, one risk is the loss of control over inflation. Inflation expectations may increase once markets realize there is a change in the central bank's objective and that public finances are unsustainable. Whether public finances are on the cusp of sustainability in advanced economies is beyond the scope of this article. But they are clearly under strain—debt-to-GDP ratios increased in advanced economies from 60 percent to more than 100 percent between 2007 and 2013 (IMF, 2013). Most emerging market and developing economies, however, reduced debt-to-GDP ratios and kept fiscal deficits in check, which gave them leeway to offset some of the effects of the global crisis.

Perhaps the more tangible risk is that markets believe that monetary policy has turned its back on its traditional objective to support public finances. This risk is especially high in countries whose central banks maintain extraordinarily large balance sheets—through big bond purchase programs, for example. The risk would also materialize if central banks decided to target longer-term interest rates in the future. Central banks might be unable to convince markets that their purchases of longer-term bonds were justified by monetary policy or financial stability objectives, not fiscal ones. Clearly, these concerns grow with the level of a country's debt and the duration of bond purchases.

Misperceptions of a change in monetary policy objectives would be costly. Monetary policy would have to increase interest rates by more than before to achieve the same stabilizing effect on the economy. Among the vast amount of

Fiscal dominance could become a reality in countries that fail to build buffers in good times.

evidence pointing to the cost of an inflation risk premium, some suggests that central banks with stronger restrictions on purchasing government bonds exhibit better inflation performance (see Chart 3).

Fiscal dominance could become a reality in countries that fail to build buffers in good times in preparation for bad times. So central banks should prepare to face significant pressure to keep inflation high and reduce pressure on public finances. As a last resort, discussions with the government should be settled cooperatively, potentially with some central bank support for concrete and credible measures to meet medium-term debt sustainability targets. The level of cooperation required, though, is new and will have to be built over some time. Whatever the framework, transparency and communication will be key to preserving central bank credibility and economic stability. ■

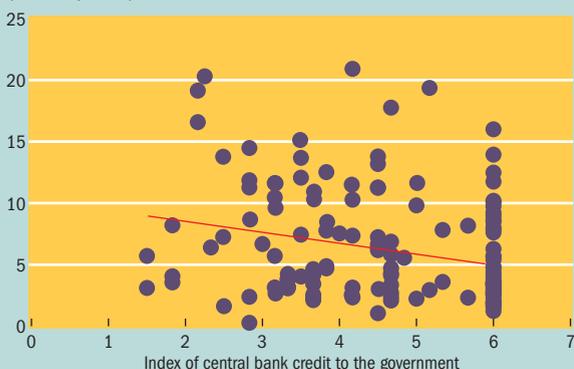
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Chart 3

Lend not to the government

On balance, inflation performance is better in countries where central banks have stronger restrictions on purchasing government bonds.

(inflation, percent)



Sources: Jácome and others, 2012; and IMF, *International Financial Statistics*.

Note: The index of central bank credit to the government ranges from 1, no restrictions on central bank lending to the government, to 6, prohibition of central bank loans to the government. There are 138 central banks in the sample. The calculations are statistically significant at the 1 percent level. The period is 2004 through 2008.

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Call center for ticket-booking website, Beijing, China.

Not Your Father's Service Sector

Prakash Loungani and Saurabh Mishra

IN 1988, General Motors launched an ad campaign with a memorable jingle: “This is not your father’s Oldsmobile. This is the new generation of Olds.” The car’s image had not kept up with its transformation from a staid cruiser to something far more high-tech and stylish. The service sector could use such an ad campaign: it too needs an image makeover to match its transformation over the past decade. The Oldsmobile didn’t make it, but the service sector is here to stay—it already accounts for 60 percent of global employment.

Prejudice against the service sector runs deep. Some regard it as the useless sibling of other sectors of the economy such as agriculture and manufacturing. In *The Wealth of Nations*, Adam Smith questioned the social value provided by “churchmen, lawyers, physicians, men of letters of all kinds, players, buf-

foons, musicians, opera-singers, opera-dancers, etc.” To this day, as economist Christina Romer lamented in a *New York Times* op-ed, there is a “feeling that it is better to produce ‘real things’ than services” (Romer, 2012).

Others have treated services not as socially useless but as somewhat challenged. A famous 1967 paper by U.S. economist William Baumol fostered the view that services is a sector resistant to improvements in productivity. He noted that the provision of services—such as restaurant meals, haircuts, and medical checkups—required face-to-face transactions. These did not lend themselves easily to standardization and trade, the source of growth in productivity and hence income.

This image is no longer a fair representation of the service sector. Service occupations

Services are gaining newfound respect as the basis of modern global trade

today include a few that even Smith might have considered useful. Trade in services has increased within and across national borders. Many services are now high tech and pay high wages. And increasingly, manufacturing and services, far from being competing siblings, are part of a joint family of value creation. Services are ever more critical to the successful operation of manufacturing, debunking debate over countries' need to choose between the two sectors.

Tradable and techy

A haircut still means a trip to the local barbershop. But many other services no longer require the provider to be close to the customer. People no longer have to go to the local bank to have access to their money: financial services are global. Many consulting services, such as architectural designs, can be delivered from anywhere. And while most medical care still requires a trip to the doctor, the provision of medical services—including in some cases surgery—from remote locations is increasing. Evidence of this transformation lies in the growing share of the service sector in global exports. Globally, the growth in exports of modern services outpaced manufacturing exports over the past decade (see Chart 1).

The main reason for the increased tradability of services is the revolution in information and communication technologies. Rapidly declining telecommunication costs, increasing Internet adoption around the world, and rapid proliferation of broadband Internet services have made arm's length delivery of services possible within and across borders. Using telecommunication networks, service products can be transported almost instantly over long distances. The range of service activities that can be digitized and globalized is expanding, from the processing of insurance claims and tax payments to the transcription of medical records to the provision of education via online courses.

Technology and increasing trade have in turn combined to improve productivity in services, albeit not as much as in the

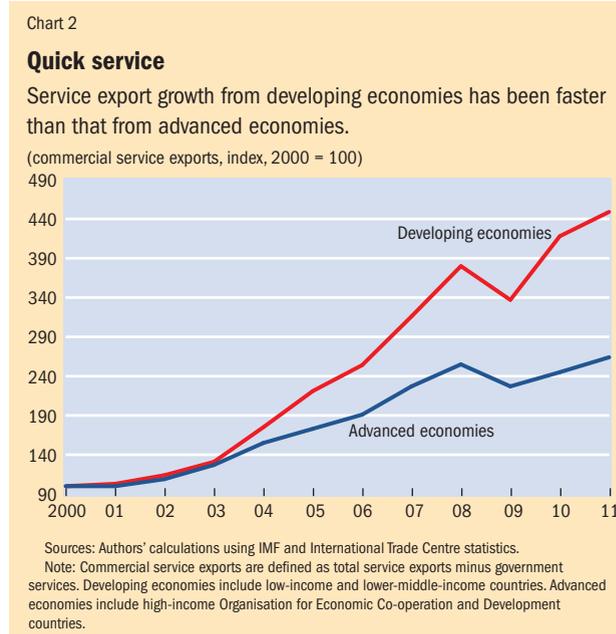
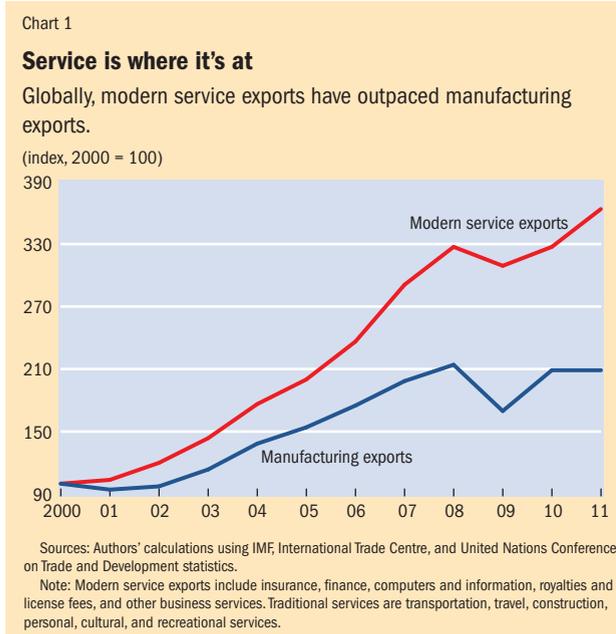
manufacturing sector (Summers, 2013). More and more services can now be unbundled: a single service activity can be divided up into tasks done at different geographic locations. Smith famously described how the productivity of a pin factory was boosted if, instead of one worker doing all the tasks involved in making a pin, a number of workers each specialized in particular tasks and then exchanged the fruits of their labor. A similar process of specialization and exchange is under way in many service industries. As with goods, services productivity can rise because of specialization (a finer division of labor) and scale (falling unit costs of production).

The unbundling of services has opened up niches that can be exploited by developing economies (the term is used in this article to refer to both emerging markets and low-income countries) as well as advanced economies (see map). Though measuring services trade is difficult, it appears that developing economies' share in world service exports increased from about 14 percent in 1990 to 25 percent in 2011. And even though it is measured from a much lower base, service export growth has exceeded that from advanced economies (see Chart 2).

Recent studies have shown that middle-income countries are starting to export services that have typically been exported by advanced economies. Moreover, this increased service sector sophistication is positively related to developing economy growth, after controlling for other standard determinants of growth. Causality is always difficult to establish, but the results suggest a new channel of growth for developing economies, particularly middle-income economies such as Malaysia (Mishra, Lundstrom, and Anand, 2011; Anand, Mishra, and Spatafora, 2012).

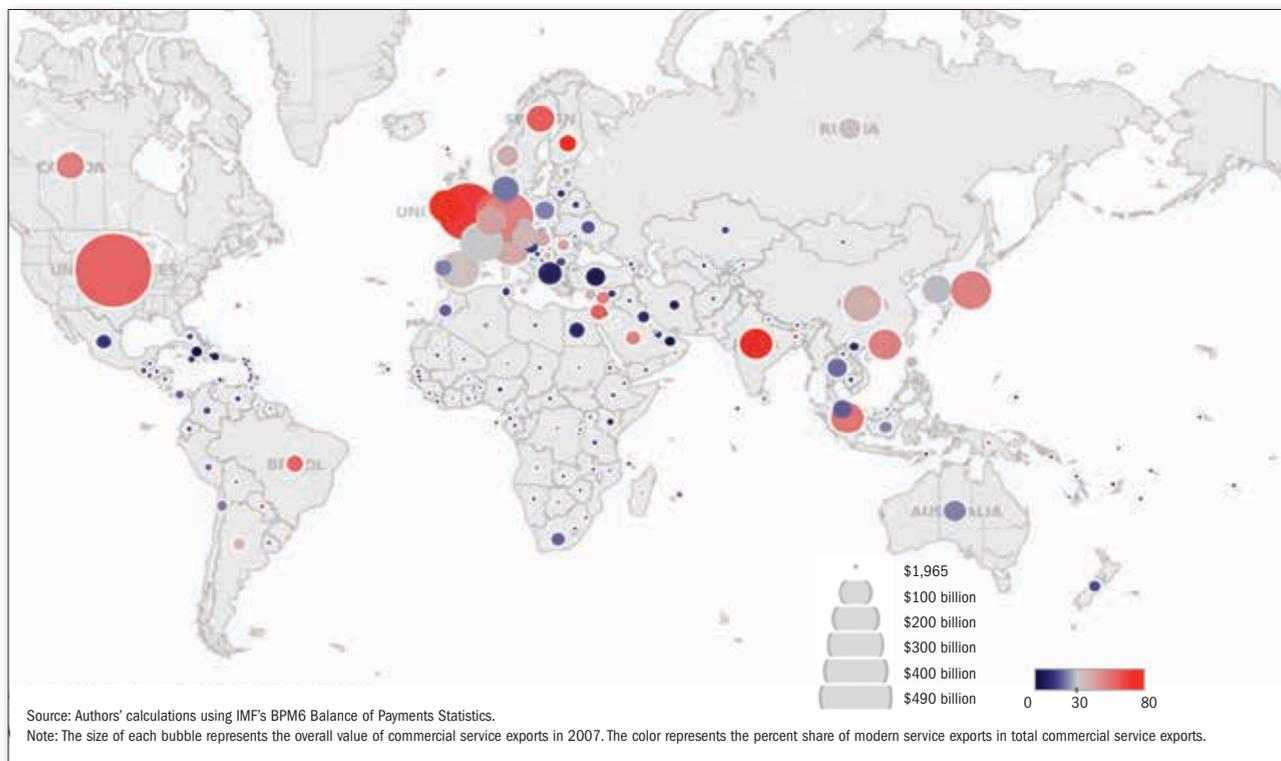
At your service

Traditional economic theories of structural transformation—developed by noted authors such as Nicholas Kaldor, Ragnar Nurkse, and Arthur Lewis—have viewed industrialization as



Spreading the wealth

Service exports are more concentrated in the United States and Europe but are expanding in importance in emerging economies.



the prime engine of jobs and growth. The push for manufacturing-led growth continues to this day (see, for example, Lin, 2011; and Rodrik, 2011). But the growing interdependence of the manufacturing and service sectors could soon put an end to debate about choosing one sector over the other.

A long-standing truism in California's Silicon Valley is that "70 percent of hardware is software"—early recognition of the link between sales of computers and software services. It is a phenomenon that now extends beyond the computer industry. Services have become the glue that binds many manufacturing supply chains. The success of many chains depends on an underpinning of services, from research and development at the inception of the product to distribution and repair at completion.

Recognizing this interdependence, companies are shifting from "selling products to selling an integrated combination of products and services that deliver value," a development that the academic literature refers to as the "servitization of manufacturing" (Baines, Lightfoot, and Smart, 2011). Neither the term nor the practice of manufacturing companies selling services is new. What is new is the magnitude of the practice—and its prevalence in both advanced and emerging market companies—and a change in attitude among managers from viewing services as a necessary evil to seeing them as an essential feature that helps deliver what the customer desires. Companies are more open today to the incorporation of products and services from other vendors if it helps them establish and maintain a relationship with their customers.

Examples abound. An obvious one is FedEx, which through reliable delivery and a tracking system assures companies that products will make it to customers. Less of a household name but just as well known in the business world is Rockwell Automation, which specializes in the maintenance and repair of automation products for virtually every major industry. A more pedestrian example is Zappos, an "online shopping utopia" that has allowed shoe producers to transform shoe shopping from dealing with "salesmen (they are usually men—one doesn't like to think too closely about why) staggering under stacks of boxes" to a transaction in "the comfort and privacy of customers' living rooms" (Jacobs, 2009).

Service with a smile

While some companies hold on to one component of the supply chain and outsource all others, many are embracing a vertical integration strategy in which they control multiple parts of the value chain. Activities within a firm's value chain are generally grouped into three categories: the upstream end comprises design, basic and applied research, and the commercialization of creative endeavors; activities in the middle comprise manufacturing and standardized service delivery; and activities at the downstream end consist of marketing, brand management, and after-sales services.

Management guru Ram Mudambi has drawn attention to the fact that many "firms combine the comparative advantages of geographic locations with their own resources and competencies to maximize their competitive advantage" (Mudambi,

2008). A common pattern is the “smile” of value creation in which companies break up the location of high value-added and low value-added activities (see Chart 3). An early and

Companies are more open today to the incorporation of products and services from other vendors.

prominent—though also controversial—example is the geographic location of Nike’s value chain; the parent company in the U.S. state Oregon concentrates on design and marketing while closely coordinating production through an offshore network of low-cost suppliers. An ad campaign could not save Oldsmobile, but General Motors has kept its Pontiac LeMans alive by placing design and marketing in advanced economies and assembly in emerging market economies.

The good news is that locating high value-added operations in advanced economies and relegating low value-added activities to developing economies is starting to change (Mudambi, 2007, 2008). Firms—particularly those in mature emerging market economies—are beginning to catch up when it comes to some high value-added activities. And advanced market firms are stripping out the more standardized portions of their high value-added activities and relocating them to emerging market economies. Witness mushrooming business consulting and knowledge-processing offices and the boom in e-commerce and online retailers in emerging markets across the Middle East, Brazil, China, India, and Singapore.

Happy together?

To reap the benefits of these trends, even developing economies where manufacturing still looms large must develop state-of-the-art services. Such services are needed for manufacturing firms to connect to global value chains and develop competitiveness in more skill-intensive activities along the value chain. Some countries may be able to use their comparative advantage in labor costs to become

exporters of some intermediate or final service products. In others, services may pose lower barriers to entry than capital-intensive industries or offer an easier route to employment for women than other available options. Countries such as Malaysia could take advantage of the globalization of services to escape a potential middle-income trap (Flaen, Ghani, and Mishra, 2013).

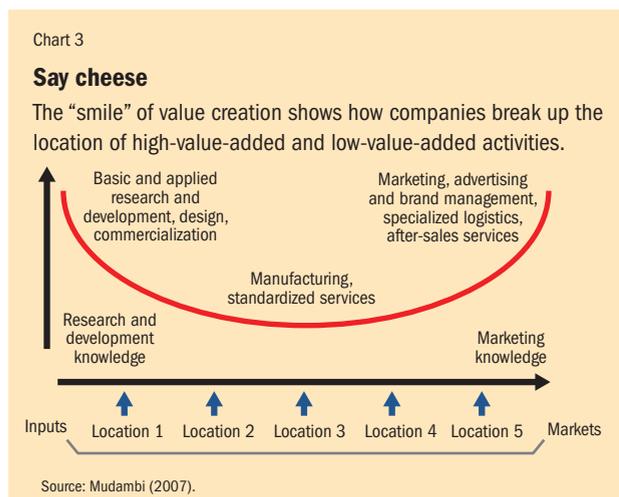
The good news is that the spread of the service sector—and of service exports—in developing economies has outstripped the oft-cited example of information technology growth in India. Think of the mobile revolution that has transformed financial services in many countries in Africa, the Nigerian film industry, game design in Cambodia, accounting services in Sri Lanka, and human resources-processing firms in Abu Dhabi.

Narratives of structural transformation often pit manufacturing versus services and advanced versus developing economies. While such forces of conflict surely exist, the story may be changing: the transformation of the service sector offers hope, at least in some cases, of amicable coexistence. ■

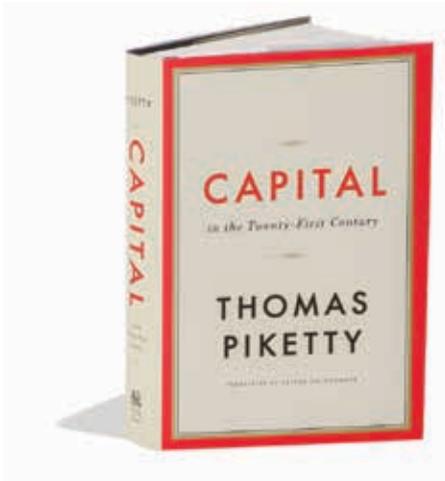
Prakash Loungani is an Advisor and Saurabh Mishra is a Research Officer, both in the IMF’s Research Department.

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The Rise of the Top 1 Percent



Thomas Piketty

Capital in the Twenty-First Century

Belknap Press, Cambridge, Massachusetts, 2014, 685 pp., \$39.95 (cloth).

This important and fascinating book surely ranks among the most influential economic analysis of recent decades. Much of the debate over inequality in recent years is the result of the work of Thomas Piketty and his fellow researchers.

Earlier research on inequality focused on data from household surveys described in terms of the “Gini” index, which measures the income distribution in a country. But the Gini misses much of the action at the top of the income distribution, partly because the very rich tend not to report all their income. And at best, these surveys measure income, not wealth.

Piketty has painstakingly drawn on new data sources to show that income inequality has risen sharply in recent decades to extremely high levels in the United States and, to a lesser extent, in a handful of other English-speaking countries. The rise has been driven mostly by wage inequality between the top 1 percent of the wealthiest in society, and everyone else. (I wish there had been room in this long book to address the critics who attribute these results to distortions in the data.)

A standard explanation is that education has failed to keep up with increasing demands for skilled labor.

Unlikely, says Piketty. That doesn’t explain why inequality increased sharply even among graduates from top colleges.

Could these sky-high salaries reflect top CEOs’ ability to generate huge increases in value? No, winner-take-all forces would presumably also be at work in other developed economies such as Japan, France, and Germany, and we see no such relative wage increases.

Maybe these other countries have resisted the relative wage implications of technological change, precipitating the slowdown in growth observed in several of these countries around the time inequality started to rise in the United States in the late 1970s. But real per capita growth has been about the same in both sets of countries since about 1980.

For Piketty, the most plausible explanation—though here he has less clear evidence—is essentially cultural and political; that the political elite in the United States and the United Kingdom engaged in radical market-oriented reforms that lowered the top tax rates, kept minimum wages from rising, weakened unions, and contributed to a change in what is considered an acceptable pay differential.

With a corporate governance structure in which the elite choose each other’s pay, little remained to constrain top wages. The solution, for Piketty, is to reverse those changes. He notes that growth did not increase in the United States and the United Kingdom as they lowered their marginal tax rates, relative to their continental peers.

Wage income inequality is limited to a handful of countries, but wealth is extremely unevenly distributed in all developed economies. Before World War I, however, things were even worse. The Great Depression and World War II brought about a huge leveling. At the same time, and continuing through the 1970s, public policy in the form of confiscatory top tax rates and high inheritance taxes kept the wealth distribution fairly stable.

But this may have been a temporary respite. The system is biased against the little guy: big fortunes earn higher

returns than smaller ones, and the rich save more (presumably—Piketty doesn’t say enough about saving rates). Meanwhile, population growth has halted and productivity growth is slowing, which imply a trend toward a 19th century–style society dominated by inherited wealth.

For Piketty, such a society is inconsistent with the meritocratic and democratic values that underlie

The system is biased against the little guy.

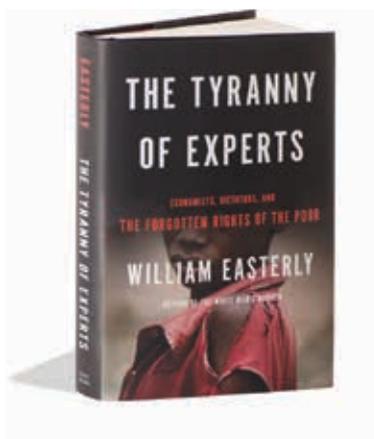
modern Western countries. Last time it took the cataclysms of the Great Depression and World War II to induce major change. But Piketty remains optimistic that ideas (and data) can influence policy. His main recommendation is a tax on all forms of capital, which would require international coordination and probably cross-border capital controls.

This book contains important lessons for economists. It is a (perhaps unwelcome) reminder that what they measure reflects political choices. It cautions them to be wary of viewing recent decades as some sort of “steady state”; the evolution of post–World War II incomes and wealth reflect the unwinding of earlier events, and the point is more general. And it reminds them of the rhetorical and explanatory power of simple comparisons of facts, once collected and arranged, relative to complex statistics and models.

Nobel Prize–winning economist Robert Lucas, Jr., commenting on questions of long-run economic growth, said that “once one starts to think about them, it is hard to think about anything else.” But readers are left with the thought that it is the *distribution* of the product of growth that will shape the economic and political nature of society in 25 or 50 years—and that this is the issue that demands our attention.

Andrew Berg
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Development by Way of Rights



William Easterly

The Tyranny of Experts

Basic Books, New York, 2013, 416 pp., \$29.99 (cloth).

I loved the premise and conclusions of William Easterly's new book.

The intervening 300 pages gave less cause for celebration.

Easterly sees development as hijacked by technocrats: "The technocratic illusion is that poverty results from a shortage of expertise, whereas poverty is really about a shortage of rights." The founding of the World Bank is the moment of original sin (the IMF gets off lightly). The resulting polemic is sweetly written, packed with fascinating human interest stories to bring alive what could have been dry conceptual debates.

For Easterly, the individual is hero, either unleashed to transform the world or confounded by the malignity of politicians. It is a quintessentially American, even Hollywood, take on the human condition. His view of power is summed up in the title of the chapter on institutions: "We oppress them if we can."

Easterly's gurus are Adam Smith and Friedrich Hayek; he reserves his scorn for development economists like Gunnar Myrdal and W. Arthur Lewis, who created a special economics that discarded free choice and individualism.

The book contains thought-provoking accounts of the origins of the technocratic approach, which

Easterly dates to 1919 (not Truman's 1949 speech, customarily cited as the dawn of aid). He sees it as rooted in attempts to divert attention *away* from the rights agenda, whether over U.S. anti-Chinese discrimination in the 1920s and 30s, Britain's attempts to resist postwar decolonization, or the struggles over civil rights in the 1950s and 60s. He traces a direct lineage to more recent wars (Cold; on Terror; on Drugs), where a focus on technocratic development enabled a convenient blind eye to be turned when rights violators lined up on the West's side.

This readiness to forget rights was music to the ears of dictators of all stripes, who grabbed the planner approach (or at least its language) as a way to ignore the opposition and consolidate their own economic and political power. He sees this abandonment of individual rights as the "moral tragedy of development today."

There is much to agree with here: his criticism of the blank slate approach, which ignores national and local specificities; the abuse of individual rights in the name of some higher national purpose; and the efficacy of spontaneous solutions rather than conscious design (neatly equating planners with anti-evolutionists).

Easterly even comes out as a growth skeptic: "If there is one number to which the rights of millions will be happily sacrificed, it is the national GDP growth rate."

But his argument founders on the China (or more broadly east Asia) question. Confronted with the historic reality that high-speed growth in east Asia has taken place under a variety of autocratic systems (the so-called developmental states), advocates of the American Dream confront two options: either accept that there may be trade-offs between growth and rights or try to explain away the east Asian miracle as a triumph for individual rights and market forces.

The World Bank attempted the latter with its much-derided East Asian Miracle of 1993, but Easterly makes that exercise in spin look positively

timid: "There is more evidence for attributing the rise of China as an economic superpower to the anonymous spread of the potato than to Deng Xiaoping's economic policies." This is desperate stuff.

By entering the terrain of rights, he expands on his earlier book, *The White Man's Burden*, which put forward a distinction between searchers and planners—a dichotomy I have found very useful over the years. But his grasp of rights is selective and flawed. For Easterly, rights are always individual, never collective—no mention of trade unions, women's or indigenous movements, or producer organizations.

Moreover, this portrayal of heroic individuals struggling for rights

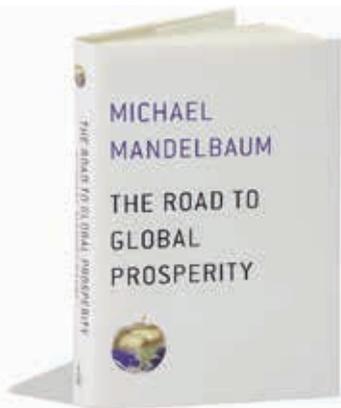
If there is one number to which the rights of millions will be happily sacrificed, it is the national GDP growth rate.

draws extensively on U.S. history, but completely ignores the institution that in recent years has done more than any other to promote human rights: the United Nations. That those contemptible planners and bureaucrats in New York should be advancing rights for all sorts of marginalized groups around the world clearly contradicts the premise, so they must be airbrushed out of the picture.

Finally, Easterly's conclusion is that if you care about rights, you should oppose aid. Mine is the opposite. Done well, aid can support poor people's struggles (individual and collective) for their rights, something I have seen firsthand in numerous countries in my work for Oxfam.

Duncan Green
Strategic Adviser, Oxfam GB
Author of the blog
From Poverty to Power

Progress in Political Economy



Michael Mandelbaum

The Road to Global Prosperity

Simon & Schuster, New York, 2014, 272 pp., \$28.00 (cloth).

Globalization—greater connectedness, to be more precise—dominates in our era, and making sense of its virtues and vices may be the central question. Most politicians try a practical approach—as the old saw goes, “The only thing worse than being exploited by multinational capitalism is not being exploited by multinational capitalism.” Yet the literature on globalization has been much more polarized between enthusiasts, who consider free trade, open capital markets, and the free flow of people the great engines of human progress, and critics who blame those forces for wrecking communities and the environment.

Michael Mandelbaum is in the first camp. His new book is breezy, accessible, and peppered with facts. It tries to restate the optimist’s position while calibrating enthusiasm down a few notches to fit the post-financial-crisis mood. His central argument is simple: if economics is the solution, politics is the problem. The “global economy, when it is working successfully—indeed because it is working successfully—cannot help but provoke opposition to its workings, which in turn produces political conflicts.”

After the obligatory canter through free trade theory, and a quick gallop through the headlines

of recent economic history, the book hits its stride with its description of how politics obstructs rational economics, particularly in the so-called BRICS (Brazil, Russia, India, China, South Africa). India will be let down by its messy, corrupt democratic politics. But will it be a greater disrupter than China, whose ability to compete in services will threaten far more than the West’s manufacturing workforce? Russia must cope with bribery—20 percent of GDP in 2005. It also suffers from an unhealthy mix of populism, authoritarianism, and inefficiency, with “energy revenues high enough to generate widespread corruption and prevent robust growth, but not high enough to sustain the standard of living to which

If economics is the solution, politics is the problem.

Russians aspire.” Brazil is also vulnerable to populism: 13 percent of its GDP goes for pensions, and proponents of greater public expenditure are likely to defeat “those favouring prudence who have economic history on their side.”

Mandelbaum nearly always blames the people or, more precisely, the way democracy mobilizes populist sentiment to defy economic rationality. The argument’s theoretical fuel is the Stolper-Samuelson theorem, which says that countries as a whole gain from trade, but the gains are distributed unequally.

You might think that the obvious question prompted by the Stolper-Samuelson theorem is how to handle the political economy of progress. If a society as a whole gains from trade, but some lose along the way, it may make sense to share the pain as well as the gain. People in the world of policy and politics realize this. But apparently not the author. And he has no response to the case made by Occupy Wall Street and others who

don’t take issue with globalization as such, but rather with the hugely uneven distribution of the gains between the 1 percent and the 99 percent, and the widening gulf between returns to capital and to labor.

The book says it’s about political economy, but is naïve when it comes to politics, especially when it comes to global solutions. We’re told, “the alternative to the current global economic order is . . . nothing.” An undergraduate would get an F for that statement. There may be no comprehensive and realistic alternative waiting in the wings, but innumerable policies have been proposed by central bankers as well as antiglobalists, Nobel Prize winners as well as nongovernmental organizations. At the very least these deserve some comment.

Mandelbaum’s prognosis is breezily optimistic: “The global economy will continue to grow. Its growth will make everyone richer. While not inevitable this is the likely future.” I hope he’s right. There is much in his book I agree with. If you want to give a non-Westerner insight into the worldview of the U.S. elite this is not a bad place to start. It’s fairly well informed, and easy to read.

But its arguments are better understood as symptoms of the problem than answers. Robert MacNamara concluded that the biggest strategy errors arise from failures of empathy rather than of analysis. A book whose references are almost all American, and all English language centered, struggles to understand how the world looks from the bottom up rather than the top down. Its vices are complacency and parochialism—something of an irony for a book that purports to be about the glories of a much more connected world.

Geoff Mulgan

Author of The Locust and the Bee: Predators and Creators in Capitalism’s Future
Chief Executive,
NESTA (UK National Endowment of Science, Technology and the Arts)

Has bank reform addressed the problem of too big to fail?

What are the risks from low inflation?

How does the growth rate in China affect other emerging markets?

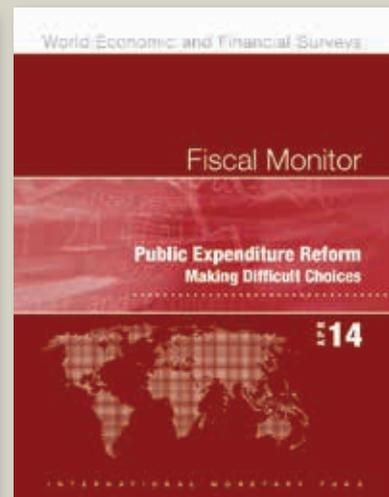
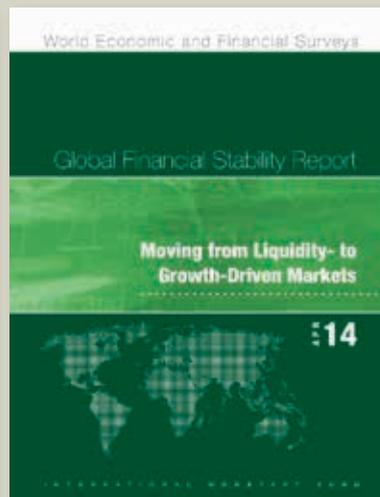
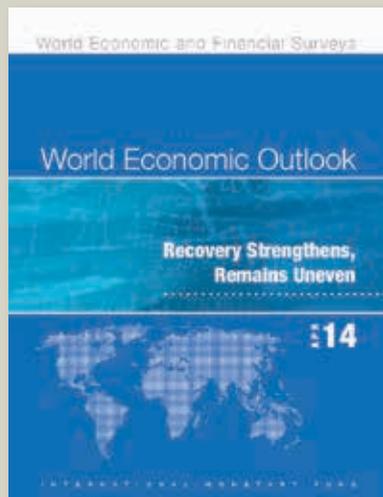
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