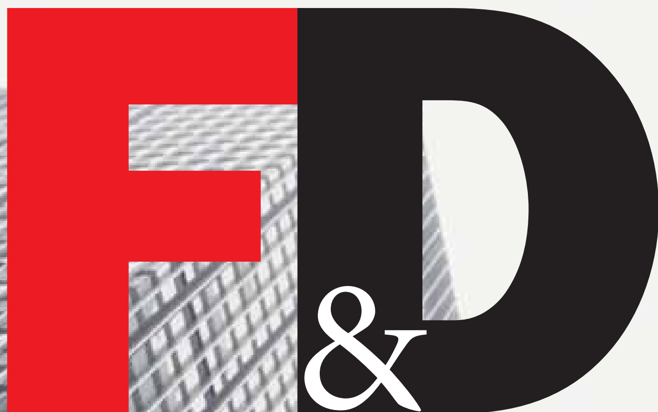

FINANCE and DEVELOPMENT

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March 2009

China's Domestic Growth Solution

Crisis Prophet Roubini Profiled

Trade Finance Dries Up

Getting Regulation Right

Crisis Stalls Globalization

Reshaping the World Economy

Finance & Development, March 2009

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Finding Solutions

THE global crisis is cutting deep into many economies around the world, triggering a slump in world trade and putting globalization on hold.

This issue of *F&D* examines the multiple facets of the recession—from the impact on individual economies to the effect on the external accounts of the world's lenders and borrowers—and offers a variety of suggestions for supporting a recovery and averting future crises, through both policy changes and longer-term regulatory reform.

We cover several IMF studies that shed light on the depth of the crisis—including a survey on the sharp drop in trade finance, along with quantitative findings about the direct and indirect costs of the financial turbulence—and debate what is to be done from several angles, including the redesign of the regulatory framework and ways to plug large data gaps to prevent future crises and aid in the creation of early warning systems.

We profile economist Nouriel Roubini, the "global nomad" credited with sounding the alarm about the coming global crisis, while in our "Back to Basics" column we examine what makes a recession.

Opinion pieces discuss the shifting boundary between the state and markets, the agenda for financial sector reform, and the governance of global financial markets. We take a historical perspective to see when restructuring the global financial architecture actually succeeds. Reinforcing regulation will take time, but the impetus to move toward reform is now strong. It will take both leadership and inclusiveness.

Jeremy Clift
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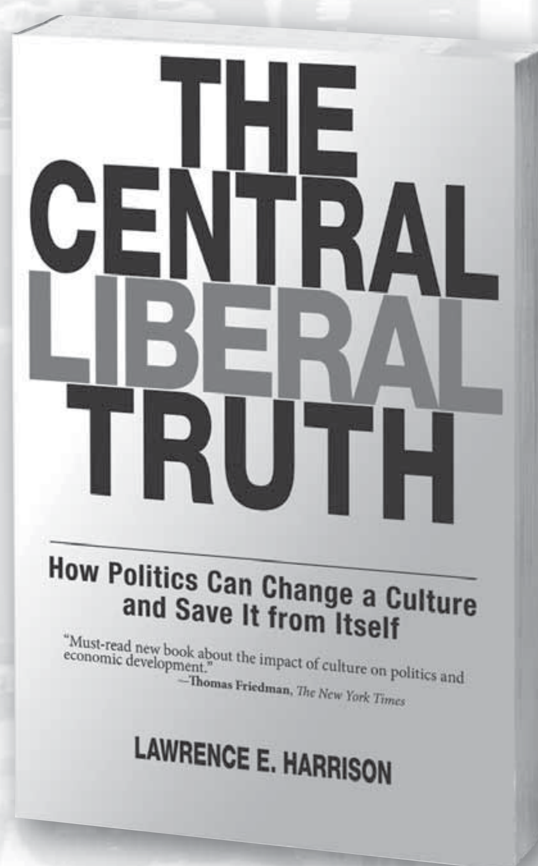

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A Belarusian worker on duty at the Yamal-Europe pipeline.

IMF seeks to double resources

Japan has provided the IMF with an additional $100 billion to bolster the Fund's lendable resources during the current global economic and financial crisis. The IMF said the additional funds, signed over on February 13, would strengthen its capacity to provide timely and effective balance of payments assistance to its 185 member governments.

The IMF has so far committed about $50 billion in lending to a number of economies affected by the crisis, including most recently to Belarus, Latvia, and Pakistan. With global growth expected to grind to a virtual halt in 2009, the IMF anticipates it will receive more requests for financial assistance in the coming months.

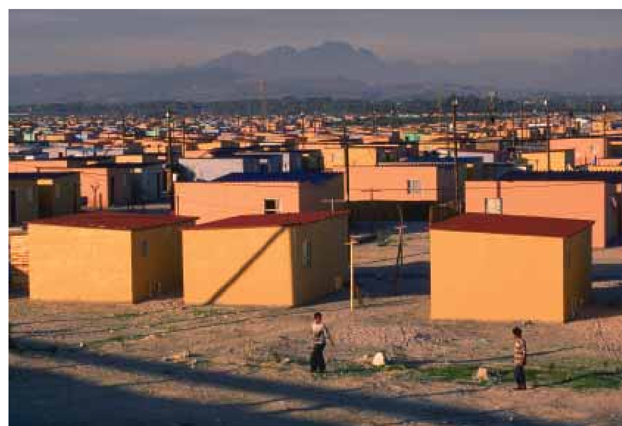
Apart from the new money from Japan, the IMF has about $200 billion in lendable resources. Managing Director Dominique Strauss-Kahn wants to boost the IMF's lendable funds to about $500 billion, both as a precaution in case the crisis gets worse and as reassurance that the IMF can meet any eventuality. The IMF's Executive Board is considering a number of ways to strengthen the Fund's resources, including boosting its concessional resources for poorer countries.

Vulnerability Fund

World Bank President Robert B. Zoellick has called on developed countries to dedicate 0.7 percent of their economic stimulus packages to a "Vulnerability Fund" for developing countries affected by the global downturn. Zoellick made this plea ahead of the 39th World Economic Forum in Davos, Switzerland, in late January.

Such a fund could speed resources to existing World Bank, United Nations, and regional development bank safety net programs that provide access to health, education, and nutrition services; help build infrastructure; and support small and medium-sized businesses and microfinance institutions that lend to the poor, Zoellick said.

"Poor people in Africa should not pay the price for a crisis that originated in America," Zoellick noted in a *New York Times* op-ed on January 22.



The proposed "Vulnerability Fund" would boost safety net programs in developing countries.

New publication series

The IMF has launched a new publication series, Staff Position Notes, to showcase its staff's policy analysis and research on topical issues.

In the latest note, "Foreclosure Mitigation Efforts in the United States: Approaches and Challenges," authors John Kiff and Vladimir Klyuev observe that foreclosures in the United States have risen to the highest levels since the Great Depression—despite the fact that they lead to substantial loss of value for both the lender and the borrower. The paper lays out a plan for stemming foreclosures and resolving the broader problems in the U.S. housing market.

Other recent titles have examined fiscal policy in times of crisis and how to gauge a country's vulnerability to deflation. To read Staff Position Notes, visit www.imf.org/external/ns/cs.aspx?id=236.

Events in 2009

April 2, London, United Kingdom
Group of Twenty Summit
April 14–16, Rio de Janeiro, Brazil
World Economic Forum on Latin America
April 25–26, Washington, D.C.
Spring Meetings of the IMF and the World Bank
May 2–5, Bali, Indonesia
Annual Meeting of the Asian Development Bank
May 13–14, Dakar, Senegal
Annual Meeting of the African Development Bank
May 15–16, London, United Kingdom
Annual Meeting of the European Bank for Reconstruction and Development
July 8–10, La Maddalena, Italy
Group of Eight Summit
October 6–7, Istanbul, Turkey
Annual Meetings of the IMF and the World Bank

PEOPLE IN ECONOMICS

Seeing Crises Clearly

Prakash Loungani profiles economist

Nouriel Roubini

THE "Power 50"—that was what *Institutional Investor* called its 2009 list of the 50 most influential people in the financial world. Many of the names were those of top policymakers and CEOs such as Ben Bernanke and Warren Buffett. Only one professor of economics made the list: at number 44, one notch below Saudi investor Prince Alwaleed bin Talal, was Nouriel Roubini of New York University.

It is a satisfying turn of events for Roubini, who was drawn to economics for its potential to influence public opinion and policies. Two decades ago, Roubini was known primarily in academic circles for influential work on how political conditions affected economic outcomes. A decade ago, he was starting to make his name outside academia as a provider of information and analysis on the Asian financial crisis. Today, he is becoming a household name, lauded in the words of *Institutional Investor* for "predicting that a U.S. real estate crash would cause banking failures and a deep recession."

He travels extensively these days to lecture about the effects of the crash he predicted. Ticking off a recent two-week itinerary—"Istanbul, Dubai, Abu Dhabi, London, Moscow"—he pauses: "I'm forgetting some place in between. What is it? Oh yes, Davos!"

Italian influence

Roubini calls himself a "global nomad." Of Iranian descent, and born in Istanbul, he grew up in Israel and Italy, receiving his bachelor's education at Bocconi University in Milan in the late 1970s. "There was a lot of social and political turmoil in Italy at this time. And many people like me, even in their teens, were socially conscious and cared about this.... Economics offered a way to understand the world and then, hopefully, through good policies, also change it for the better."

He had a role model in Mario Monti, an economics professor at Bocconi, who went on to become very influential in European policymaking circles (see *F&D*, June 2005, for a profile of Monti). The Yale-trained Monti was "a charismatic leader and teacher," says Roubini. "He was a serious academic but he cared about policy."

When it came time to pick graduate schools, Roubini faced the Cambridge vs. Cambridge choice that confronted many promising students. There was a tradition of Italian students going to the University of Cambridge in the United Kingdom, attracted by the presence there of the noted Italian economist Piero Sraffa. But by the 1980s, students were more likely to turn to Cambridge, Massachusetts, where another great Italian economist, Franco Modigliani, was ensconced at the Massachusetts Institute of Technology (MIT).

Roubini picked Cambridge, Mass., but went to Harvard rather than MIT. Why? "I didn't get into MIT," he says. "But please make it clear that I take no offense. These things happen." In fact, he got the benefits of interactions with both Harvard's superstars—"Jeff Sachs, Larry Summers, Robert Barro, and Greg Mankiw were around"—and MIT's. "I would attend classes [at MIT] by Rudi Dornbusch, Stan Fischer, and Olivier Blanchard," he says. His first job after graduating from Harvard in 1988 was at Yale.

Fiscal follies

Influenced by the saga of Italy's struggle with large and persistent budget deficits, Roubini was drawn to the study of fiscal policy—how governments decide how much to spend and how to pay for it. It was a time when governments were spending and not paying for it, at least not right away.

"It was quite striking," says Roubini. "In the 1970s and early 1980s, many countries in Europe had deficits of about 4 percent of GDP, and in some, such as Belgium, Greece, and Italy, deficits were as high as 10 percent of GDP." As a consequence, government debt increased significantly: the debt of the countries that would later make up the euro area "nearly doubled, from something like 30 percent to 60 percent" of their combined incomes. The United States and Japan also ran persistent deficits.

Two views prevailed in the academic arena of what gave rise to these government deficits and how much to worry about them. One view, put forward by Nobel Prize winner James Buchanan, was that there was a chronic tendency toward budget deficits because warring politicians competed for the votes of special interest groups by promising them a continuous IV drip of government spending.

The other view, whose main proponent was Robert Barro, was that on deficit spending governments tended to do the right thing over the long run: they ran up deficits in times of need, such as during wars and recessions, and paid back the debt—albeit fairly slowly—in tranquil times. This view was supported by the behavior of the U.S. and U.K. governments, which had behaved in roughly this fashion over the long sweep of history.

Roubini's contribution, in work done in the mid-1980s with Alberto Alesina and Jeffrey Sachs, was to carve a middle passage between these two views. He looked carefully at the political situation in countries to understand when it was more likely that governments would be captured by special interests, but did not downplay the economic factors that also contributed to deficits.

In a series of papers, Roubini demonstrated that when power is dispersed, say across many political partners in a coalition government, there was a greater tendency toward out-of-control budget deficits; the shorter the expected tenure of the coalition government, the greater this tendency. Adverse economic conditions raised the odds that fights would break out among coalition partners, further exacerbating the loss of fiscal control.

This marriage of politics and economics made it possible to explain better the behavior of government deficits across the range of industrial democracies. It explained why Italy, which had decades of short-lived coalition governments, found it difficult to control budget deficits. But it also explained why Japan was able to sustain its plan to reduce budget deficits in the 1980s—the unbroken majority control of the ruling party there, and its expected longevity in office, gave it the political space to pursue such a policy.

Fiscal bondage

Japan was an early mover in a trend toward fiscal correction that was to characterize industrialized economies in the mid-1980s. Roubini thinks it may have been a reaction by voters to the enormous expansion of the public sector during the 1970s. "Around 1985," he points out, "every G-7 government was headed by a right-of-center party," and fiscal restraint was in the air. The prevalent feeling was that fiscal rules—explicit benchmarks—were needed to check governments' tendencies toward unrestrained deficits.

The most noted examples of such rules were those in the 1992 Treaty of Maastricht, which set preconditions on countries wishing to join the European Monetary Union. In the area of fiscal policy, these so-called Maastricht criteria were that budget deficits should not exceed 3 percent of GDP and government debt should not exceed 60 percent of GDP.

In a now famous 1993 paper, "Excessive Deficits: Sense and Nonsense about the Maastricht Treaty" (written with Yale colleague Willem Buiter and then-student Giancarlo Corsetti), Roubini criticized these criteria as a case of "serious fiscal overkill." The problem with the Maastricht criteria was that they did not make any allowance for the state of the economy. Even in the face of a recession, governments were expected to keep to their plan for reducing deficits and debt until the criteria had been met.

Nor did the criteria recognize that some government spending took the form of investments, say in infrastructure, that could generate revenues in the future. The implementation of the criteria "would require an excessive degree of fiscal retrenchment which would adversely affect the level of economic activity," Roubini and his coauthors concluded. They recommended that the "criteria should be disregarded or applied quite loosely."

In any event, some European countries found it difficult to meet the stated criteria but were waved into the union nevertheless. And in 2005, the rules themselves were relaxed, providing more explicit scope for countries to let deficits increase in the face of adverse economic conditions. Roubini supports these changes and feels vindicated: "I think that the amendments go in the direction of what we had been suggesting from early on, in 1993. It took them a while, but what was eventually done was sensible."

Asian drama

With his work on political business cycles and on fiscal rules, Roubini was becoming quite well known in academic circles. But his name recognition went up measurably during the Asian crisis of 1997–99 as a result of an act of generosity uncommon among academics. He started to maintain a web page, which he made freely available to everyone, on which he posted and catalogued material about the crisis—reports by the IMF and other agencies, newspaper and magazine articles, private sector analysis, and technical papers by academics.

Soon, "Roubini's page" became the first port of call for those engaged in following or fighting the crisis. In January 1998, *The New York Times* acknowledged its influence, noting that "Professor Roubini maintains a site . . . that even people without an M.B.A. will find helpful in learning about the crisis. What the site lacks in fancy design it makes up in analysis, extensive links and a detailed chronology." Today, Roubini laughs that "the reporter was right about the design. In those days I was maintaining the page myself. It was just a wall of links, completely unsophisticated."

During the Asian crisis, Roubini was not just an aggregator of information but an active analyst. With his students Corsetti and Paolo Pesenti, Roubini offered the most comprehensive analysis of the Asian crisis. By academic standards, it was close to real time. In the November 1998 paper, Roubini and his coauthors wrote that at the root of the Asian crisis was "a long tradition of public guarantees to private projects. Even in the absence of explicit promises of bail-out . . . the corporate sector largely overlooked costs and riskiness of the underlying investment projects."

Roubini accused Asian governments of conducting policies that were "enmeshed within a widespread business sector network of personal and political favoritism" and interventions in favor of troubled firms. In such an environment, markets operated under the assumption that their return on investment was insured against adversity. Banks played along, "channeling funds toward projects that were marginal if not outright unprofitable from a social point of view."

This view of the crisis was controversial at the time because it appeared to blame the victim. But Roubini stands by his analysis. "I still see it as a moral hazard story," he says. Economist Paul Krugman "was right to say that this was a game of 'heads I win, tails the taxpayer loses.' It was because investors believed that the governments would protect them from most losses that you got the overinvestment, the excessive external borrowing, and the current account deficits."

Whistle-blowers

Roubini acknowledges there were others who sounded the alarm of a crisis before he did—and often just as loudly. "Raghu Rajan gave a very strong speech in 2005," he says, about excessive risk taking in financial markets and the possibility of a full-scale financial blowout. "He deserves a lot of credit for speaking out, particularly because he still had an official position" as the IMF's chief economist. Rajan returns the compliment, giving Roubini credit for acting on his convictions and noting that academics often labor under their own constraints: "Most academics . . . fear talking about things where everything is not neatly nailed in a model."

Another prominent whistle-blower was the Bank for International Settlements (BIS), which warned in its July 2007 annual report that the world economy was in danger of a major slump; *The Daily Telegraph* summarized the report with the headline "BIS warns of Great Depression dangers from credit spree." Roubini says that having his views shared in official circles such as the BIS helped him "stay the course." And, he says, he knew the "battle was won" when many Wall Street analysts and media commentators acknowledged that he had been right.

Abby Joseph Cohen of Goldman Sachs says that "Roubini was among the first to raise alarms" about financial fragility and that market participants no longer treat his views as "low-probability scenarios primarily of interest to academic economists." And Martin Wolf, the *Financial Times* columnist, wrote in a February 2008 column that "Professor Roubini's scenarios have been dire enough to make the flesh creep. But his thinking deserves to be taken seriously. He first predicted a recession in July 2006. At that time, his view was extremely controversial. It is so no longer."

Roubini and his coauthors offered nuanced policy advice on what was needed to overcome the crisis. Over the medium term, they argued, fiscal balances would have to improve to absorb the costs of bailing out the financial and corporate sectors. But because "in the short run the crisis led to a sharp fall in investment and output in the Asian region," the implementation of this adjustment ought to be postponed, "even at the cost of temporarily running large fiscal deficits." International rescue plans—such as those led by the IMF—can "play a crucial role," they wrote, "by helping to ease the crunch and avoid an even sharper decrease in investment and consumption."

"Over the past decade, his one-man Asian crisis web page has morphed into a 40-person operation called Roubini Global Economics Monitor, which aggregates and analyzes information on all international economics issues."

More so than many academics, Roubini has been a supporter of the IMF. He thinks this is partly because "he got to know the institution from the inside" at an early age. In 1985, while a second-year graduate student, he interned at the IMF. He has returned to the IMF many times in subsequent years and was an advisor to the U.S. Treasury from 1999 to 2001. During 2001–02 he worked with IMF staff on an approach to spotting vulnerabilities in financial and corporate sectors and wrote (with Brad Setser, now at the Council on Foreign Relations) a book that has become a standard reference on the appropriate policy responses to emerging market crises —entitled *Bailout or Bail-ins? Responding to Financial Crises in Emerging Economies*.

Emerging problems

Though his work on the Asian and other emerging market crises had made him well known in policymaking circles and among some segments of the media, Roubini's ascent to fame truly began when he started to sound alarms of a crisis much closer to home. Starting in 2005, and increasingly in 2006, Roubini says the runup in asset prices, the relaxed lending practices of the financial and corporate sectors, and the large current account deficits had him thinking: "Hey, wait a moment. The U.S. looks like an emerging market. Why hasn't it gone belly up?"

Roubini was one of a handful of observers who relayed their warnings to incredulous, often downright hostile, audiences (see box). In 2006, the global economy had just registered its fastest five-year period of growth in 30 years; the U.S. economy was doing well, having shrugged off the effects of the bursting of the dot-com bubble and the 9/11 terror attack. In September 2006, in a now-celebrated speech, Roubini told an audience of IMF staff that there was a more than 50 percent risk of a U.S. recession the following year. Over the past several years, U.S. consumers had gone on a spending binge, with many using their home equity as an "ATM." Now, he warned, "consumer burnout" is imminent.

Roubini drew a parallel between 2006 and 2001, when the U.S. economy had last slid into a recession: "What is happening today is that, instead of a glut of tech goods, we have a glut of housing stock and also a glut of consumer durables." The U.S. Federal Reserve Board could not stave off a recession, he said, "for the same reason that Fed easing did not work in 2001." If you have a glut, "you have to work it out, and interest rates effectively do not matter." Roubini also predicted that the rest of the world would not "decouple" from developments in the United States.

Charles Collyns, deputy director of the IMF's Research Department, says that by the time Roubini returned to speak at the IMF a year later he had been proved largely right. In fact, Collyns quipped in 2007, "perhaps Nouriel had not been pessimistic enough" in his year-earlier talk. Collyns also said that Roubini's views helped persuade the IMF early on to take a concerned view about global prospects.

Finding a balance

These days, Roubini leads a busy life, trying to be as he puts it "a full-time academic, a full-time policy wonk, and a full-time entrepreneur." He says that he has to find a better balance among these activities but doesn't know which one to scale back.

Over the past decade, his one-man Asian crisis web page has morphed into a 40-person operation called Roubini Global Economics Monitor, which aggregates and analyzes information on all international economics issues. Roubini says being an entrepreneur has given him insights into business that an academic professor of economics would never have. It's a sentiment with which his former colleague at Yale Robert Shiller agrees. A successful businessman as well, Shiller says that "for an academic economist, it is a good thing to run a business."

Perhaps he will be tempted into the Obama administration? Roubini says that's unlikely, adding that "in the last few years I have become used to being able to write freely and express my views without constraints. It would be a hard adjustment to go into a situation in which every word I say has to be cleared by somebody." Instead, he says, he is content with having an indirect influence on policy by expressing his views. "I don't want to overemphasize my influence, but I think that now when I write something, people read it and think about it. I'm happy with that." ■

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

Reshaping the Global Economy

Jean Pisani-Ferry and Indhira Santos

The economic and financial crisis marks the end (for now) of a rapid expansion of globalization

THE ECONOMIC and financial turmoil engulfing the world marks the first crisis of the current era of globalization. Considerable country experience has been accumulated on financial crises in individual countries or regions—which policymakers can use to design remedial policies. But there has not been a world financial crisis in most people's living memory. And the experience of the 1930s is frightening because governments at that time proved unable to preserve economic integration and develop cooperative responses.

Even before this crisis, globalization was already being challenged. Despite exceptionally favorable global economic conditions, not everyone bought into the benefits of global free trade and movement of capital and jobs. Although economists, corporations, and some politicians were supportive, critics argued that globalization favored capital rather than labor and the wealthy rather than the poor.

Now the crisis and the national responses to it have started to reshape the global economy and shift the balance between the political and economic forces at play in the process of globalization. The drivers of the recent globalization wave—open markets, the global supply chain, globally integrated companies, and private ownership—are being undermined, and the spirit of protectionism has reemerged. And once-footloose global companies are returning to their national roots.

So what role has globalization played in the genesis and development of the crisis? How is the global economy being transformed?

A sealed factory in Dongguan, China.

And what are the possible policy responses? These are the key questions we address in this article.

More than regulatory failures

At the start, many analysts failed to grasp fully the character of the crisis. The focus was almost exclusively on market regulation and the supervision of financial institutions, whereas little attention was devoted to the root global macroeconomic causes of the crisis. Indeed, as late as November last year, when the Group of Twenty (G-20) leading industrial and emerging market economies issued a communiqué at the end of an emergency meeting in Washington, D.C., the main focus was on failures in regulation and supervision and, correspondingly, the remedies were considered to be of a regulatory nature—hence the long G-20 agenda.

Partly, this was because the expected crisis did not occur: there was no precipitous depreciation of the U.S. currency, nor a sell-off of U.S. Treasury bonds. But the truth was that, however real the microeconomic failures, their effect would have been much more contained absent the insatiable appetite for AAA-rated U.S. assets. It was the combination of strong international demand for such assets, largely in connection with the accumulation of current account surpluses in emerging and oil-rich economies, and an environment of perverse economic incentives and poor regulation that proved to be explosive (see *F&D*, June 2008).

However, the complex interrelationships in the global system helped mask how it operated, and for a long time there was a collective failure to grasp fully the link between global payments imbalances and the demand for safe (or seemingly safe) financial assets and the manufacturing of those assets (Caballero, 2009). Discussion at the international level was further complicated by political overtones: ever since Ben Bernanke's 2005 "global savings glut" hypothesis, the United States has insisted that the key macroeconomic problem in the world economy was not its current account deficit, but rather China's high propensity to save.

A second related mistake dates to the early stages of the crisis. ***It was hoped, until autumn 2008, that economies immune from the direct fallout of the subprime crisis would sail through the storm*** with sufficient strength to pull along the entire world economy.

There were some superficial grounds for this "decoupling" view. According to the IMF, U.S. banks suffered 57 percent of the financial sector losses on U.S.-originated securitized debt, and European banks suffered 39 percent, but Asian institutions took only a 4 percent hit (IMF, 2008). This explains the simultaneous drying up of liquidity on the interbank markets in Europe and the United States in summer 2007 and is consistent with a degree of transatlantic financial integration far more intense than between any other pair of regions (Cohen-Setton and Pisani-Ferry, 2008). Thus, the subprime mortgage–related clogging of the banking system, and the resulting credit crunch, were mainly a U.S.-European phenomenon.

"There is an urgent need to avoid the recessionary combination of drying-up capital flows to emerging and developing economies and an accumulation of large foreign exchange reserves."

But it is now apparent that growth is declining sharply in all regions of the world. The decoupling hopes were put to rest on September 15, 2008, with the bankruptcy of Lehman Brothers and its consequences for capital markets. Vividly represented by the IMF's "heat map" of the crisis (Blanchard, 2008), emerging and developing markets were almost immediately hit by the sharp rise in risk aversion and the resulting sudden stop of capital inflows. The shock was especially severe for capital-importing countries, notably in Central and Eastern Europe, where it compounded preexisting imbalances and prompted calls for IMF assistance. But it was severe also for those that had accumulated foreign exchange reserves, such as Korea. The channel of transmission here was net capital flows rather than capital market integration in the form of gross external assets and liabilities (some of these countries held almost no U.S. assets or mainly held treasury bonds, whose value has increased in recent months). Net private capital flows to emerging economies had dwindled at end-2008 and are now projected to be $165 billion in 2009, 82 percent below the 2007 level (IIF, 2009). Once again, the high volatility of international capital flows has been a powerful factor in crisis contagion.

Finally, ***trade was bound to be a major channel of transmission for East Asia***, whose combined exports to North America and Europe amount to a staggering 12 percent of the region's GDP. This was enough to make decoupling an illusion. Trade has not only been a vector of contagion, but an accelerator. Figures for end-2008 show world trade and industrial production declining in tandem at double-digit rates. Several Asian countries have seen their exports fall by 10 to 20 percent year on year. It is not possible yet to disentangle what can be attributed to a fall in demand and the adjustment of inventories and what is the result of clogging of trade finance. What is clear is that the contraction of international trade is both a channel of transmission and a factor in the acceleration of output contraction.

Beyond the specifics of shock transmission, the crisis has exposed that, in spite of regional integration and the emergence of new economic powers, the global economy lacks resilience. After all, the losses on subprime and Alt-A mortgages that set in motion the dramatic deleveraging process amounted to some $100 billion; in other words, just 0.7 percent of U.S. GDP and 0.2 percent of world GDP—a trivial amount by any standard. With the world economy now having succumbed to recession, the questions are what toll it will take on globalization and how national economies and international organizations can manage the ongoing changes.

Globalization: reshaping or unmaking?

The crisis has already started to affect the drivers behind rapid globalization in recent years—private ownership, globally integrated companies, the global supply chain, and open markets.

To start with, ***public participation in the private sector has increased significantly in the past few months*** (see chart). Of the 50 largest banks in the United States and the European Union, 23 and 15, respectively, have received public capital injections; that is, banks representing respectively 76 and 40 percent of pre-crisis market capitalization depend today on taxpayers. Other sectors, such as the automobile and insurance industries, have also received public assistance. Whatever the governments' intention, public support is bound to affect the behavior of once-footloose global firms.

Second, ***this crisis challenges globally integrated companies.*** Economic integration in the past quarter century has been driven largely by companies' search for cost cutting and talent. Yet globally integrated companies were first put to the test early on in the crisis, with the collapse of banks that acted across international borders. Once-mighty transnational institutions were suddenly at pains to identify which government would support them. In some cases, governments responded cooperatively—as in the case of Belgium and France with Dexia Bank—but other cases ended in a breakup along national lines—as with Fortis, a Belgian-Dutch lender and insurer. This not only made clear that the existing supervision and regulation systems were inadequate for this transnational company model, but also showed that only national governments had the budgetary resources required to bail out financial institutions. Public aid risks turning global companies into national champions. Today, no CEO of a firm that has received public support would echo the words of Manfred Wennemer (CEO of Continental, a German tire maker): when justifying layoffs at the company's Hanover plant in 2005, he said: "My duty is to my 80,000 workers *worldwide*" (*The Economist,* May 18, 2006).

Third, ***national responses to the crisis can lead to economic and financial fragmentation.*** There is initial evidence that as governments ask banks to continue lending to domestic customers, credit is being rationed disproportionately in foreign markets. This was what happened recently when the Dutch government asked ING Bank to expand domestic lending while reducing its overall balance sheet. Because companies in emerging and less developed economies depend largely on foreign credit, this leaves them especially vulnerable to financial protectionism. Furthermore, government aid—driven by a legitimate concern with jobs—often, implicitly at least, shows preferences for the local economy. The French bias toward domestic employment in its auto industry's plan, the U.S. "Buy American" provision in the stimulus bill, and U.K. Prime Minister Gordon Brown's now infamous "British jobs for British workers" slogan are but a few examples.

Last but not least, ***despite the G-20's commitment last November not to increase tariffs, these have gone up since the start of the crisis in several countries, from India and China to Ecuador and Argentina.*** This follows a similar move one year ago when export restraints were introduced as countries tried to isolate domestic consumers from increasing international food prices.

It is hard to say whether these changes are merely short-term reactions to a major shock or amount to new and worrisome trends. At the very least, the balance between political and economic forces has been significantly altered. Because political support for globalization was at best shallow while the global economy was in a buoyant state, this suggests the pendulum is now swinging in the opposite direction. Against this background, two lessons from history are worth keeping in mind. One, dismantling protections takes time. It took several decades for many of the trade barriers erected during the interwar period to be brought down. Second, even if a significant part of the progress in liberalizing trade in recent times has been institutionalized and strong reversals à la 1930s are not likely, the downward spiral of protectionism acts fast.

Taken together, these risks pose a significant challenge for global integration. This is true also at the regional level. Economic divergence is rising within Europe, and cooperation within East Asia has been limited to say the least, in spite of the violent shock affecting the region.

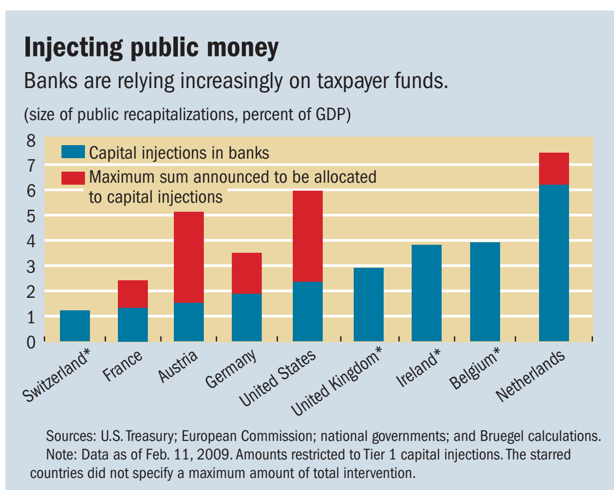
No doubt, global governance and the economic landscape will emerge from this crisis reshaped. The main test remains fostering international cooperation at a time when there is a big temptation to look for solutions at home. It is in deeper multilateralism, rather than in nationalism, that many of the answers to the current challenges lie. But what exactly should global actors and national governments do?

"In a deep recession, the temptation to export unemployment through beggar-thy-neighbor exchange rate policies inevitably arises."

Injecting public money

Banks are relying increasingly on taxpayer funds.

(size of public recapitalizations, percent of GDP)



Sources: U.S. Treasury; European Commission; national governments; and Bruegel calculations.
Note: Data as of Feb. 11, 2009. Amounts restricted to Tier 1 capital injections. The starred countries did not specify a maximum amount of total intervention.

The policy agenda

The evidence suggests that reforms of the regulatory and supervisory frameworks are only part of the answer. At its next meeting in April, the G-20 needs to turn to a broader set of issues that includes trade, financial integration, and macroeconomic policies. Furthermore, policy cooperation at the global level requires an adequate institutional framework; for this reason, the reform of international financial institutions is once again bound to be on the menu of discussions. Therefore, we suggest a five-point agenda, with the first three issues referring to global trade and the macro agenda and the last two to tasks for the international financial institutions.

Preserve trade integration. There is an urgent need to avoid actions that can make the crisis and the contagion worse. The November G-20 commitment to "refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing WTO [World Trade Organization]-inconsistent measures to stimulate exports" is clearly insufficient. From increases in applied tariffs, subsidies, and biased public procurement to mandated bank lending to domestic customers and pressures on manufacturing and services companies to preserve jobs at home, the G-20 commitment leaves many routes to protectionism wide open. Instead, governments in the G-20 should agree on a code of conduct that establishes which rescue and support measures are acceptable or not in times of crisis (whether they affect trade directly or indirectly) and entrust the WTO and the Organization for Economic Cooperation and Development with the policy monitoring task. Similar provisions should apply at the regional level.

Design national stimulus programs and aid packages that support globalization rather than undermine it. Governments should take stock of plans made at the G-20 November meeting to foster global recovery through stimulus packages, and review the size and adequacy of efforts announced so far. International cooperation in this field is by nature delicate because, as bluntly stated by an Irish minister, "From Ireland's point of view, the best sort of fiscal stimulus are those being put in place by our trading part-

ners. Ultimately these will boost demand for our exports without costing us anything" (Willie O'Dea, Minister of Defense, in the *Irish Independent*, January 4, 2009). Packages announced so far vary greatly in terms of size and content and, even when they do not include any distortionary measures, many tend to favor supply measures in industries with high local content, such as infrastructure. This is perfectly legal and, to a certain degree, inevitable because governments are accountable to national taxpayers who

"Giving greater voice and representation to emerging and developing economies . . . implies a reduction in the number of European seats and the renunciation of the U.S. veto power."

want to benefit from the injection of public money. But it is not efficient because the tradable goods sector is (with construction) the one most affected by the crisis. As a stopgap measure, the G-20 should agree on a set of principles concerning the content of national stimulus and support packages and include their potentially most distortionary elements in the code of conduct proposed above.

Avoid exchange rate policies that trigger external instability. In a deep recession, the temptation to export unemployment through beggar-thy-neighbor exchange rate policies inevitably arises. Fortunately, this has not yet been the case on a significant scale, but for the future, the G-20 should reaffirm the need to avoid such measures and ask the IMF to carry out real-time exchange rate monitoring and report infringements immediately. This principle was agreed in 2007, and it is of particular relevance in the present context.

Build confidence in multilateral insurance rather than self-insurance. There is an urgent need to avoid the recessionary combination of drying-up capital flows to emerging and developing economies and an accumulation of large foreign exchange reserves. The danger is very real. Most emerging economies have been suffering from a sudden stop of capital inflows (or capital flow reversals) with dire consequences, especially in Central and Eastern Europe—the one region of the world that had until recently relied on foreign capital to catch up. Moreover, the lesson many may draw from the crisis is that there is a need for even more reserves to self-insure against such events. This would imply, including in Asia where reserves are already high, a widespread move toward current account surpluses at the worst possible time—an international "paradox of thrift." Moreover, in addition to contributing to the crisis by fueling excess demand for U.S. financial assets, reserve accumulation is an individually costly and collectively inefficient way to protect against crises stemming from a lack of confidence in multilateral insurance through international financial institutions, especially the IMF. Rather, there is a need to rebuild confidence in the system. The level of resources this requires and the best combination of multilateral and regional insurance needed to achieve this goal are legitimate topics for discussion. There is no reason for the combination to be uniform across regions, but, whatever the form, it would result in significant capital savings.

Make international financial institutions more representative of current realities. The recent reform of quota and voice at the IMF has evidently not been sufficient to create or recreate the needed ownership in the emerging and developing world, which is why further governance reform should be on the agenda. The G-20 has mandated that ministers prepare proposals to reform international financial institutions, including giving greater voice and representation to emerging and developing economies. This indispensable change—which in practical terms implies a reduction in the number of European seats and the renunciation of the U.S. veto power—will be easier to achieve if the debate over power redistribution is put in a broader context (as suggested above).

The tasks ahead for the G-20 are thus daunting, but the G-20 is the appropriate venue for dealing with them. Admittedly, many of the items in the November 2008 declaration were primarily the responsibility of the countries or regions with the most sophisticated financial markets. In contrast, ensuring that in the short term the crisis does not result in economic fragmentation and that international trade and finance do not become powerful engines of economic contraction requires a wider forum, such as the G-20. If the G-20 governments are able to successfully link to existing international institutions and rely on their analytical capabilities, it could mean the transformation of the crisis into an opportunity for a stronger and more legitimate governance of globalization. ■

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Deep Impact

Four countries confront the harsh and disruptive effects of the global economic downturn

Sources: Haver Analytics; and IMF staff estimates.

A KEY indicator of the depth of the current global economic crisis is the slump in world trade. Behind the projected fall in overall international trade volume in 2008 and the bigger drop forecast for 2009 lie compelling stories of individual countries grappling with collapsing export markets, evaporating trade finance, and fickle migration flows. Steel producer Ukraine and consumer electronics manufacturer Singapore face shriveling demand and drooping prices for their output. At the same time, cotton exporter Burkina Faso's production reforms encounter fading textile buyers, and hi-tech nursery Ireland fails to keep its migrant labor employed.

Metal Fatigue

Ukraine's steel earnings buckle with the world economy

David Hofman

A steel mill in Donetsk, Ukraine.

WORLD steel prices are highly sensitive to global economic downturns. The earnings of major steel exporters such as Ukraine are therefore closely linked to trends in the world economy. As global car manufacturing and construction activity—and hence steel prices—have sunk in the deepening world slowdown, Ukraine's fortunes have been dragged down too, weighed down further by overdue policy decisions.

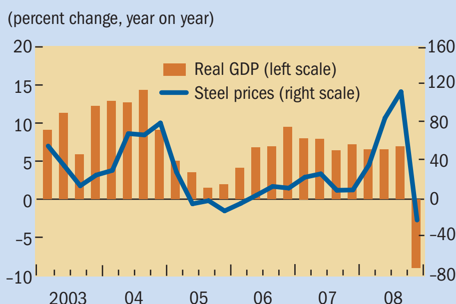
The economy of Ukraine, the world's eighth-largest steel producer, depends heavily on developments in its steel sector. Measured directly, the steel industry accounts for about 12 percent of Ukraine's national income, and for more than one-third of total exports of goods. Large as these numbers may already be, indirectly steel is even more important because many other economic activities depend on the steel sector. As a result, GDP growth in Ukraine tends to track developments in world steel prices (see chart).

Ukraine's strong link to metals prices previously helped boost the economy. A 2000–08 surge in steel prices—to levels far above their long-term downward trend—underpinned Ukraine's largely favorable export performance and impressive GDP growth: between 2001 and 2007, the Ukrainian economy grew by an average of 7½ percent a year in real terms. Export earnings and generous capital inflows fueled domestic credit growth, and equity and house prices soared. The external current account deficit rose strongly as imports jumped, and inflation began spiraling out of control. Meanwhile the government's policies, in particular the de facto exchange rate peg, failed to address the building imbalances.

Bolted together

The economy of Ukraine, the world's eighth-largest steel producer, depends heavily on developments in its steel sector.

(percent change, year on year)



Sources: Ukrainian authorities; and *Metal Bulletin*.

Sharp correction

Although steel prices clearly could not remain at the high levels of 2007 and 2008, few could have foreseen the dramatic speed with which steel prices came down in late 2008. Amid the global economic crisis, the commodity boom of recent years ended abruptly, and with global car sales slumping and a sharp contraction in construction activity, steel was particularly badly affected.

By early November 2008, steel prices had fallen more than 80 percent from their near-peak levels in August, bringing prices close to their long-term-trend levels. Even though the speed of the adjustment was exceptional, the sharp correction in steel prices itself was not without precedent. Indeed, steel prices have plummeted in every global recession since the early 1970s, each time bringing steel prices back to or beneath their long-term trend.

The collapse of steel prices has hit Ukraine hard. Led by a 50 percent fall in steel production, industrial production fell by about 25 percent between September and December 2008, and exports plunged. Overall economic performance slumped. Preliminary GDP figures show that real output contracted by about 9 percent in the fourth quarter in seasonally adjusted terms. All this was compounded by a simultaneous crunch in the availability of external financing, related to reduced risk appetite among international investors. This caused Ukrainian bond spreads to soar, and the local stock market lost about 75 percent over the year.

Untenable currency regime

The combination of the large steel price shock and the loss of access to international capital markets made Ukraine's rigidly managed exchange rate regime untenable. Concerns about exchange rate volatility and the stability of the banking system then caused a run on deposits. This put the banking system—already vulnerable due to recent rapid credit growth, including in foreign currency to unhedged households—under heavy strain.

To deal with the negative effects of the steel price shock and of the squeeze in external financing, Ukraine's authorities are implementing a policy adjustment program that is supported by a $16.4 billion IMF loan approved in November 2008. ■

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Reboot Required

Dwindling demand in major export markets freezes Singapore's electronics industry

Roberto Guimaraes and Alessandro Zanello

A digital video disc player assembly line in Singapore.

WESTERN markets that for years eagerly sought consumer electronics made in Singapore have fallen off a cliff in the past 12 months. European and American gadgeteers who had repeatedly rushed to stores for new-generation computers, smartphones, and digital cameras now stay at home, out of credit and confidence. The global downturn has hit Singapore head on: the economy, which experienced rapid growth of almost 8 percent in 2007 managed only 1½ percent last year.

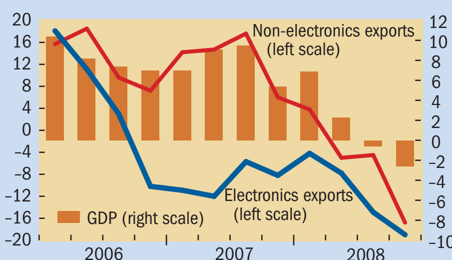
This high sensitivity to global events reflects Singapore's industrial structure and areas of specialization. One-third of the economy—revolving around manufacturing, especially of information technology products, trading services, and some financial activities particularly vulnerable to shifts in investor confidence—is directly affected by advanced economies' growth.

Another third of economic activity is influenced mostly by regional developments. Both sectors are being hit significantly (see chart), and the shock waves of falling external demand are having an impact on more domestically oriented industries such as construction and utilities.

Network down

Singapore's information technology-based electronics exports have crashed and taken the city-state's economy with them.

(percent change, year on year)



Sources: CEIC Data; and IMF staff calculations.

Commitment to openness

Singapore's engagement with the international trade and financial systems is exceptional by many metrics, so a large impact is to be expected when the world economy wobbles. Exports account for 230 percent of GDP, and the city-state is a vibrant financial hub in Asia. More than 100 foreign banks, with assets equivalent to nearly six times GDP, use Singapore as a base for regional operations; three domestic banks are also major providers of liquidity to regional firms and multinationals.

But deep economic and financial integration carries with it exposure to global financial shocks and the business cycle of trading partners. For example, a recent IMF study shows that a slowdown in the United States translates into almost a one-for-one decline in the pace of activity in Singapore.

One-two punch

In fact, the current crisis packs a one-two punch for reeling Singapore. Contagion is occurring through both the trade and the financial channels.

Trade. Exports shrunk by 25 percent in the fourth quarter of 2008 compared with the same period in the previous year, after also contracting in the previous two quarters. The export slump has been broad based. The contraction in electronics exports (which account for one-third of total exports) started in early 2007 and has now become the longest on record. Worse still, the export fall has deepened since early 2008. Meanwhile, shipments of petrochemical and pharmaceutical products that had held up through 2007 have taken a dive. Exports to the United States and the European Union have been particularly affected so far, but exports to Asia, which absorbs more than one-half of Singapore's total exports, have also started to feel strong headwinds.

Finance. The global financial turmoil has also affected equity prices and credit. Singapore's stock index fell 50 percent in 2008 and volatility spiked. Interbank lending in U.S. dollars has slowed considerably as global liquidity tightened—and only timid signs of recovery are in sight. With higher bank funding costs, there have been reports of cutbacks on trade financing that could bring wider disruptions in trade activity by putting firms under additional stress.

On the upside, the authorities are taking decisive action to cushion the impact of the global crisis. The central bank has eased the stance of monetary policy and introduced deposit guarantees to shore up confidence in the banking system. On the fiscal front, the 2009 budget is appropriately expansionary and includes a range of tax and spending measures to help businesses and households, including tax rebates, infrastructure spending, and loan guarantees. ■

Roberto Guimaraes is an Economist and Alessandro Zanello is Assistant Director in the IMF's Asia and Pacific Department.

The cotton harvest in Boromo, Burkina Faso.

In a Spin

Plunging prices leave Burkina Faso's cotton companies in a difficult situation

Isabell Adenauer, Norbert Funke, and Charles Amo Yartey

AS the global economic crisis cut demand for textiles and depressed cotton prices, Burkina Faso's cotton farmers at first were insulated from the worst effects of the commodity price shock. A new producer price mechanism helped put cotton sector finances on a sounder footing. But as the crisis escalates, cotton companies face a choice between selling or stocking during an extended slide in the world cotton price.

Cotton accounts for about 60 percent of exports in Burkina Faso, sub-Saharan Africa's biggest cotton producer. The cotton sector provides about 700,000 jobs, employing about 17 percent of the population, and many more people benefit indirectly. In several rural areas, where poverty is high, the sale of cotton seed is the main or even only source of cash revenue. The expansion of cotton growing has stimulated production of cereals, mainly because fertilizer financed with cotton credit can also be used for other crops. As a result, poverty has been reduced by one-quarter in cotton-growing areas.

Cotton sector reforms

Although the past few years have been difficult for Burkina Faso's cotton production, the sector was about to recover when the global economic crisis started. Ginning companies, which separate the cotton fiber from seeds and stalks, sell at world prices and incurred sizable financial losses during 2005–07, partly because of an inflexible pricing mechanism that prevented the pass-through of lower cotton prices to producers. In 2007, Burkina Faso's cotton production declined by more than 40 percent because of late rainfall and low international cotton prices.

Several institutional and policy reforms followed.

- A market-based producer price mechanism was established. It sets producer prices, based on a five-year centered average of world prices, at the beginning of each growing season.
- A smoothing fund was created to support the price mechanism for producers and compensate ginning companies should world market prices fall below producer prices.
- Big ginning company losses required a recapitalization of the largest, SOFITEX, in 2007, which increased government ownership of the company from 35 percent to more than 60 percent.

The crisis and cotton

The global economic crisis affects the four main stakeholders in the cotton sector in different ways.

Bobbin lower

The global economic crisis cut worldwide demand for textiles and depressed cotton prices during 2008.

(international cotton prices, U.S. cents per pound)

Sources: DataStream; and IMF staff estimates.

Producers. The new producer price mechanism gave farmers certainty about sale prices at the beginning of the 2008 season, isolating them from the price decline later in the year. Cotton production in 2008 was thus not affected by the plunge—down about 40 percent from the March peak—in cotton prices during the year (see chart). In fact, cotton production exceeded expectations, reaching more than 500,000 tons because of good weather conditions. But producers will be affected directly if crisis-related demand continues to depress cotton prices in coming years.

Ginning companies. They protected part of their income by selling about one-third of their production forward when the average cotton price was still relatively high. For their unhedged production, the companies now face a difficult choice: sell at current spot prices or stock ginned cotton in the hope that international prices recover. However, postponing sales carries the risk that prices may decline further. Moreover, sales contracts are needed to finance the rest of the current season, because banks take them as guarantees.

Banking sector. Local and international banks provide financing for the cotton sector, and local banks have important exposure to the crop. A reduction in credit or higher borrowing costs would jeopardize the equilibrium of the sector.

Government. Although the government plans to gradually withdraw from the cotton sector, it is having difficulty identifying a strategic partner for SOFITEX. If cotton prices continue to decline, a drying up of the smoothing fund could eventually lead to calls for government support.

Although the cotton sector in Burkina Faso has so far managed to weather the global storm, its fortunes depend on the outcome of the current season, international cotton prices, and financing conditions. That is why reforming the sector to improve productivity is more important than ever. Burkina Faso is currently experimenting with genetically modified cotton, which promises a productivity gain of about 30 percent. It may also explore the scope for more cooperation with cotton producers in other West African countries. ■

Isabell Adenauer, Norbert Funke, and Charles Amo Yartey are, respectively, Resident Representative, Mission Chief, and Economist for Burkina Faso in the IMF's African Department.

High Mobility

Newly unemployed migrants to Ireland may stay put in recession

Siobhán McPhee

An English class in Lublin, Poland.

RAPID economic growth in the early 1990s transformed Ireland from a land of emigration and few opportunities to one with a high demand for labor. It became a ready destination for foreign workers. Now, the global recession has hit hard in Ireland—harder at the foreign workers than at Irish nationals. But it is unclear whether this reversal in fortune will result in a mass exodus of non-Irish nationals. So far many of them appear to be staying—in part because of generous social benefits and in part because there are few, if any, alternative destinations where they can find jobs.

The Celtic Tiger

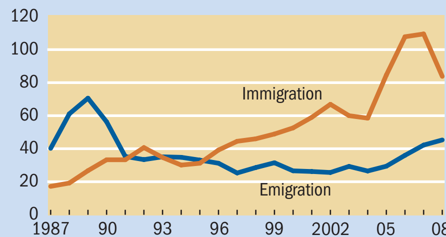
In the early 1990s, labor shortages first appeared in high-skill sectors, such as information technology. Many Irish people who had emigrated in the 1980s returned from the United Kingdom and the United States to meet some of this demand. But as the so-called Celtic Tiger continued to grow, other sectors began to experience labor shortages that were filled by foreign workers. Among these sectors was hospitality—restaurants, hotels, and entertainment. Shortages were especially acute in nursing, prompting the Irish government to actively recruit nurses in the Philippines and Sri Lanka.

Non-Irish workers in Ireland represented 16 percent of the population in July–September 2008, according to the Quarterly National Household Survey (QNHS). After 2004, when eight Eastern European countries (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia) joined the European Union (EU), the majority of migrant workers to Ireland came from these countries—especially from Poland.

Heading to the Emerald Isle

Ireland's once booming economy attracted workers from abroad. But, in the current economic crisis, emigration is up and immigration is slowing.

(thousands of persons)



Source: Irish Central Statistics Office.
Note: Data preliminary for 2007 and 2008.

But the global economic recession has dramatically set back the Celtic Tiger. Unemployment has risen sharply, from 4.8 percent in the third quarter of 2007 to 7 percent in the same period of 2008, according to the QNHS. Irish immigrant workers have felt the impact of declining production more than have Irish nationals. Similarly, more immigrants have signed on to the live register—where job-related claims are filed with county welfare offices—than have Irish nationals. The unemployment rate among non-Irish workers was 9 percent, compared with 6.1 percent among nationals. The number of non-nationals signing on to the live register increased by 100 percent between October 2007 and October 2008, compared with a 52 percent rise among nationals.

Higher unemployment among migrants comes as no great surprise. The vast majority of the Eastern European migrants to Ireland were lured by the construction and financial sectors—both of which experienced heavy job losses in 2008. But the employment situation is different in some other sectors. Hospitality, a major employer of migrants, is not hiring, but hospitality employers are not cutting staff either. Moreover, job losses are occurring in some high-skill sectors—particularly in those related to the construction industry, such as engineering and architecture. Some Irish nationals are again emigrating, seeking work in Australia, New Zealand, and even the oil-rich countries of the Middle East, according to recent reports.

Migrants may stay

But the reality is that Irish emigration never ceased, even when some highly skilled workers were returning and increasing numbers of foreign workers were settling in Ireland (see chart). And this recent increase in emigration of high-skilled Irish nationals may not be accompanied by large numbers of migrant departures. If the recession in major European countries during the late 1970s and 1980s is a guide, Ireland would not experience an exodus of migrant workers. But times are different and migrant workers lead highly mobile lives. Workers could choose to go where jobs are more readily available or they could choose to return home. But they may just stay put.

Ireland's relatively liberal social welfare system could dissuade many migrants from leaving. Migrants from other EU countries qualify for social welfare benefits after working and paying taxes in Ireland for two years. Non-EU migrants must have been living in the country for five years and working for the entirety of this period to qualify. Immigration peaked in 2006. As a result, many, perhaps most, immigrant workers qualify for benefits. Because the entire EU is in a recession, as are most major economies around the world, jobs elsewhere might not be readily available and rather than risk a move in search of work, many migrants may choose to stay in Ireland and ride out the storm. Although Ireland's rate of emigration in 2009 may once again be close to that of the 1980s, as the Training and Employment Authority predicts, Ireland has become an immigration country. ■

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Trade Finance Stumbles

The rising cost and declining availability of finance for imports and exports is taking a toll, especially in emerging markets

Thomas Dorsey

Empty trucks in Busan, Korea.

GLOBAL trade has plunged in recent months during what is proving to be the worst worldwide economic slump since World War II. Part of that decline in trade reflects the sharp drop in global demand. But the fall in trade that began in the final quarter of 2008 [see "Deep Impact," page 13, in this issue] appears to be far greater than would be expected given the decline in global economic activity. That suggests that part of the fall reflects a disruption of financial intermediation, in which institutions, banks, and corporations facilitate global trade.

Anecdotal evidence indicates that the cost of trade finance has risen rapidly, while in some cases its availability has fallen. But there have been few hard data on trade finance. To fill in this gap, the IMF, in conjunction with the Bankers' Association for Finance and Trade, surveyed major banks in advanced and emerging economies to find out about current conditions in and expectations for trade finance (see Box 1).

The survey results tended to support the anecdotal conclusions. Trade finance is costlier and somewhat harder to get in emerging markets—where much of the intraregional trade is in low-profit-margin items that are part of the manufacturing supply chain for exports to advanced economies. The banks anticipate these trends to continue in 2009. But it is difficult to disentangle cause and effect. Some of the decline in trade finance is the result of the plunge in trade spawned by the recession, while some of the rise in costs is due to the higher probability of defaults from falling trade.

Box 1

Surveying banks

In response to the dearth of information about trade finance, the IMF worked with the Bankers' Association for Finance and Trade (BAFT) to survey advanced, emerging market, and developing country banks about current trade financing conditions compared with a year ago and expectations about 2009. The survey focused on bank-intermediated forms of international trade finance such as letters of credit and trade lending. BAFT and the Latin American Federation of Banks, trade associations of globally active financial institutions, sent a questionnaire to a long list of banks, of which 40 responded—roughly evenly split between advanced countries and emerging markets.

Costs of trade finance

Not all foreign trade is financed through intermediaries such as banks (see Box 2). But banks play an important role in facilitating the movement of merchandise around the globe.

The bank survey showed the following:

- ***The price of trade finance has increased sharply.*** More than 70 percent of the respondents said that prices of various types of letters of credit (LCs), a common technique that uses banks to guarantee importers that they will be paid, have risen in the past year (see Chart 1). About 90 percent of the banks reported increased prices of both short- and medium-term lending facilities in which the goods being traded serve as collateral.
- ***International financial strains are a major factor in the rising cost of trade finance in both advanced economies and emerging markets.*** Roughly 80 percent of the banks said that a higher cost of funds played a role in increasing the price of trade finance (see Chart 2). The pressure of increased cost of funds to banks has outweighed the dampening price effect of sharply less restrictive monetary policies in many nations, especially the United States and other advanced economies. Higher capital requirements imposed by regulators and by banks on their own lending have also boosted the spreads between the banks' costs of funds and the price of trade finance to their customers.
- ***Fear of default, called counterparty risk, is causing banks to tighten lending guidelines.*** More than 90 percent of the banks in advanced economies and 70 percent in emerging markets said they had changed their lending criteria with respect to the specific counterparty bank to the trade transaction. Banks also reported tighter guidelines for a number of specific countries, including Argentina, the Baltic countries, Bolivia, Ecuador, Hungary, Iceland, Korea, Pakistan, Russia, Turkey, Ukraine, the United Arab Emirates, Venezuela, and Vietnam.
- ***Current pricing trends are expected to continue in 2009.*** The survey suggests that emerging markets and commodi-

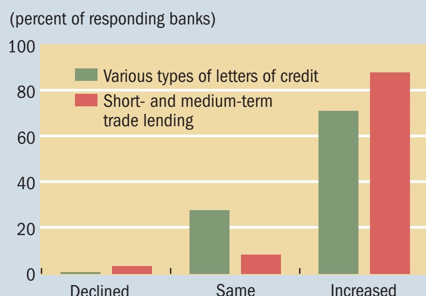
ties trade are likely to be the hardest hit. But a few banks said that spreads could narrow once global demand recovers and that the volume of trade credit could increase as a result of the consolidation of the banking sector that is occurring, especially in the advanced economies. The smaller number of global and super-regional institutions that emerge may end up providing more trade finance than is currently being provided.

Chart 1

Trade finance is costlier

Since late 2007, 70 percent of banks report that prices for letters of credit have risen and 90 percent say the price of trade lending has risen.

(percent of responding banks)



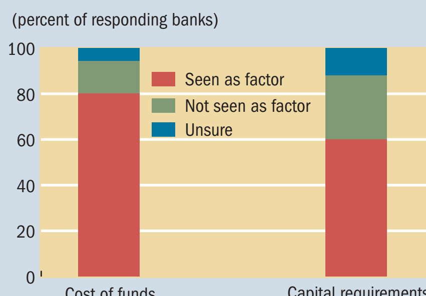
Source: IMF/Trade Finance Survey, 2008.

Chart 2

What makes trade finance pricier?

Most banks cite the rising cost of funds, while a majority also say higher capital requirements are driving up the price of trade finance.

(percent of responding banks)



Source: IMF/Trade Finance Survey, 2008.

Emerging markets are hit hard

Although higher costs of trade finance are global, the decline in availability has occurred more in the emerging markets, especially in Asia. Banks in advanced countries reported roughly the same number of trade finance transactions in the final months of 2008 as occurred at the end of 2007. But emerging market banks report on average a 6 percent decline in trade finance transactions. Responding banks, whether from advanced or emerging economies, anticipated that the trend will continue into 2009: advanced country banks expect no significant change in transactions but emerging market banks expect on average a 10 percent decrease.

Banks reported that intraregional trade among advanced economies seems unaffected so far by the current crisis. More than half the respondents said that financing exports to the Middle East and North Africa has actually increased. But a similar proportion of banks said that financing of imports from South Asia, Korea, and China has sharply decreased. One possible explanation for the collapse of trade in East Asia is that rising costs and increased risk perceptions are having a severe impact on low-margin products in the long global value-added supply chains. For manufactured goods with low profit margins, which are most important in East Asian trade, the higher price of financing could reduce volume because importers may not be able to afford more expensive letters of credit. That effect may lessen with the high-margin products that dominate trade in advanced economies.

Whither prices

With increased costs of funds to banks, higher capital requirements, and rising default risks, the increase in cost of trade finance is easy to explain. Predicting the future is trickier.

The cost of funds is likely to come down as the sharp reductions in official target rates offset somewhat higher spreads. But the effects of increased capital requirements are likely to be more durable. Many banks said that excessively low capital requirements for all bank products had allowed spreads to shrink to unsustainably low levels. That implies a semi-permanent increase in spreads because banks' own internal capital allocation and risk managers, as well as national regulators, are requiring more capital to back risk.

But growth prospects also matter, and the dismal near-term outlook for the world economy will place upward pressure on the cost of trade finance as banks set rates that account for the higher probabilities of defaults by importers and exporters. ■

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Box 2

What is trade finance?

Trade finance can take many forms, depending on the level of trust between counterparties and the degree of financing needed from banks.

If the transaction is purely between the importer and exporter, it can be done on a *cash-in-advance* basis (payment is received before goods are shipped) or an *open account* basis (shipment occurs before payment is due). Otherwise, banks play a role.

Banks offer products to mitigate the risk of nonpayment.

With *documentary collection*, the exporter instructs the exporter's bank to deliver documents and collect payments from the importer. This speeds the collection process, but the bank does not guarantee payment.

With exporter *letters of credit* (LCs, also called documentary credits), the importer gets its bank to certify that it will be able to pay for a shipment. If the exporter does not trust the importer's bank, the exporter's bank can provide *confirmation* of an LC.

Banks also offer products to reduce credit risk. *Export credit insurance* allows exporters to offer open account terms in competitive markets.

Finally, banks offer *trade lending* (also called export working capital lending) against the security of the actual goods. This allows the exporter who lacks sufficient liquidity to cover the entire cash cycle.

Changing Fortunes

Battered by the financial crisis, the world's lenders and borrowers see dramatic shifts in their external accounts

Gian Maria Milesi-Ferretti

THE ongoing financial crisis has caused dramatic changes in asset prices and exchange rates across the globe. Stock markets have lost 40 percent or more of their value in both advanced economies and emerging markets. Interest rate spreads on corporate and sovereign bonds have widened dramatically. Exchange rates have been very volatile: the currencies of most emerging markets and some advanced economies (such as the United Kingdom) have seen steep declines, while the yen has appreciated very sharply. In addition to their impact on macroeconomic activity, these changes have significantly affected the external assets and liabilities of the main creditor and debtor countries.

Take, for example, the world's largest external borrower—the United States. How did the crisis affect its position vis-à-vis the rest of the world? Preliminary estimates suggest that the U.S. net external position—meaning the difference between U.S. residents' financial claims on the rest of the world and the rest of the world's financial claims on the United States—saw in 2008 its most serious deterioration in history: more than $2 trillion. This deterioration occurred despite substantial declines in the market value of U.S. wealth—which inflicted losses on foreign holders of U.S. assets, and significantly exceeded net borrowing by the United States (the current account deficit) that amounted to "only" some $650 billion. Similarly, changes in asset prices and exchange rates seriously affected the net external positions of countries that ran large current account surpluses in 2008, such as China, Japan, and the oil exporters.

This article explores the ways in which the ongoing crisis is affecting the net external positions of the borrowing and lending countries and the likely consequences of these developments. It starts out by explaining how economists measure a country's net external position, discusses in detail the changing external position of the United States as well as of creditor nations, and concludes with some thoughts about how these and related developments could affect the unwinding of global imbalances.

Gauging net external positions

Explaining the worries about persistent "global imbalances"—that is, large current account deficits and the associated external borrowing in countries such as the United States, and large current account surpluses and associated external lending by countries such as China and the major oil exporters—is relatively straightforward. Consider, for example, a deficit country. Over time, it will accumulate large external liabilities, which need to be serviced (and thus require a trade surplus). Its ability to attract foreign capital may also decline as its external position deteriorates, causing the exchange rate to depreciate and its cost of external borrowing to increase.

The risk associated with large external liabilities will clearly depend on the international environment. During periods of growing international financial integration, residents of a country increase the share of their wealth invested overseas, thus making it easier to borrow and lend internationally. In periods of financial turmoil, of which the current one is an extreme case, the risks associated with a large recourse to external borrowing can rise dramatically, as is vividly illustrated by cases such as Hungary and Latvia.

To measure a country's net external position, economists typically focus on the so-called net international investment position (NIIP—the difference between a country's residents' financial claims on the rest of the world and the rest of the world's financial claims on a country's residents). A country's NIIP can change for two reasons: net external borrowing or lending (the mirror image of

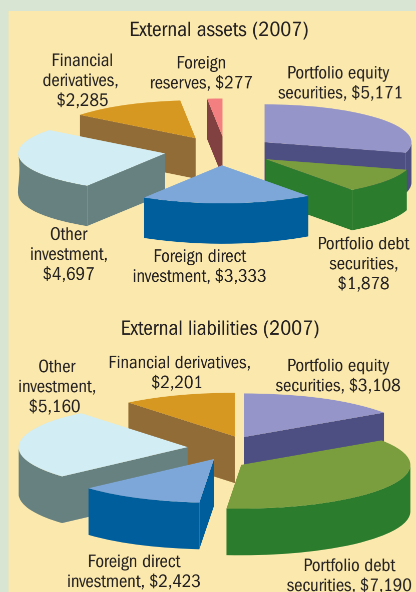
current account deficits or surpluses) and changes in the value of the country's assets and liabilities due to fluctuations in exchange rates and asset prices. For example, if China holds a large stock of U.S. Treasury bonds and the value of these bonds increases because U.S. interest rates decline, then China's NIIP will improve. Conversely, an appreciation of the renminbi vis-à-vis the U.S. dollar will tend to reduce the renminbi value of China's dollar-denominated assets and hence worsen the NIIP. The NIIP should not be confused with a measure of the country's overall wealth: for example, if the productivity of a country's firms increases, the market value of these firms will rise, and so will the country's wealth. However, if foreigners own some of the shares of these firms, the country's NIIP may well deteriorate, because some of the wealth gains will accrue to the rest of the world.

Chart 1

Net negative

The U.S. net equity position at the end of 2007 was positive ($3 trillion), but the net debt position was negative (over $5 trillion).

(billion dollars)



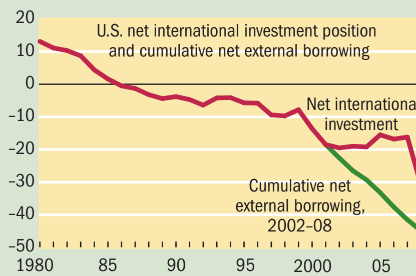
Source: Bureau of Economic Analysis.

Chart 2

Trend reversal

The U.S. net capital gains from 2002–07 were reversed in 2008.

(percent of GDP)



Sources: Bureau of Economic Analysis; author's estimates.

Developments in the U.S.

Why then did the U.S. NIIP deteriorate so much? And what consequences will that have?

To understand these developments, it is useful to start by characterizing the U.S. position at end-2007, which was negative to the tune of $2.2 trillion (see Chart 1). The U.S. external assets were characterized by large holdings of portfolio equity and foreign direct investment (FDI), while U.S. external liabilities were predominantly in debt instruments (such as treasury and corporate bonds). The net equity position (the sum of portfolio equity assets and FDI assets minus the sum of portfolio equity and FDI liabilities) was positive at about $3 trillion, and the net debt position negative, at more than $5 trillion. In terms of currency composition, U.S. external assets are predominantly denominated in foreign currency, whereas U.S. liabilities are almost entirely denominated in dollars.

After posting strong gains for several years, stock market valuations in 2008 plummeted worldwide, battered by the financial crisis. Because the United States is substantially "long" on equity instruments vis-à-vis the rest of the world, this has inflicted severe net capital losses on U.S. residents. These net losses were further boosted by the fact that the stock market decline was larger in non-U.S. stock markets than in the United States, also reflecting some dollar appreciation. All told, stock price declines have likely worsened the U.S. portfolio equity position by some $1.3 trillion. In addition, the dollar value of U.S. FDI abroad has been negatively affected by the dollar appreciation, implying a further deterioration in the U.S. net equity position.

Although the global financial crisis originated in a segment of the U.S. debt securities market and gave rise to very large changes in bond prices, the net impact of these fluctuations on the U.S. debt position is likely to be modest. At the end of 2007, foreigners held significant amounts of U.S. Treasury bonds and bills ($2.4 trillion), agency bonds ($1.6 trillion), and corporate bonds ($2.8 trillion). Both treasury and agency bonds rose in value with the decline in interest rates, while corporate bonds (which include privately issued mortgage-backed securities) declined in value. Net losses on corporate bonds likely exceeded the gains on treasury and agency bonds.

At the same time, however, U.S. residents incurred losses on their holdings of bonds issued overseas, for various reasons: declining emerging-market dollar bond prices; the impact of the dollar's appreciation on the value of U.S.-held local-currency bonds; the decline in corporate bond prices in Europe; and declining values of asset-backed securities (bonds issued by entities in the Cayman Islands but backed by U.S. mortgages, and bought by U.S. residents). The net valuation losses incurred by U.S. residents on these debt instruments may well exceed those incurred by foreign residents on U.S. bonds.

All told, the net loss on the U.S. external portfolio is likely to be in the range of $1.5 trillion—and would be even higher if FDI were estimated at market value. This very large figure once again illustrates how, in a world with large cross-border holdings of financial instruments, fluctuations in the value of these instruments can swamp the effect of net borrowing or lending. It also illustrates the danger of extrapolating a systematic overperformance of asset returns as an alternative to current account adjustment: as Chart 2 illustrates, the United States had experienced very large net capital gains during 2002–07 that allowed it to maintain a broadly stable

NIIP, despite relying heavily on external borrowing. These capital gains originated from very high returns on foreign equity holdings by U.S. investors, which increased in value much more rapidly than the U.S. equity holdings held by foreign investors, as well as from significant dollar depreciation, which increased the dollar value of U.S. foreign-currency holdings. Both trends were reversed in 2008.

Developments in creditor countries

Which countries experienced the corresponding net gains on their net external position during 2008? And, more generally, what have been the implications of the dramatic changes in exchange rates and asset prices on global asset and liability holdings? The first point to note is that the decline in stock prices across the globe has reduced considerably the market value of financial wealth in virtually all countries, a shock compounded in a number of countries by declining values of residential and commercial real estate. Countries where foreign holdings of domestic stocks substantially exceed their residents' holdings of foreign stocks (a country group that includes most emerging markets, as well as the euro area) experienced net capital gains on their external position, even though their aggregate wealth declined. My rough preliminary estimates suggest that the improvement in the net external position arising from equity price changes could be on the order of $1 trillion for the euro area, and on the order of $200 billion for several large emerging markets, such as Brazil, China, India, Korea, and Russia.

More generally, how did the changes in asset prices and exchange rates affect the external position of the largest creditor countries: China, Japan, and the oil exporters? All these economies ran large current account surpluses in 2008, which, other things equal, further increased their NIIP. But of course changes in asset prices and exchange rates also had a significant impact. Specifically,

- In market-value terms, China likely experienced significant capital gains on its holdings of U.S. Treasury and agency bonds, whose value increased because of the decline in U.S. interest rates. These net gains should be added to those on the net portfolio equity position mentioned above (foreigners own more shares of Chinese companies—including American depositary receipts—than Chinese residents own foreign shares). On the other hand, the appreciation of the renminbi vis-à-vis the U.S. dollar and other currencies has increased the dollar value of FDI in China. On balance, net capital gains were likely positive, so at market value the Chinese NIIP is likely to have increased by more than the current account surplus would suggest.
- Japan instead likely experienced net capital losses on its NIIP, which may well have declined despite the current account surplus. The main reason for this development is the behavior of the exchange rate: the yen appreciated dramatically in 2008 (more than 30 percent in nominal effective terms), and because Japan's external assets are predominantly denominated in foreign currency and its liabilities in domestic currency, the yen value of assets has declined relative to liabilities.
- Calculating the impact of asset price changes on the value of external assets in oil exporters is a daunting task, in light of the paucity of information on the size and composition of their assets. Some decline in the value of their external assets is likely, in light of the global decline in equity prices, but the extent of this decline cannot be pinpointed accurately (for an estimate of losses by sovereign wealth funds in Gulf Cooperation Council countries, see Setser and Ziemba, 2009).

Impact on global imbalances

How do these developments, and the ongoing economic and financial crisis more generally, relate to prospects for an unwinding of global imbalances? Although one cannot do justice to this issue in a few paragraphs, here are a few general points:

- The external adjustment process was—at least partially—under way before the crisis: excluding oil imports, affected by record-high energy prices, the U.S. current account deficit had been declining since the end of 2005, helped by a significant weakening of the dollar since its 2002 peak.
- With a much reduced equity cushion, the large negative debt position of the United States now looks more vulnerable, underscoring the importance of a further reduction in the current account deficit.
- IMF *World Economic Outlook* projections suggest that such a reduction will occur, helped by the dramatic decline in oil prices, which could reduce the U.S. current account deficit by $150 billion or more in 2009, as well as by the very sharp decline in U.S. demand.
- More generally, international trade volumes are plummeting with the large declines in output and demand across the globe, and the evolution of trade and current account balances in the United States and elsewhere will depend on the relative severity and duration of the downturn in each country relative to its trading partners—something on which there is clearly great uncertainty.

As for the main creditor regions and countries:

- Among oil-exporting countries, the decline in the value of external assets is compounded by the very large reduction in oil revenues—indeed, their $600 billion current account surplus in 2008 may disappear altogether in 2009.
- In Japan, lower commodity prices would tend to cushion the decline in the current account surplus driven by the significant yen appreciation and lower external demand.
- In China, whose external accounts will benefit from lower commodity prices, a sizable boost to domestic demand would be key to countering the risk of a severe slowdown domestically, and help the process of external rebalancing. ■

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Reference:

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What Is to Be Done

Laura Kodres and Aditya Narain

The scope of financial regulation needs to be revamped and the provision of liquidity improved. Here's how

WHILE there is enough blame to pass around, one key contributor to the global financial crisis was inadequate regulation—both in its fragmented nature and its lack of enforcement. Regulatory structures must be revamped to prevent another buildup of systemic risks, to provide a sounder footing for connecting global savers and investors (that is, global financial intermediation), and to ensure a clear and consistent method of dealing with financial instability when it does arise. Central bank methods of providing liquidity to markets must be looked at too.

The IMF has been examining several areas that will require attention to prevent systemic crises:

- ***the perimeter of regulation,*** or which institutions and practices should be within the purview of regulators;
- ***procyclicality,*** the tendency for some regulatory and business practices to magnify the business cycle;
- ***information gaps*** about risk and where it is distributed in the financial system;
- ***harmonizing national regulatory policies and legal frameworks*** to enhance coordinated supervision and resolution of firms and markets that operate across borders; and
- ***providing liquidity to markets*** to ensure the smooth flow of funds for investment and the effective transmission of monetary policy.

The perimeter of regulation

What is clear from the latest crisis is that the perimeter of regulation must be expanded to encompass institutions and markets that were outside the scope of regulation and, in some cases, beyond the detection of regulators and supervisors. Some of these entities were able

to obtain short-term debt to invest in longer-term assets and increased their leverage (the use of debt to purchase assets) to a degree that threatened the stability of the financial system when those short-term lenders recalled their funds. However, coverage of all financial intermediaries is unnecessary and would limit the benefits some of them provide to the economy—such as innovation and efficient transfer of funds. To avoid overburdening useful markets and institutions it is important to identify carefully the specific weaknesses that wider regulation would seek to address (so-called market failures). This could be achieved by a two-perimeter approach. Many financial institutions and activities would be in the outer perimeter and subject to disclosure requirements. Those that pose systemic risks would be moved to the inner perimeter and be subject to prudential regulations.

At a first cut, unregulated activities or entities that should be placed within the new perimeter include:

- Institutions that are counterparties to risk transfers from the regulated sectors: new regulation should target off-balance-sheet entities such as structured investment vehicles that could be used to acquire risky assets from banks and other regulated firms.
- Investment firms that use leverage and are apt to amplify downward spirals of asset prices when they need to deleverage, that is to sell assets prematurely to reduce their reliance on debt when leverage is deemed to be excessive.

Making a clean distinction between entities that are systemically important and those that are not will be difficult, but ideally institutions that take on less leverage and are less interconnected should be less burdened by regulation. Still, regulators must be able to collect enough information about institutions to be able to decide whether they contribute to systemic risk.

Procyclical practices

Economic cycles are to be expected, but some regulatory and institutional practices can accentuate cyclical movements. These practices can range from capital regulations and provisioning rules for banks to the risk management and compensation practices in many financial institutions.

The challenge to prudential regulation is to remove procyclical elements without negating risk-based decision making within financial institutions. Moreover, any movement to add regulations that require additional capital should be gradual to avoid more damage to a weakened financial system.

One of the main items on the agenda to mitigate procyclicality would be regulation of capital—the funds institutions are required to maintain to absorb losses. (For instance, "core" capital is considered to be equity capital from stock issuance and disclosed reserves set aside from profits.) Incentives should be introduced to encourage firms to accumulate additional capital buffers during upturns and let them run down during downturns. There are several ways of doing this, but a simple one would be to make capital requirements countercyclical—the amount of capital required to support a given level of assets would rise during booms and fall during busts. Ideally, these countercyclical capital regulations would not be discretionary, but built into regulations, becoming an automatic stabilizer that during upturns would enable supervisors to resist pressures from either firms or politicians to let things continue on their upward trajectory.

The crisis has highlighted the role of leverage. In principle, risk-weighted capital requirements, which require more capital for riskier assets than for less risky ones, should control excess leverage. But it would also be helpful to apply a maximum leverage ratio—such as high-quality capital divided by total assets—including off-balance-sheet entities, as a relatively simple tool to limit overall leverage in financial institutions during an upswing.

Although fair value accounting methods, requiring institutions to value assets using current market prices, serve as a good benchmark in most situations, the crisis made it apparent that in periods of deleveraging, they can accentuate downward price spirals. If a firm has to sell an asset at a low price, other firms may have to value similar assets at the new low price, which may encourage the other firms to sell, especially if they have rules against holding low-valued assets. Thus, accounting rules should allow financial firms with traded assets to allocate "valuation reserves," which grow to reflect overvaluations during upswings and serve as a buffer against any reversions to lower values during downturns. Similarly, values of assets used as collateral, such as houses, also tend to move with the cycle. More room is needed in the accounting rule book to allow the reporting of more conservative valuations, based on forward-looking and measurable indicators.

Another procyclical feature of the financial system is funding liquidity—that is, the ability of financial firms to obtain funds to lend. Funds tend to be more abundant during upswings and less so during downturns. The first line of defense in ensuring steady availability of funds is strengthened liquidity risk management techniques in financial firms. Firms should be encouraged to rely on less volatile forms of funding such as retail deposits rather than short-term wholesale funding. Setting additional risk-based capital requirements or imposing some type of levy might be efficient methods of repricing liquidity to mitigate a portion of systemic risks. A blunter tool, requiring banks to hold a minimum quantity of high-quality liquid assets, might also be considered.

Plugging information gaps

One of the most troubling aspects of the crisis has been the inability to see what risks were distributed to various holders and who those holders were. Many of the new structured credit products were supposed to distribute risk to those who, in theory, were best able to manage it. But in many cases, supervisors and other market participants could not see where various risks were located. What's more, risks often were sliced and diced in ways that prevented the packagers of the risks and the purchasers from thoroughly understanding what risks they had sold or acquired. Moreover, the underlying information used to price such complex securities was not

easily available or able to be interpreted.

Serious analysis of systemic risk and how to prevent it requires filling information gaps. Probably most needed are data on the risk exposures of systemically important banks and nonbank financial institutions. Levels and concentrations of their exposures (which would be collected but not published by the authorities) and the linkages among the institutions across borders and markets are the most important for observing systemic risks and vulnerabilities.

More public information about asset valuation techniques and the underlying data and assumptions would allow better pricing and give participants greater ability to see correlations and, potentially, tail risks (unlikely outcomes that are devastating when they occur). Data on prices, volumes, and overall concentration in over-the-counter markets also need attention because they are typically not recorded in ways that allow others to see transaction information, limiting liquidity in periods of stress. A clearing system can be used to collect (and to net) trades, allowing participants and others to see how much total risk is being undertaken.

"More emphasis should be placed on collecting information that could permit construction of indicators that warn of impending problems."

More emphasis should be placed on collecting information that could permit construction of indicators that warn of impending problems. Analysts must think carefully about the kind of information that could give forward-looking assessments of risk both in the system and in individual institutions or markets. Intuitively, indicators that incorporate risks—such as those based on options prices—are better at this than those that do not. But because these indicators use market prices, they are likely to reflect only current perceptions of future risk and may not be able to predict when risks will become systemic.

Better disclosure rules covering financial institutions are also warranted, to make information more specific and consistent. In particular, reporting should cover both on- and off-balance-sheet items because much risk was kept off the balance sheet—hidden from investors and supervisors alike. Basic measures of leverage and exposure would also be required of nonbank financial institutions, in part to judge their systemic importance. Models and valuation techniques should be disclosed to allow investors to better judge the risks of what they are buying. These types of disclosures aim to give market discipline a chance to work.

On another level, markets will function better if prices, transaction amounts, and other information regarding over-the-counter (OTC) derivative markets are more readily available. Markets lacking consistent reporting of information have been the most problematic and were associated with the most uncertainty. Some OTC data are already collected and could be disclosed more often with more information provided about geographic location and instrument coverage, counterparty type, and overall market concentration. This would shift the focus of data collection from information on volume to risk exposure. There must be better information on credit default swaps (CDS) because these "insurance policies" are held by so many interconnected parties that it is difficult to discern who is exposed to the default of various firms. Centralized clearing facilities for CDS contracts, as are currently under construction, would help reduce counterparty risks and provide a central place for information collection.

Improving cross-border coordination

Supervision of globally and regionally significant financial firms was not executed in a way that allowed for the smooth handling of the systemic and global risks associated with this crisis. Regulators are not solely to blame. The bankruptcy of the international investment bank Lehman Brothers, the insolvency of three Icelandic banks, and the meltdown of international insurance giant AIG are all episodes of miscoordination that have damaged confidence and the functioning of financial markets. The difficulties of ceding national interests—and other structural, political, cultural, and legal constraints—have undermined effective supervision of financial groups.

Policymakers and politicians from countries where financial conglomerates operate must now act together to address inconsistencies in national legal frameworks that have become apparent in recent bank failures. Ensuring that bank insolvency frameworks are compatible across home and host countries on a number of fundamental fronts is important. For instance, it would be useful to have consistent criteria to initiate insolvency procedures if approved by the home regulator or relevant supervisors in countries where the institution does business. A consistent set of guidelines to initiate bank resolutions—including triggers, time frames, and procedures—could help preserve a firm's franchise value. Depositor and investor protection schemes across jurisdictions should avoid triggering destabilizing flows of deposits from one place to another during periods of uncertainty. Finally, an arrangement based on some objective criteria, such as proportionate size and quality of assets across countries, should ensure an equitable distribution of losses so that better-supervised jurisdictions bear less of the cost. These arrangements could also lead to the reduction of a firm's operations abroad if the home country does not have the capacity to contribute to resolution costs.

During the crisis, cross-border information flows and cooperation among regulators have been inconsistent—sometimes inhibiting solutions. Information about cross-border risk exposure was incomplete, and systemic connections among financial institutions were underappreciated. Regulators and supervisors must decide what information is essential to collect and communicate, taking into account its relevance for systemic stability.

There are a number of ways to enhance cooperation across jurisdictions. For example, a college of supervisors from countries in which a firm does business could oversee that

firm. The head of that college, the lead supervisor (typically from the country where the bank is domiciled), would be responsible for drawing a clear picture of risk concentration across the firm as well as its major strengths and weaknesses. A firm's permissible activities would be decided by the lead supervisor and other appropriate supervisors. The college would examine the firm's activities and make ad hoc requests for information as the need arises. Broadly, making minimization of systemic risk an explicit goal of financial supervision would help align various dimensions of the regulation of global and domestic financial firms.

"Most important, the new methods used to supply emergency liquidity and provide intermediation to needy borrowers should include some notion of how to discontinue those methods as conditions normalize."

The fragmented nature of some domestic regulation also requires more coordination and cooperation. An approach similar to the international college of supervisors could be instituted at the domestic level if there are multiple supervisors. Domestic regulatory entities' ability to better mitigate systemic risk depends not on the institutional structure (that is, whether they are housed in one institution or in several, or inside or outside the central bank), but on close cooperation and coordination among responsible regulators.

Providing liquidity to markets

The crisis has spawned a plethora of ways to provide liquidity to markets. Central banks have expanded the number of counterparties, broadened the types of collateral they will accept, and lengthened the maturity of liquidity support. In some cases, new facilities have been introduced. But even though these actions have helped meet increased demand for liquidity, they have failed to keep markets functioning—in part because they do not remove the counterparty uncertainty pervading financial markets. Central banks' ability to use interest rates to govern the intermediation process has become more complex. Central banks must consider which market rates they can influence, taking into account how those rates translate to the borrowing rates paid by end users. In emerging markets, central banks also have to struggle with the trade-off between providing needed liquidity and the risk of facilitating capital flight.

Because transmission mechanisms of monetary policy have been less reliable, central banks must devote attention to determining how they can directly support intermediation during a period of bank balance sheet adjustment. Activities such as asset swaps to free up bank balance sheets temporarily to allow them to make other loans can support markets directly. Quasi-fiscal measures—such as using the central bank's balance sheet to provide credit to specific borrowers—help keep credit markets functioning but could have deleterious effects if used for long periods of time. Specifically, they may muddy the signaling aspect of the central bank's policy interest rate, exclude nonpreferential borrowers (potentially crowding out funds to them), and increase the size of the central bank's balance sheet to a degree that may begin to strain its credibility as a well-managed institution.

Most important, the new methods used to supply emergency liquidity and provide intermediation to needy borrowers should include some notion of how to discontinue those methods as conditions normalize. The timing of such an exit must be coordinated to avoid abrupt movement of liquidity and credit. Exit strategies with incentives that gradually wean market participants from central banks back to normal liquidity providers are least likely to incur such bumps. For instance, central banks could gradually alter posting policies to make riskier collateral less attractive to post. Adjusting rates on central bank instruments to increase incentives to use market channels would serve a similar purpose.

The future of regulation

Discussions on the redesign of the regulatory framework to avert future crises are taking place in many international forums. While reiterating the imperative of restructuring regulation, it is also important to keep in mind the need to strengthen the ability and willingness of supervisors to enforce these regulations in a timely and credible manner. No amount of regulatory redesign will be effective unless enforcement is improved, and this in turn will require ensuring the operational independence and adequacy of resources available to supervisory agencies.

Restructuring regulation will take time, but the impetus to move in the directions just discussed is strong. The sooner markets can discern the direction new regulations are taking, the sooner investors can consider the new environment. Because many investors expect heavy-handed regulatory reforms, they are waiting before deploying their funds in various institutions and financial markets. The uncertain regulatory landscape makes it difficult to gauge which business lines will be productive and which may be regulated out of existence. Thus, moving to provide consistency in the regulations across a number of areas—both across borders and within domestic jurisdictions—could help restore some desperately needed certainty in the financial system. ■

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Paying the Piper

Carlo Cottarelli

The role of medium-term fiscal policy in rebounding from the crisis

MASSIVE and unprecedented intervention by governments in the United States and other advanced economies aims to restore economic growth and clean up the financial sector. But the impact of the crisis on public finances is substantial: the increase in government debt (as a share of GDP) in advanced economies is projected to be the largest and most pervasive since World War II. And this increase is taking place against the background of preexisting long-run pressures from pension and health care spending, especially in countries that will soon experience a rapid shift toward an older population.

Governments have had little choice but to intervene to save the financial system from collapse, and to provide fiscal stimulus to counter the sharp contraction in private sector demand. And we may not be finished yet. It is not difficult to imagine a scenario in which higher interest costs and lower economic growth snowball into even higher debt-to-GDP ratios, ultimately leading investors to raise questions about the sustainability of government finances around the world. So far, in general, this has not happened (although credit default swap spreads have been on the uptick in many countries), and the perceived likelihood of default remains small. But because investor confidence in governments' creditworthiness has been key in preventing a complete meltdown of the financial and economic system, preserving such confidence is of paramount importance. Perceptions of fiscal solvency problems, pushing interest rates up as debt holders demand a higher risk premium, would also undermine the effectiveness of fiscal stimulus measures.

So how should governments respond in the wake of a crisis that is leaving nations with far more demands on the public purse? This article presents the quantitative findings of a recent study by the IMF's Fiscal Affairs Department about the direct and indirect costs of the financial crisis. We examined the size of interventions in the financial sector; indirect, nondiscretionary costs, such as those from the impact on revenues of the economic slowdown and the collapse in asset prices; and indirect costs from discretionary fiscal stimulus, intended to jump-start economic growth. The crisis is also placed in a broader context by (1) comparing it with previous episodes of major debt accumulation and contraction in some of the largest economies; and (2) comparing the costs of the ongoing crisis with the preexisting, and far more severe, long-run challenges from aging populations. The article concludes by summarizing a possible strategy whereby fiscal policy can foster the resumption of normal economic growth while maintaining public sector solvency, and by indicating a few key areas where the IMF can play a constructive role.

Mounting direct costs and liabilities

The unprecedented scale and nature of the financial crisis have prompted policymakers to be remarkably inventive in their efforts to support troubled financial institutions and markets. These interventions have essentially involved capital injections, asset purchases, or direct lending or guarantees by governments or central banks. In most cases, operations undertaken directly by governments have led to increases in gross public debt, though not

A window display in Hong Kong SAR.

necessarily a change in net worth or the overall deficit, after taking into account the related acquisition of assets—at least to the extent that specific asset transactions reflect actual market value, without any subsidy element.

The combined gross cost of capital injections and purchases of assets, plus direct lending by governments has amounted to 5 percentage points of GDP, on average, for the advanced economies in the Group of Twenty (G-20) (see box). Over time, however, the net fiscal impact will depend on the recovery rate from the sale of the acquired assets. Experience from previous banking crises suggests that recovery rates on these operations vary widely, and recoveries only become significant once economic growth has resumed on a solid footing.

Beyond these operations, which have an immediate impact on gross government debt, new contingent liabilities in the form of central bank lines of credit and guarantees for bank deposits have been far larger. Indeed, most countries have raised their deposit insurance limits, and several have guaranteed interbank loans and other instruments—in a few cases for amounts equivalent to multiples of GDP. While the ultimate net costs of such guarantees would be limited in benign scenarios, it is important to bear in mind that the range of possible outcomes is much wider and the outcomes could be far worse, particularly if the economic and financial crisis turns out to be protracted.

Fiscal stimulus

Faced with the economic slowdown, many countries have announced fiscal stimulus packages. The headline numbers have in some cases been truly impressive. However, with governments under pressure to be seen providing help to their citizens, it is important to distinguish between headline numbers provided to the press and actual facts by keeping track of how many of the measures are genuinely additional to what would have already been contained in budgets for the next year. In some cases, the differences are substantial. Correcting the data for these factors, the fiscal stimulus is somewhat smaller, but still significant. For example, it amounts to 1½ percentage points of GDP, on average, for the G-20 countries in 2009.

Almost two-thirds of the fiscal stimulus has so far been represented by expenditure measures, with particular emphasis on increased infrastructure spending. Many countries have also announced plans to protect vulnerable groups—including strengthened unemployment benefits, cash transfers to the poor, and support to children and pensioners. A few countries have stepped up support for small and medium-sized enterprises; others have supported specific sectors (such as the automobile industry).

On the revenue side, measures have targeted primarily households, mostly through cuts in personal income and indirect taxes. Most of the stimulus measures on the spending side are designed to expire after a certain period—although some spending programs are likely to have recurrent cost implications, such as maintenance costs for new infrastructure projects. Most revenue measures, though, are permanent; a few sets of measures are self-reversing, with some tax cuts today already scheduled to be offset by tax increases a few years from now. (For example, in the United Kingdom, a value-added tax cut will be offset by revenue-increasing measures starting in 2010.)

Other fiscal implications of the crisis

The global slump in economic growth triggered by the financial crisis also has adverse consequences for government revenues through the operation of automatic stabilizers. If economic activity recovers relatively soon, the impact of lower revenues should not raise major concerns. But should the slowdown turn into a prolonged recession, the impact for the sustainability of public finances would be far more severe.

In addition, larger nondiscretionary effects of the crisis have resulted from the collapse in equity and housing prices, and financial sector profits; this has caused a sharp decline in tax revenues on items such as capital gains and corporate profits. Further, to the extent that the collapse in commodity prices may be attributed to the worldwide economic growth slowdown, another adverse effect—for commodity producers—is the sharp decline in revenues linked to commodities.

Losses suffered as a result of the asset price collapse have also been substantial for funded pension systems (both public and private), and it is possible that public pressures will emerge for the state to compensate pension system participants adversely impacted by the crisis.

Who's in the G-20?

The G-20 comprises the finance ministers and central bank governors of 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States, plus the European Union, represented by the rotating Council presidency and the European Central Bank. The Managing Director of the International Monetary Fund and the President of the World Bank, plus the chairs of the International Monetary and Financial Committee and Development Committee of the IMF and World Bank, also participate. Together, member countries represent around 90 percent of global gross national product, 80 percent of world trade (including intra-EU trade), as well as two-thirds of the world's population.

Rising debt

Advanced economies will see a dramatic rise in their public debt because of the economic crisis.

(change in fiscal balances and government debt in the G-20,[1] percent of GDP; difference over previous period)

	2008 (A)	2009 (B)	2008–09 (A+B)
Fiscal balance			
Advanced G-20 economies	–2.3	–3.8	–6.1
Emerging market G-20 economies	–0.3	–3.2	–3.4
G-20	–1.5	–3.6	–5.1
Public debt			
Advanced G-20 economies	4.4	10.0	14.4
Emerging market G-20 economies	–2.0	1.9	–0.1
G-20	2.0	7.0	9.0

Source: January 2009 World Economic Outlook, updated to reflect the final version of the stimulus package in the United States and recent financial support measures in the United Kingdom.

[1]General government if available; otherwise most comprehensive fiscal aggregate reported in the IMF's *World Economic Outlook*, updated as noted above. Table reports purchasing-power-parity GDP-weighted averages.

Picking up the tab

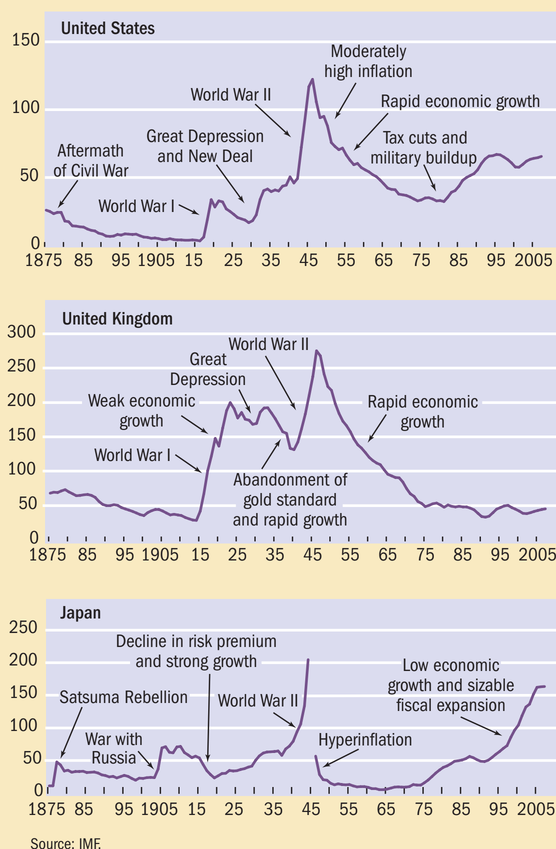
Summing up these various costs, it is clear that public finances will be severely affected by the crisis in the short run and beyond (see table). Indeed, our projections, based on the IMF's January 2009 growth forecast, would worsen if growth is further revised downward.

- Fiscal balances are projected to worsen by 6 percentage points of GDP in 2008–09 compared with 2007 for the G-20 advanced economies, with half of the deterioration accounted for by the fiscal stimulus and financial sector support. The remainder is due to automatic stabilizers and revenue losses from other nondiscretionary effects. For the G-20 emerging economies, the deterioration is somewhat smaller, reflecting the lower impact of the crisis on output, and possibly that many of these countries have less room for providing fiscal stimulus. That said, the crisis is still unfolding, and some emerging economies are increasingly feeling the pinch.
- The increase in debt-to-GDP ratios is projected at 14½ percentage points of GDP for the G-20 advanced economies, half of which is accounted for by financial sector support packages. Again, the impact is smaller for the G-20 emerging economies. However, the expected pickup in debt in 2009 is a reversal of the declining trend since 2002.

Peaks and troughs

Historically, wars have driven up public debt.

(public debt, percent of GDP)



Source: IMF.

Historically, perhaps not so exceptional

Today's crisis has thus resulted in the sharpest and most pervasive rise in debt-to-GDP ratios since World War II for the advanced economies. However, even larger increases were observed in the past—notably at the time of the two world wars; the Great Depression also saw a generalized increase in debt-to-GDP ratios, though this occurred more gradually, primarily as a result of the prolonged recession. To put the ongoing crisis in perspective, it is useful to recall the main features of earlier episodes involving large debt accumulations and reductions in some of the largest economies (see chart). These may lead one to view the present debt increases with a reasonable degree of optimism.

- Very large debts—in excess of 100 percent of GDP—have been accumulated by some of the world's largest economies on a number of previous occasions, and have in several cases been reduced without much economic or social upheaval.
- Sustained and rapid economic growth has been a principal factor underlying most cases of successful reduction in debt-to-GDP ratios over the past couple of centuries. For example, rapid economic growth following World War II reduced the debt-to-GDP ratio in the United States from 121 percent in 1946 to 50 percent in 1965. In contrast, with overly prudent fiscal policies and continued compliance with the gold standard, sluggish economic growth in the 1920s and during the Great Depression led the debt-to-GDP ratio to rise in the United Kingdom from 130 percent in 1919 to 178 percent in 1933.

However, there are reasons to be more guarded in considering the present outlook, and to place emphasis on the need to preserve fiscal solvency.

- Disruptive ways of reducing debt are not unknown to the major advanced economies. Hyperinflation occurred in the aftermath of major wars and in a context of domestic political instability, and moderate inflation also played a significant role in reducing the real value of debt—especially until the 1950s. Partial defaults also took place in the context of severe economic slowdowns during the interwar period, for example in Italy in the late 1920s; and the abrogation of "gold clauses" in debt contracts in 1933 in the United States prevented a 25 percentage point increase in the public-debt-to-GDP ratio when the United States went off the gold standard.
- When considering lessons from past episodes, it is also important to bear in mind two important differences. First, in wartime episodes—which represent some of the largest and most rapid increases observed in the past—domestic financing of the debt was facilitated by comprehensive government control over the economy, including capital controls; citizens may also have felt a moral duty to support the war effort. Second, the current crisis involves truly novel features compared with historical episodes: in particular, it involves contingent liabilities associated with guarantees of financial sector obligations, on a scale not previously observed.

Don't forget a bigger crisis: population aging

A further difference between the ongoing debt accumulation episode and those experienced in the past is the context of

today's preexisting fiscal challenges in the areas of pension and health care systems.

While present day pension and health care systems are highly developed (and costly) in most advanced economies and several emerging economies, this was not the case during the pre–World War II episodes. For example, one of the best known accomplishments of Franklin Delano Roosevelt's administration in responding to the Great Depression was to establish the social security system in the United States in 1935 (with immediate increases in contributions and delayed pension payments).

Today, most advanced economies and several emerging economies face major long-run fiscal pressures from the impact of population aging on costs for the pension and health care systems: for most of the G-20 countries for which data are available, spending on pensions and health care is expected to rise by more than 3 percentage points of GDP between 2005 and 2050. Indeed, these pressures are far more severe than those stemming from the financial crisis: in net present value terms, the burden of the crisis is equivalent to less than 5 percent of the impact of aging. Yet, because of the slow-moving nature of the aging problem compared with the far more pressing and visible implications of the financial crisis, there is a danger that the challenges from population aging may be temporarily forgotten, and their resolution postponed to a time when it will be more costly.

A strategy to bounce back

Based on these considerations, although successful economic recovery from the financial crisis requires both restoring the health of the financial system and providing substantial stimulus in the near term for countries that can afford it, countries need to clarify soon their strategy to ensure fiscal solvency.

Policymakers will have to balance two opposing risks.

- ***The risk of prolonged depression and stagnation:*** here, the economic and fiscal costs of inaction could be even larger than those of action; should the economic and financial situation deteriorate further, additional support to the financial sector, as a key priority, but possibly also to bolster aggregate demand, may become necessary.
- ***The risk of a loss of confidence in government solvency:*** from this perspective, there is a need to closely monitor indicators of perceived fiscal vulnerability, such as real interest rates, inflation expectations, bond and credit default spreads, and debt maturity.

The trade-off between these two risks will depend on country-specific circumstances. Indeed, countries differ widely in whether they can afford further stimulus: projected debt levels and indicators of fiscal vulnerability will be relevant in making policy choices in this regard.

For all countries, however, the trade-off can be improved if governments clarify, in a credible way, their strategy to ensure fiscal solvency. A strategy to ensure fiscal solvency should be based on four pillars.

First, fiscal stimulus packages should consist as much as possible of temporary measures to avoid raising deficits permanently. While the stimulus will likely have to be prolonged—because the decline in private sector demand is likely to be long-lasting—it should not become permanent.

Second, policies should be cast within medium-term fiscal frameworks providing for fiscal consolidation, once economic conditions improve. A medium-term framework (supported by fiscal responsibility laws, fiscal rules, or independent fiscal councils) would anchor expenditure and revenue policies. But given the elevated uncertainty about the economic outlook, the fiscal frameworks should provide sufficient flexibility to provide additional fiscal support, if needed.

Third, governments should implement structural reforms to enhance growth prospects—a key factor in reducing the debt burden in most past episodes of successful fiscal consolidation. In the fiscal area, this should include expenditure reforms to reduce unproductive spending while preserving programs that yield high-quality growth and a high social rate of return. Tax reforms should improve incentives to work and invest; there is also merit in reducing the bias in favor of debt vis-à-vis equity financing, present in most tax systems.

Fourth, a clear plan for reforming pension and health entitlements is needed to tackle long-run pressures arising from population aging. The amount and speed of adjustment will be country-specific. Nevertheless, for most countries, postponing reforms would eventually result in the need for larger and more painful measures. In some ways, the vast scale of the challenges from aging could even be viewed as an opportunity in the present context: addressing pressures from aging, through measures such as increases in retirement age, could go a long way toward allaying market concerns about fiscal solvency.

Opportunities too

These prescriptions are not new—some are part of long-standing IMF policy advice. However, the weaker state of public finances has increased the need to implement them.

Enacting major fiscal reforms at times of severe economic weakening is likely to be challenging from a political economy perspective, but there are opportunities too. Indeed, sometimes crises have provided the spark for politically difficult reforms, and the crisis environment may give scope for a comprehensive big bang approach, where immediate stimulus to support the economy could be combined with the introduction of long-lasting reforms in entitlements.

The IMF, together with other international financial institutions, has an important and constructive role to play in promoting the fiscal reforms that are part of this proposed strategy. Given its global membership, the IMF is uniquely placed to help—through both its country and policy work and technical assistance to member countries, all of which are affected, albeit to different degrees, by the ongoing crisis. Work efforts in the areas of entitlement reform, medium-term fiscal frameworks, fiscal reporting, and fiscal rules are among those that are likely to come to the forefront in the coming years. ■

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Data to the Rescue

Why improved statistical information will be key for prevention of future crises

Adelheid Burgi-Schmelz

ACCURATE, complete, and timely data are critical to making good economic policy and financial decisions. Without strong data, policymakers cannot manage effectively and business leaders may be left in the dark, unable to spot emerging trends and danger signals.

Every crisis exposes weaknesses, and the current global financial crisis is no exception. The speed at which the crisis developed underlines the importance of indicators that could support early warning efforts and the analysis of cross-border financial linkages. While the analysis of the spread and transfer of risk has been hindered by the complexities created by new financial instruments, the crisis has also helped underscore the need to keep a better eye on the activities of special purpose entities and off-balance-sheet operations, often created specifically because they were "off the radar."

The crises of the mid- to late 1990s prompted major progress in data provision—essentially more and timelier data from emerging economies. In addition, data on foreign exchange reserves and external debt are much improved.

But as these gaps were being plugged, the financial landscape changed further. On the one hand, nonbank financial intermediation grew much faster than bank-based intermediation. At the same time, new instruments, including derivatives and securitized assets, saw explosive growth. The latest crisis has highlighted the lack of consistent data on who holds what, on the balance sheets of nonbanks, and on contingent risks and derivative positions. In addition, private entities in emerging markets have become more financially integrated in global markets, underlining the lack of balance sheet data for the private sector in emerging economies.

This article examines what has been achieved in recent years to strengthen the international collection and distribution of statistical information, and makes suggestions for what should be done to further improve international cooperation and plug gaps highlighted by the crisis.

Major strides

Major improvements in the harmonization and availability of economic and financial data have taken place over the past 10 to 15 years, along with the initiation of projects that support the analysis of the vulnerability of countries to shocks. Partly this has been in response to earlier crises, including the Mexican and Asian crises during the 1990s, when it was felt that slow and incomplete reporting of critical economic data had exacerbated problems. As a result, analysts and policymakers are now able to assess sovereign risk in emerging economies much better than in the 1990s.

Standards and dissemination of data. A big effort was made to set standards for governments to report economic data. The crisis in Mexico in the mid-1990s led to the establishment of two crucial standards—the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS). These initiatives provide comprehensive frameworks for the generation and dissemination of a core set of economic and financial data sets. The SDDS prescribes how IMF members that have, or that might seek, access to international capital markets should provide their economic and financial data to the public, while the GDDS suggests good practice for the production and dissemination of statistics.

Later, following the financial crisis in Asia, the SDDS was strengthened to include dissemination of reserves and foreign currency liquidity data, and new requirements were introduced for external debt and a country's international investment position. Consequently, the number of countries disseminating these data sets significantly increased, which improved cross-country comparability.

Among the IMF membership, the relevance and importance of these standards were soon recognized. Today about 85 percent of the IMF's 185 member countries participate in one or another of these standards.

Harmonization. In addition to this work on data dissemination initiatives, the statistical community has promoted the integration of macroeconomic databases. In 1993, concepts such as residence (that is, defining who is a resident), economic sectors, instruments, accrual accounting, and valuation methods were made consistent in the key statistical frameworks, such as the *System of National Accounts* (SNA) and *Balance of Payments Manual* (BPM). Related manuals for monetary and financial statistics and government finance have also been harmonized. This work has continued, and in 2008 the international statistical community

completed the updating of the SNA and BPM, undertaken to help keep economic statistics relevant in an increasingly globalized world.

Helping assess vulnerabilities

Much of the IMF's work on vulnerability has focused on the quality and transparency of data. Timely and detailed data on international reserves, external debt, and capital flows strengthen the ability to detect vulnerabilities, giving policymakers enough time to put remedial measures in place.

Key vulnerability indicators cover the government, financial, household, and corporate sectors. When economies are under stress, problems in one sector often spread to other sectors. For example, concerns about a country's fiscal deficit might lead to a run on the exchange rate or undermine confidence in banks holding government debt, thereby triggering a banking crisis.

The data dissemination initiatives, combined with the emergence of a consistent economic statistics system, have supported the development of relevant statistics that are timely and comparable both within and across countries. The IMF's Statistics Department provides comprehensive economic and financial data through its monthly *International Financial Statistics* and other publications. Indeed, these data sets provided partial warnings before the current crisis started unfolding; for instance, in the surge in the ratio of gross cross-border assets and liabilities to GDP for industrial countries, as well as more broadly in global cross-border imbalances.

Progress in data provision since the mid-1990s has allowed for substantial improvements in the analysis of vulnerabilities of emerging economies. Emerging markets, which often rely heavily on external borrowing and other capital inflows for their economic growth, are especially vulnerable to reversals in investor sentiment. The IMF has therefore paid special attention to this group of countries in its vulnerability assessment work.

But as the recent financial turmoil underscores, crises can manifest themselves in countries at various stages of development. Work is under way to strengthen the framework for the analysis of financial vulnerabilities in advanced economies.

The balance sheet approach

The balance sheet approach (BSA) focuses on shocks to stocks of assets and liabilities that can trigger large adjustments in capital flows. Such an approach can therefore be a useful complement to traditional flow analysis. The IMF developed the BSA for analyzing debt vulnerabilities. For each sector, the BSA provides a look at currency and maturity mismatches, in both financial assets and liabilities, in a cross-sectoral balance sheet matrix that shows the counterparty sector on which the sector has a claim or to which the sector has a liability.

In essence, the BSA disaggregates the financial balance sheet in a country's national accounts and is the stock counterpart to flow-of-funds-transactions data. Notwithstanding data limitations, this analysis of cross-sectoral linkages can provide useful insights as a diagnostic tool for detecting potential vulnerabilities. The BSA matrices are populated primarily by monetary data reported through the IMF's Standardized Report Forms (SRFs), introduced in 2004. To date, more than 100 countries have adopted the SRFs, and the data reported are published in the *Monetary and Financial Statistics Supplement* of the IMF's monthly *International Financial Statistics*.

Keeping tabs on cross-border linkages

The speed at which the current crisis spread across countries has highlighted the interdependence of the global economy. To support analysis of such global links, the IMF analyzes debt vulnerabilities through a balance sheet approach (see box). It also keeps track of a variety of other asset and liability positions between countries, so-called from-whom-to-whom databases, on a bilateral partner country basis.

- ***Trade.*** For trade-in-goods statistics, the IMF has long published the *Direction of Trade Statistics* on a quarterly and annual basis.
- ***Financial account.*** On the financial account, since the 1960s, the Bank for International Settlements (BIS) has been collecting international banking statistics with bilateral partner country information, first on a locational (residence) basis and then also on a consolidated group basis, for banks in major banking centers.
- ***Investment.*** The IMF has published data on bilateral partner country portfolio investment positions on an annual basis since 2001, through the Coordinated Portfolio Investment Survey (CPIS). A Coordinated Direct Investment Survey (CDIS), with bilateral position data, is scheduled to be conducted with a reference measurement date of end-2009.

With the implementation of the CDIS, a framework is in place to construct a from-whom-to-whom database for most components of a country's international investment position (IIP). Through the Joint External Debt Hub, the BIS, the Organization for Economic Cooperation and Development, the IMF, and the World Bank are promoting the from-whom-to-whom data sets and increasing the availability of external debt data.

Monitoring shocks

Combined with the balance sheet approach, the from-whom-to-whom data sets are a potentially powerful tool to study the transmission of shocks across countries. This was highlighted in a recent paper by Pedro Rodriguez (2008) that illustrates the contrasting pattern between current account developments and exposures to U.S. financial assets, using IIP and CPIS data.

The challenge for both the balance sheet approach and from-whom-to-whom projects is increasing the coverage, frequency, and/or timeliness of the relevant data sets. In addition, the IMF has developed indicators to measure the soundness of banks and the development of securities markets.

Bank soundness. Having developed the methodology and undertaken a pilot collection earlier in the decade, the Statistics Department of the IMF is initiating regular collection and dissemination of data on indicators of the current financial health and soundness of financial institutions and,

to a lesser extent, their client sectors. These are known as financial soundness indicators (FSIs). FSIs capture the global activities of banking groups located in an economy and are compiled closely following supervisory and international accounting standards. Measures of liquidity and real estate indicators are also included. About 50 IMF member countries are expected to start reporting in the second quarter of 2009.

The lack of regular and uniform reporting of FSIs for the banking sector has been a clear lacuna, along with incomplete information on other financial institutions.

Securities markets. Finally, the importance of identifying the size and key segments of securities markets, particularly in emerging market countries, was identified in 2007 by the Group of Eight finance ministers and has led to the preparation of a *Handbook on Securities Statistics*—a major initiative of the Working Group on Securities Databases, chaired by the IMF (and involving the BIS, the European Central Bank, and the World Bank). The handbook will initially focus on statistics for debt securities issuance and is expected to be completed in the first half of 2009.

Crisis creates new challenges

So what are the new areas that need attention? While the current global economic crisis points to the need to reinforce the ongoing initiatives, recent events also further challenge economic statisticians to come up with fresh data initiatives, particularly in four key areas.

Sectoral balance sheet data. The availability of data on the assets and liabilities of nonbank financial institutions, nonfinancial corporations, and the household sectors needs to be improved. The crisis highlighted the need to capture activity in segments of the financial sector where the reporting of data is not well established and in which sizable risks may have developed. Nonfinancial firms have had unexpected vulnerabilities arising from, for example, derivative and foreign currency exposures. Housing assets on household balance sheets and the impact of house prices on household net worth have been highly relevant to the current crisis despite progress in some countries.

In the public sector (including central banks), the costs resulting from intervention in response to the crisis need to be appropriately and transparently recorded, and reported in both gross and net terms. A solid accounting framework (along the lines of the public sector accounting principles, which are compatible with the IMF's *Government Finance Statistics Manual, GFSM 2001*) is a core building block. The IMF is monitoring the scale of announced interventions by country and recommends wider use of the GFSM framework.

Ultimate risk/credit risk transfer framework. The crisis has highlighted the complexities in analyzing the spread and transfer of risk and in finding out how much debt is out there. The issues include capturing the activity of special purpose entities and off-balance-sheet operations and assessing the transfer of risk through instruments such as credit default swaps and derivatives. In addition, structured products such as collateralized debt obligations and asset-backed securities mask where the risks in the system lie.

Work is under way in the Statistics Department on capturing off-balance-sheet items for financial corporations, but there is a need to build on existing experience to develop a meaningful framework in which to undertake such work.

Data to monitor developments in housing markets. The changes in housing prices and markets and their impact on the economic behavior of households and financial institutions were central to recent economic developments in many countries. Although for some countries there is plentiful information, this is not universal, despite the increasing importance of this market in many countries.

Leverage and liquidity. The high levels of leverage (assets to capital) that built up in the economic system and the delinking of financial cross-border from real activity for industrial countries (Lane and Milesi-Ferretti, 2006) are another feature of the recent crisis.

Liquidity risk has also been highlighted by the crisis. Within economic statistics, original maturity has always been favored as the measure of maturity, but with the problems faced by many institutions when the flow of capital suddenly dried up, greater attention needs to be given to remaining maturity measures, more clearly identifying rollover risk.

Filling the gaps

Without adequate data policymakers are bound to fly blind. But to plug the gaps requires long-term commitment and international cooperation.

The ongoing crisis underlines the importance of going beyond traditional statistical production approaches to obtain in more innovative ways a set of timely and higher-frequency real and financial indicators, particularly to support early warning efforts and to reinforce a number of international initiatives designed to strengthen statistical databases and fill data gaps.

The IMF is working on this in two ways. Within the institution, it is developing through its Data Link Project a set of timely and higher-frequency indicators for, at least initially, systemically important countries. Internationally, the IMF is chairing an interagency group on economic and financial statistics involving other multilateral organizations. The group intends to create a global website of economic and financial indicators—initially for a number of systemically important countries—and address certain data gaps and weaknesses in a coordinated manner. ■

Adelheid Burgi-Schmelz is Director of the IMF's Statistics Department. Robert Heath and Armida San Jose of the IMF's Statistics Department assisted in preparing the article.

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VIEWPOINT

Redrawing

Rethinking the role of the state and markets

Roger Bootle

ECONOMISTS should be used to shocks. When the Berlin Wall fell, there was little on the stocks about how to make the transition from a totalitarian state with a centrally planned economy to a democratic society with a market economy. In the years that followed, a whole new aspect of the subject was developed—and many brilliant careers were forged.

A similar act of reinvention is needed now, in light of the current financial market turmoil. It is not that many people in the West—and, let's hope, not that many economists—will want a shift to central planning and extensive public ownership of businesses, but the boundaries between government and the markets are now back in the melting pot.

In a sense, we have been here before. But that makes this all the more disturbing. The events of the 1930s brought a revolution in economics—but not before they had ushered in a period of political revolution that led to untold human misery.

Lessons learned

It is impossible to give a summary of the lessons of the 1930s that will please everybody. But this is my attempt at a distillation. First, ***economies can get stuck in a state of depression*** from which individual actors, whether people or companies, can find no escape. The state is the only agent in society capable of working for the collective interest on a sufficient scale. Moreover, this is its duty—first to try to prevent a depression and then, if it occurs, to get us out of it.

Second, ***the financial markets are different***. Huge uncertainty and long time horizons make the markets subject to wild swings of sentiment and herd behavior. Because of the importance of the financial markets for real economic activity, they cannot be left to their own devices. They require intervention, management, regulation, and restriction.

Revolution and counterrevolution

This Keynesian view of the macrorelationships between markets and government broadly held sway in most Western countries throughout the postwar years until the 1980s. But then a counterrevolution overturned it. In the intellectual world, the driving force was Milton Friedman, who argued fervently that markets were rational and effective. Governments, by contrast, were inefficient and often irrational. What's more, they weren't even always acting in the public interest, as they could fall prey to corruption or be captured by group interests.

Perhaps the clearest expression of this change of view was Friedman's overturning of the Keynesian explanation for the Great Depression. The Keynesian view was that the Great Depression revealed a flaw in capitalism. The Depression derived from a collapse of the confidence of investors, interacting with the peculiarities of a monetary economy.

Friedman's explanation? Policy failure. The Federal Reserve made umpteen mistakes—most important, allowing the money supply to contract. Without this, there would have been only an ordinary slowdown, but not a depression, let alone the Great Depression.

Friedman's philosophy found practical implementation in the policies of U.S. President Ronald Reagan and British Prime Minister Margaret Thatcher, who seemed to reject just about all of the postwar settlement. Appropriate control of money, which was admitted as belonging to the public realm (although some free market vigilantes even questioned that), would provide macrostability; competition, deregulation, privatization, and low taxes would provide microefficiency.

From the perspective of the financial collapse of 2007–09, so many of the simple certainties of the free market fundamentalists now seem naive to the point of absurdity. Keynes may have been overplayed and subsequently revealed as a plaster saint. But it is surely now evident that the same was true of Friedman.

Getting Keynes right

What do recent events tell us about markets and the role of government? I believe they reaffirm the lessons drawn from the 1930s by the early Keynesians. Most important, they confirm that financial markets are different. They can be left alone only at our peril. Government policy needs to be directed toward preventing extremes in both directions and stabilizing the financial system and the economy.

the Boundaries

There is also a serious problem for capitalism in the behavior of corporate executives—something that has been well-known almost since the beginning of the capitalist system. The theory of capitalism is all about self-interested behavior delivering the common good. Yet, on the whole, companies are not run by their owners, but by employed managers, who have enormous day-to-day power. This is known in the literature as "the agency problem." In banking, although pay is not the root cause of the crisis, extraordinary levels and structures of remuneration have played a key supporting role—encouraging risk taking that destabilized the system.

Not bigger, but better, government

But this crisis has not been only a failure of the market system. Government failure has played a large part as well. After all, if you accept that government should have the responsibility of supporting the economic system to fend off depression, including by the use of massive fiscal expansion, then you would expect government to foster and preserve the power to do so.

Yet this means having access to massive fiscal resources. It is unsettling to see so many Western governments reluctant to provide such support on a massive scale because they are wary of reaching a point at which the markets fear a sovereign default. But the reason for this is governments' own past profligacy in borrowing so much and letting the debt-to-GDP ratio reach such high levels. Ironically, being prepared to exercise the state's vital role as the protector from depression requires that the state ordinarily minimize its need for money from the market and keep the debt-to-GDP ratio low. In nearly all Western countries, it has signally failed to do so.

Also, amid the demand for more regulation, let us acknowledge that the markets were in fact quite heavily regulated. It is just that they were badly regulated. The answer to the crisis is not more regulation, but better regulation.

What's more, it has been less a matter of microregulation and more a matter of macrosupervision. What went wrong was not the misregulation of a particular market but rather the mismanagement of the whole economy—the excessive reliance on credit; the tolerance for, and even embracing of, the housing bubble; and, in the case of several countries, including the United States, the United Kingdom, Spain, and much of Eastern Europe, excessive reliance on foreign funds that enabled those countries to run huge current account deficits.

But who should be responsible for such macromanagement? Not the private sector, surely. This is a failure of government—of treasuries and central banks—who deceived themselves, as well as others, and basked in the glory of an illusory prosperity, which was built on sand.

Don't fix what ain't broken

The supreme danger in all this now is that we will throw the baby out with the bathwater. Outside the world of finance, this crisis has not revealed any widespread failure of capitalism—although capitalism is in crisis as a result of it. For the most part, in Western economies, the ordinary business of producing goods and services and distributing them has proceeded well. The only lesson for that part of the economy from these events is the importance of the agency problem. Taming greedy executives and getting companies to behave in accordance with the interests of their shareholders, never mind society at large, is a serious challenge. Now that whole swaths of executives have been shown to be not just greedy but also incompetent, recent events will imperil popular support for capitalism itself.

> "What went wrong was not the misregulation of a particular market but rather the mismanagement of the whole economy."

The great danger I fear is that feelings of disgust and disillusion after the events of 2007–09 will bring widespread disenchantment with markets in general, just when we need more of them to do what they are good at—incentivizing, signaling, and encouraging the best use of scarce resources, especially now in the fields of environmental protection, climate change, and road usage.

We do need to fix the financial markets, and that means, in a variety of ways, a bigger role for government. But we do not need bigger government. Nor, except in relation to the powers of corporate executives, do we need to fix the market economy in general. ■

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VIEWPOINT

The Shape of Things to Come

Brad Setser

National decisions, not international summits, will remake the global financial system

AFTER Asia's financial crisis, the world's leading economies launched a major effort to remake the international financial system. Ten years later, they decided to try again. The 1998 effort to revise the world's "financial architecture" followed a crisis that had originated in the unwinding of the external deficits in the emerging world—deficits that were for a time willingly financed by banks and private investors in the world's wealthy economies. The second effort will follow a systemic financial crisis that started in the United States, spread to European banks that had borrowed dollars to buy U.S. securities, and then infected most of the world economy.

A downturn in U.S. home prices that led to large losses at the large banks and broker-dealers triggered the current crisis. But the household deficit of the United States, the United Kingdom, and many euro area economies couldn't have been financed for as long and at as low a rate without an unprecedented increase in the assets of the emerging world's central banks and sovereign funds. Private investors were never that keen on financing large deficits in the slow-growing United States; they wanted to finance the fast-growing emerging world.

The 1998–99 effort never quite lived up to its name: "architecture" suggested building new institutions or at least remodeling existing institutions for international economic and financial cooperation. That clearly didn't happen. What emerged instead was a host of suggestions to help emerging economies reduce their vulnerability to sudden swings in capital flows—along with new "restructuring" clauses in international sovereign bonds governed by New York law and new IMF lending facilities designed to help countries facing crises stemming from sudden swings in capital flows.

At the same time, the global financial system that emerged from the last crisis was fundamentally different from the financial system that existed before the crisis. A world where unprecedented growth in the foreign assets of emerging economies' central banks helps finance a large U.S. current account deficit at low rates is not the same as a world where private investors in the United States finance deficits in the emerging world. Neither the IMF nor the G-7 changed all that much. But the world around them did.

Decisions, decisions

The most important lesson from the past is that the international financial system is defined more by the decisions key countries make during and after a crisis than by carefully chosen communiqué language. The architecture for responding to "capital account" crises emerged from the U.S. decision to lend large sums to Mexico when it couldn't refinance its dollar-denominated bonds in 1995, the IMF's subsequent decision to take the lead in providing large-scale financing in the Asian crisis, and the conditions the IMF attached to its loans to Asia. The G-7's Koln Communiqué—which explicitly tried to lay out the G-7's vision for the financial architecture—didn't define the world's exchange rate regime. That emerged from the collapse of Argentina's currency board, the success of Brazil's managed float, the persistence of currency boards in many Eastern European economies, the Gulf's ongoing dollar peg, and—above all—China's decision to maintain its link to the dollar even after the dollar started to depreciate in 2002. The regulatory regime was defined as much by the deci-

Depositors in line outside a U.K. bank that applied for emergency central bank funding.

sion not to rein in the shadow financial system—the largely unregulated or lightly regulated institutions that came to play much the same role in the economy as banks—as by the work of the Financial Stability Forum.

Three additional lessons from the 1998 architecture debate—and subsequent debates on the global framework for preventing and managing international financial crises—are worth remembering.

Getting the right group of countries around the table doesn't guarantee results. Real change happened when there was a broad consensus among relevant countries on the nature of the needed reforms. The most obvious example is that advanced and emerging economies agreed that emerging economies could reduce their vulnerability to crises by holding more reserves and replacing debt denominated in foreign currencies with debt denominated in local currency. The governments of most emerging economies proved far more able to finance themselves with debt denominated in their own currency than many expected 10 years ago—helped by a growing sense that most emerging market currencies were undervalued. Don't doubt the magnitude of this change. A world where Russia's government enters a global downturn with $10 billion in foreign currency reserves and $140 billion in foreign currency debt is quite different from a world where Russia's government enters a downturn with $600 billion in reserves and only $35 billion in external-currency-denominated debt. Russia's current vulnerabilities are real, but they aren't found on the government's external balance sheet. The balance sheets of the governments of other large emerging economies—Brazil, for example—also look nothing like they did in 1998.

In other areas, real consensus proved elusive. Getting the right countries around the table was rarely the main problem. The biggest difficulty was that the key countries didn't agree—and saw no need to reach agreement absent the pressure of a crisis. The G-7, for example, was arguably the right group to discuss when the IMF should lend large sums to emerging economies. The G-7, however, was not willing to abandon the option of providing countries facing a run on their currencies—or countries unable to roll over their maturing external debts—with large amounts of front-loaded financing nor willing to recognize that the IMF's old access limits were no longer the norm for major emerging economies. Real differences over the desirability of continuing to allow emerging economies to borrow large quantities of reserves to help manage large swings in capital flows were papered over; hard decisions were left for the next crisis.

The G-7 made an effort to broaden the discussion of exchange rate regimes to include the emerging world: even in the 1990s, it was clear that the global economy couldn't be reduced to the United States, Western Europe, and Japan. But broadening the dialogue to include the emerging world—through forums such as the Group of 22 and then the Group of 20 (G-20)—didn't bring coherence to the world's exchange rate regimes. The dollar floated against the euro and—most of the time—the yen. The pound sterling and the Canadian dollar floated against the currencies of their larger neighbors. But the enormous acceleration in the growth of emerging market reserves from 2002 onward belied any notion that the monetary financial system was defined by independent, inflation-targeting central banks that let their currencies float against each other to preserve their monetary autonomy.

Don't ignore tough problems . . . One of the key sources of pressure on the foreign exchange reserves of major emerging economies in the 1997–98 crisis was a reduction in cross-border bank lending. Only in Argentina's crisis were payments on international sovereign bonds a major drain on the country's balance of payments—and even in Argentina, a domestic bank run was a bigger source of capital outflows. Yet the most animated debates that emerged from these crises focused on removing legal impediments to the restructuring of international sovereign bonds. Limiting outflows associated with short-term bank credit—or, for that matter, monitoring the risks associated with a large rise in bank lending to the world's emerging economies—didn't get comparable attention.

But it should have. Policymakers assumed that emerging economies would finance themselves through the sale of traded securities rather than by borrowing directly from the world's banks. But at the end of the second quarter of 2008, cross-border bank lending to the emerging world (largely to private banks and firms) totaled $1.2 trillion, a sum that easily exceeds the outstanding stock of international sovereign bonds. The roll-off of cross-border bank exposure will prove to be a larger source of pressure on emerging economies in the current crisis than maturing international sovereign bonds. Ignoring a difficult problem doesn't necessarily mean it will go away.

. . . but also challenge your assumptions. It is always easier to highlight the reemergence of old vulnerabilities than to imagine new risks. It is striking that the "architecture" debate focused almost entirely on the risk that a financial crisis in a single emerging market economy could spill over to other emerging economies and then to the global economy. The risk that financial trouble in an advanced economy might prove far more destabilizing to the emerging world than financial trouble in another emerging economy was never seriously considered.

The G-7 put pressure on the IMF to look more closely at balance sheet, not just fiscal, vulnerabilities in emerging economies. No comparable push was made to evaluate whether the U.S. and European financial sectors were too exposed to the household sector. Yet emerging economies' complaints about the procedural inequities of IMF surveillance miss an even more important point: there is little evidence that more intensive IMF surveillance would have made a difference. In 2007, the IMF extolled the "highly innovative" role of U.S. financial markets in "supporting capital inflows," arguing that the U.S. edge in creating complex financial products helped pull in the funds needed to sustain large U.S. external deficits. Its Article IV report noted that "core commercial and investment banks are in a sound financial position, and systemic risks remain low," though it did concede that "financial innovation has complicated risk assessment at a time of higher risk taking and deteriorating lending standards in some sectors." We all make mistakes, but that wasn't exactly a Roubiniesque warning of building risks.

With the benefit of hindsight, it is striking how many key issues of the past few years were left off the architecture agenda. Ways to help emerging economies manage volatile capital flows were discussed, but not ways to help manage volatile commodity prices. The modalities of restructuring sovereign bonds were discussed, but not the challenges of restructuring mortgage-backed securities—or mortgages denominated in a foreign currency. The need to limit the IMF's lending to emerging economies was discussed endlessly, while the risks of excessive self-insurance were ignored. And there certainly was no discussion of how advanced economies should manage the risks associated with increased demand for their debt from emerging economies looking to raise their stock of reserve assets—including the risk that the emerging economies' desire for reserves might distort financial markets in the advanced economies and mask the impact of large fiscal and household deficits.

Customers press for food in Jakarta, Indonesia, during the Asian financial crisis.

Hopeful signs

Will the current effort to remake the international financial system succeed?

This crisis is still in its early stages. Past experience suggests that national decisions, often made under extreme distress, will do more to define the shape of the world's future financial system than international summitry.

But it is still important to try to forge a global consensus on the kinds of changes that are needed in the international financial system. Some signs are encouraging. Key emerging economies have been brought to the table in a new way. The G-7 lives on—but the annual G-20 leaders summit looks likely to attract far more attention than the G-7's annual summer retreat.

The crisis itself has already remade the architecture of the U.S., U.K., and European financial systems—with governments playing a far larger role in financial intermediation than in the past. It also looks certain to produce large changes in the regulatory structure.

Unless too-large-to-fail institutions are broken up, it would be a mistake to rely on credit markets to discipline them. In the short run, containing the current crisis has to take precedence over avoiding the next one—and right now forcing institutions to hold more capital would be self-defeating. Too

much leverage has given way to too rapid deleveraging. Over time, though, large institutions need to hold larger buffers of capital and liquidity.

This is work that the world's mature economies have to do themselves. But emerging economies should insist that they do this job well. The emerging world's interest in well-regulated institutions at the core of the global financial system is clear: Lehman's collapse generated a bigger funding crisis for many emerging economies than Russia's default.

Less hopeful signs

Better regulation isn't all that is needed to help create a stronger basis for global growth. Three additional issues stand out:

- coordination of macroeconomic stimulus,
- the evolution of the world's exchange rate regime, and
- strengthening global institutions for crisis lending.

And in each area, it isn't yet clear that there is a real consensus for change.

At the peak of the housing boom in the United States and Europe, large household deficits in some key mature economies offset the emerging world's surplus. But that boom could last only as long as the already heavily indebted household sector took on more debt. When households gave out, governments had to step in with large stimulus packages. But—as Martin Wolf of the *Financial Times* tirelessly points out—there is a risk that overindebted households will lead directly to overindebted governments.

The obvious conclusion is that countries with lots of debt and large deficits shouldn't do all the heavy lifting to support global growth. The big-surplus countries also need to do their part—and not just rely on the spillover from large stimulus packages in the deficit countries. Otherwise the next systemic crisis could easily come from loss of confidence in the public sector balance sheet of an advanced economy with a large external deficit.

A second issue—exchange rates—wasn't even mentioned in the communiqué that emerged from the first meeting of the G-20 leaders. That isn't encouraging; it suggests unwillingness to discuss the key issues facing the world economy. The Fed's decision to cut U.S. interest rates after the dot-com crisis could have led to a weak dollar and a boom in exports, not a boom in residential investment. But key countries followed the dollar down, limiting the dollar's overall depreciation. The end result of the combined depreciation of the dollar and the renminbi against the euro was China's larger trade surplus and more Chinese financing of the United States—not a smaller U.S. trade deficit. U.S. regulators looked the other way as households took on large amounts of debt—and key financial institutions kept profits up as margins fell by levering up (that is, by borrowing to buy more assets). But it is hard to see how the vulnerabilities in the household sector of the United States could have been allowed to build for so long absent large inflows from the world's central banks.

The integration of the large emerging markets into the world economy is bound to be complicated if their exchange rate regimes differ dramatically from the exchange rate regimes of the world's other large economies, especially if the currencies of countries with large external surpluses are tied to the currency of the country with the world's largest external deficit. The IMF has concluded that reduction of the world's imbalances likely implies depreciation of the currency of the deficit country—and it isn't clear whether the currencies of the big-surplus countries should fall too. It also isn't obvious that most oil exporters should continue to peg to the dollar. Too often the dollar has gone down when oil has gone up and gone up when oil has gone down.

Finally, the IMF lacks sufficient resources to stabilize the global financial system—or to provide a large enough pool of shared reserves to offer a real alternative to national self-insurance (or large bilateral swap lines). Many emerging economies are likely to conclude that maintaining their own financial stability in the face of huge swings in exports, commodity prices, and capital flows requires almost unimaginably large reserves. Emerging economies with trillion-dollar GDPs and $200 billion in reserves now aren't sure that the IMF's $200 billion ($350 billion counting the IMF's credit lines, including a new one from Japan) is enough. Russia started the crisis with close to $600 billion—and that won't be enough if its reserves continue to fall by $100 billion a quarter. Recent swings in global capital flows have been extreme—with record net (annual) private inflow to the emerging world turning into large net outflows in the span of a single quarter. Swings in commodity prices—and associated export revenues—have been no less extreme. A $200 billion Fund is too small to be relevant for any major emerging economy.

Tomorrow's world

Today's crisis is hitting all parts of the global economy hard. Countries that relied on private capital inflows to cover external deficits are suffering from a sudden stop in capital flows comparable in magnitude to the sudden stop that marked the 1997–98 crisis. Countries with current account surpluses that didn't rely on ongoing capital inflows are not faring any better: commodity importers are struggling alongside commodity exporters amid an extraordinary contraction in global trade. Something clearly has gone wrong. The need for a more robust financial system—one less prone to finance excessive deficits in mature and emerging economies alike and also less prone to sudden reversals and sharp crises—should not be in doubt.

Anticipating future risks is hard. But the scorching experience of the past few months ought to push all countries to try harder—and think carefully about the kind of world economy they want to see emerge from the current crisis. One suggestion: don't rely on large external deficits in the United States to drive demand growth globally, or solely on U.S. deficits to supply the world with large quantities of reserve assets. That hasn't worked. ■

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VIEWPOINT

A Tangled Web

Everyone agrees on reforming the governance of financial markets, but who will do what remains unclear

Amar Bhattacharya

THE financial crisis sweeping the world has brought into sharp focus serious weaknesses in how today's global financial markets are governed. Since the 1970s, the world's financial markets—dominated by the institutions of mature markets—grew exponentially, much faster in fact than any other global markets.

The expansion was driven by the mutually reinforcing forces of deregulation and financial innovation. Banks played a central role in this sharp, sustained expansion and progressive internationalization, but capital markets and the trend toward securitization also helped transform finance.

What didn't grow—or rather couldn't keep up—with the proliferation of these markets were the institutions and structures that oversee them by setting and implementing regulations. There remained a gnawing gap between market activities and regulatory scope, especially in relation to mature markets.

The current financial crisis has dramatically revealed how these regulatory weaknesses have hurt the global economy and highlighted the need for global approaches to regulating global markets. Treated until the 1990s as only one—and an arcane one at that—aspect of the broader agenda of global economic governance, financial market reform is now universally recognized as a central and urgent global priority. But although there are many reform proposals, there is no agreement as yet on how much reform is needed, who will do what, and how international cooperation will be coordinated and enforced.

Photo shows the headquarters of the Bank for International Settlements in Basel, Switzerland.

Financial markets evolved—rapidly

Until the early 1980s, national financial systems were bank dominated, relatively tightly regulated, and with limited international exposures. Starting with the modest issuance of eurobonds during that decade, cross-border financial flows and linkages started to expand dramatically. And although the 1980s debt crises arrested the integration of developing countries and the 1990s financial crisis severely hurt some emerging markets, these crises had little impact on the evolution and expansion of global financial markets.

Led by the rapid growth in international banking, global financial markets continued to boom—from just $0.1 trillion in 1970 to $6.3 trillion in 1990 and to a massive $31.8 trillion in 2007. This was accompanied by a consolidation of the international banking industry—a result of a wave of cross-border mergers and acquisitions. Banks entered areas of activity that had previously been the preserve of non-bank institutions (such as underwriting, asset management, investment banking, and proprietary trading), blurring distinctions between banks and other financial institutions and leading to a "shadow banking" system with large segments of bank activity outside the perimeters of regulation. And rapid growth of complex securitized products, such as credit derivatives, sharply increased banks' leverage and masked underlying risks. The credit derivative market—which was insignificant in 2001—grew to about $50 trillion by 2007.

Asian crisis set alarm bells ringing

The 1997–98 Asian crisis triggered a range of initiatives to reform the architecture of the international financial system (see box) and thereby reduce the likelihood and costs of future financial crises and cross-border spillovers.

In the immediate aftermath of the crisis, working groups (the so-called Willard groups) were set up, drawing on policymakers from 22 developed and emerging market countries as well as the international financial institutions (IFIs) to identify reform priorities in the areas of transparency, strengthening of financial systems, and resolving international financial crises.

Subsequently, in 1999, the leading industrialized countries in the Group of Seven (G-7) asked Hans Tietmeyer, then governor of the Bundesbank, to consider options to strengthen the institutional arrangements for global coordination. Tietmeyer submitted a report proposing one forum of finance ministers and central bank governors, and another of policymakers, regulators, the IFIs, and the apex bodies of standard setters, regulators, and supervisors. These recommendations led that year to the establishment of two institutions that are now in the spotlight—the *Group of Twenty* (G-20) industrialized and emerging market nations and the *Financial Stability Forum* (FSF) that links financial authorities in major economies with regulatory bodies and IFIs.

Since its inception, the G-20 has served as an important forum for dialogue between the developed and major emerging markets on the global economic and financial agenda, including on the reform of the international financial architecture.

The FSF, which is supported by a small secretariat in the Bank for International Settlements (BIS), was aimed at bringing together senior representatives of national financial authorities, IFIs, and international regulatory and supervisory groups to focus on systemic risks in financial markets and on ways to address them. Its membership is highly tilted toward G-7 countries, each of which is represented by three senior officials from its respective treasury department, central bank, and supervisory authorities. Australia, Hong Kong SAR, the Netherlands, and Singapore are also represented, though only by their central banks.

A web of regulators

The oversight of global financial markets evolved over time, reflecting changes in international financial markets, but the gap has continued to grow between the scope of regulation and the activities of financial markets. The *Bank for International Settlements* (BIS), established in 1930, is the central and the oldest focal point for coordination of global governance arrangements. Its 55 members comprise central banks of advanced economies and an increasing number of emerging markets.

The main power behind the BIS is the *Group of Ten* (G-10) nations, comprising finance ministers and central bank governors of 10 advanced economies. The G-10 has established important committees, with secretariats in the BIS, that play key roles in their respective areas. The Basel Committee on Banking Supervision has served as the standard setter on bank supervision; the Committee on Payment and Settlement Systems on payment, clearing, settlement, and related arrangements; and the Committee on the Global Financial System on identifying and assessing potential sources of stress in global financial markets as well as measures that promote stability in emerging markets.

The BIS also houses the secretariat of the *International Association of Insurance Supervisors*, which represents insurance regulators and supervisors of some 190 jurisdictions in nearly 140 countries, accounting for 97 percent of the world's insurance premiums, as well as the *Financial Stability Forum*.

The *International Organization of Securities Commissions*, which is not linked to the BIS, has 109 members and covers 90 percent of the global securities markets. Another important body, the *International Accounting Standards Board*, has oversight of formulation and agreement on international accounting standards.

At present, accounting practices and credit rating agencies are not covered or overseen directly by any global regulatory body, although indirect regulation is enforced by financial regulators.

Other standard setters and global cooperative forums include the *IMF*, which is responsible for monetary and financial transparency codes; the *OECD*, which sets the standards and good practices for corporate governance; and the *World Bank* and *United Nations Commission on International Trade Law*, which have jointly developed a standard on insolvency regimes and creditor rights.

The FSF has been the main mechanism to link the growing array of institutions involved in global financial governance and to carry out technical work on cross-cutting topics that were high on the global agenda—global standards and codes, highly leveraged institutions, offshore financial centers, and deposit insurance systems. It established a systematic inventory of work across the IFIs and the supervisory and regulatory groupings, and has also provided a forum to assess and review financial market developments and potential risks.

In addition to the FSF, much of the work and attention of the IMF between 1997 and 2003 was devoted to initiatives to bolster the international financial architecture (such as the launch of the joint IMF–World Bank Financial Sector Assessment Program and Reports on the Observance of Standards and Codes as well as the aborted Sovereign Debt Restructuring Mechanism).

All of these efforts were skewed toward emerging markets; they did not focus on the underlying vulnerabilities in mature markets. Indeed, they assumed that mature financial markets were already robust and there was little value in enhancing the oversight of these markets. Efforts to extend regulation to systemically important segments in advanced economies, such as hedge funds, also met with resistance from some major countries and market participants.

Current crisis has exposed deep flaws . . .

The current financial crisis has provoked a major rethinking of the role of financial markets and the failures in their governance, particularly in advanced economies. Many have argued that the role of financial markets has expanded beyond what it should be—a means rather than an end—and the unbridled globalization of financial markets has left countries and citizens vulnerable to the markets' inherent vagaries. Although such reflections—especially on what went wrong and what can be learned from the crisis—are ongoing, three core sets of failings can be identified, with implications for future reform.

First, the crisis has underscored fundamental weaknesses in the functioning of financial markets. The problems of informational asymmetries, moral hazard, and principal agency in financial markets are well known, but the crisis has exposed weaknesses in corporate governance (linked partly to the nature of executive compensation), loan origination, and underwriting standards that border on fraud. It has also shown how new financial instruments and their growing complexity (typified by new securitized products such as credit default swaps) have amplified procyclicality and masked the underlying risks. The two important pillars of market correction—risk management by financial institutions and market discipline—have not worked either.

Second, there was a broad-based failure in the regulation of financial markets. Despite the emphasis on capital adequacy, capital regulation was imposed in a way that allowed the buildup of significant leverage and promoted procyclicality. In addition, the fragmentation of regulation, especially in the United States, contributed to regulatory arbitrage and greater risk taking, as did the fact that large systemically important segments—such as hedge funds and the special investment vehicles created by banks—were outside the scope of prudential regulation.

Third, the crisis has revealed major deficiencies in international coordination and cooperation. Surveillance by the IMF and the FSF has remained weak and incomplete, in large part because both institutions lack the building blocks of effective oversight of systemically important advanced economies. Even where the problem was well understood, as in the case of growing macroeconomic imbalances that contributed to the buildup of vulnerability, there was no agreement on responsibilities or means to enforce the necessary cooperative actions. As the recent crisis has shown, the IMF lacks the resources and instruments to respond aggressively to systemic instability, which also reflects differing opinions among its member countries on what the institution's role should be. And the imbalance in voice and representation of emerging and developing economies in the IMF, and even more so in the BIS and other standard-setting bodies, has undermined the legitimacy and effectiveness of global financial governance.

. . . leading to new reform proposals

The growing consensus on regulatory weaknesses has led to many reform proposals from different quarters. A common theme has been that the balance between regulation and laissez-faire needs to be restored in favor of prudential regulation that is countercyclical, comprehensive in its coverage of financial institutions, and global in scope and consistency.

These proposals emphasize, among other things, the need for (1) improved incentives for prudent risk taking through such steps as reform of compensation and greater risk sharing on the part of loan and securities originators; (2) much tighter capital regulation, with stricter limits on leverage and built-in stabilizers to prevent procyclicality and buildup of asset bubbles; (3) greater attention to liquidity supervision and funding risks; (4) better mechanisms for supervising large, complex cross-border financial institutions; (5) extending the scope of financial regulation to ensure that all systemically important institutions are appropriately regulated; (6) improved transparency and reduced systemic risks associated with derivatives and complex financial instruments through greater reliance on exchange-traded or electronic trading platforms rather than on over-the-counter derivatives transactions; and (7) ensuring that credit rating agencies meet the highest standards and avoid conflicts of interest.

Although there may be broad agreement on most of these elements, the devil is in the details. The views of those who propose much tighter regulation differ from those who rely on market discipline and believe in preserving room for financial innovation.

And who will do what?

This broad agenda for financial reform poses a range of complex questions, including who should be responsible for what, how gaps in the existing institutional architecture should be filled, and how international cooperation can be reinforced.

At the most ambitious end are proposals for entirely new institutions or approaches to regulation (especially of large cross-border institutions) implemented through a world financial organization, an international bank charter, and an international insolvency mechanism. If such new mechanisms do not materialize, there are proposals to create "colleges of supervisors" who would be collectively responsible for effective supervision. More generally, there is agreement on the need for improved cooperation and communication across regulators, given the national scope of regulation and the global nature of financial markets.

Given the importance of macrofinancial linkages in the buildup of vulnerability and resolution of crises, clarity in the roles of and enhanced cooperation between the FSF and the IMF have also come to the fore. Of even greater importance is fundamental reform of the IMF so that it can play a central and effective role in reducing the risks of financial instability and in crisis response. The IMF will need a major overhaul of its surveillance role, especially in systemically important countries and markets, as well as of its instruments and policies so that it can provide the necessary precautionary and crisis support to the full spectrum of members, it is endowed with a much enlarged pool of resources, and its governance is reformed to make it more accountable and representative. It is also time to revisit the role of the IMF in the international monetary system and in the new world of volatile capital flows. All this is not just about reform in Washington, but requires equally the commitment of all members to the cooperative nature of the institution.

Given the breadth, complexity, and political obstacles in reforming global financial governance, a steering group with sufficient political and technical clout is needed at the global level to drive the reforms. The G-20 is well placed to play this role since it brings together finance ministers and central bank governors from the most systemically important countries. The elevation of the discussion to the leaders' level gives even greater political impetus and scope to take up cross-cutting issues.

While the G-20 can therefore play a constructive role, it cannot supplant the more universal and legitimate decision-making structures. In that regard, it will be important for the G-20 (and other related forums, such as the FSF) to be as inclusive as possible in their deliberations, and to defer to the appropriate institutions for ultimate decisions. In particular the International Monetary and Financial Committee and the Board of Governors of the IMF will need to play a key role, as will the United Nations, as the most universal body at the level of world leaders. ■

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U.K. economist John Maynard Keynes (center) was a chief architect of the UN International Monetary and Financial Conference in 1944.

A New Bretton Woods?

James M. Boughton

History shows that reforming the international financial system requires both leadership and inclusiveness

WHEN French President Nicolas Sarkozy and British Prime Minister Gordon Brown called for a "new Bretton Woods" agreement in October 2008, they were recalling the success of the International Monetary and Financial Conference held in Bretton Woods, New Hampshire, in July 1944. What Sarkozy and Brown envisaged was a new multilateral agreement to stabilize international finance in the 21st century, the way the 1944 conference, which established the International Monetary Fund and the World Bank, stabilized financial relations among countries in the second half of the 20th century. The summit meeting of world leaders held in Washington, D.C., in November 2008 started a process that could lead to such an agreement. What would that take to succeed? What kind of leadership, and what kind of commitment, would be needed? History offers some useful lessons.

On several occasions throughout the 20th century, political leaders in major countries sought international agreements on the global economic or financial architecture. Many of those efforts failed, Bretton Woods being the major exception. The central lesson that emerges from these efforts is that successful reform in response to a crisis requires three ingredients: effective and legitimate leadership combined with inclusive participation; clearly stated and broadly shared goals; and a realistic road map for reaching those goals.

Paris, 1918–19

A useful starting point to survey such efforts is the Paris peace conference of 1918–19, which followed World War I. Although its main purpose was to redraw political borders and to establish principles for avoiding a repeat of the war, establishing a framework for restoring free trade and the flow of capital was also on the agenda. U.S. President Woodrow Wilson provided leadership by enunciating his "Fourteen Points" as a polestar. All of the victorious allied powers were present. Although only the large countries had a significant impact on the outcome, the inclusion of the other allies lent legitimacy to the proceedings.

The economic goal of open trade and finance was widely shared, but how to achieve it was left unresolved because it was not the top priority at the conference. Agreement on a framework was scuttled by differences on war reparations, on the practical aspects of returning to the gold standard, and on the need for an international institution with oversight powers. The U.S. Congress declined to ratify participation in the new global institution, the League of Nations. A 1920 follow-up conference in Brussels established the League's Economic and Financial Section, but its functions and

powers were limited. These failings contributed substantially to the ensuing decades of autarky, unstable financial relations among countries, and economic depression.

London, 1933

Between the wars, the most ambitious event was the World Monetary and Economic Conference, held under the auspices of the League of Nations. It was preceded by two relatively successful meetings—one in Genoa in 1922 that re-established the gold standard for a group of mostly European countries, the other in Rome in 1930 that established the Bank for International Settlements. The 1933 London conference sought to re-establish fixed parities for a wider range of currencies. As with the League of Nations, this effort failed primarily because of a lack of support from the U.S. government. Three years later, the United States did sign an accord with France and the United Kingdom on a stabilization pact known as the Tripartite Agreement. That agreement, however, was an ad hoc effort to ward off a potentially competitive devaluation of the French franc. Though successful on its own terms, the agreement lacked an institutional structure and a sustainable enforcement mechanism. It thus did little to prevent similar conflicts from arising in the future.

Bretton Woods, 1944

During World War II, the U.K. and U.S. Treasuries initiated plans to overcome the weaknesses of the piecemeal interwar approaches by establishing multilateral financial institutions for the postwar period. By mid-1942, the U.K.'s John Maynard Keynes and Harry Dexter White of the United States had prepared first drafts of their respective plans and had begun exchanging ideas to develop a common proposal before the end of the war. Preparations for what would become the Bretton Woods conference began in earnest in the middle of 1943. Keynes suggested limiting participation to a few countries, with the United Kingdom and the United States as "founder states" of the proposed institutions. This time the United States took the broader view. White insisted that delegations from all 45 allies in the war against the Axis be included and be given an opportunity to participate in the drafting sessions and in key decisions. Representatives of 18 countries met in Washington, D.C., in June 1943 to offer suggestions, and a 17-nation preparatory drafting conference was held in Atlantic City, New Jersey, in June 1944. All 45 delegations convened in Bretton Woods a few weeks later.

The singular success of Bretton Woods is attributable to the extraordinary circumstances in which it was held and to the care devoted to its preparation. Any concerns countries had about threats to national sovereignty posed by the powers given to the World Bank and IMF were effectively neutralized by the twin traumas of depression and war that characterized the interwar period. The willingness of the U.S. government to host the meeting, to take the lead in the design of the IMF, to commit itself to be the principal creditor, and to accommodate the needs of other countries (for example, by accepting the "scarce currency" clause, which imposed requirements on the dominant creditor country) was critical to the success of Bretton Woods. The two-and-a-half-year collaboration between Keynes and White produced many revisions to the original proposals, not just to accommodate each other but also to make the design more appealing to other countries. The unanimous agreement on the Articles resulted from the careful development of a realistic plan, strong leadership from the two predominant countries, the legitimacy that came from an inclusive process, and the effect of a major crisis in stimulating the political will to act.

The planners of Bretton Woods intended to create three multilateral institutions, not two. A proposed international trade organization proved to be too politically divisive, and so a decision on it was postponed until after the war, with nearly fatal effect. As a fallback option, a group of countries established the less potent General Agreement on Tariffs and Trade in 1948. It was not until 1994 that the World Trade Organization came into being.

The end of fixed exchange rates, 1971–73

Following substantial pressures on exchange rates in the 1960s and the official termination of gold convertibility of the U.S. dollar in 1971, it became apparent that a new monetary order was needed. IMF Managing Director Pierre-Paul Schweitzer took the lead by proposing a realignment of key-currency exchange rates, including a devaluation of the dollar. The major industrial countries were divided on how to respond, and developing countries resisted being left out of the discussions. The Group of Ten (G-10) industrial countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States) took the lead by agreeing to currency realignments at a December 1971 meeting at the Smithsonian Institution in Washington, D.C. But that agreement quickly came under strain, and the focus shifted back to the IMF. Although the G-10 could not devise a solution on its own, it did agree to the creation of the Committee of Twenty (C-20), a ministerial advisory body that at the time represented the 20 countries and constituencies of the IMF Executive Board.

Delegates at the Group of Ten talks discuss the dollar crisis in 1971.

The C-20 had the advantages of a preexisting institutional framework and secretariat and the political support of both the industrial and the developing countries. But it lacked a realistic plan for restoring stability to the payments system. The French and U.S. positions on exchange rate stability—the former wanting a return to fixed parities and the latter wanting market-determined rates—were too far apart to permit a consensus. After two years the goal of exchange rate stability was abandoned and the IMF instead was mandated to exercise "firm surveillance" over what was supposed to become a stable system through bilateral and multilateral oversight. That mandate was eventually enshrined in the Second Amendment of the IMF Articles of Agreement in 1978.

The oil-price shocks of the 1970s

U.S. Secretary of State Henry Kissinger called for a new Atlantic charter to coordinate the responses of industrial countries to the oil-price shock of 1973–74. Both the IMF and the Organization for Economic Cooperation and Development (OECD), then comprising mainly wealthier industrial economies, responded by developing proposals for a financial facility to recycle the surpluses of oil-exporting countries. The OECD plan was to create a Financial Support Fund by borrowing from oil exporters and lending to OECD member countries. With strong backing from both the United States and the major European countries, the OECD quickly negotiated a treaty establishing the support fund. But even before the OECD facility was in final draft form, the IMF had established an Oil Facility that was borrowing from oil exporters and rich countries and lending on low-conditionality terms to oil-importing countries, both industrial and developing. Political support for the OECD proposal vanished, and the treaty was never ratified.

Calls for a new Bretton Woods in the 1980s

The exchange rate system was already unstable by the time the Second Amendment took effect in 1978, and it became much more so over the next few years. On several occasions from 1982 to 1985, senior finance officials from France, the United States, and other countries called for a "new Bretton Woods," although no one ever publicly articulated either the goals for such a conference or a road map for surmounting the failed effort of a decade earlier. Despite the high-level backing, which included French President François Mitterrand and U.S. Treasury Secretary James Baker, the proposal was never acted on. Instead, the G-5 (France, Germany, Japan, the United Kingdom, and the United States)—which had largely supplanted the G-10 as the primary steering committee for the industrial countries—acted on its own in 1985–87 to halt the five-year sustained appreciation of the dollar and then to try to stabilize rates around a new equilibrium.

Recent reforms

In 1998, the U.S. Congress took the initiative by convening the International Financial Institutions Advisory Commission, which recommended that the IMF stop making longer-term loans and write off its claims on heavily indebted poor countries that are implementing an effective development strategy approved by the World Bank. These recommendations stimulated public discussion—most importantly in the G-7 (the G-5 plus Italy and Canada) and then in the International Monetary and Financial Committee, the advisory policy-setting body of the IMF, the successor to the Committee of Twenty. Those discussions eventually resulted in the adoption of the Multilateral Debt Relief Initiative and the IMF's Policy Support Instrument in 2005.

What we have learned

The international financial architecture over the past century evolved in response to circumstances of the moment. Formal conferences were occasionally an important element of that process. In most cases, however, institutional adaptation to changes in the world economy came from the interplay of internal deliberations and initiatives from groups of industrial countries. When problems were clearly identified and the major countries agreed on the type of solution required, deliberations within a group of those countries usually provided the necessary leadership for reform. In the most successful efforts, leadership came from a small inner group that was willing to include, listen to, and absorb ideas from a wide outer set of participants.

Each of the major attempts to revise the international financial architecture came in response to a crisis. When they succeeded, they did so only partially. This observation leads to three broader but interrelated lessons about the context in which financial and other reforms are attempted.

- It is inevitable that some important goals have to be set aside, such as the trade organization at Bretton Woods and systemic rules for exchange rates in the 1970s. Even the best "new Bretton Woods" will solve only a few problems. Whatever gets set aside is unlikely to get accomplished for another generation—or at least until the next major crisis.
- Financial crises often occur at times when other—and possibly more serious—crises are competing for attention. In the past year, the world economy has suffered a variety of ills, including a financial meltdown and wide fluctuations in the prices of food, fuel, and other basic commodities. Over the longer run, both climate change and the persistence of extreme poverty in much of the developing world are looming crises. If revising the rules of international finance dominates the agenda, the opportunity to find better ways to deal with other issues could be lost, possibly for many years.
- Decisions on which countries have a seat at the table have a major effect on what gets done and what gets set aside. Only the major participants in financial markets—industrial and emerging market countries—can devise new rules for finance, but they cannot by themselves devise new rules for trade in commodities. Nor can they cope alone with climate change or extreme poverty. The more inclusive the participation in the next Bretton Woods, the more likely the outcome will have long-run benefits for mankind. ■

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IMF RESEARCH

The Domestic Solution

Can China's growth be sustained through good-neighbor policies?

A construction site in Guangzhou, China.

Leslie Lipschitz, Céline Rochon, and Geneviève Verdier

FOR economists and political scientists—as much as for tourists seeking adventure—China is intriguing. It is huge and enormously populous. It has a multilayered ancient culture and history. It has become fully engaged with the global economy in recent years, and the blistering growth of its output and exports has had a significant global impact. Moreover, the country is large enough for its policies to influence the rest of the world. China is achieving comparatively strong growth even during the current global economic crisis, but a massive drop in employment is prompting a profound reconsideration of policy options.

Recent research at the IMF (Lipschitz, Rochon, and Verdier, 2008) has sought to use a formal growth model to answer some general questions about the process of growth in developing countries and specific questions about the driving forces in the case of China.

- How is China's catching-up process different from the norm? Does its large and significantly underemployed labor force help or hinder its performance?
- Does the extraordinary competitiveness of China's industry reflect underlying structural characteristics or—at least in the past few years—a mercantilist beggar-thy-neighbor exchange rate policy?
- Why, despite a very high domestic saving rate, does China still have sizable inflows of foreign direct investment?

A transitional growth model for catching up

For any country, output (and thus income) is created by combining capital and labor to produce goods and services. But much depends on the institutional and technological environment within which these factors of production are combined. For many countries the transition from a controlled economy to a market economy has changed the institutional and technological setting and elicited sizable increases in the productivity of labor and capital. These productivity increases have raised returns on capital and encouraged investment, and thereby increased the productivity of labor and sustainable wages even further. Thus, an endogenous process of better institutions, improved technology, higher returns, increased investment, more employment, and higher incomes has resulted. Certainly, the reform and opening up of the Chinese economy since 1978 has been a development of this sort. Such a process, however, is transitional: at some point the institutional and technological environment will catch up with that in advanced economies and the era of easy growth gains will end, and thereafter growth will revert to a rate more similar to that in advanced economies.

One other part of this catching-up process is important: workers will be sucked out of the agrarian economy (as productivity there improves and labor mobility is increased) and into the high-growth (usually manufacturing) economy. Putting this "reserve army" of workers into higher-productivity jobs is a critical part of the high-growth catching-up process, especially in populous countries with large low-productivity agricultural sectors.

For China the stylized facts are unusual (see box). Both growth and investment rates have been very high. Although a low initial capital-to-labor ratio would ordinarily be associated with large returns to capital and substantial investment, this investment could be financed as easily through foreign borrowing as through high domestic saving. Nevertheless, the domestic saving ratio has been extraordinarily high—exceeding domestic investment in recent years.

A mercantilist strategy?

China critics (see, for example, Goldstein and Lardy, 2005) argue that the very high saving rate reflects an undervalued exchange rate that has suppressed consumption by skewing income distribution away from wages and toward profits. China's intervention in currency markets has certainly influenced the nominal exchange rate, but it is not clear whether the extraordinary competitiveness of Chinese industry has

been sustained by this policy or by more fundamental structural characteristics of the economy.

Consider the following thought experiment. If wages in Chinese industry were in equilibrium—that is, workers were paid the value of their marginal products—and the authorities were to engineer a 30 percent appreciation of the renminbi, would there really be a corresponding increase in real wages (that is, nominal wages deflated by the renminbi product price)? If so, to the extent that this could not be passed on entirely to buyers, it would surely eventually force a significant drop in employment and downward pressure on real wages—unless there were some *deus ex machina* that somehow simultaneously produced an increase in labor productivity.

An alternative, more subtle, version of the undervalued exchange rate argument starts from a disequilibrium situation and thus departs from the formal modeling exercise. Imagine that the starting position in China is one where workers are being paid less than the value of their marginal products, and that there is a natural tendency toward a *real* appreciation of the renminbi—that is, an increase in China's relative unit labor cost adjusted for the exchange rate—that is being deliberately slowed through a policy of intervening to prevent an appreciation of the exchange rate. In these circumstances, an appreciation would hasten the movement toward a new sustainable equilibrium, and the foot-dragging on exchange rate policy is slowing an inevitable process—perhaps with the objective of gaining short-term competitive advantage. Of course, an argument along these lines would require some evidence of the initial disequilibrium—most obviously mounting inflation pressures.

Much of the debate on China has focused on this issue of its exchange rate policy as part of its growth strategy. There has often been more heat than light. It is for this reason that we have sought to formalize the issues more precisely and to uncover the underlying forces at work.

China: key points

Growth, saving, investment, and foreign investment are high.

- Growth averaged 9.6 percent in the decade through 2007, but will continue at a lower rate in the current crisis.
- The national saving rate was 54 percent in 2007, compared with an average of 33 percent for a sample of other emerging market economies (still well above the rate in advanced economies).
- The investment ratio in 2007 was 43 percent, compared with 29 percent on average in other emerging market economies; it is much lower in advanced economies.
- Net foreign direct investment in China has increased from less than $3 billion in 1990 to more than $120 billion in 2007.

Manufacturing wages are very low by international standards but very high relative to those in the rural economy.

- There is a lack of reliable current data, but data for 2002 show Chinese wages in manufacturing at 3 percent of U.S. levels—compared with 33 percent in the other Asian emerging economies.
- In 2007, per capita incomes in rural households were 30 percent of those in urban households, and the ratio had been on a declining trend since the late 1990s.

China's large army of rural labor drives internal migration.

- China's agricultural sector has a reserve army of surplus labor estimated to be perhaps as large as 200 million (see Banister, 2005).
- Internal migration is driven by the large labor surplus in the rural economy and the sizable wage differentials between urban and rural workers.

A real growth model for China

We have formulated a conventional real neoclassical growth model, set up to capture some telling characteristics of the Chinese economy and parameterized with numbers that plausibly reflect the situation in China.

- The Chinese economy of the model cannot influence the foreign interest rate at which it borrows, but it can influence prices in the world market for its industrial products.
- Production requires two kinds of capital—domestic and foreign—that are complements in production. Foreign capital can be acquired in global markets at a fixed rate. Domestic capital can be generated only by domestic saving. (This is intuitive if one thinks of domestic capital as human capital, with a very limited supply of Chinese language–proficient skilled workers available to import from abroad.)
- The model focuses on the urban industrial sector. However, the rural sector has a substantial surplus of workers willing to move to the urban sector whenever the urban wage exceeds that in the rural sector. The speed of migration depends on the degree of labor mobility.

These latter two characteristics drive the model. For example, if there is an accumulation of domestic capital, it will raise the returns to labor and foreign capital, increasing migration, employment, and foreign investment. Because there is no limit to the availability of foreign capital and there is a large reserve of rural labor, domestic capital is *the* scarce factor; it earns large returns and elicits high rates of saving.

We ran the model through various experiments—shocks to productivity, foreign demand, and interest rates—to illustrate its mechanics. The results are informative. To the extent that labor is mobile, the substantial excess of workers from the rural sector reduces the variance of both wages and the real exchange rate. Any increase in foreign demand is more likely to elicit increased employment, greater foreign investment, and higher saving (in response to an increase in the return to scarce domestic capital) than a rise in wages and the real exchange rate. The model thus seems to pick up critical characteristics of China's recent history—high saving coupled with substantial foreign direct investment and wages that seem to be maintained at very competitive low levels. Moreover, these characteristics emerge from a model that is "real"—that is, one where there is no scope for influencing the nominal exchange rate. The model, however, is limited: it does not explain other developments—for example, the massive accumulation of foreign reserves—that may be indicative of disequilibrium.

The model also provides a perspective on the impact of the current global turmoil on the Chinese economy. A critical consideration here is the numerical characterization of the

labor market as highly elastic; this, together with the economy's reliance on industrial production for export, imposes the brunt of the adjustment to an external demand shock on industrial employment. A drop in foreign demand for Chinese goods puts downward pressure on the terms of trade, forces Chinese firms to reduce prices, cuts profits, and lowers industrial wages. More important, however, in an economy with such a marked trend movement of labor into the industrial sector in recent years, it also reduces manufacturing employment sharply, sending workers back to the agrarian economy. For the government, resisting this deindustrialization of labor may well be *the* policy imperative.

Because the model is neoclassical and not Keynesian, it is not set up for short-run policy analysis. In particular, any assessment of the appropriate policy response to a Keynesian drop in demand—that is, one that is impervious to price competitiveness—is, to an extent, speculative. However, the results suggest that if there were ever a time for the Chinese authorities to stimulate domestic demand and reduce the economy's reliance on foreign demand, this is it. Policies to boost domestic demand—fiscal stimulus, among others—may be the only way to stanch job losses in the manufacturing economy.

Policy conclusions and caveats

The model experiments show that it may be possible for a country with structural characteristics like those of China to sustain, for a considerable period, a situation of very low wages in industry, high domestic capital returns, and rapid export-led growth. But dangers emerge when the underlying characteristics change, and the authorities—either through simple inertia or encouraged by domestic interest groups—resist adapting to this change. Trying to hold on to a low-wage strategy (in which the real exchange rate is inappropriately valued) in the face of emerging disequilibrium—for example, price and wage pressures—is a dangerous strategy. It risks raising inflation and inflation expectations in a way that may become entrenched and thus prove costly to reverse. It also risks excessive vulnerability to adverse developments in foreign demand.

In the current circumstances of a substantial drop in external demand, policies to stimulate domestic demand in China may be the only way to sustain growth and employment—certainly China is one of the few emerging market economies without

"The results suggest that if there were ever a time for the Chinese authorities to stimulate domestic demand and reduce the economy's reliance on foreign demand, this is it."

an external financing constraint that would preclude such policies. Aggressive demand stimulus in China would, moreover, be a "good-neighbor" strategy, contributing to global demand and a resolution of the current global crisis. ■

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B. Legitimate paid and/or requested distribution	7,366	3,371
C. Total paid and/or requested circulation	7,366	3,371
D. Nonrequested copies	8,458	9,467
E. Nonrequested copies distributed through the USPS by other classes of mail	679	0
F. Nonrequested copies distributed outside the mail	9,735	5,212
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I. Copies not distributed	9,735	5,212
J. Total (sum of H and I)	35,973	23,262
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I certify that the statements made by me above are correct and complete.
Jeremy Clift, Editor-in-Chief

Small Steps

The fine balance of developing financial markets in small economies: payoffs with a dose of realism

Mark Stone and Seiichi Shimizu

A clerk marks prices at the stock exchange in Mbabane, Swaziland.

FINANCIAL markets in smaller economies have the potential, in theory, to provide important benefits. These include more effective monetary and fiscal policies, higher risk transfer, increased corporate financing, and greater integration into the world economy. But the analytical foundations for what it takes to develop financial markets in smaller economies is limited because cross-country research so far has focused on financial market development in advanced and emerging market countries. Moreover, the policies needed to develop financial markets in smaller countries tend to be more country specific because small economies are quite different from one another (see box).

This article addresses that analytical gap and suggests policies for developing "essential" financial markets—foreign exchange, money, government security, and equity—in small economies. These markets are essential because they provide the most basic level of financial services. This article also outlines a sequence of steps that small countries can follow, while recognizing that one-size-fits-all approaches do not work for these countries.

Shallow markets

Financial markets in small economies are generally smaller and provide a narrower range of services compared with those in larger economies. Foreign exchange markets in small economies have much lower turnover compared with emerging market countries, and fewer than 50 percent conduct forward transactions (a purchase or sale of currency in the future according to an exchange rate determined beforehand). Money markets are thin, with most dominated by overnight interbank cash transactions. Just 25 percent of small economies have secondary government security markets developed enough to involve foreign institutions. Only 40 percent of small economies even have a stock exchange, and trading on many of those exchanges is so low that the economic impact is minimal. Regional integration, so far, has had mixed success in deepening markets. Still, there are positive examples, and some small economies (Croatia and Jordan) have fairly developed markets that provide a wide array of benefits.

Why are financial markets in small economies underdeveloped? Many small economies face intrinsic obstacles that are largely beyond the control of policymakers. Banks are the linchpin of market development because they are the main players in most financial markets. However, banking sectors in most small economies are small and uncompetitive: the median number of banks is six and an even smaller number tend to dominate the banking sector. An undiversified real economy also limits the opportunities for risk transfer. State-of-the-art infrastructure and sophisticated regulation may not pay, given the smaller size of the economy. The low number and small size of companies is another inherent obstacle.

Policy measures can help overcome other obstacles to market development. Excess liquidity in the banking sector, which puts all banks on the sell side of money markets, and dollarization, which reduces the scale of local currency financial transactions, can be addressed through appropriate policies implemented over the long run. Institutional constraints, such as a limited number of financial market players and weak disclosure of financial information practices, can be eased over the medium term. Market development can also be impeded by policy rigidities under the direct control of the authorities, and by a lack of political will and vested interests of those who would not benefit from market development.

Which are the smaller economies?

Smaller economies are defined here as countries with GDP and per capita GDP below a certain threshold that can be seen as marking limits on the potential development of their financial markets. A review of basic information on financial markets suggests that most countries below the thresholds of $40 billion for GDP and $10,000 for per capita GDP have relatively underdeveloped financial markets and, in many cases, are lacking markets altogether.

Smaller economies account for 2 percent of world GDP: their total population is 960 million, or 15 percent of the world total. The smaller economies encompass a wide range of countries. A number of the smaller economies have some developed markets and either have joined the ranks of emerging market countries or have the potential to do so. At the other end of the spectrum, 36 smaller economies have a population of less than 1 million, indicating that economies of scale will be difficult to attain.

What works and what doesn't

How can small economies benefit from promoting financial sector development? Much can be gleaned from the experience of individual countries, cross-country comparisons, and work done at the IMF and elsewhere.

The drivers of ***foreign exchange market*** development shift from the central bank and government to the market players as the market deepens. In the early stages, the government removes impediments, such as foreign exchange surrender requirements and tight capital controls (Uganda). The next step is reorienting the central bank from a market-limiting to a market-supporting role, as in the former Yugoslav Republic of Macedonia. This entails scaling back direct central bank control of market flows, establishing a market-friendly trading mechanism, shifting the market-making function entirely to the market, and setting up market-based foreign exchange operations. The last phase is market-driven development, with the authorities' role limited largely to prudential support (Serbia).

The development of ***money and government security markets*** should be integrated because banks tend to dominate both of these markets, the same infrastructure usually supports both markets, and they have a joint role in monetary and fiscal policies and operations. Policies for the initial development market phase, which involve mainly interbank deposits, tend to focus on government measures to remove impediments and develop the banking system, as in Botswana. Once regular trading of securities begins, the central bank, in close coordination with the government and market participants, can boost development by shifting to market-supporting monetary operations (Tunisia), such as repos, and to market-supporting fiscal financing, such as market-driven treasury bill auctions (Serbia). Market players themselves take the lead for formal and sophisticated markets, with public agencies working together to ensure systemic stability.

Equity markets are somewhat different from the other essential financial markets in that the market players themselves play a bigger leading role and government policies cover a wider spectrum. For small economies without an active stock exchange, the primary challenge is to establish alternative sources of corporate financing. As markets develop regular trading, policies should focus on institutions and basic corporate governance, as in Croatia, Mauritius, and Kenya. Finally, deep and active secondary market development is led by the market players themselves, with various government agencies improving the provision of information and fostering market stability (Jamaica, Jordan, and Sri Lanka).

Regional integration has the potential to address some of the obstacles to market development by alleviating diseconomies of scale, but the experience so far has been mixed. The broad preconditions for successful integration seem to be regional economic and political linkages, developed and integrated banking sectors, already existing local markets, and political support to overcome vested interests. Regional integration should generally complement local markets rather than replace them. Most cases of successful regional integration have been market led and involve equity markets (the Baltics). Government intervention can be effective when the interests of individual market players conflict with market integration. Joining an existing regional market that has already realized the requisite scale economies may make more sense than trying to integrate small markets across countries.

What are the lessons?

The overarching lesson is that market development policies should be realistic and tailored to the often unique circumstances of smaller economies. Effective implementation of such policies can involve three steps. First, a more active market must be judged as viable—that is, there must be enough players to form both sides of the market on an ongoing basis. Second, the broad benefits of realizable market development over the long run must be deemed to outweigh the costs to the public sector. For many small economies, the opportunity costs of expending scarce government financial and human resources on market development can be high. Finally, any potential implications for systemic financial stability of a more active market must be fully factored into policies.

What about alternatives to financial markets if development potential is limited or risky? Tapping the full capabilities of the banking sector can help make up for a lack of developed markets. For example, banks can offer money and foreign exchange products to help corporations manage liquidity. Government policies that promote market-based bank lending can make up for a shortfall of equity financing. Wealthy individuals and small groups of specialized investors are alternative sources of corporate financing that can be promoted by government policies.

Finally, should the current financial turmoil compel a rethink of the role of financial markets in small economies? So far, the impact on smaller economies of global market stress operating through financial linkages seems to have been moderate, owing largely to the relatively small role of private capital flows for these countries. Moreover, financial institutions in smaller economies did not purchase the toxic assets that contributed to the stress in advanced and many emerging market economies. Thus, the ongoing problems in advanced and emerging market economies do not seem to alter the broad case for developing markets in smaller economies. Smaller economies are probably best off sticking to the basics and exploiting their own market potential to the maximum. ■

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This article is based on the paper Developing Essential Financial Markets in Smaller Economies: Stylized Facts and Policy Options, *IMF Occasional Paper 265 (Washington, 2009).*

BACK TO BASICS

What Is a Recession?

Stijn Claessens and M. Ayhan Kose

FOR more than a year, barely a day has passed that we have not heard dire economic news about the United States, Europe, or Japan. Unemployment has been rising, company profits have been falling, financial markets have been tumbling, and the housing sector has been collapsing. Is there a single word to describe these developments? Yes: "recession."

The ongoing global financial crisis has been accompanied by recessions in many countries. This pattern is consistent with the historical record. Synchronized recessions have occurred in advanced economies several times in the past four decades—the mid-70s, early 80s, early 90s, and early 2000s. Because the United States is the world's largest economy and has strong trade and financial linkages with many other economies, most of these globally synchronized recession episodes also coincide with U.S. recessions.

Although U.S. recessions have become milder over time, the current recession is likely to change this trend. Already 16 months old—with sharp declines in consumption and investment—it could become one of the longest and deepest recessions since the Great Depression of the 1930s.

Calling a recession

There is no official definition of recession, but there is general recognition that the term refers to a period of decline in economic activity. Very short periods of decline are not considered recessions. Most commentators and analysts use, as a practical definition of recession, two consecutive quarters of decline in a country's real (inflation adjusted) gross domestic product (GDP)—the value of all goods and services a country produces (see "Back to Basics," *F&D,* December 2008). Although this definition is a useful rule of thumb, it has drawbacks. A focus on GDP alone is narrow, and it is often better to consider a wider set of measures of economic activity to determine whether a country is indeed suffering a recession. Using other indicators can also provide a more timely gauge of the state of the economy.

The National Bureau of Economic Research (NBER), a private research organization, which maintains a chronology of the beginning and ending dates of U.S. recessions, uses a broader definition and considers a number of measures of activity to decide the dates of recessions. The NBER's Business Cycle Dating Committee defines a recession as "*a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough.*" Consistent with this definition, the committee focuses on a comprehensive set of measures—including not only GDP, but also employment, income, sales, and industrial production—to analyze the trends in economic activity.

Although an economy can show signs of weakening months before a recession begins, the process of determining whether a country is in a true recession (or not) often takes time. For example, it took the NBER committee a year to announce that the current U.S. recession started in December 2007. This is understandable, because the decision process involves establishing a broad decline in economic activity over an extended period of time after compiling and sifting through many variables, which are often subject to revisions after their initial announcement. In addition, different measures of activity may exhibit conflicting behavior, making it difficult to identify whether the country is indeed suffering from a broad-based decline in economic activity.

Why do recessions happen?

Understanding the sources of recessions has been one of the enduring areas of research in economics. There are a variety of reasons recessions take place. Some are associated with sharp changes in the prices of the inputs used in producing goods and services. For example, a sharp increase in oil prices can be a harbinger of a coming recession. As energy becomes expensive, it pushes up the overall price level, leading to a decline in aggregate demand. A recession can also be triggered by a country's decision to reduce inflation by employing contractionary monetary or fiscal policies. When used excessively, such policies can lead to a decline in demand for goods and

services, eventually resulting in a recession.

Some recessions, including the current one, are rooted in financial market problems. Sharp increases in asset prices and a speedy expansion of credit often coincide with rapid accumulation of debt. As corporations and households get overextended and face difficulties in meeting their debt obligations, they reduce investment and consumption, which in turn leads to a decrease in economic activity. Not all such credit booms end up in recessions, but when they do, these recessions are often more costly than others. Recessions can be the result of a decline in external demand, especially in countries with strong export sectors. Adverse effects of recessions in large countries—such as Germany, Japan, and the United States—are rapidly felt by their regional trading partners, especially during globally synchronized recessions.

Because recessions have many potential causes, it is a challenge to predict them. The behavioral patterns of numerous economic variables—including credit volume, asset prices, and the unemployment rate—around recessions have been documented, but although they might be the cause of recessions, they could also be the result of recessions—or in economic parlance, endogenous to recessions. Even though economists use a large set of variables to forecast the future behavior of economic activity, none has proven a reliable predictor of whether a recession is going to take place. Changes in some variables—such as asset prices, the unemployment rate, certain interest rates, and consumer confidence—appear to be useful in predicting recessions, but economists still fall short of accurately forecasting a significant fraction of recessions, let alone predicting their severity in terms of duration and amplitude (see "Picture This," *F&D,* September 2008).

Recessions are infrequent but costly

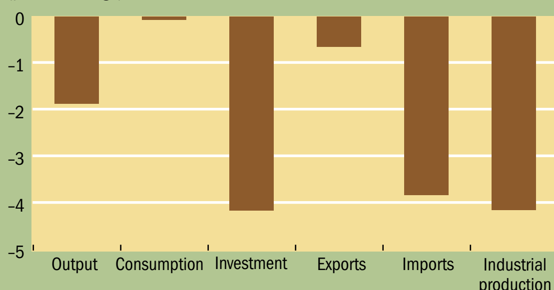
There were 122 completed recessions in 21 advanced economies over the 1960–2007 period. Although this sounds like a lot, recessions do not happen frequently. Indeed, the proportion of time spent in recession—measured by the percentage of quarters a country was in recession over the full sample period—was typically about 10 percent. Although each recession has unique features, recessions often exhibit a number of common characteristics:

- They typically last about a year and often result in a significant output cost. In particular, a recession is usually associated with a decline of 2 percent in GDP (see chart). In the case of severe recessions, the typical output cost is close to 5 percent.
- The fall in consumption is often small, but both industrial production and investment register much larger declines than that in GDP.
- They typically overlap with drops in international trade as exports and, especially, imports fall sharply during periods of slowdown.
- The unemployment rate almost always jumps and inflation falls slightly because overall demand for goods and services is curtailed. Along with the erosion of house and equity values, recessions tend to be associated with turmoil in financial markets.

Recessions are costly

They are characterized by substantial declines in output (real gross domestic product), investment, imports, and industrial production, whereas declines in consumption are smaller.[1]

(percent change)



Source: Claessens, Kose, and Terrones (2008).

[1]The average of 122 recessions in 21 advanced economies that occurred between 1960 and 2007.

What about a depression?

The current U.S. recession is the eighth the country has experienced since 1960. The typical U.S. recession in that period lasted about 11 months, with the longest (in 1973 and 1981) 16 months and the shortest (1980) eight months. The peak-to-trough output decline was on average 1.7 percent, with the single worst recession (in 1973) leading to a slightly more than 3 percent output loss. Although investment and industrial production fell in every recession, consumption registered a decline in only three.

One question sometimes asked is how the ongoing recession compares with a depression, especially the Great Depression of the 1930s. There is no formal definition of depression, but most analysts consider a depression to be an extremely severe recession in which the decline in GDP exceeds 10 percent. There have been only a handful of depression episodes in advanced economies since 1960. The most recent was in the early 1990s in Finland, which registered a decline in GDP of about 14 percent. That depression coincided with the breakup of the Soviet Union, a large trading partner of Finland. During the Great Depression, the U.S. economy contracted by about 30 percent over a four-year period. Although the current recession is obviously severe, its output cost so far has been much smaller than that of the Great Depression. ■

Stijn Claessens is an Assistant Director and M. Ayhan Kose is a Senior Economist in the IMF's Research Department.

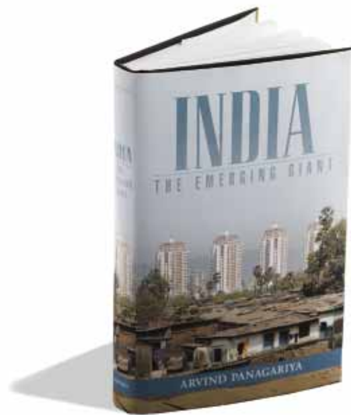
Suggestions for further reading:

Claessens, Stijn, M. Ayhan Kose, and Marco Terrones, 2008, "What Happens During Recessions, Crunches, and Busts?" IMF Working Paper 08/274 (Washington: International Monetary Fund).

———, forthcoming, "American Recessions: Domestic and Global Implications" IMF Working Paper *(Washington: International Monetary Fund).*

BOOK REVIEWS

Demystifying the Hype



Arvind Panagariya

India: The Emerging Giant

Oxford University Press, Oxford and New York, 2008, 545 pp., $39.95 (cloth).

Arvind Panagariya has written probably the best all-around, up-to-date, and accessible book on the Indian economy. It is informed by the analytic apparatus of a leading international trade economist, yet it is packed full of useful real-world detail. It has a comprehensive range—but it links the separate elements into a coherent whole. It is a superlative work of applied economics, and it is also sensitive to India's political economy. It has pointed, punchy policy conclusions: Panagariya is not shy about attacking those he thinks have got it wrong on the Indian economy, and he does so with a powerful combination of analytical argument and detailed evidence. Finally, though the book was written before the current global economic crisis, its fundamental conclusions remain as valid as they were before the crisis.

This decade's Goldilocks global economy (which ended in 2007–08) has encouraged "India hype," and with it a misdiagnosis of India's seemingly successful recent economic performance. India-hype peddlers paint an impossibly glossy picture of the Indian economy. This has very little to do with Indian reality.

One aspect of India hype that has been given a degree of academic respectability by some business school professors and academic economists is the thesis that India is forging a separate successful path to development, in contrast with the traditional comparative-advantage-based development of China and other industrialized Asian economies. At its extreme, this argument holds that India's growth engines are its high-end service and now manufacturing sectors, with their globalizing, world-beating companies. Dani Rodrik and Arvind Subramanian go one step further: they give some credit to past dirigiste policies for laying the groundwork for recent economic success and downplay the role of the post-1991 market reforms in generating better economic performance.

Panagariya attacks these arguments head-on. He highlights Indira Gandhi's disastrous economic policies (from the mid-1960s to the early 1980s), which turned India's back on its comparative advantage in labor-intensive activities and entrenched destructive regulations that are still difficult to dislodge (not least in labor markets). And he gives due credit to pro-market reforms, not just from reform bursts in 1991–93 and 1998–2004, but also in the late 1980s.

Reform gaps

Also threaded through the book is a dissection of India's growth dynamics and nongrowth statics. The vaunted successes in services based on information technology and in manufacturing niches are welcome. But they are merely a high-wage, capital- or skill-intensive drop in India's low-wage, unskilled, labor-abundant ocean. India's growth should be churning in these labor-abundant waters, but it isn't. Agriculture is stagnant, hobbled not just by very high external protection but even more by draconian domestic restrictions that fragment the internal market. Nontradable service sectors—where potential employment generation is huge—are also crippled by domestic restrictions. Backbone service sectors (such as banking, insurance, and retail) suffer from external protection as well. And—crucially—India's glaring development gap is in manufacturing, for all sorts of national and state-level policies conspire to stand in the way of labor-intensive industrial production. Panagariya has no doubt that India needs its Industrial Revolution if it is to grow out of poverty. That means putting impoverished people in the countryside into (initially) low-wage work in mass manufacturing. That is what East Asia has done. But not India.

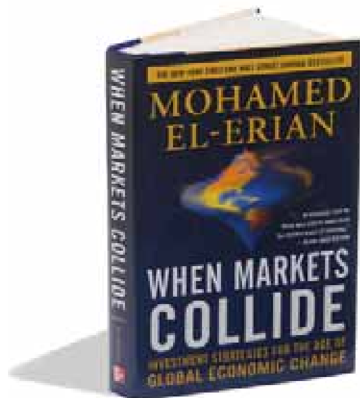
Nevertheless, Panagariya is optimistic about India as an "emerging giant." He believes that market reforms have forward momentum, that they will widen and deepen, and that Indian economic performance will come closer to its potential, to the benefit of a broader cross section of Indians.

I can't say I fully share such optimism—for three reasons. First, the end of the Goldilocks global economy has exposed India's reform deficits and brittle growth foundations. Second, India is now paying the price for a government that since 2004 has not delivered any reforms. Third—and most important—the Indian state, led by its political-bureaucratic elite, remains unreformed. Indeed, state institutions have gotten worse at both the national and state levels. According to Arun Shourie, a former minister and leading Indian commentator, India's race backward as a state "hollowed out by termites" is not compatible with its race forward led by urban professionals in the private sector; the former will drag the latter backward. That remains to be seen. But the upshot is that much-needed market reforms cannot continue to skirt reform of the state itself. Politically, that is the hardest nut to crack.

Razeen Sally
Director, European Centre for International Political Economy, Brussels

Archana Kumar is Book Review Editor.

How We Got Here



Mohamed El-Erian

When Markets Collide

Investment Strategies for the Age of Global Economic Change

McGraw-Hill, New York, 2008, 304 pp., $27.95 (cloth).

Timely, informative, and readable, this book combines a multifaceted analysis of structural transformation in the global economy and financial markets with an action plan for market participants, as well as policymakers. The approach reflects the extensive experience of the author, cochairman of PIMCO, which runs the largest bond fund in the world, and formerly president of the Harvard Management Company and a senior official at the IMF.

The book first summarizes elegantly anomalies and puzzles, giving a snapshot of the symptoms of the transformation, including the famous interest rate conundrum: falling long-term interest rates in the United States even as monetary policy was being tightened. It explores these symptoms' underlying causes—dramatic change in the magnitude and channels of interaction among industrial and emerging market countries, and enormous expansion in the operations of the financial markets. These in turn have a significant bearing on how we should assess market developments, investment decisions, and policy responses.

The author argues convincingly that we should not ignore the anomalies and the information they contain, because they highlight underlying changes in risk and return patterns. The book offers a systematic framework for recognizing and understanding anomalies and turning points, and explains why it is difficult to look for signals within the noise. The author draws on behavioral science disciplines and neuroscience to explain our general inability to internalize rare events, despite their extreme impact. This analysis illustrates well the basis for the Keynesian dictum that "the difficulty lies not so much in developing new ideas as in escaping from old ones." The book identifies a number of specific steps to separate the signal from the noise.

El-Erian uses this framework to explore the general realignment of the global system: it is no longer enough to assess developments in the major industrial economies; the role of emerging markets is also crucial. Moreover, the fundamentals are affected by unprecedented cross-border capital flows, and proliferation of new products and instruments, new financial market participants, and new pools of capital such as sovereign wealth funds. In short, there are more diversified sources of global activity and a wider array of investable funds. He illustrates actual and prospective changes in the drivers of key variables such as growth, trade, price formation, and capital flows that will affect the approaches taken by market participants.

Disciplining investors

The author considers how market participants should position themselves to benefit from the upside and manage the downside, and how to design an asset allocation plan that is consistent with forward-looking realities but also affords portfolio protection. He takes the reader step by step through a disciplined asset allocation process. He argues that investors have to assume greater responsibility for the management of risk than in the past and discusses the need for frequent monitoring of a portfolio's sensitivity to key market risk factors. (There is an enjoyable discussion of tail risks and "Pascal's wager"—the small probability of an event that has enormous consequences—and its implications for buying tail insurance.)

Regarding policy, the author argues that transformations weaken the effectiveness of traditional approaches and instruments, and erode the informational content of traditional indicators. This points to needed changes to traditional approaches. He presents a concrete action plan for multilateral institutions—such as the IMF—that would strengthen their role in a sustainable way.

Given the transformation under way and the uncertainties that "alter in unthinkable ways the configurations of risks and returns," the book provides a powerful analytical framework for charting a course through the thicket of recent and ongoing developments. The proof of the pudding is that the book came out in early 2008 and its predictions have proven all too true. The author warned of the danger of increasing risk through unprecedented leveraging and deregulation, which in turn reflected the scramble for high returns, and the risk of serious market accidents and dislocations as a result of investors' and intermediaries' unsustainable behavior. The speed with which the crisis has deepened and spread, particularly since the Lehman bankruptcy, testifies to the inter-relationships analyzed in this book, as does the recognition that the depth of the global recession will be determined by the extent to which the banking sectors and financial markets stabilize in the near term. The book also clearly anticipated the limitations of policymakers in such an environment and the compounding influence of potential policy mistakes.

In short, the book should be required reading in these unprecedented times to understand where we are, how we got here, and where we might be headed.

Manmohan S. Kumar
Assistant Director
IMF Fiscal Affairs Department

DATA SPOTLIGHT

Latin America's Debt

Lower external debt ratios help Latin America face the global crisis better

EXTERNAL debt has risen in many countries over the past five years, particularly in Europe. But in Latin America, external debt as a share of GDP has fallen significantly, according to IMF–World Bank data. External debt—the amount owed to nonresidents by residents of an economy—for 10 Latin American economies has declined, on average, from 59 percent of GDP in 2003 to 32 percent in 2008.

But this does not imply that Latin America is immune to the current crisis. Like other regions, Latin America faces many challenges, but in an environment of global financial strains, having reduced external debt ratios is one factor enhancing the region's resilience to the current crisis.

Composition of external debt. In Europe and Asia, a large portion of external debt is owed by banks. In 2008, banks owed 54 percent of foreign borrowing in Europe and 45 percent in Asia. In contrast, in Latin America, banks' debt represents a relatively small share (16 percent), and the shares of external debt owed by governments and the nonbank private and public sectors are larger than in Europe and Asia.

About the external debt database

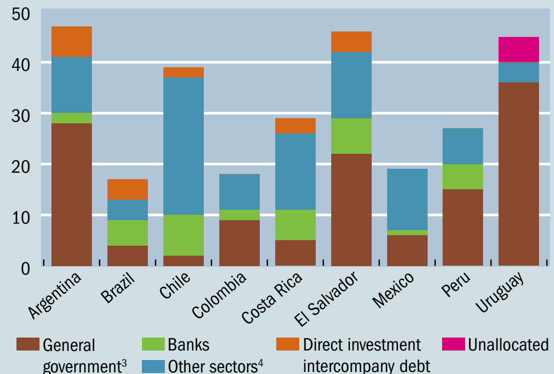
Most data are from the Quarterly External Debt Statistics (QEDS) database, jointly developed by the IMF and the World Bank in 2004, mainly for countries that subscribe to the IMF's Special Data Dissemination Standard (SDDS). Currently, the QEDS database includes detailed external debt data (by instrument and maturity, among other breakdowns) for 58 SDDS subscribers. Work is under way to extend the QEDS to General Data Dissemination System (GDDS) countries. As of February 2009, 40 GDDS countries have agreed to provide data to the QEDS database in the near future. The QEDS database is available at www.worldbank.org/qeds.

Latin America has reduced its external debt from 59 percent of GDP in 2003 to 32 percent of GDP in 2008.[1]

	Total debt (million dollars)	Debt as percent of GDP	
	September 2008	September 2008	December 2003
Argentina[2]	155,842	46	127
Brazil	272,966	16	43
Chile	68,459	38	58
Colombia	45,525	18	48
Costa Rica	8,814	29	32
Ecuador	17,752	32	59
El Salvador	10,369	47	57
Mexico	211,904	19	23
Peru	35,864	27	49
Uruguay	12,494	44	98

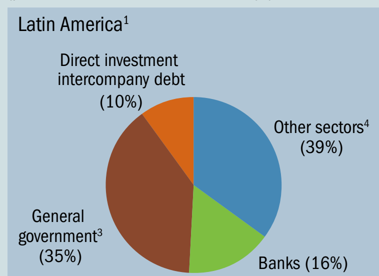
In Latin America, most of the debt is owed by the government and other nonbank sectors.[1]

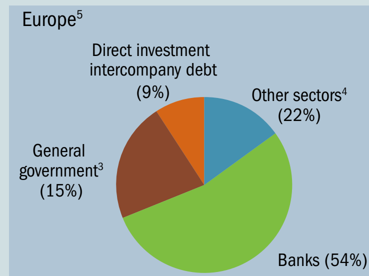
(percent of GDP, 2008:Q3)

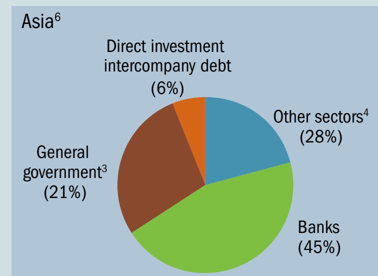


In Europe and Asia, most of the debt is owed by the banking sector.

(percent of total external debt, 2008:Q3)







Sources: Quarterly External Debt Statistics database; national authorities; IMF, *International Financial Statistics*; and IMF, *World Economic Outlook* (WEO) database.

Note: 2008 GDP figures based on WEO estimates.

[1]Refers only to Latin American subscribers to the SDDS (sectoral breakdowns not available for Ecuador).

[2]Includes $27.9 billion in debt not presented for exchange during Argentina's 2005 debt restructuring.

[3]Includes monetary authorities.

[4]Includes nonbank financial corporations, nonfinancial corporations, households, and nonprofit institutions serving households.

[5]Europe includes 35 SDDS subscribers.

[6]Asia includes 10 SDDS subscribers.

Prepared by Eduardo Valdivia-Velarde and Lily Seo of the IMF's Statistics Department.

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Due Diligence

PERSPECTIVE

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