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FINANCE and DEVELOPMENT

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June 2009

Russia's Reversal of Fortune

Crisis Shakes Europe

Stark Choices Ahead

Collier's Bottom Billion

The Postcrisis World

Exotic Derivatives

Finance & Development, June 2009 $8.00
MFIEA2009002

Finance & Development is published quarterly in English, Arabic, Chinese, French, Russian, and Spanish by the International Monetary Fund.
English edition ISSN 0015-1947

Subscriber services, Changes of address, and **Advertising inquiries**
IMF Publication Services
700 Nineteenth Street, NW
Washington, DC, 20431, USA
Telephone: (202) 623-7430
Fax: (202) 623-7201
E-mail: **publications@imf.org**

Postmaster: please send changes of address to *Finance & Development*, International Monetary Fund, Washington, DC, 20431, USA.
Periodicals postage is paid at Washington, DC, and at additional mailing offices.
The English edition is printed at United Lithographers Inc., Ashburn, VA.

FINANCE & DEVELOPMENT A QUARTERLY PUBLICATION OF THE INTERNATIONAL MONETARY FUND
June 2009 • Volume 46 • Number 2

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FROM THE EDITOR

Testing Times for Europe

THE economic downturn sparked by the financial crisis that began in mid-2007 has become a global, synchronized recession. Tighter financial conditions, falling wealth, and greater uncertainty have triggered a sharp decline in all types of demand. In parallel with the rest of the world, Europe has entered a deep recession, and there is a risk that it might become even worse.

This issue of *F&D* looks at the harsh toll of the crisis on both Europe's advanced and emerging economies because of the global nature of the shocks that have hit both the financial sector and the real economy, and because of Europe's strong regional and global trade links.

Marek Belka, Director of the IMF's European Department, writes in our lead article that beyond the immediate need for crisis management, Europe must revisit the frameworks on which the European Union is based because many have been revealed to be flawed or missing. Most pressing is the need to overhaul the EU's financial stability framework.

The crisis is also testing the new central and eastern European members of the EU. But in many respects, one key European institution has proved its mettle—the euro. Both Charles Wyplosz and Barry Eichengreen discuss the future of the common currency.

Also in this issue, IMF economists rank the current recession as the most severe in the postwar period; John Lipsky, the Fund's First Deputy Managing Director, examines the IMF's role in a postcrisis world; and Giovanni Dell'Ariccia assesses what we have learned about how to manage asset price booms to prevent the bust that has caused such havoc. In addition, we talk to Oxford economist Paul Collier about how to help low-income countries during the current crisis, while Donald Kaberuka, President of the African Development Bank, writes about how African policymakers can prepare to take advantage of a global economic recovery.

Jeremy Clift
Editor-in-Chief

DEPARTMENTS

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IN BRIEF

Private schooling

There is growing evidence that contracting with the private sector to deliver education has benefits, including greater efficiency, increased choice, and wider access, says a new World Bank report titled *The Role and Impact of Public-Private Partnerships in Education.* This finding holds true particularly for households that have been poorly served by traditional delivery mechanisms.

The report describes how developing countries increasingly use private education organizations—such as faith-based organizations, local communities, CSOs, private for-profit institutions, and not-for-profit schools—to help deliver education services. Such partnerships are demonstrating success in boosting education access, equality, and student learning, the study finds.

Since the onset of the global economic crisis, poor countries have faced threats to their education systems, prompting the World Bank to double its education financing this year in low- and middle-income countries to more than $4 billion.

IMF helps protect most vulnerable

The IMF is trying to ensure that economic adjustments taken to combat the impact of the global financial crisis also take account of the needs of the most vulnerable by developing or enhancing social safety nets.

Social spending is being preserved or increased wherever possible. For instance, in Pakistan, expenditure will be increased to protect the poor through both cash transfers and targeted electricity subsidies. About a third of programs in low-income countries include floors on social and other priority spending.

Structural reforms are designed in a way to protect the most vulnerable. For instance, in Hungary, low-income pensioners were excluded from benefit reduction. The IMF is working closely with the World Bank and donors to identify external financing for social protection and to promote social safety net reform.

Events in 2009

June 25–26, Basel, Switzerland
Bank for International Settlements' Eighth Annual Conference

June 22–24, Seoul, Korea
World Bank's Annual Bank Conference on Development Economics

July 8–10, L'Aquila, Italy
Group of Eight Summit

August 19–21, Jackson Hole, Wyoming, USA
Federal Reserve Bank of Kansas City's Annual Economic Symposium

September 10–12, Dalian, China
World Economic Forum's Annual Meeting of the New Champions 2009

October 6–7, Istanbul, Turkey
Annual Meetings of the IMF and the World Bank

November 8–10, New Delhi, India
World Economic Forum's India Economic Summit

November 13–14, Washington, D.C., USA
IMF Tenth Annual Jacques Polak Research Conference

November 14–15, Singapore
Asia-Pacific Economic Cooperation Economic Meetings

Do the math

The Bank for International Settlements, the European Central Bank, and the International Monetary Fund have jointly released the first part of the *Handbook on Securities Statistics*, which covers debt securities issues.

The handbook is the first publication of its kind dealing exclusively with the compilation and presentation of securities statistics. The aim of the publication's first part is to assist national and international agencies in the production of relevant, coherent, and internationally comparable securities statistics for use in financial stability analysis and monetary policy formulation.

The handbook may be gradually extended to cover holdings of debt securities as well as issues and holdings of other types of securities. To download the publication, visit *www.imf.org/external/np/sta/wgsd/index.htm*

IMF overhauls lending practices

The IMF has completed a major overhaul of its lending to strengthen its capacity to prevent and resolve crises. The reforms are redefining the way the IMF engages with its member countries.

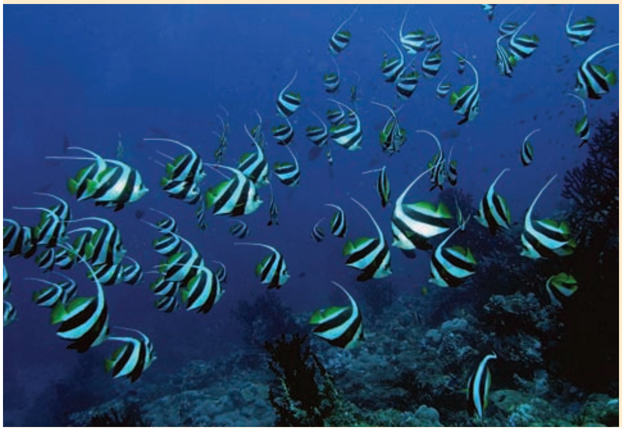
As part of the reform package, the IMF has established a new credit line for well-run emerging market economies. Disbursements are not phased and there are no conditions to meet once a country has been approved for the IMF's Flexible Credit Line. To date, Colombia, Mexico, and Poland have been provided credits totaling $78 billion.

The IMF has also eliminated procedures that have in the past hampered dialogue with some countries, and prevented others from seeking financial assistance because of the perceived stigma in some regions of the world of being involved with the Fund. The new lending framework focuses on the underlying objectives of a country's structural reform program rather than on specific actions that need to be adopted according to a specific deadline. The new rules will apply to all the IMF's loan programs, including those with low-income countries.

In a related development, the Group of Twenty (G-20) advanced and emerging market countries agreed in April to triple the IMF's resources to $750 billion and to double money for concessional lending to low-income countries. This expanded pool of loanable resources, together with the lending reforms, will enable the IMF to play a larger role in tackling the ongoing global crisis.

At the beach

Environmental experts from 120 countries met in Indonesia in mid-May for a major conference on coastal and marine resources management, followed by the first Leaders' Summit of the Coral Triangle Initiative.



The inaugural World Ocean Conference was designed to focus global attention on measures to protect the health of marine ecosystems and the important roles they play in regulating global warming.

At the summit, leaders of six Asia and Pacific nations—Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor-Leste—endorsed an agreement that lays out a plan of action to ensure the sustainability of their shared coastal and marine resources.

"Both the World Ocean Conference and the Coral Triangle Initiative are helping the region to collectively address critical threats to marine and coastal resources posed by climate change, unsustainable fishing methods, and land-based pollution," said Asian Development Bank (ADB) Vice President Lawrence Greenwood. "The ADB strongly supports these efforts."

The ADB is serving as the lead agency in mobilizing domestic and international financial resources for this regional cooperation program, as well as providing technical and financial support.

Bridges to growth

The World Bank has launched two multibillion dollar infrastructure investment initiatives to help developing countries withstand the global financial and economic crisis.

The World Bank's Infrastructure Recovery and Assets Platform and the Infrastructure Crisis Facility, set up by the International Finance Corporation (the World Bank Group's member that focuses on private sector investments), will mobilize more than $55 billion over the next three years for infrastructure projects in developing countries.

The global financial crisis has depressed investments in infrastructure projects, particularly in developing countries. Infrastructure projects are widely recognized as key to creating jobs and to laying the groundwork for future productivity and growth. The catalytic role of infrastructure in poverty reduction has also been recognized in the UN Millennium Development Goals, which cite access to water supply and sanitation service as targets to be achieved by 2015.

Still the Bottom Billion

Glenn Gottselig interviews Oxford economist ***Paul Collier***

F&D: **In a recent presentation to IMF economists, you spoke about the macroeconomics of the bottom billion. What do you see as the macroeconomic challenges that these countries have in common?**

Collier: I think the countries of the bottom billion, the low-income countries, are distinctive not just in terms of having on average fewer good policies than the middle-income countries; they've got different problems. So good policies in those environments would just look different from good policies in middle-income environments, and that's not sufficiently recognized. Let's start with what the key differences are between a low-income economy and a middle-income economy. Out of those differences will emerge different strategies and different responses.

The overarching difference is that these countries are desperately capital scarce. The implication of that is that they need to go through a prolonged phase of high investment. For the moment, in Africa the average investment rate to GDP is less than 20 percent, whereas to catch up, to converge with other economies, it needs to be over 30 percent. So they must move from under 20 to over 30. That's a big change.

F&D: **How can we do that?**

Collier: It means an agenda of raising the capacity to invest productively. I call that a phase of investing in investing. It is something that has partly a macroeconomic agenda, but also a microeconomic agenda. If we just say it's hopeless, the country doesn't have a capacity to invest, it drives them into what I call the economics of Polonius: "Neither a borrower nor a lender be." The economics of Polonius was always mocked. In *Hamlet*, Shakespeare set Polonius up as a pompous fool, basically. For low-income countries, neither a borrower nor a lender be would be ruinous, because they could never finance the move to investment rates above 30 percent.

Of course, in moving up investment rates and borrowing, we don't want to repeat the debt crisis, so investment has to be done much better than it is at the moment. That is the strategy for investing in investing, building the capacity to make good investments. And it is something that the Fund can't do on its own. It's largely a microeconomic agenda, and so the macro depends upon the micro. The IMF needs to work with the agency responsible for that micro agenda, which is largely the World Bank. Of course, in principle the IMF does this, but in practice not enough. The two institutions need to work on a common core agenda of investing in investing, which is something that might take about three years working with governments to get the capacity for good investment decisively raised.

So capital scarcity is the overarching defining feature of low-income countries, but it's not the only distinctive feature. Typically, they are resource rich, and this raises issues also of savings and investment. Countries are depleting their natural assets as they extract resources, and because commodity prices are very volatile, the revenue stream is very unpredictable. Such circumstances call for savings and investment strategies that are distinctive to low-income countries.

The objective of reducing absolute poverty—the only objective for the bottom billion—is one from which we've been diverging for 40 years from the rest of mankind. The primary focus must be on convergence. They've got to catch up; that means they must grow faster than other developing countries. And for that they need investment rates that are at least commensurate with the successful developing countries.

A third feature that makes these low-income countries distinctive is that they need to live down the past. The past has usually been rough, and so these countries often lack good reputations, especially with investors. Given this situation, they need commitment technologies—by which I mean some mechanism through which these countries commit beforehand to certain actions to be taken later and, thus, can build credibility. Part of the IMF's core business is providing commitment technologies via conditions inherent in lending programs.

Finally, there is typically low capacity to actually implement public expenditure to adequate standards of honesty and efficiency. So building systems that actually achieve that is part of the agenda for both the Fund and the World Bank in the low-income countries.

"The crisis is an opportunity to refocus policy priorities toward building long-term capacity for investment in low-income countries."

***F&D:* As governments of advanced economies around the world shift their spending priorities to deal with their slowing economies, how important is it that aid continues to flow to developing countries?**

Collier: Now is the time for public resource transfers to the poorest societies, because private resource transfers are falling. Private resource transfers have been in two forms, remittances and private investment, and both are falling fast. For the low-income countries, this crisis was not of their making, but they're suffering from it. This was the sort of situation for which the public agencies for development were created. Looking back to the late 1940s, it was a somewhat analogous time, where there was no hope that private capital would rebuild Europe, and so public institutions were created to channel public money into that task. And now it's a different set of countries that need help and international public efforts. That's the right solution for the present time.

***F&D:* In recent months the G-20 has taken on a more prominent role as a forum for the major governments. Do you see this as a positive development for the bottom billion?**

Collier: Very much so. What has happened over the years is that the group of countries that are credibly part of the solution to international problems has expanded enormously. Sixty years ago it was all down to the United States. Then Europe came from being a problem to being part of the solution. And now a whole new class of countries, like Brazil, China, South Africa, are part of the solution. I've just been working in Haiti, where 9,000 Brazilian peacekeeping troops have kept order and peace for the last five years. That's a huge contribution by Brazil to the poorest country in the Western Hemisphere.

The G-20 recognizes, rather belatedly, the reality that we've thankfully moved from the G-1, which was true 60 years ago, to the G-8, and now the G-20. That's something to celebrate, and it's something that institutional architecture has also been late to recognize.

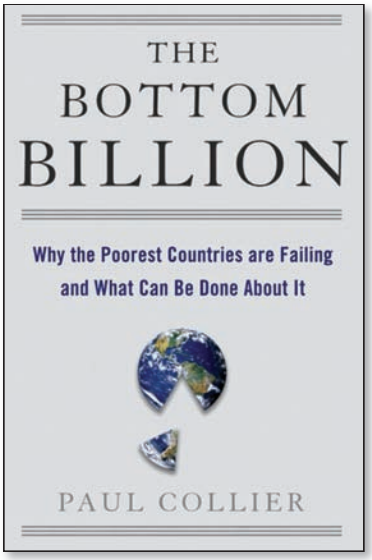
***F&D:* What's the IMF's role in helping low-income countries, in your view?**

Collier: Good policies in low-income countries are not going to look the same as good policies in developed countries, and so there is no model up there in the sky called "soundness" to which we all aspire, with the stratospheric clouds being the G-8 and the very low clouds being the low-income countries. That's not our world.

I think that there are three different roles for the IMF. First, for governments of low-income countries, the Fund is a source of money. Second, the Fund provides a commitment framework for donors through its programs. And the third role, which I think is the most important, is one of providing a conceptual and coordination framework to assist the many different players in the low-income development field, including various agencies and the different governments.

But my larger point is that the right macro answers depend on resolving the micro and institutional issues. The right macro answers, taking the micro and institutional as given—which is what the IMF has been doing—are the wrong macro answers for development.

The implication of that is that the IMF cannot walk away from the micro and institutional agendas. The IMF obviously cannot do everything, but it has to learn how to merge its low-income work with the other agencies that cover the micro and institutional angles. You need joint teams, codirected around common directives, particularly with the World Bank.



First published in 2007, *The Bottom Billion* challenged conventional views on development and aid.

***F&D:* What are some of the obstacles to productive high levels of investment in the public sector?**

Collier: One is the identification of projects and another is the implementation of projects. We know that the identification of projects is very badly done. There is, of course, an economic technology for identifying projects, called cost-benefit analysis, but I often wonder whether that's a realistic approach and whether there is a more effective shortcut.

It's not even always a desirable approach, because cost-benefit analysis of projects works on a discrete, piecemeal basis. Yet the business we're in with these low-income countries is the business of trying to turn them into middle-income countries, and we try to do that quite quickly. And the piecemeal approach, looking at one project at a time, doesn't really capture all of the effects that are external to a single project.

Take something like the big arterial transport links that would get landlocked Africa better stitched to the coast. In 40 years, those transport links have not been done. Those investments are not being made. Why? Because even when we get to cost-benefit analysis, and usually we don't, but even when we do, they fail the cost-benefit tests, which are done nation by nation and take all of the other parts of the economy as given. I think it makes more sense to take a leap and ask what is typical of public infrastructure in middle-income countries, which is where we have got to get to. And given we are so far off sensible public investment planning at the moment, maybe we need this type of a shortcut.

***F&D:* What determines success or failure?**

Collier: I've just been analyzing the data set of all World Bank projects, thousands of them, to see what's the difference between success and failure. In particular, I looked at postconflict environments. And the answer is that supervision is much more important in determining the difference between success and failure.

Now admittedly, postconflict environments are at the extreme end of low-income countries. After a conflict, the private sector has retreated during conflict away from anything that's formal. During conflict the state is predatory, and so the private sector learns to escape; it informalizes. Postconflict reconstruction is partly about coaxing the private sector back into formal structures, and if you hit the formal sector with high taxation because you're trying to build revenue too fast, you retard that more fundamental process of rebuilding the postconflict economy.

In a postconflict environment, there are some issues common to both the public and private sectors, and a key one is the high cost of capital goods in low-income countries. These capital goods include structures produced by the construction sector. In low-income countries with low investment rates, the construction sector is small, and again, postconflict is an extreme example. During conflict the construction sector withers away because nobody's doing construction. The society is focused on destruction. And so, once conflict ends, you inherit a tiny construction sector. But what you desperately need in a postconflict environment is reconstruction. And so the intense demand for reconstruction collides with a tiny construction sector, and what you get is a very steep supply curve in the construction sector.

This is microeconomics with macro implications, because what it means is that even if you spend a lot on investment, public or private, you don't buy very much. Your spending gets dissipated in marching up that steep supply curve. And so a policy priority in low-income countries is to flatten that construction supply curve.

***F&D:* How do you do it?**

Collier: Again, it's coming down from macro toward micro issues and involves looking at the chain of production in the construction sector. Often in these environments there are legal bottlenecks that prevent access to land for construction. There are bottlenecks in material imports—cement is a classic bottleneck. There are bottlenecks in skills—a minimum level of construction skills is needed, and that means investing in the education capacity that builds those skills. And finally, you need organizations—firms that specialize in construction.

Typically, there is somewhat of a bypass of the domestic construction sector by bringing in foreign construction firms, and that's throwing the baby out with the bathwater because potentially the construction sector can generate a lot of employment in these economies; in postconflict situations, that's enormously valuable. In technical terms, the shadow wage of young men in postconflict environments is negative. It's worth spending money employing them even if they were to do nothing. But actually you can get them productively employed in the construction sector.

F&D: **What about resource-rich developing countries?**
Collier: This is the area that I've been working on probably the most for the last few months. Resource-rich countries are distinctive in that natural assets pose problems of depletion and problems of price shocks. So depletion and volatility go hand in hand with resource riches, and each has implications. The depletion of natural assets obviously has implications for savings. As you run down one set of assets, you need to build up some offsetting asset. Maybe not one for one, but you certainly need to build up, and that implies that for the resource-rich countries, the savings rates need to be even higher than for the other low-income countries.

I've suggested that the typical low-income country should be investing something like 30 percent of GDP. And for low-income countries that are depleting natural assets, it should be higher than that. In what form do these countries save? Low-income countries are not Norway. They are not capital abundant. They don't have a lot of capital per worker. On the contrary, they have the lowest capital per worker on Earth, and so evidently they need to use the savings toward the capital stock in the country. We need a phase of investing in investing, and this goes back to my earlier point. An investing-in-investing phase is even more important in the resource-rich low-income countries.

Now, how to manage volatility? Well, the standard approach is liquid savings, but I have come to the conclusion, fairly reluctantly, that the resource-rich low-income countries have no choice but to take the volatility within the real economy rather than trying to smooth it through sovereign liquidity funds. I don't want to take that to the extreme because that would eliminate entirely some role for liquidity funds, but my point is that the objective should be much more modest than actually stabilizing public spending.

If we accept that public spending is going to be volatile, into what part of public spending, investment, or consumption should the volatility be channeled? And here the modern economics textbooks instruct us that it is a bad idea to have volatility in public consumption; there is such a thing as habit formation, so that bringing down public consumption is socially costly once habits are formed.

Volatility in investment is not as bad, because you can have quite big fluctuations in investment, and they translate into only very tiny fluctuations in the capital stock. They stabilize public consumption, and in so doing they pretty closely stabilize the capital stock, but investment is left to fluctuate.

Now, the low-income countries still must do this without messing up the rate of return on investment, and that complicates the investing-in-investing agenda because, for the resource-rich countries, it means you've got to have a capacity to change the investment rate. But remember, they will be fluctuating around a high rate of investment, say 35 percent. Maybe at the most extreme, they will be moving between 45 percent and 25 percent. That 20 percentage point swing is less disastrous than moving between 19 percent and minus 1.

F&D: **How badly has the global economic crisis affected low-income countries?**
Collier: The main impact is on the public sector through drops in commodity prices and corresponding drops in revenue. And in my own very recent work, the severity of a falling commodity price is, through its implications for GDP, dependent upon prior structural policies. So it is not just a matter of how a country responds after the fact—if the country is shock prone, it can design policies so that it reduces the macroeconomic consequences of commodity price falls. The micro agenda that seems to work there involves freeing up firms to be able to enter quickly and exit quickly. Using the database from the World Bank's *Doing Business* surveys, this is what we find. Where countries have easy entry and exit for firms, the consequence of a falling commodity price is much smaller for GDP.

The money that the G-20 has come up with, to be channeled through the IMF, is ostensibly, I suppose, for balance of payments support. I think the balance of payments support should be directed toward supporting the public sector increasing its fiscal deficit. Then the question is, what does that imply for different parts of public expenditure?

If investment were optimal, then, as I alluded to earlier, these countries would take the shock by letting investment fall. Unfortunately, investment in the low-income countries isn't anywhere near optimal. It is far too low, and so they are in a dilemma. The strategy of taking the shock on by reducing public investment takes us in precisely the wrong direction for the longer term. Where public recurrent expenditure has recently risen, then it seems obvious that it should be brought down again before habits are formed. So before countries get used to these higher levels of public consumption, public consumption should be brought down. Public investment should be protected.

More radically, at the same time as increasing the fiscal deficit, I think there's a case for shifting the composition of public spending quite sharply from consumption to investment. This goes back to the commitment problem. These are low-credibility environments, and in low-credibility environments, raising the fiscal deficit while cutting investment is easily construed as a signal of populism. The right response is to counter the potentially damaging signal of an increase in the fiscal deficit with a robust signal that this is a government that is trying to protect the future by increasing investment and lowering public consumption.

Finally, a negative shock is often an opportunity for major policy change. Crisis is opportunity. To my mind the central opportunity that has to be seized is for governments to adopt this investing-in-investing concept and get serious about trying to raise the capacity to invest. The crisis is an opportunity to refocus policy priorities toward this building of the long-term capacity for investment. ■

Paul Collier is Professor of Economics at Oxford University and Director of the Center for the Study of African Economies. Glenn Gottselig is on the staff of F&D.

EUROPE

Europe Under Stress

The global economic crisis is testing the cohesion of the European Union

Marek Belka

THE global financial crisis has jolted Europe's historic journey toward "an ever closer union." For many years, the great European project progressed smoothly, adding new members, eliminating the barriers that divide its people, and delivering greater prosperity. This crisis is its first major test, revealing framework flaws that the good years had covered up. Although national and regional responses to the crisis have grown more coordinated over time, it is still too little and too late. Will European institutions and policymakers be able to respond and adapt to keep moving toward "more Europe" or will the result be "less Europe," or indeed "many Europes"? The choices made during this crisis will shape Europe's destiny for the foreseeable future. The problems differ in the west and in the east, but many, indeed the most important, challenges must be tackled jointly.

Financial to-do list

Advanced Europe is experiencing the worst recession since World War II. Decisive and unprecedented policy action has helped prevent an outright meltdown of the financial sector and even more brutal consequences for output, but the outlook is still bleak and the eventual recovery will likely be tepid and fragile. Beyond the immediate need for crisis management, Europe must revisit the frameworks on which it is based, because many have been revealed to be flawed or missing.

Most pressing is ***the need to overhaul the European Union's financial stability framework***. This is critical to prevent future financial crises and to minimize the costs when they happen. Although policymakers have generally reacted swiftly to crises, countries have often pursued different solutions to similar problems, causing difficulties for others.

Deposit guarantees are a case in point. Prompted by the crisis, many countries increased their guarantees, with some moving cautiously and others deciding to provide unlimited coverage. This distorted competition affected deposit allocations and led to cross-border tensions between policymakers—most important, however, it undermined public confidence in the European crisis response. And although attempts have been made to address these issues, more needs to be done. For instance, the agreement on deposit insurance specifies a minimum level but not a maximum, which would help address competition issues.

Europe's regulatory and supervisory frameworks have lagged financial market integration. The current framework, while slowly evolving toward a more European solution, is ill equipped to adequately anticipate systemic risks. Preventing

Girl walking past a shop window in Riga.

Europe's financial markets from splitting up along national boundaries requires "more Europe," especially in terms of regulating, supervising, and agreements on sharing the costs of supporting cross-border institutions.

Another lesson from the crisis is that ***there is an urgent need to establish Europewide macroprudential oversight*** to avoid the kind of boom and bust cycle that is afflicting the global economy now. The recent proposal by the European Commission—based on a report prepared by former IMF Managing Director Jacques de Larosière—would be an important step toward meeting these goals, but much more is ultimately needed.

More immediately, ***Europe's financial system needs to make more rapid and better coordinated progress on loss recognition, ring-fencing legacy assets, stress testing, and recapitalizing viable institutions*** while resolving others. Without such measures to restore the health of the financial sector, the macroeconomic effect of the support provided by governments and central banks across the region will be stymied.

Euro area under pressure

The crisis has exacerbated strains within the euro area. Many of the euro area's 16 member countries have been running large current account and fiscal deficits, coupled with anemic growth and high debt ratios. These countries are now suffering from more difficult financing conditions and even worse growth prospects. This has prompted some analysts to question whether the euro area can stay together, and others to call for greater "solidarity," such as issuing euro area bonds for national financing or greater federal fiscal powers. These are complex and sensitive issues, but if they are not tackled, they could become highly disruptive.

Reinvigorated structural reform would ease these strains and help Europe confront growing social pressures in the wake of the crisis. In the context of the European Union's Lisbon Agenda for improving competitiveness, Europe has made important progress in liberalizing and opening its markets, resulting in increased productivity and employment. But progress has slowed in recent years. This is particularly unfortunate, because the crisis threatens to undermine future growth by forcing people out of the labor market and dampening private investment. What is needed is a second generation of structural reforms to reinvigorate Europe's economies.

Crises sometimes weaken politicians' resolve, but they can also be a call to arms and provide an opportunity to overcome old obstacles. Consider the comprehensive reforms in Italy after the 1992–93 Exchange Rate Mechanism (ERM) crisis, the shake-up in the United Kingdom after the "winter of discontent" in the late 1970s, and the reform drive in Ireland and the Netherlands in the early 1980s following macroeconomic deterioration and global supply shocks.

High on the agenda now should be increasing competition in still-protected sectors and making labor markets more flexible and less divided between well-protected insiders on permanent contracts and vulnerable outsiders on temporary contracts. Both theory and experience show these reforms work best if implemented simultaneously, with labor benefiting from lower prices, firms from lower costs, and government accounts from faster growth and higher tax revenues.

Balancing the budget

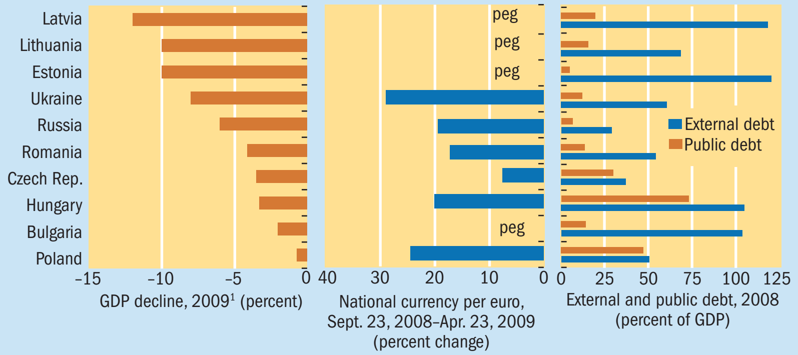
The cost of the recession, the fiscal stimulus applied to beat it, and the support given to the financial system, highlight ***the need to strengthen Europe's fiscal framework***. Although the Stability and Growth Pact (which imposes a ceiling on budget deficits) and national fiscal rules have fostered some improvement in fiscal positions, it has not been enough. Going into this crisis, some 10 years after the euro's introduction, too many countries were too far away from balanced budgets and moderate debt levels. Coming out of the crisis, these ratios will rise to alarmingly high levels. With financial markets set to scrutinize fiscal performance once again, potential growth expected to fall, and population aging to intensify, Europe's public finances need to improve quickly and in a lasting fashion so that it will be able to weather future crises. This can really be achieved only through political will, but changing the fiscal framework could help. An important step in this direction would be to make medium-term deficit and debt targets more binding and macroeconomic projections more realistic.

From boom to bust

Emerging Europe is also in deep crisis. The region has evolved rapidly since the breakup of the Soviet Union, with ever closer financial and trade links with advanced Europe bringing about growth and income convergence. But this integration, especially the region's heavy reliance on capital inflows, has also made it more vulnerable (see chart).

Varied picture

Countries in central and eastern Europe have been affected very differently by the crisis.



Source: IMF.
[1]Forecast as of April 2009, World Economic Outlook database.

The apparent ability of new EU members to attract cheaper funding, the so-called halo effect (see "Losing Their Halo," in this issue), has disappeared. Gone too is the notion that bank-based external financing will guarantee more stable capital inflows. Countries with higher inflation and current account deficits or those that funded a credit boom by taking cross-border loans are suffering the most. And the recovery will depend not only on making the right policy choices at home, but also on developments and choices made in the rest of Europe.

In the short run, ***macroeconomic policies should reflect the fact that Europe, from east to west, increasingly acts like one economy***. Sharing the benefits of integrated markets goes hand in hand with sharing the shocks that affect others and now reverberate through feedback loops of trade, financial markets, and cross-border banks. For instance, deflating credit markets in emerging Europe now affect advanced economies through the exposure of parent banks and the trade repercussions caused by possible exchange rate volatility. This calls for coordination of macroeconomic policies, but also for more specific measures, such as extending European Central Bank support for emerging market currencies—for example, through currency swap arrangements—and a more regional approach to debt management to avoid clustering in the sovereign debt market.

Customized support

Some countries may suffer further delays in returning to growth. Others, especially those that started out with sounder domestic policies, are more resilient, but remain at risk from the fallout of the global recession. The IMF is closely involved in the region, providing financial support and policy advice in cooperation with the European Union and other multilateral and regional partners. The IMF has tailored its support to meet the different needs in the region by:

- Extending financial support to those hit hardest by the crisis, helping them ease the extent of fiscal adjustment and repair banking systems. Countries that currently have IMF-supported programs in place include Belarus, Hungary (see box), Latvia, Romania, Serbia, and Ukraine.
- Providing insurance to "innocent bystanders" with sound economic fundamentals but still at risk of being affected by spillovers from the crisis (for example, Poland).
- Providing advice to countries that do not need financial support.

The crisis has left emerging Europe with a vexing list of problems. Some of these are domestic, but many others are part of the European agenda of unresolved issues. Constrained by fixed exchange rates, high foreign currency debt, or both, most countries must tread carefully, keeping their deficits under control and limiting their monetary policy response. As elsewhere in Europe, the financial sector to-do list is long and includes in many cases the need to recapitalize the banking system. Given the dominance of cross-border banks owned by parent banks based in advanced European countries, this problem clearly goes beyond emerging Europe to encompass Europe as a whole. Its solution requires an update of the Europewide framework for financial supervision and regulation.

Adjusting to a postcrisis world

In the longer run, the more fundamental question is about emerging Europe's business model. The crisis response, as crucial as it is in the short run, is creating "exit problems" in many areas—from central bank liquidity operations to government guarantees in the financial and real sectors.

But perhaps the most pressing postcrisis problem concerns the question of how emerging Europe, after so many years of abundant capital inflows, will adjust to the realities of the postcrisis world. These massive capital movements allowed the accumulation of large current account deficits and softened budget constraints for fiscal policy and the private sector alike, resulting in unsustainable credit growth in many cases. Of course, sooner or later, foreign capital will again be drawn to what will remain a relatively fast-growing region, but the flows are likely to be small compared with the past.

Adjusting to this new reality will not be easy. It will require the right mix of macroeconomic and structural policies to earn and keep the trust of international financial markets and safeguard the growth potential of Europe's emerging economies. Although often painful, governments will have to embrace and facilitate structural change, including through ***measures to improve the business environment and labor mobility, enabling countries to diversify away from producing nontradables to tradables***. For current and prospective EU members this ties in tightly with the European Union's mission to integrate European labor and goods and services markets and the much-needed rejuvenation of the Lisbon Agenda. Governments across emerging Europe also need to strengthen their fiscal accounts and invest in financial governance in concert with the rest of Europe.

Facing the crisis: Hungary

Hungary was one of the first emerging economies in Europe to turn to the IMF when the global financial turbulence worsened in late 2008. Over much of the past decade, large current account and fiscal deficits had led to high levels of external and government debt. The capital inflows that funded the current account deficits spurred rapid credit growth, much of which was denominated in foreign currencies. In October 2008, the government suddenly faced difficulties in issuing debt, banks struggled to obtain foreign currency funding, and the exchange rate depreciated sharply.

Hungary's economic program, which is being supported by the IMF, the European Union, and the World Bank, aims to strengthen government finances and maintain financial stability, so as to provide the foundation for a robust and sustained improvement in living standards. Thus far, thanks to the implementation of macroeconomic and financial policies in line with the program, government and external financing have stabilized, and a severe contraction of credit to the economy has been avoided. Looking ahead, the consistent implementation of sound policies provides the best opportunity for Hungary to weather its current difficulties.

Rethinking the euro area admission rules

One way to help this process is by ***resurrecting a European framework that seems to have fallen victim to the crisis: the euro area accession process***. The euro, like a fixed exchange rate, may not be for everyone. But clarifying the road map to the euro can help countries with sound policies navigate the postcrisis world. Needless to say, this will not be easy. What is needed is a joint effort and the close cooperation of the countries wanting to join, current euro area members, the European Union, and the European Central Bank.

More fundamentally, there are trade-offs between eastern European countries' aspirations and EU rules.

If it hadn't been for existing EU commitments and objectives, eastern European countries might have chosen different policies in response to the crisis. For example, some countries might have decided to regulate financial subsidiaries and bank branches more closely. Others, with fiscal room to maneuver, might have been able to enact more countercyclical fiscal stimulus, as most euro area countries have done.

Longer term, there may be a case not only for clarifying the road map for euro accession, but for revisiting the accession criteria themselves, which were conceived for a much more homogenous group of countries. For example, some argue that the price stability criterion should differentiate between inevitable structural inflation related to catch-up growth (which is welcome) and inflation associated with loose macroeconomic policies (which is not). Others have put a question mark next to the necessity of ERM II membership, in particular for countries with already firmly fixed exchange rates (countries wishing to adopt the euro must participate in the exchange rate mechanism for two years without severe tensions).

Of course, it is hard to tell what such differences in the policy-setting framework would entail for many of the small open economies in emerging Europe. The rules and commitments that come with EU membership were designed for good reasons, and revising them, even temporarily, will often come at a cost. Still, the discussion seems worth having, and worth having soon.

Toward a stronger Europe

Europe could emerge stronger if the right choices are made now. The integration of Europe's economies has been a tremendous success story. This success could now be at risk. The trick is to manage the crisis, preserve the progress that has been made, and revamp Europe's frameworks and reform agenda. Meeting this challenge will require much stronger coordination and "more Europe." If Europe's governments succeed, the region will emerge with stronger institutions and a more vibrant and robust economy—better able to face not only today's challenges but also those of the future. ■

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EUROPE

Losing Their Halo

Many countries in central and eastern Europe are finding it hard to adjust to the new economic reality

Martin Čihák and Srobona Mitra

THE new central and eastern European members of the European Union had it very good for a while. EU membership spurred economic and financial integration, leading to rapid economic growth and large capital inflows. It also created a "halo effect," shielding some countries from paying more to borrow external funds in spite of growing vulnerabilities.

But the good times didn't last. The new member states' initial resilience to the global financial turmoil gave way to deep crisis in a few of them. When the global crisis hit in 2007, emerging Europe initially seemed immune because it did not have direct exposure to U.S. subprime assets. But as the crisis deepened in 2008, exports slowed and capital inflows came to a virtual standstill in some countries. Unfortunately, the economic and financial integration that had helped emerging Europe catch up with advanced Europe during the good times made them more vulnerable as the global economic climate worsened.

The new EU members must now not only overcome the current crisis but also build on the gains of recent years. They need to put in place more prudent policies and stronger policy frameworks, especially with respect to fiscal policy and financial supervision. And they must do so in a far more difficult global economic environment. The good news is that the flexibility of their economies may help them adjust more quickly than the more advanced European countries.

Catching up, and fast

The accession of eight new member states—the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia—to the European Union in 2004 represented the biggest ever enlargement of the European Union in terms of population (19 percent) and area (22 percent), but a smaller increase in terms of economic output (9 percent). Two more countries from the former Soviet bloc, Romania and Bulgaria, joined in 2007. For all these countries, EU membership represented a major milestone in their transformation to market-based economies.

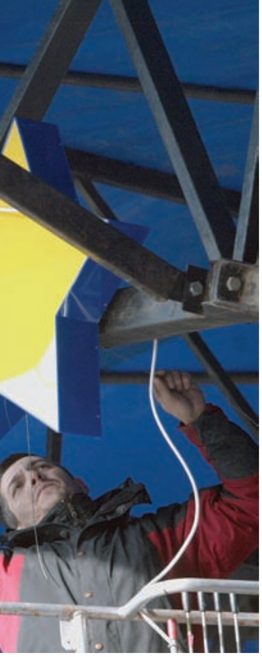
Increased economic integration and successful reforms fostered faster than expected growth in the new member states—by 1 percent, on average—given their economic fundamentals (see Chart 1). This rapid growth allowed the new EU countries to increase their share in global economic output. Greater access to western markets led to a rapid rise in exports and improved access to foreign financing helped boost consumption.

EU membership has been particularly favorable for Slovenia and the Slovak Republic, which have managed to meet all of the Maastricht criteria and enter the euro area. Slovenia was the first new member state to adopt the euro, in January 2007. The country's per capita income, the highest among the new member states, reached about 80 percent of the EU average in 2006, putting it on a par with Greece and above Portugal. The Slovak Republic, the most recent entrant to the euro area in January 2009, has been one of the strongest economic performers among the new member states, with growth fueled by productivity gains and exports. Together with Slovenia and the Czech Republic, it is now considered an advanced, rather than emerging economy.

Tiger in the tank

The new EU states' relative success in stabilizing and reforming their economies, combined with their acceptance into the European Union, appears to have contributed to rapid interest rate convergence, even though favorable global conditions—low interest rates, ample liquidity, and a widening of the investor base for emerging markets—also played a role. This spurred massive capital inflows to the new member states, in the form of direct investment, bank loans, and portfolio investment.

Today, the share of foreign ownership in the banking systems of emerging Europe is higher than in advanced Europe and in emerging markets in other parts of the world. A handful of foreign banks, headquartered in advanced Europe, entered the new markets in emerging Europe mainly by acquiring newly privatized banks. These foreign banks currently control a major part of banking assets in the new member states (see Chart 2). The fact that foreign-owned banks



could potentially tap into the larger pool of capital available to their foreign parents provided comfort to other foreign investors in the region. Whether this will continue to be the case remains to be seen.

Capital inflows into banks were accompanied by rapid credit growth, although the speed of this growth differed among new member states. While the three Baltic countries recorded credit growth rates well above comparable countries, rates in most other new member states were broadly in line with their financial development. The rapid credit growth also led to substantial financial deepening in the new member states.

Overheating engine

But increased integration and the large capital inflows that followed also led to new vulnerabilities. The inflows contributed to high levels of external debt and excessive current account deficits in several new EU members (see Chart 3). Rapid credit growth raised concerns about overheating as inflation increased, current account deficits widened, and housing bubbles inflated. The concern about balance sheet risks was especially pronounced in countries where people and businesses were taking out loans in euros and other foreign currencies (mainly Swiss francs and yen) because this led to a buildup of currency mismatches. Indeed, the share of foreign currency lending in most new member states exceeded the levels of western European, Latin American, and East Asian emerging markets. Currency mismatches increased the private sector's vulnerability to exchange rate depreciation and built up banks' credit risk.

Higher financial integration also raised emerging Europe's exposure to risks originating elsewhere. Tighter linkages, which had previously lifted growth, could also heighten a slowdown. And although cross-border exposures by international banks, mostly from advanced European countries, helped increase financial intermediation, they also created new channels of contagion.

No longer special

Despite warning signals in the form of growing current account deficits and high levels of public debt, markets appeared to have underestimated the risks and maintained their exposure to central and eastern Europe. This reflected the markets' perception that, by virtue of their EU membership, these countries were likely to be bailed out in the event of a crisis. This perception meant that bond spreads reflecting country risk were lower than they would otherwise have been—what is known as the halo effect. Indeed, markets priced the sovereign assets of new member states some 50–100 basis points below the levels that would be expected based on standard macroeconomic fundamentals.

The onset of the global financial crisis changed everything, not least because it eliminated the halo effect and highlighted the differences among the new EU states (see Chart 4). Late in 2008, with shrinking exports to advanced countries and a sharp slowdown in capital inflows, the crisis spread virulently through emerging Europe. The cost of funding for all sovereign borrowers soared, and access was sharply curtailed. Although countries adhering more closely to the Maastricht criteria tended to face lower increases in spreads, they were not shielded completely.

The crisis brought increased scrutiny on external imbalances and domestic overheating of individual EU countries. The IMF's May 2009 *Regional Economic Outlook for Europe* shows that countries with higher inflation, current account deficits, and bank-related capital inflows were hit hardest. In other words, the risk of a sudden stop in capital inflows was at least as important as adherence to the Maastricht criteria for the initial impact of the crisis on individual countries.

Sharp slowdown

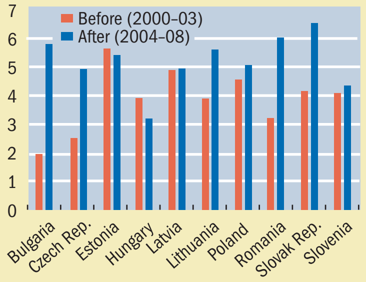
The financial crisis has resulted in a sharp slowdown in all emerging markets, including those in Europe, with the IMF's Spring 2009 *World Economic Outlook* forecasting a contraction of almost 3 percent for these countries in 2009. The new member states' vulnerabilities are worsened by macrofinancial linkages: a slowdown in income growth, interest rate and ex-

Chart 1

Boost to growth

EU membership sparked rapid catch-up growth in central and eastern Europe.

(GDP, average annual change, percent)



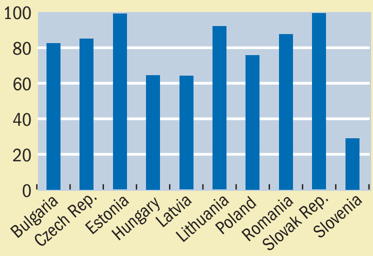
Source: Čihák and Fonteyne, 2009.

Chart 2

Controlling stake

Much of the banking system in central and eastern Europe is in the hands of western European banks.

(asset share of foreign-owned banks, percent, 2007)



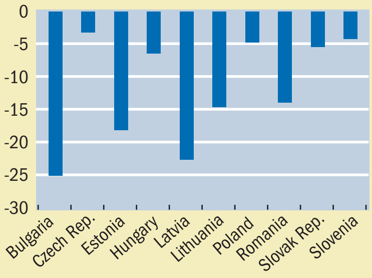
Source: European Bank for Reconstruction and Development.

Chart 3

Large imbalances

Many new member states developed sizeable current account deficits.

(percent of GDP, 2007)



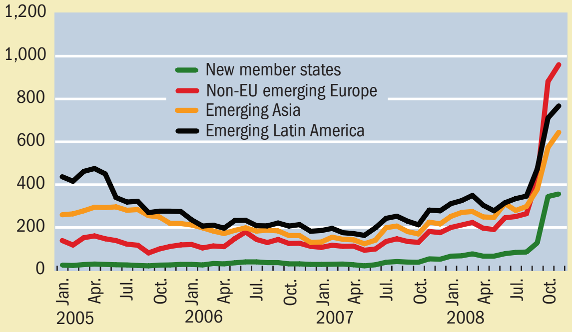
Source: IMF, World Economic Outlook database.

Chart 4

Losing the halo

Spreads on sovereign bonds in central and eastern Europe have started to rise, mirroring emerging markets elsewhere.

(basis points)



Sources: Bloomberg L.P.; and IMF staff calculations.

Note: Spreads in euros for new member states and non-EU emerging Europe; in dollars for all others.

change rate instability, and asset price corrections feed back into the financial sector. In response, the new member states have changed direction in the areas of monetary and exchange rate policy, financial sector policy, and fiscal policy.

Local currencies are looking increasingly vulnerable and governments are either unable, or finding it expensive, to borrow from the financial markets to finance their budget deficits. EU membership, however, has given emerging Europe access to some facilities that have proven useful during the crisis. One is the European Union's balance of payments facility, which has provided a safety cushion, and another is the establishment by the European Central Bank of repo arrangements with a few new member states. Hungary, Latvia, and Romania have requested financial support from the European Union and the IMF, and Poland has requested access to the IMF's Flexible Credit Line, a new facility designed for economies with a strong track record.

Stronger and leaner

Will the new EU member states emerge stronger from the crisis? In some ways, their economies are more flexible than those of advanced Europe, which may make it easier for them to adjust.

The crisis has put a higher premium on sound policies, and the adoption of EU-level frameworks appears to have contributed to sound macroeconomic and structural policies. This evidence is stronger for macroeconomic policies, where the Maastricht criteria and the Stability and Growth Pact have served as anchors for monetary and fiscal policy.

The Lisbon agenda—the EU's strategy for promoting growth and jobs—also seems to have had some impact in the new member states. The smaller EU members, and those with better fiscal performance, have shown greater progress on structural reform. Compared with advanced Europe, emerging Europe has less restrictive employment protection, lower minimum wages, less centralized collective bargaining, and less generous unemployment benefits.

Yet the disparity in outcomes among the new member states underscores that domestic policies are the critical drivers of economic performance. The crisis has amplified market perceptions of the differences across countries and has led to a repricing of risks in individual countries, as reflected in the increased dispersion of sovereign spreads.

The record on financial health in the new member states is mixed. Their banking systems have held up relatively well so far in the global crisis—with no systemic failures or generalized loss of depositor confidence. But prospects are challenging. Loan defaults are bound to increase as local currencies lose value and economies contract. Banks will have to cut back on credit because they failed to build buffers for bad times. Households will be unable to borrow from banks just when falling house prices and tighter economic conditions are squeezing incomes. Household consumption, averaging 60 percent of GDP, will undoubtedly suffer as a consequence.

What policies should the new EU member states adopt to get out of crisis? The banking sector was at the center of the crisis and so holds the key to recovery.

- Policies should include steps to support credit, for example through preemptive recapitalization of viable banks. Given that most of the banking sectors are foreign owned, attempts at recapitalization would be futile without close cooperation with supervisors of foreign parent banks.
- There is substantial scope for more effective supervision in individual countries under the existing financial supervisory frameworks. This includes, for instance, the possibility of imposing stricter capital requirements for weaker banks under the Basel II framework and adopting forward-looking provisioning policies for loan losses.
- The new EU members must safeguard the advances they have made in their financial policy frameworks and fortify them through stronger cross-border cooperation between home-host central banks, supervisors, and ministries of finance.
- Structural reforms should be intensified to prevent declines in long-run productivity and growth. Stronger policy institutions would ultimately reduce vulnerabilities associated with greater financial integration.

On all these counts, close cooperation between emerging and advanced Europe will be essential. The crisis represents an opportunity to solidify political, economic, and financial links in the region. But although strong EU policy frameworks can provide valuable support, the policies adopted by individual countries will ultimately determine how quickly emerging Europe recovers from what has turned out to be the worst crisis since the Great Depression. ■

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Reference:

Čihák, Martin, and Wim Fonteyne, 2009, "Five Years After: European Union Membership and Macro-Financial Stability in the New Member States," IMF Working Paper 09/68 (Washington: International Monetary Fund).

Spasskaya Tower of the Kremlin, Moscow.

A Tale of Two Crises

Erik Berglöf, Alexander Plekhanov, and Alan Rousso

Russia is still a resource-dependent economy that must diversify in a market-friendly way

RUSSIA'S reversal of fortune is striking. Just before the global financial crisis hit the country with full force in late 2008, Russia looked invincible. Nearly 10 years of impressive economic performance, prudent macroeconomic management, fiscal and current account surpluses, the third-largest foreign exchange reserves in the world, and a growing middle class were just some of its achievements.

But now the picture has changed dramatically. A sharp reduction in output in the fourth quarter of 2008 and the first quarter of 2009, the near-failure of a few sizable banks, and struggling major industrial groups coupled with an alarming rise in unemployment, have put things in an entirely new light. And then there is the fact that nearly one-third of the country's reserves—used mainly to prop up the ruble during its gradual slide—have evaporated.

Déjà vu

Where have we heard this story before? The whipsaw shift in sentiment and economic performance as well as several other features of the current crisis are strangely reminiscent of the 1998 financial meltdown. From 1995 to early 1998, Russia was described by many respected western analysts as a major global success story. Thanks to the early efforts of the first reform team, under President Boris Yeltsin and Acting Prime Minister Yegor Gaidar, Russia, according to these analysts, had become a market-oriented democracy in less than five years.

Then, as in 2008, Moscow had the feeling of a boomtown to which young professionals flocked to make their fortune. The stock market, although small and illiquid, was one of the best performing in the world, and a middle class was taking shape. Russia was thought to be too big and too important (and too nuclear) to fail, so fears that it would become infected by the Asian crisis—which was spreading throughout emerging markets in the second half of 1997 and early 1998—were thought to be unfounded. We know the rest of the story. In August 1998 came default, devaluation, despair.

What then can be learned from these two crises, which occurred almost exactly 10 years apart? Russia has moved on in many ways since the last major crisis hit. What we may gain by looking back at the events of 1998 is some comfort, knowing that Russia today is more robust now than it was back then. But some apprehension is also warranted: the economy's rebound may be less immediate and profound this time.

What we are certain to find is that Russia has not done enough to inoculate itself from recurring crises that stem, in large part, from a sharp drop in the price of oil. Russia is still a resource-dependent economy that must take meaningful steps to diversify in a market-friendly way.

Continued importance of oil

Both crises were caused primarily by a sharp drop in the price of oil, the key external variable for the Russian economy, whose diversification away from oil, gas, and other commodities remains a key long-term challenge.

Prior to the crisis in 1998, oil and gas accounted for almost half of Russia's export revenues and directly for one-fifth of federal government revenues. By 2008 the share of oil and gas in export receipts had reached 68 percent, and natural resources directly accounted for half of federal government revenues. Extraction industries accounted for more than 10 percent of the total value added, and their true contribution to GDP was much higher, because about 60 percent of industrial production was concentrated in closely related sectors, such as oil refining and fertilizer and metal production. Rough estimates suggest that the overall direct share of natural resources and related sectors in the economy's total value added has actually increased from about 15 percent in 1997 to about 20 percent in 2007. In addition, a significant share of value added in services is accounted for by trade in natural resources and transshipment of oil, gas, and minerals.

Given that Russia today is even more dependent on natural resources than it was in 1998, how has its economy been affected by the oil price shock? Following the Asian crisis, the price of Urals brand oil fell from $23 a barrel in early 1997 to less than $9 in mid-June 1998, a drop of more than 60 percent. The current oil price level is far from historical lows: it

"Russia has not done enough to inoculate itself from recurring crises that stem, in large part, from a sharp drop in the price of oil."

is almost three times higher in real terms than in mid-1998 and is comparable to prices in early 2005, when the Russian economy was steaming ahead at a rate of 7 percent a year and accumulating foreign currency reserves (see Chart 1). But the price adjustment in relative terms was even faster and larger this time: the Urals price fell from the August 2008 high of $138 a barrel to an average of $44 in the first four months of 2009, a drop of almost 70 percent.

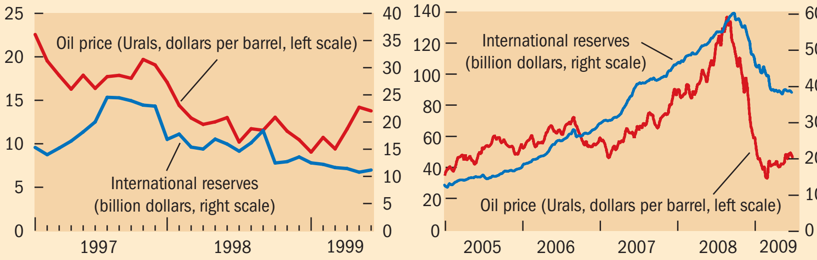
Common theme

The importance of oil to the economy is a common theme in both the 1998 and 2008 crises. Another similarity is that the real sector, the financial sector, and government finances all were severely affected. However, the initial conditions in these three sectors, the linkages between them, and the sequencing of events that led to the crisis in 1998 and the downturn in 2008 differ substantially.

The real economy. Even before the 1998 crisis hit, Russia experienced a recession. Although Moscow's economy had returned to rapid growth by mid-1997, output is estimated to have contracted in 43 out of 79 regions in 1997. By contrast, the past decade has seen fast, robust, and geographically broadly shared growth. In the first half of 2008 output grew at an annual rate of 8.2 percent, increasing by 82 percent during 1999–2008. By many accounts the economy was overheating.

In 1998, the problems in the real sector started long before the August default hit the financial system and triggered serious ruble depreciation. Official seasonally adjusted data are not available, but rough calculations suggest that output contracted

Chart 1
Resource dependent
Russia's economic well-being remains closely linked to the price of oil.



Sources: Central Bank of Russia; U.S. Department of Energy; and calculations by the European Bank for Reconstruction and Development (EBRD).

sharply in the first three quarters of 1998, after which a robust recovery started almost immediately after the financial crisis (see Chart 2). In simplified terms, a drop in oil prices aggravated the situation in the already struggling real economy, making a large dent in public finances, which was temporarily filled by issuing short-term debt (GKOs) at very high interest rates in which nonresidents as well as resident financial institutions became deeply invested. Collapse of the GKO market triggered the financial crisis and sharp depreciation of the ruble.

Unlike in 1998, when the malaise gradually spread from the real sector to the public finances to the banking system, in 2008 all three sectors of the economy were hit simultaneously. A rapidly growing real sector was dealt a double blow by a sharp fall in commodity prices and a pronounced reduction in global demand for manufactured goods, including finished and semifinished steel products. The syndicated loan markets seized, making refinancing of external liabilities very challenging for some private sector borrowers and impossible for others. Many portfolio investors fled Russia, and emerging markets more generally, and trade finance started drying up. Fiscal revenues contracted sharply: in January-February, year-over-year general government receipts were down 9 percent in nominal terms, which corresponds to an almost 20 percent reduction in real terms.

Government finances. In 1998, the real sector malaise predated the financial crisis, and after the crisis had blown over there was little feedback from the banking sector and government finance to the real economy. General government revenues (including extrabudgetary funds) accounted for only 27 percent of GDP in 1997, of which federal government revenues were less than half. There was therefore only limited room for fiscal stimulus.

By 2008, the role of the government in the economy had increased dramatically. General government revenues totaled 39 percent of GDP, of which the federal government accounted for 58 percent. In 2004, Russia set up the Oil Stabilization Fund, which later was split into the Reserve Fund and the National Wealth Fund, to set aside part of the country's oil revenues. By early 2009, this fund had accumulated $225 billion—amounting to 17 percent of GDP—and external public debt has been largely repaid. Despite the large drop in fiscal revenues, the government has much more room for fiscal stimulus than it had in 1998.

Financial sector. While the financial sector in 1998 was heavily invested in GKOs, credit to the private sector totaled only 9 percent of GDP, with a loan-to-deposit ratio of 76 percent. Consumer credit was all but nonexistent, and project financing with terms of more than one year added up to less than 2.5 percent of GDP. In these circumstances, the banking system collapse had a limited impact on the real sector. If anything, the crisis helped reorient the banking model toward financing enterprises and consumers.

By mid-2008, however, domestic credit to the private sector had reached 42 percent of GDP, about one-quarter of which was granted to consumers. With a loan-to-deposit ratio at about 150 percent, a major part of the loan book was effectively financed by banks' external borrowing ($200 billion as of end-September 2008), largely in the form of syndicated loans or credit lines from foreign parent banks. Large firms have also been actively tapping into international financial markets and accumulated about $300 billion in external debt.

Between end-2000 and the third quarter of 2008, banks' loan books grew at an average annualized rate of more than 50 percent, almost as fast as in Ukraine, where the private sector credit-to-GDP ratio reached 63 percent and the banking system already faces serious difficulties. In this sense, Russia's still relatively modest credit-to-GDP ratio is somewhat misleading, because it reflects the unprecedented high growth of nominal GDP, which increased eightfold in dollar terms between 1999 and 2008 on the back of rapidly rising commodity prices.

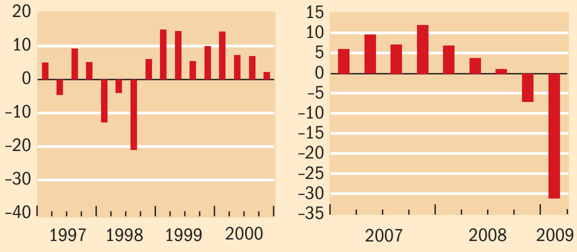
Such high rates of credit growth make it difficult for banks and supervisors alike to ensure that appropriate risk management models and procedures are in place. Liquidity support by the central bank may temporarily enable banks to roll over problem loans, but ultimately the underlying quality of assets

Chart 2

Anatomy of a crisis

Russia's economy rebounded quickly in 1999. Whether the same will happen in 2009 remains to be seen.

(GDP quarter-on-quarter, seasonally adjusted, annualized, percent)



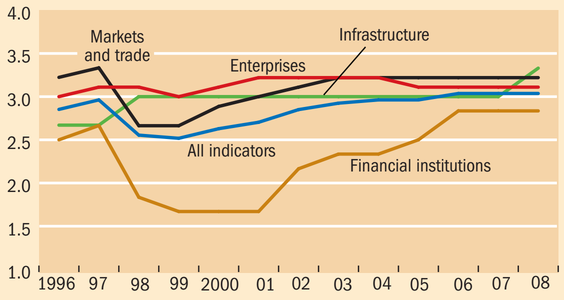
Sources: Rosstat; Russian authorities; and estimates by the EBRD.

Chart 3

Transforming the economy

Some reforms ground to a halt after the crisis in 1998.

(transition indicators, 1996–2008, min=1; max=4.33)



Source: EBRD Transition Indicators.

Note: The EBRD tracks reforms in transition countries along several dimensions—enterprise restructuring, markets and trade, infrastructure, and financial institutions—and compiles respective indices of reforms on a scale of 1 to 4+, where higher values correspond to deeper reforms.

will depend on the state of the real economy. Therefore, it is important to develop contingent plans for restructuring and recapitalization of the banking system.

Efforts to shore up the now much larger banking system have so far centered on the provision of much-needed liquidity, as banks have found themselves largely cut off from international markets. In addition, in September 2008 a large number of banks, in particular medium-sized and regional banks, faced rapid withdrawal of deposits by retail and corporate customers. The authorities responded by extending deposit insurance coverage and injecting liquidity on a large scale through collateralized and uncollateralized loans to banks.

"Unlike the situation 10 years ago, the government now has sufficient funds to administer sizable demand-side fiscal stimulus and provide targeted social transfers."

On the positive side, Russia has not had a big problem with debt denominated in foreign currency. Only 25 percent of domestic corporate loans and about one-ninth of consumer loans were denominated in foreign currency, much less than most other emerging markets in Europe. This stands in contrast to the situation in July 1998, when the dollarization ratio stood at 42 percent.

Therefore, the recent depreciation of the ruble has not had an immediate strong negative impact on the quality of medium-sized firms' balance sheets and bank loan books. At the same time, the severity of the economic downturn and very rapid growth of the banking system point to a possible rapid increase in the incidence of nonperforming loans in the future.

Different times, different policy responses

The different circumstances explain, in part, another important difference between 1998 and 2008: the policy response. In 1998, Russia lacked the resources and probably the political will to respond to the crisis. In fact, what was most important at the time was what the government did not do; that is, to try to ease its way out of the crisis quantitatively. The government, and somewhat surprisingly the central bank governor, Viktor Gerashchenko, resisted pressure from many stakeholders to print money, and the real economy quickly rebounded.

This time, the nature of the crisis is fundamentally different, with its origin outside Russia, and the government's resources much larger. The authorities' response has also been much more forceful, in monetary as well as fiscal terms.

The revised 2009 budget provides for substantial fiscal stimulus, with the federal budget expected to run a deficit of up to 8 percent of GDP in 2009, likely followed by a deficit of 5–6 percent of GDP in 2010, financed primarily with accumulated fiscal reserves. The additional discretionary spending of 4.1 percent of GDP combines a demand-side package of about 2 percent of GDP of mostly social spending, a supply-side package of up to 1.3 percent of GDP made up by targeted support to individual enterprises and industries, and a package for banks of about 0.8 percent of GDP.

The 1998 crisis led to a number of structural reform reversals—mainly in the financial sector, but also in terms of free markets, trade integration, and enterprise privatization and restructuring (see Chart 3). But the crisis also arguably gave rise to a number of significant medium-term structural reform initiatives, including restructuring of the electricity sector, tax reform, introduction of deposit insurance, and pension reform.

It is too early to assess the impact of the current crisis on the reform agenda. Surging unemployment (estimated at 9.5 percent in February 2009), falling incomes, high inflation (13 percent year over year), weak demand for manufactured goods, and fewer pressing short-run infrastructure needs may make administrative measures, such as price controls, tariff controls, trade barriers, and targeted subsidies to failing enterprises, politically tempting. Some of them have already been tried on a small scale. For instance, import tariffs on used cars were recently increased.

How will it all play out?

As in 1998, the speed of the recovery from the current crisis will depend on external factors, mostly the pace of global recovery, the trajectory of oil prices, and the cost of capital in the international markets, given Russia's vast investment needs in its industrial sector and in infrastructure.

But the pace of recovery, much more than in 1998, also depends on the policy response, given the government's more prominent role and considerably stronger links between the financial system and the real economy.

Unlike the situation 10 years ago, the government now has sufficient funds to administer sizable demand-side fiscal stimulus and provide targeted social transfers to those hit particularly hard by the crisis. However, allocating public spending in a way that is productive and stimulates aggregate demand without creating new bottlenecks remains a challenge in Russia. In particular, the government's capacity to manage large infrastructure programs is still limited. With the financial sector now playing a much more prominent role in the Russian economy compared with the 1990s, the potential costs of a banking system collapse for the real economy could be very high, as could be the cost of misguided fiscal policies. Russia's government will have to tread carefully in the months ahead. ■

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VIEWPOINT

Stress Test for the Euro

Countries tempted to abandon the European currency face formidable barriers

Barry Eichengreen

IF the ongoing credit crisis is the most serious economic shock to hit the world economy in 80 years, then it is certainly also the most serious problem to confront the euro area in its inaugural decade. It is precisely the kind of "asymmetric shock" warned of by early euro-skeptics and highlighted by the theory of optimum currency areas.

Although housing prices have fallen euro area wide, they have fallen more dramatically in some countries than others (see Chart 1). Although the crisis has meant large losses for banks throughout the euro area—often on those same housing-related investments—it has produced larger losses in some countries than others. It has led to rising unemployment throughout the euro area, but more in some countries than others. The result is more deflationary pressure, actual or potential, in some euro area countries than others. There are also more strains on the public finances of some euro area countries, as reflected in the widening of spreads on sovereign bonds and their associated credit default swaps (see Chart 2).

Under these circumstances, different euro area countries presumably would prefer a different monetary policy response. But the members of the euro area are necessarily subject to a one-size-fits-all policy, such being the intrinsic nature of monetary union. This tension has revived the pre-1999 debate over whether monetary union in Europe is a good idea. It has also given rise to chatter and speculation about the possibility that one or more euro area countries might now choose to abandon the euro. This article weighs the implications of such a move and, although finding it risky, costly, and complicated, concludes that it is not inconceivable.

Temptation is there

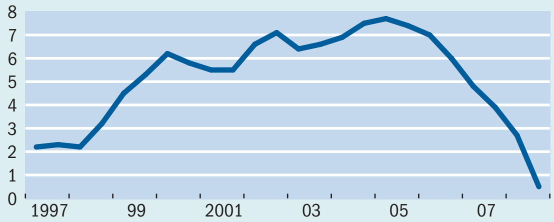
Since April 2008, the online prediction market Intrade has offered for trading a contract that pays off if any euro area

Chart 1

Wrong neighborhood

Although housing prices have fallen euro area wide, they have dropped more in some countries than others.

(euro area residential real estate prices, annual percent change)



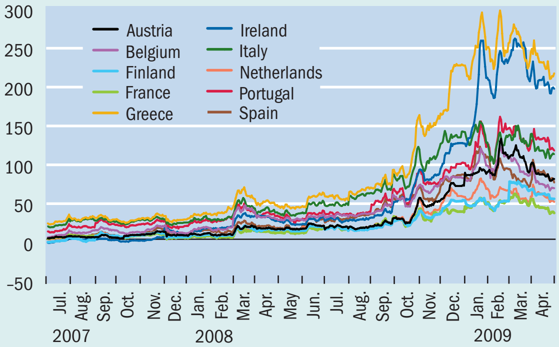
Source: European Central Bank calculations based on biannual national data.
Note: Euro area residential real estate price aggregate calculated from national series covering more than 90 percent of euro area GDP for whole period.

Chart 2

Pressure points

Wider spreads on the sovereign bonds of some euro area countries reflect increasing strain on their public finances.

(sovereign spreads, in basis points)



Sources: Datastream; and IMF staff calculations.
Note: Spreads calculated on 10-year bonds with Germany as benchmark.

country announces its intention of dropping the currency on or before December 31, 2010. As of mid-April, the pricing of that contract implied a 20 percent probability—in an admittedly thin market—of that event (see Chart 3).

No doubt the temptation is there. Policymakers in the countries where domestic demand is now weakest can imagine how, if they still possessed a national currency, they might allow it to depreciate or even actively push it down to encourage exports. Those with the most serious worries about failed government bond auctions can imagine how, if they still possessed an autonomous national central bank, they might enlist it as sovereign bond purchaser of last resort.

But for each of these arguments for contemplating the reintroduction of the national currency, there is a counterargument. Although the gain in competitiveness from currency depreciation will be transitory, many of the costs, both economic and political, will be permanent. Among other things, currency depreciation would escalate tensions within the European Union. The initiating country's EU partners would feel, not without justification, that it was exporting not just its merchandise but also its problems. If evidence of this danger is required, one need look no further than the reaction in other EU countries to the fall of sterling against the euro. More generally, the current downturn, like all the others, has intensified pressure for governments to support domestic producers in distress with concessional loans and other subsidies. In this way it threatens Europe's signal economic achievement, namely the creation of a true single market in which producers in different EU countries compete on an equal footing. More complaints of currency manipulation and competitive devaluation would place this achievement at risk.

Treaty obligations

Beyond that, a country that unilaterally abandoned the euro to "steal" a competitive advantage would jeopardize its status as a member in good standing of the EU. It would not be welcomed at the table where EU policies are discussed. The Lisbon Treaty (admittedly yet to be ratified) contains a clause under which countries can conceivably exit the EU. But there is no clause concerning exit from the euro. The implication is that in order to quit the euro the country would also have to quit the EU, thereby abrogating the entire range of treaty obligations to its fellow member states. Nothing precludes this in principle, but given the high value that Europeans attach to their union, it is not something that a member state would contemplate lightly.

Nor is it clear that reintroducing the national currency would really make it easier for a euro area government to manage its finances. Hallerberg and Wolff (2006) show that sovereign bond spreads (interest rates on 10-year government bonds relative to the corresponding German rates) rise more quickly with the budget deficit and public debt-to-GDP ratio in European countries that are not members of the euro area. Eichengreen (2007) shows the same greater sensitivity outside the euro area for sovereign credit ratings.

> **"The main cases where participants have left preexisting monetary unions concern countries that were relatively closed to trade and financial flows."**

Evidently, both investors and the rating agencies informing their decisions take comfort in the fact that the conduct of fiscal policy in the euro area is overseen by the mutual surveillance and sanctions of the Stability and Growth Pact and by the fact that the European Central Bank (ECB)—unlike the typical national central bank—operates under a no-bailout rule that prohibits it from buying bonds directly from governments.

Thus, even if debts and deficits rise in the short run, investors have reason to believe that the trend will not be allowed to persist. Spreads are therefore less likely to blow out. Even if reintroducing the national currency, and detaching the national central bank from the European System of Central Banks and the ECB, might make it easier for the government of a crisis country to fund its deficit in the short run, this will come at a cost in terms of more expensive funding on the market.

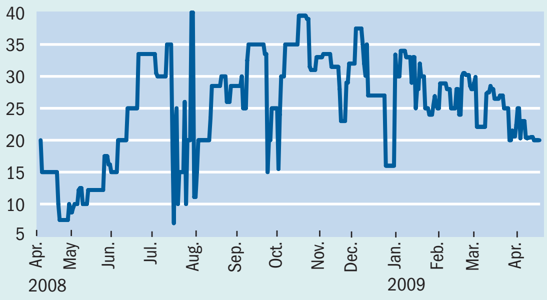
It is far from clear that the first consideration (more short-run flexibility) would dominate the second (higher longer-run costs) in the calculations of policymakers. Some recent commentary has suggested that if a heavily indebted euro area country found itself forced, as a result of the crisis, to default on its debt, it would at the same time leave the euro area so that the government could have recourse to money financing. But insofar as the government's objective was not just to finance its immediate expenditures but also to normalize its financial relations and reestablish its good credit, the conclusion does not follow. Abandoning the euro would only make its problem worse.

Chart 3

Keep the change

An online prediction market says there is a 20 percent chance that a euro area country will drop the common currency by end-2010.

(contract price, in points)



Source: www.intrade.com

And even if, despite all this, the temptation to exit the euro area remained, the technical barriers to exit would be almost impossible to surmount. It would be straightforward for a parliament or congress to pass a law mandating that the state and other employers would henceforth pay workers and pensioners in the new national currency. But with wages and other incomes redenominated into that national currency, it would become necessary to redenominate the mortgages and credit card debts of residents into the national currency as well. Currency depreciation would otherwise have adverse balance sheet effects for households, leading to financial distress and bankruptcies.

But with mortgages and other bank assets redenominated, bank deposits and other bank balance sheet items would have to be redenominated as well to avoid destabilizing the financial sector. With government revenues redenominated into the national currency, not just public sector wages and pensions but also other government liabilities, notably the public debt, would have to be redenominated to prevent balance-sheet effects from damaging the government's financial position.

Act of default

Technically, nothing prevents a national legislature from passing a law requiring domestic banks, firms, households, and governments to redenominate their contracts in this manner. Domestic investors are subject to domestic law, which the appropriate domestic authorities can change, but the claims of foreign investors are a separate issue. "Continuity of contract" provisions mean that foreigners could continue to demand to be paid in euros, and they would presumably sue to enforce their claims. Unilaterally redenominating the public debt would technically be an act of default, and thus leaving the euro area would not be a way of avoiding debt default. If the government did go ahead and redenominate their claims, its access to international financial markets might be curtailed indefinitely. If it chose not to, depreciation of the national currency against the euro would severely damage the public sector balance sheet because the domestic currency value of the external debt would rise.

Either way, in a democracy this decision would require discussion. There would be parliamentary deliberations. Market participants, meanwhile, would be aware that reintroduction of the national currency was being considered so that the national unit could be depreciated against the euro. They would have every incentive to act. Anticipating that domestic deposits would be redenominated into the local currency—which would then lose value against the euro—they would shift their deposits to other euro area banks.

A systemwide bank run would certainly follow. Investors anticipating that their claims on the government would be redenominated into the national currency would shift into claims on other governments, leading to a bond market crisis. If the precipitating factor were a debate among parliamentarians over whether to abandon the euro, it would be unlikely that the ECB would provide lender-of-last-resort assistance. And if the government were already in a weak fiscal position, it would not be able to borrow to bail out the banks and buy back its debt.

As I have put it elsewhere, this would be the mother of all financial crises. And what sensible government, invested in its own survival, would willingly court this danger? What responsible government would even moot the possibility?

"A country that unilaterally abandoned the euro in order to 'steal' a competitive advantage would jeopardize its status as a member in good standing of the EU."

Revealingly, the main cases where participants have left preexisting monetary unions concern countries that were relatively closed to trade and financial flows and whose banking and financial systems were underdeveloped or very tightly regulated, so there was only limited scope for capital flight when deliberation and preparations were under way. The breakup of the Czech and Slovak monetary union and the dissolution of the ruble zone are cases in point. The fact that there was little in the way of financial wealth, that exchange controls were still in place, and that the economy was still in the early stages of being opened to the rest of the world made it possible to deliberate without precipitating a meltdown.

More generally, research by Nitsch (2004) for a large sample of cases suggests that more open economies are least likely to exit monetary unions. (Nitsch looks at trade openness rather than financial openness, but the two dimensions of openness are correlated. Among other things, trade over- and under-invoicing is an obvious conduit for disguised capital flows.) Clearly, the exceptional openness of EU member states with respect to trade and financial transactions of all kinds places them squarely in this camp.

Is it inconceivable, then, that a participating member state might leave the euro area? If the economic events of the past year have taught us anything, it is that many economic events we once thought to be inconceivable are not. But, if not inconceivable, we can safely say that exit from the euro area is exceedingly unlikely. ■

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VIEWPOINT

The Euro's Finest Hour?

Charles Wyplosz

The euro has proved a safe haven for countries lucky enough to have made it into this exclusive club in time

A COUPLE of years ago, as we were preparing to celebrate the euro's 10-year anniversary, a common theme was that the new currency had not yet faced a serious challenge. Little did we know! The financial—and now economic—crisis has presented the euro area with a large number of varied tests. Many in Europe believe that the adoption of a single currency has been vindicated and that the euro is now in full ascendancy. I agree with the former but seriously doubt the latter.

The number one reason for creating a single currency has always been to avoid speculative attacks on exchange rates because wide currency fluctuations threaten the European Union's single market for goods and services. This is why the decision to adopt the euro was made at a time when capital movements were liberalized (Baldwin and Wyplosz, 2009).

The number one lesson from the crisis is that this objective has been achieved. The Swedish krona and pound sterling are down—deeply. Most currencies in central and eastern Europe have been very volatile. Several of these countries have called on the IMF for support, and their troubles are far from over. Meanwhile, some advanced European economies, including Austria, Greece, and Ireland, face extremely difficult times because of bank distress or shaky public finances, or both. But one thing they don't need to worry about is their currencies, because they don't have any. The euro works and that is no mean feat.

Safe haven?

And yet the euro has not shielded some member countries from speculative pressure, which has taken the form of large spreads on government bonds. During previous crises, large spreads used to emerge alongside pressure on exchange rates that often resulted in depreciations or devaluations. A common interpretation of the spreads was in terms of the interest rate parity principle: spreads signal expected depreciations (although, as is well known, the empirical success of the interest rate parity principle is shaky at best).

The emergence of spreads within the euro area reflects either a belief in the markets that the country could abandon the euro or that the government might default partially or totally on its debt obligations, or both. The media have discussed the possibility that some countries may leave the euro area, but most observers have dismissed this possibility on the grounds that the costs borne by a departing country would far exceed the benefits, especially in the midst of a crisis. It is likely, therefore, that the spreads reflect mostly default risks, which may or may not be justified. The point is, this is a perfectly normal occurrence within a currency area. In fact, the very low spreads observed before the crisis were sometimes described as an oddity, and some even suggested that the markets weren't sensitive enough to large public debts. Now it seems that the markets are too sensitive.

Euro pessimism turns to optimism

Members of the European Union that are not members of the euro area have now seen what a difference the single currency makes. In Denmark, which was granted an opt-out clause in 1992, the protection provided by the euro during this crisis has made an impact: the Danish population, which twice voted against adopting the euro, may now be shelving its long-held opposition to joining the monetary union.

A brief debate also erupted in the United Kingdom, but that served only to cement widespread opposition to the euro. Much the same applies to Sweden, whose population has also voted against adopting the euro.

The other countries that joined the European Union in 2004 have not yet fulfilled the admission criteria for all sorts of reasons, good and bad. Being kept outside of the club made many of these countries reluctant to join, but the crisis is now leading these countries to rethink their reluctance. However, they still face the same tough admission conditions, known as the Maastricht criteria.

The Maastricht criteria were developed nearly two decades ago in a very different environment. Inflation had just been brought down—barely so, in some countries—after a long period of price instability. It was felt that the European Central Bank (ECB) would need to quickly establish its credibility as an inflation fighter. This meant that to be admitted to the euro area a country would have to demonstrate its firm commitment to price stability, hence the tough entry conditions.

But now that the ECB has achieved a high degree of credibility with the markets, such caution is unnecessary—if it was ever needed at all. Central bank governors from the new member states will join a central bank governing council that has well-established procedures. Given the negligible risks of admitting countries identified as "not yet ready" on the basis of outdated criteria and the significant distortions to the European Union's single market generated by the deep currency depreciations that are taking place right now as a result of the crisis, one would have hoped that the Maastricht criteria might finally have been set aside. But it is perhaps not surprising that existing euro area members have reiterated that the rules must be followed, no matter what. The ECB, too, is sticking to the rules, even though it has felt the need to provide swap lines to a number of central banks under pressure in central and eastern Europe.

A single regulator for a single market

Another major lesson from the crisis may not be taken on board. From the beginning, it was clear that operating a currency area with as many regulators and supervisors as there are member countries was dangerous (Begg and others, 1998). For a long time, banks were mostly national, lessening the need for centralizing information and preparing for international lending of last resort.

But the logic of having a single currency is that the banking system will become increasingly pan-European, with banks operating across borders and owned by shareholders from many countries. And that is, of course, exactly what has happened, thanks in large measure to efforts by the European Commission. Bad luck had it that two of these large transnational banks—Fortis and Dexia—failed as a result of the financial crisis. This led to messy emergency interventions with messy outcomes.

One would hope that the crisis would help wear down national resistance to centralized regulation and supervision. To push this process along, a committee led by Jacques de Larosière recently proposed to create a European Systemic Risk Council and a European System of Financial Supervision, which would rank above national regulators and supervisors. But early reactions indicate that even albeit this limited, but potentially evolutionary, overhaul will not pass muster with national governments.

Reacting to the crisis

How has the euro area managed its macroeconomic policies so far? The ECB reacted immediately and forcefully to disruptions on the interbank market brought on by the financial crisis by injecting previously unthinkable amounts of liquidity into the markets. It soon developed a dichotomy, distinguishing between its two core functions. To achieve orderly conditions in the financial markets, it would provide as much liquidity as needed. Liquidity provision, however, would not interfere with setting interest rates, which would remain driven by monetary policy objectives, or so went the argument.

The two intermediate objectives pursued by the ECB were temporarily disjointed: set the policy rate and close the gap between the interbank and the policy rates. The dichotomy had some logic to it, but only up to a point. Indeed, a key channel of monetary policy transmission is the market rate, which therefore matters at least as much as the policy rate for monetary policy. Trust in this dichotomy may help explain why it took 14 months for the ECB to start lowering its policy rate, which it did for the first time in October 2008, after a final increase that took place as late as July 2008.

In fact, the ECB was more concerned about inflation, which had been rising steadily since 2006, than about growth and unemployment. Along with most other forecasters, the ECB did not anticipate that the financial crisis would eventually provoke a recession. Given that monetary policy operates with long lags, the ECB should have started to lower its policy interest rate much earlier. Of course, this is now obvious, but it wasn't at the time. Still, in comparison with other major central banks, the ECB was late in loosening monetary policy. This characterization may be unfair, but it goes some way toward explaining why some EU countries are reluctant to give up monetary policy independence.

Muted reaction also characterizes fiscal policies, which remain a national prerogative. Many governments believed that the automatic stabilizers—much larger in continental Europe than in most other countries—would be enough to counteract the macroeconomic effects of the financial crisis. With few exceptions, discretionary fiscal stimulus has so far been quite subdued.

The muted fiscal response may be attributed in part to the Stability and Growth Pact, which imposes a ceiling on budget deficits. As the recession has deepened, the Pact has been quietly set aside because it allows for some flexibility in "exceptional circumstances." Yet the Pact may well provide a useful anchor for limiting slippages that will prove hard to correct once the recession is over. But, meanwhile, with interest rates now at the zero lower bound, the euro area is not actively trying to counter the ongoing contraction in economic activity. Resumption of growth will have to rely on private spending or exports. Europe will not replace the U.S. locomotive.

Thus, just when the euro is demonstrating its usefulness and is poised to attract new recruits, policymakers are displaying considerable—some would say excessive—prudence in macroeconomic policies and in dealing with potential new members. Are they driven by fear of rocking the boat? Difficulties in coordinating very different economic circumstances? Lack of a common framework of analysis?

Vindicated at last

At the same time, there is a sense of vindication in Europe. In September 2008, for instance, Peer Steinbrück, Germany's Finance Minister, suggested that "the U.S. will lose its status as the superpower of the global financial system. . . . America will not be the only power to define which standards and which financial products will be traded all over the world. . . . The dollar will remain a very reliable and important currency, as well as the euro, as well as the yuan and the yen, so I think it will perhaps be the starting point of some changes."

Many in Europe have seen China's suggestion that the dollar's days as hegemon should now draw to a close as a powerful signal in the same direction. Aware that dominant currencies lose their status only after a major shake-up, they see the current financial crisis as the trigger. After all, they say, the crisis originated in the United States and exposed the cracks in the Anglo-Saxon approach to finance. They further note that the U.S. banking system is poised for massive shrinkage that will make room for the more prudent European model.

Time will tell, but I fear that the Europeans are setting themselves up for a big disappointment. Prudence is a virtue, but it has its costs, well captured by the risk-return trade-off. Financial regulation is not a matter of more versus less, but of quality in both setting up rules and implementing them. History—and current debates—do not indicate that Europe has a comparative advantage with either. The dollar may have lost some of its shine, but the euro area's slowness in dealing with the crisis and, in the longer run, its lower trend growth rate does not set Europe on a path of ascendant economic and financial power.

Economic ascendancy is taking place in Asia, but the region's financial markets are a long way from challenging New York and London—and then there is the issue of Asia's demographic decline. Furthermore, any rebalancing of power within the international financial institutions is bound to bring to an end the historical overrepresentation of Europe.

A plausible bet is that the crisis will deliver a better regulated Anglo-Saxon financial system, more dominant than ever, which will further shape emerging markets in Asia and elsewhere, while Europe will remain a beacon of prudence, with a currency that fails to attract—and include—a significant number of converts within the continent. ■

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Out of the Ballpark

M. Ayhan Kose, Prakash Loungani, and Marco E. Terrones

By any measure, the ongoing global recession is the deepest and the most synchronized of the postwar period

THE U.S. baseball season culminates in a championship called the World Series, reflecting a time when the United States was the world when it came to baseball. Likewise, in the 1960s, a recession in the United States could just as well have been called a global recession. The United States accounted for a large share of world output, and cyclical activity in much of the rest of the world was dependent on U.S. conditions.

What constitutes a global recession today? Although advanced economies like the United States used to account for roughly 75 percent of world output in the 1960s, their share is now only about 55 percent. As a result, the coincidence between business cycles in advanced economies and global business cycles can no longer be taken for granted. At the same time, however, the countries of the world are more integrated today through trade and financial flows than they were in the 1960s. This creates greater potential for spillover and contagion effects, increasing the odds of synchronous movements and a global business cycle.

Surprisingly, there is no commonly accepted definition of a global recession. Under the definition we propose here—a contraction in world real per capita gross domestic product (GDP) accompanied by a broad decline in various other measures of global economic activity—there have been four global recessions in the post–World War II period: 1975, 1982, 1991, and 2009. The current recession is easily the most severe of

Skyline in Dubai, United Arab Emirates.

the four: output—depending on the measure—is projected to fall between four and six times as much as it did on average in the three other global recessions, and unemployment is likely to increase twice as much. The collapse in world trade this year dwarfs that in past global recessions. And no previous global recession has had so many countries in a state of recession simultaneously. Put simply, in baseball parlance, this global recession is out of the ballpark.

"If total, rather than per capita, real GDP is used, 2009 would be the only year since 1960 in which there has been a contraction in the global economy."

Let's date

In deciding when a particular country is in recession, economists often use statistical procedures to date the peaks and troughs of a key indicator of economic activity, such as the country's real GDP. Applying the same idea at the global level since 1960, we use annual data on world real per capita GDP, using purchasing-power-parity (PPP) weights, from 1960 to 2010 (see Box 1). The estimates for 2009–10 are based on the latest IMF growth forecasts (International Monetary Fund, 2009). A per capita measure is used to account for the vast differences in population growth rates across countries. Emerging and developing economies tend to have faster GDP growth than industrialized economies, but they also have higher population growth.

The procedure picks out four troughs in global economic activity over the past 50 years—1975, 1982, 1991, and 2009. These correspond to declines in world real per capita GDP (see Chart 1, top panel). What major events took place during these episodes?

The global recession of 1975 followed a sharp increase in oil prices, which shot up fourfold in a short time following the Arab oil embargo that began in 1973. This recession marked the beginning of a prolonged period of stagflation, with low output growth and high inflation in the United States.

The recession in 1982 was associated with a variety of events, including tight monetary policies in several advanced economies, the rapid increase in oil prices, and the debt crisis experienced by a number of Latin American countries.

The 1991 recession reflected a host of problems in various corners of the world: difficulties in the U.S. saving and loan industry, banking crises in several Scandinavian economies, adverse effects of an exchange rate crisis on a large number of European countries, challenges faced by the east European transition economies, and the uncertainty stemming from the Gulf War and the subsequent increase in the price of oil.

There is little substantive impact on the analysis if market weights, which enhance the importance of advanced econo-

Box 1

Valuing world GDP: PPP versus market rates

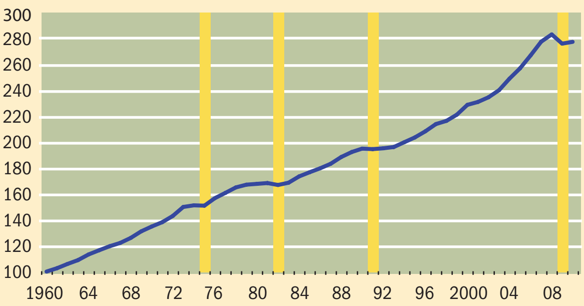
Countries report economic data in their own currencies. To make a cross-country comparison of those statistics (for example, GDP), the data must be converted into a common currency. Most economists do the conversion using either market exchange rates, usually the U.S. dollar rate, or purchasing-power-parity (PPP) exchange rates. The market approach converts currencies into the exchange rate prevailing in the open market. PPP calculates the rate at which the currency of one country would have to be converted into another to buy the same assortment of goods and services. PPP, which is harder to calculate, reflects the fact that goods and services that are not traded internationally tend to be cheaper in low-income countries than in higher-income countries. As a result, the value of, say, output in low-income countries tends to be higher using PPP rather than market rates.

Chart 1

World in recession

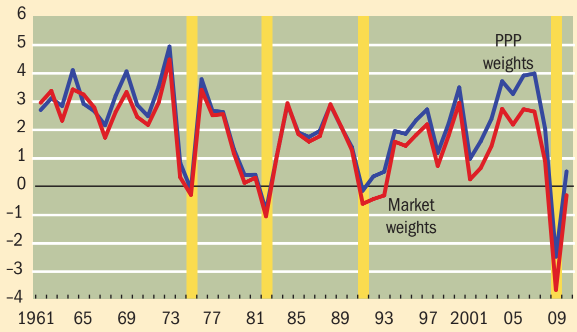
Global real per capita gross domestic product has contracted four times since World War II . . .

(1960=100)



. . . and the current contraction is the biggest percentage decline by far.

(percent change from a year earlier)



Source: IMF staff calculations. Data for 2009–10 are based on a forecast in the *World Economic Outlook* (April 2009).

Note: Shaded areas represent periods when there was a contraction in per capita global GDP weighted by purchasing power parity (PPP). PPP weights are based on the rate at which a country's currency would have to be converted into dollars to buy the same basket of goods and services. Market weights are based on the market exchange rate between domestic currencies and the U.S. dollar.

mies, are used rather than PPP weights. With market weights, the trough of the 1991 episode shifts to 1993 because of the downturns in many European countries during the exchange rate mechanism crisis of 1992–93. Using either weight, current projections suggest that the 2009 global recession will be by far the deepest recession in five decades (see Chart 1, bottom panel). If total, rather than real per capita GDP is used, 2009 would be the only year since 1960 in which there has been a contraction in the global economy.

A second look

In 1978, the U.S. National Bureau of Economic Research (NBER) established a Dating Committee, tasked with determining the dates of recessions in the United States. A similar task for the euro area has been performed by the Centre for Economic Policy Research (CEPR) since 2002.

In contrast to a purely statistical approach, the NBER and CEPR, both private institutions, date business cycle peaks and troughs by looking at a broad set of macroeconomic indicators and reaching a judgment on whether a preponderance of the evidence points to a recession. Because indicators can exhibit conflicting signals about the direction of an economy, this judgmental approach is difficult to employ in real time.

We apply this approach at the global level by using several indicators of global activity—real per capita GDP, industrial production, trade, capital flows, oil consumption, and unemployment (although unemployment data are available only for a small set of economies). The judgmental method reassuringly yields the same dates for global recessions as the statistical approach (see Chart 2).

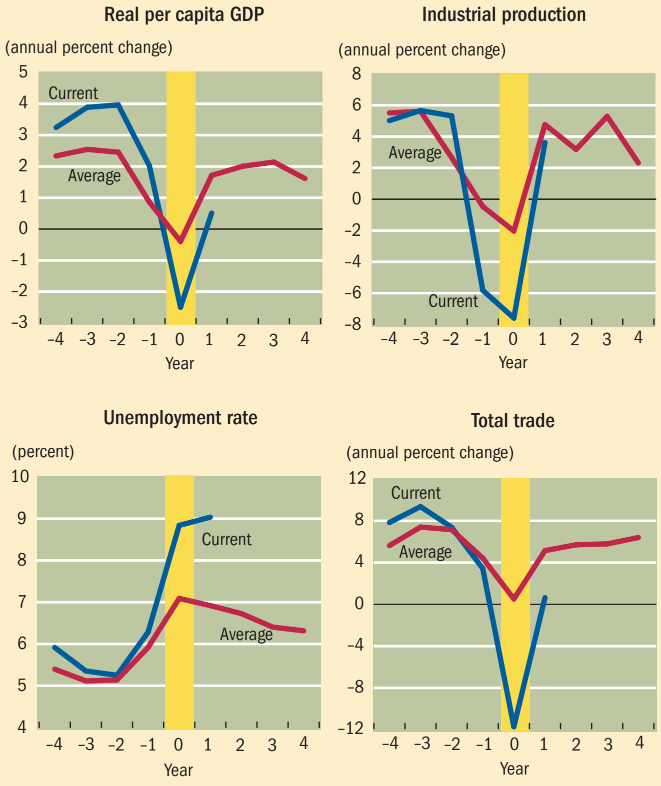
Around the global recessions of 1975, 1982, and 1991, world industrial production and oil consumption start to slow down two years before, and world trade and capital flows one year before, the trough. The unemployment rate registers its sharpest increase in the year of the recession. Similar to its behavior in national recessions, unemployment remains high in the year after the trough, whereas most other indicators have recovered to close to their normal rates of growth. The ongoing recession is following a pattern similar to that observed in past recessions, although the contractions in most indicators are much sharper this time.

This point is reinforced by an analysis of the quantitative features of global recessions (see table). No two global recessions are exactly alike. There are sharper declines in almost all indicators in 1975 and 1982 than in 1991; in 1991, in fact, world trade grew strongly despite the recession. In addition, although both world industrial production and oil consumption stayed flat during the 1991 episode, both indicators fell significantly in the earlier global recessions. In several instances, world economic performance was shaky, but con-

Chart 2

No comparison

By various measures, the current global recession is deeper than the average of the three previous episodes since World War II.



Source: IMF staff calculations.
Note: The data cover the four years preceding and following the trough of the recession, which is year zero.

Each recession is different

The performance of key indicators of global economic activity varies depending upon the recession. By nearly all measures, however, the current global recession is the worst of the four since World War II.

(percent change unless noted)

Indicator	1975	1982	1991	2009[1]	Average[2]
Output per capita (PPP weighted)[3]	-0.13	-0.89	-0.18	-2.50	-0.40
Output per capita (market weighted)[3]	-0.33	-1.08	-1.45	-3.68	-0.95
Industrial production	-1.60	-4.33	-0.09	-6.23	-2.01
Total exports and imports	-1.87	-0.69	4.01	-11.75	0.48
Oil consumption	-0.90	-2.87	0.01	-1.50	-1.25
Unemployment (percentage point change, advanced economies only)	1.19	1.61	0.72	2.56	1.18
Capital flows (change in 2-year average inflows and outflows, percent of GDP)	0.56	-0.76	-2.07	-6.18	-0.76
Per capita consumption	0.41	-0.18	0.62	-1.11	0.28
Per capita investment	-2.04	-4.72	-0.15	-8.74	-2.30

Source: IMF, *World Economic Outlook*, April 2009.
[1]Projected.
[2]Average of 1975, 1982, and 1991 recessions.
[3]PPP is purchasing power parity, which represents the rate at which one currency must be converted into another to buy the same basket of goods and services. Market weight is the market exchange rate between two currencies.

Box 2

Close, but no global recession

To many parts of the world, 1998 and 2001 felt like a recession. However, neither the statistical method nor the judgmental approach suggests that in either year the world was in a recession. The statistical method does not pick them out, because world real per capita GDP did not contract in these years. In 1997–98, many emerging economies, particularly in Asia, had sharp declines in economic activity, but growth in advanced economies held up. In 2001, conversely, many advanced economies had mild recessions, but growth in major emerging markets, such as China and India, remained robust.

Moreover, the behavior of the broad set of global macroeconomic indicators was mixed during the years 1998 and 2001, supporting the inference from the statistical method that these episodes did not display the features of a global recession. For example, the indicators did not suggest a broad-based weakness in the global economy in 1998. In 2001, although industrial production did fall and the rate of global unemployment picked up slightly, both global trade flows and oil consumption increased.

ditions were not severe enough to warrant assigning those years a label of global recession (see Box 2).

There is no question about the severity of present conditions, though. The ongoing global recession is rewriting the book on global recessions of the past 50 years. The immense impact of the global financial crisis on the real economy is evident from the sharp contraction in global industrial production and the rapid escalation of global unemployment. Although the projected decline in industrial production is more than 6 percent, unemployment is expected to increase by about 2.5 percentage points during the current recession. These changes would be much larger than those in the earlier recessions.

Trade and financial flows collapsed

The collapse of global trade and capital flows projected for 2009 is particularly striking. Although the globalization of national manufacturing chains has been a major force driving the growth of world trade during the past two decades, the same process is now instrumental in the sharp contraction of cross-border trade flows. The projected decline in global trade during this episode dwarfs those in 1975 and 1982. After overshadowing the growth of global trade flows over the past two decades, global capital flows reached unprecedented levels in 2007. However, these flows rapidly dried up in the last quarter of 2008, as the global financial crisis spread from advanced economies to emerging markets and developing countries. Global capital flows registered large declines in 1982 and 1991, but those changes are much smaller than the massive decline that seems to be occurring during the current episode.

The severity of the 2009 recession is also indicated by the expected deterioration in per capita consumption, which is much greater than that observed in 1982 and in contrast to the increase in consumption during the two other global recessions. Per capita investment fell in all global recessions, but the projected decline in the present recession easily exceeds that observed in the previous episodes. Just as national recessions associated with financial stress episodes tend to be deeper than other recessions, global recessions coinciding with worldwide financial crises appear to take a heavy toll on the real economy.

Synchronicity of national recessions

How synchronized are national recessions around episodes of global recessions? Not surprisingly, the percentage of countries in recession went up sharply during the four global recessions. The synchronization is measured by yearly fluctuations in the GDP-weighted fraction of countries that have experienced a decline in real per capita GDP. Although the 1975 recession was driven largely by declines in industrialized countries, emerging and developing countries have played a role in the other three episodes. In 1982, recessions in many Latin American countries contributed to the decline in global activity, whereas in 1991 declines in the transition economies played an important role. The 1991 recession was a multiyear episode in which the U.S. recession in 1990–91 was followed by recessions among European countries during the exchange rate crisis.

The period 2006–07 stands out as one in which the number of countries in recession was at a historical low. However, it has been followed by a sharp reversal in fortune. In 2009, all the advanced economies and roughly half the emerging market and developing countries are expected to be in recession. This degree of synchronicity of the current recession to date is the highest over the past half century. Even though it is clearly driven by sharp declines in activity in the advanced economies, recessions in a number of emerging and developing countries are contributing to its depth and synchronicity.

The worst by any reckoning

The 2009 forecasts of a 2.5 percent decline in world real per capita GDP, if realized, would qualify this year as the most severe global recession of the postwar period. Almost all indicators of economic activity are expected to register sharper declines than in previous episodes of global recession. In addition to its severity, this global recession also qualifies as the most synchronized—all the advanced economies are in recession, and many emerging and developing economies are as well. ■

M. Ayhan Kose is a Senior Economist, Prakash Loungani is an Advisor, and Marco E. Terrones is a Deputy Division Chief in the IMF's Research Department. This article is based on their forthcoming IMF Working Paper, "Global Recessions and Recoveries."

Reference:

International Monetary Fund, 2009, World Economic Outlook *(Washington, April).*

Preparing for a Postcrisis World

John Lipsky

If current plans are implemented as anticipated, the postcrisis world is likely to be one characterized by enhanced multilateralism, greater policy coordination, and a more effectively regulated financial system. In the wake of the April summit of the Group of Twenty (G-20), the IMF is set to play a key role in this new global environment and is working to ensure that it has the tools and resources to fully meet the challenges this new role implies.

THE global financial crisis presents an unprecedented challenge that calls for—and has in many ways already produced—an unprecedented response. Countries have acted together in ways that have been innovative and effective. This joint action has been underscored by the new G-20 process and was embodied in the novel Leaders' Summits in November 2008 and April 2009. These meetings were both substantive and symbolic—with important commitments on the part of G-20 industrialized and emerging market countries to cooperate more closely on macroeconomic and financial sector policies.

The IMF has found itself at the center of the new international agenda. In particular, it has been recognized broadly that systemic changes are needed if we are to maintain the benefits of an open and integrated global economy, ensure that these benefits are broadly shared, and limit the risk from future crises. The two Leaders' Summits generated key commitments to enhance global macroeconomic policy collaboration, to reinforce financial sector regulation—including by broadening the perimeter of regulation and strengthening cross-border cooperation—and to refrain from protectionism in both trade and financial policies.

In this context, the global community is looking to the IMF for leadership in several key areas. But what precisely will the IMF's role be in the postcrisis international financial structure? And what changes are needed to ensure that it can succeed in its new and expanded role?

The tools for success

Since its founding, the IMF has evolved along with the world economy. In particular, major moments of international macroeconomic stress—for example, the end of the Bretton Woods exchange rate regime and the collapse of COMECON (the Council for Mutual Economic Assistance of the former Soviet Union)—have led the IMF into new territory. Despite this evolution, it had become increasingly clear that the IMF lacked some of the

Assessing the IMF's role in the future international financial architecture

Photo shows journalists at the G-20 summit in London.

policy tools needed to be fully effective, especially in crisis prevention. The IMF's tool kit was developed during a period when financial markets were dominated by banks, sovereign debt constituted most international debt flows, and securitized financing was in its infancy. But as we know, cross-border private capital flows have grown explosively in recent years, intermediated by increasingly sophisticated financial technology. Financial integration also has deepened across countries, accompanied by a complex web of spillovers between the real economy and the financial sector. These developments helped fuel an historic global expansion during 2003–07, but they also culminated in the recent financial crisis—a crisis that originated in a narrow segment of the U.S. housing market and spread dramatically to every corner of the world.

More effective crisis prevention

Most notably, the absence of a sufficiently large and attractive precautionary facility—an insurance policy of sorts for member countries—has been a major weakness in the IMF's tool kit and in the global financial architecture. Without such a facility, countries typically sought IMF financing only *after* a crisis had struck, limiting the IMF's role to providing financing in order to smooth sometimes painful adjustment. In addition to raising the ultimate cost of macroeconomic shocks to member countries, it also meant the IMF was often associated with politically thorny austerity programs. Many countries, especially in Asia, opted instead to self-insure by building large buffers of foreign reserves. Although this may have made sense for single countries, it contributed to the buildup of global imbalances over the past decade, which, in turn, played a role in the current economic crisis.

There have been several false starts over the years as the IMF attempted to implement a precautionary facility, but it took the current crisis to provide the consensus among member countries to see the effort through. In March of this year, the IMF introduced a Flexible Credit Line (FCL), which grants access to large amounts of rapid financing—with no ex post IMF policy conditions—for countries with very strong economic policies and a proven track record. This is perhaps the biggest change in how the IMF interacts with its members since the end of Bretton Woods. Mexico, Poland, and Colombia have already tapped this new facility and are treating the financing—a total of some $78 billion for the three—as precautionary. Markets have responded very positively to the announcement of these operations—with exchange rates strengthening even as two of the countries took advantage of the breathing room provided by the FCL to loosen monetary policy (see chart). In light of this positive initial experience, it is likely more countries will follow in the near future.

This new facility is not, however, appropriate for all countries. For some, a precautionary facility would contribute to greater market confidence, but policies and policy frameworks may still need strengthening. For these countries, the IMF has introduced High Access Precautionary Arrangements, or HAPAs, which again provide an insurance policy, but in return for necessary policy measures.

More focused and flexible conditionality

For these and most other IMF programs, conditionality will remain critical to ensure that necessary policy adjustments are made and that the revolving nature of IMF credit is preserved. But conditionality has become more focused and streamlined, to encourage countries to approach the IMF early on, before their problems become too severe. At times, conditionality was seen as unduly burdensome, laden with conditions that—although potentially beneficial—were not always crucial for the success of the program or that were implemented without sufficient flexibility with regard to timing or nature of the policy actions. The IMF had already made efforts to streamline conditionality in recent years, but these efforts have taken a leap forward with recent changes that eliminate structural performance criteria and replace them with a more flexible benchmark approach based on a broader progress review. Under this approach, IMF-supported programs would continue to provide the strong policy framework country authorities often value, while moving away from a rigid checklist approach to policy evaluation.

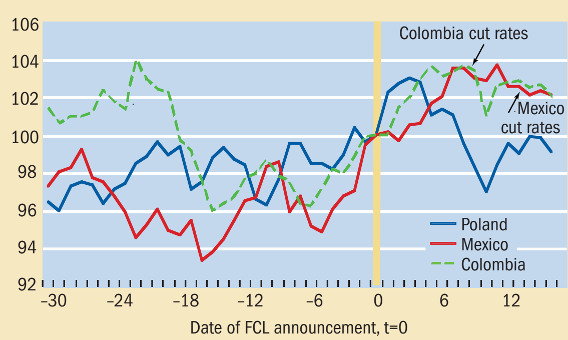
More resources required

These reforms will have little impact if the IMF lacks sufficient resources: in a world of high-volume private capital flows that can swiftly change course, financing packages must be large enough to make a difference. The IMF has thus far had enough resources to do the job. It has already increased its aggregate lending sharply during the crisis and has enlarged the size of its programs in accordance with the size of the global shocks hitting these countries. For example, three emerging market countries—Hungary, Romania, and Ukraine—are each set to receive IMF financing in excess of $15 billion. Access limits, including for low-income countries, have been doubled to assure those countries that their needs can be met. The IMF also intends to provide $6 billion in concessional resources to

Breathing room

The currencies of countries that made use of the Flexible Credit Line mostly did better against regional peers.

(currency performance against regional peers; FCL announcement = 100)



Source: IMF staff calculations.
Note: The blue line is an unweighted average of the Czech krona, Hungarian forint, and Romanian leu per Polish zloty; the red line is an unweighted average of Brazilian real, Chilean peso, and Colombian peso per Mexican peso; the green line is an unweighted average of the Brazilian real, Chilean peso, and Mexican peso per Colombian peso.

low-income countries over the next two to three years: these countries, in particular in sub-Saharan Africa, have experienced several years of very strong growth, and it is crucial that we not allow the crisis to undermine this progress.

World leaders have pledged to ensure that IMF resources remain adequate, even if the crisis ends up deeper or longer than anticipated. The G-20 leaders have agreed to triple the IMF's lending capacity to an unprecedented $750 billion and to at least double its capacity for concessional lending to low-income countries.

The G-20 has also mandated that the IMF agree on a new general allocation of Special Drawing Rights (SDRs), which would provide $250 billion in global liquidity. While this is quite small relative to overall global liquidity, it can have a sizable impact on international reserves for emerging market and low-income countries, potentially providing some additional breathing room for countercyclical macroeconomic policies.

Better and expanded surveillance

Although reform of IMF lending facilities is critical, success in contributing to crisis prevention will ultimately rest on strong surveillance. The IMF was already in the process of making important changes to its surveillance before the crisis struck, by increasing its emphasis on financial risks and their links with macroeconomic outcomes and by emphasizing cross-border spillovers. However, the crisis has clearly pointed to the need for further efforts in this area. The IMF was among the first to warn about risks to the financial sector and was ahead of the curve in its forecasts and calls for global fiscal stimulus and the cleansing of bank balance sheets. However, the IMF did not fully anticipate the depth of the crisis and underestimated the strength of domestic and international linkages. Moreover, the warnings were not loud enough, and were often ignored by policymakers. The IMF is learning from this experience and taking a number of steps to increase the effectiveness and scope of its bilateral and multilateral surveillance:

- A key initiative, in response to a request from both the International Monetary and Financial Committee and the G-20, is the ***development of an Early Warning Exercise***, in collaboration with the Financial Stability Board (FSB). This initiative, envisaged as a twice-yearly exercise, is an effort to take a more systematic view of tail risks and global interlinkages, which, ultimately, should lead to earlier and better policy responses to those risks. The first full presentation to members of this exercise will take place at the IMF–World Bank Annual Meetings in Istanbul this October.
- ***The IMF is strengthening its Financial Sector Assessment Programs***, focusing more closely on cross-border and systemic issues and integrating more closely with bilateral surveillance.
- G-20 leaders have also asked the IMF to assess regularly the actions required and taken by countries in dealing with the crisis. In this context, ***the IMF has begun publishing a G-20 Fiscal Monitor***, which tracks the implementation of fiscal stimulus by countries and will monitor, together with the FSB and other international bodies, implementation of commitments made by G-20 leaders on financial oversight.
- The IMF has also been tasked with monitoring ***implementation of regulatory and supervisory reforms*** agreed under the FSB and other standard-setting bodies.

It is important to emphasize that effective surveillance is a two-way street, with countries being open to the IMF's views and policy recommendations. In this regard, the crisis may be having a salutary effect: the G-20 countries, for instance, have made a commitment to candor and evenhandedness under IMF surveillance.

Reformed governance

For the IMF to be fully effective in its new role, it must be perceived as representing all countries in a fair manner. With that in mind, governance reform is being accelerated to ensure a decision-making structure that reflects current global realities. Completion of a second round of quota reform is scheduled for January 2011 at the latest, and emerging and low-income countries will be given a greater say in this reform. This is an important development, but the significance of quotas should not be overstated: dynamic emerging market countries already are serious global players, and their voice in the policy debate is increasingly heeded. Quota increases will, to this extent, simply reflect a reality that is already here.

What next?

Global efforts have been focused largely on the crisis at hand, but the reforms in progress are aimed equally at the postcrisis world. It is surely too much to ask that any set of institutional changes eliminate business cycles or periods of financial sector stress. Moreover, economic and financial sector policies inevitably will remain primarily the business of national governments. Nevertheless, it is not unreasonable to hope that the ongoing changes to the global financial architecture—including to the IMF—can reduce the frequency and depth of future crises. If that can be accomplished, we will have gone a good distance toward ensuring that the benefits of our increasingly open and integrated global economy can be preserved and extended.

What additional changes might be expected? For one, although there have been major changes in global governance in recent months, the situation remains very much in flux. The enhanced role of the G-20 represents a major expansion of the international decision-making process, but it has at least two potential weaknesses. First, a vast majority of the world's countries are excluded from the G-20: 165 members of the IMF are not represented directly in the process. And, second, the G-20 lacks a voting structure that allows difficult decisions to be reached except with overwhelming consensus. These shortcomings need to be addressed, and a new architecture might allow greater scope for joint decision making on a wider set of international economic and financial issues, with the IMF in its newly expanded role as a central player. ■

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PICTURE THIS

Uncharted Territory

When aggressive monetary policy combats a crisis

THE current global economic downturn will probably not be as severe as the Great Depression, partly because of the vigorous response from the world's policymakers. Eighty years ago, policymakers were initially not even convinced of the need to ease monetary conditions, and they bear a good part of the blame for the ensuing depression. This chart shows how radically policy thinking has changed since then.

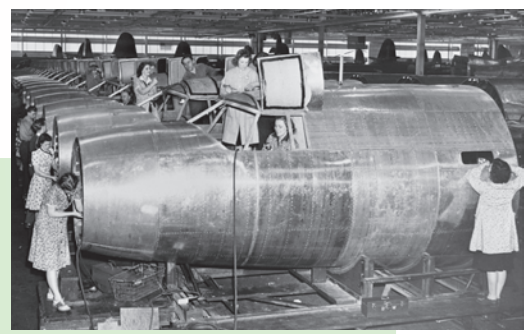
When the crisis began in mid-2007, the U.S. Federal Reserve (Fed) reacted by aggressively cutting its target for the policy interest rate—the fed funds rate, at which banks lend to each other overnight—and introducing special facilities to ensure that all parts of the financial system had access to liquidity. At the same time, too much money in the system would push the fed funds rate below target and possibly stoke inflation, so the Fed sold U.S. Treasury securities to mop up liquidity.

Following the collapse of Lehman Brothers in September 2008, financial and economic conditions worsened dramatically. The Fed cut the policy rate further, introduced yet more facilities, and now allowed its balance sheet to more than double in size over just a few months, pumping up bank reserves and thus the monetary base. Broader monetary aggregates, however, increased only modestly, given banks' cautious behavior.

The expansion of the Fed's balance sheet made it difficult to maintain the fed funds rate near the policy target, and in December 2008 the Fed dropped the target to a range of 0 to 25 basis points. Although there is no more scope for interest rate cuts, the Fed retains the ability to conduct monetary policy through changes in the composition and size of its balance sheet. And this ability is crucial, given the threat of deflation.

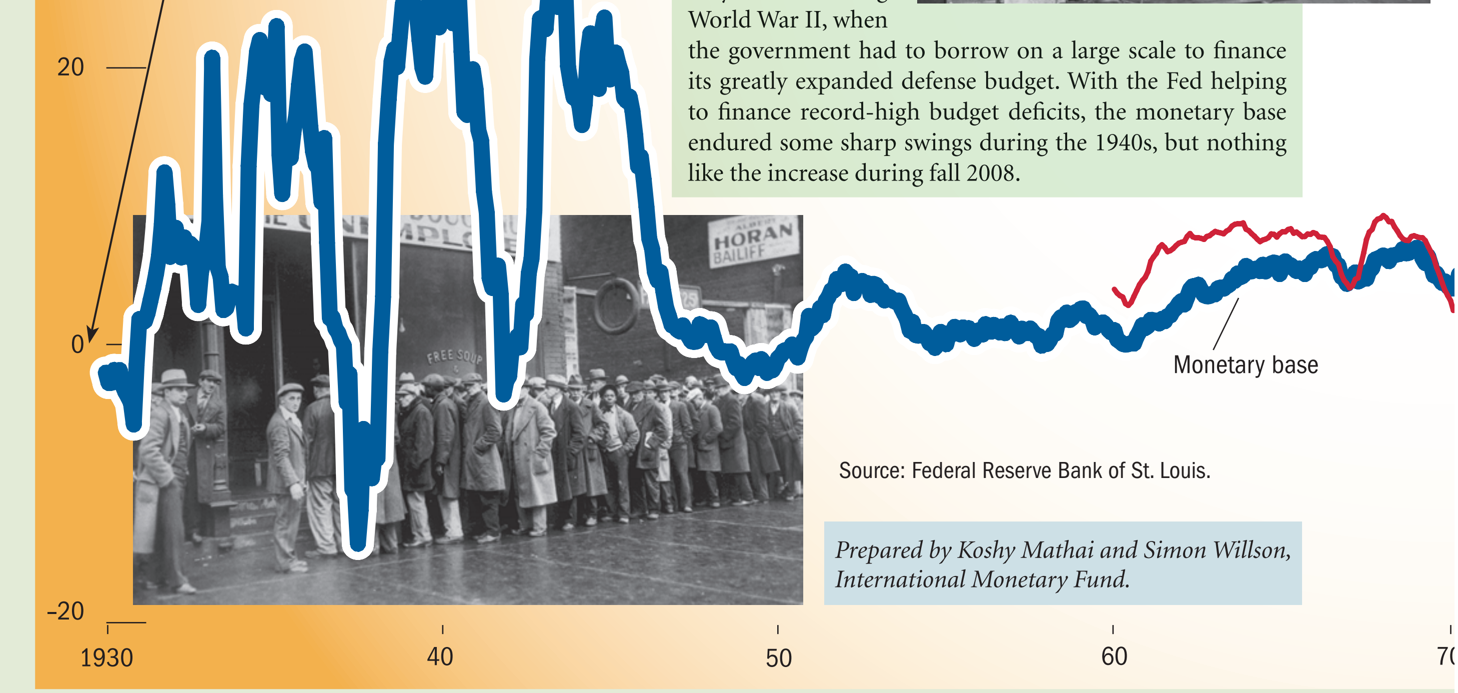
Great Depression, great rethink

The Fed tightened policy in 1930, helping to trigger the Great Depression, and in 1937 it put the brakes on too early, killing off the recovery and sending the economy into recession. In between, it did expand the money supply, but far less aggressively than today's Fed has chosen to do.



Finance to wage a world war

The Federal Reserve bought Treasury debt during World War II, when the government had to borrow on a large scale to finance its greatly expanded defense budget. With the Fed helping to finance record-high budget deficits, the monetary base endured some sharp swings during the 1940s, but nothing like the increase during fall 2008.

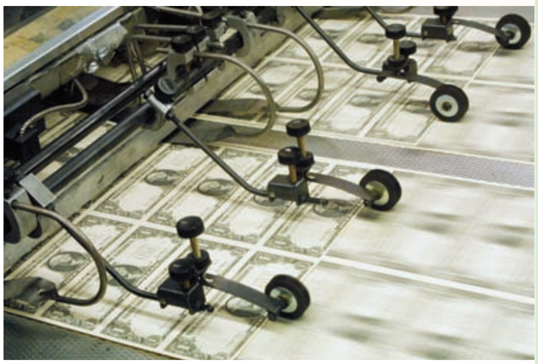


Source: Federal Reserve Bank of St. Louis.

Prepared by Koshy Mathai and Simon Willson, International Monetary Fund.

Off the chart

Having already doubled the size of its balance sheet, the Fed is now poised to increase it even further, sending the monetary base (the blue line) well into another page on top of this one. In March 2009, the Fed announced that it would massively increase its purchases of mortgage-backed securities and debt issued by U.S. housing agencies Fannie Mae and Freddie Mac, and start to buy long-term U.S. Treasury bonds. These purchases have already begun but could go much further.



Exit this way

There is little doubt that the Fed's dramatic expansion of the monetary base has been justified given the sharp economic downturn and the risk of deflation. But the exit strategy could be difficult.

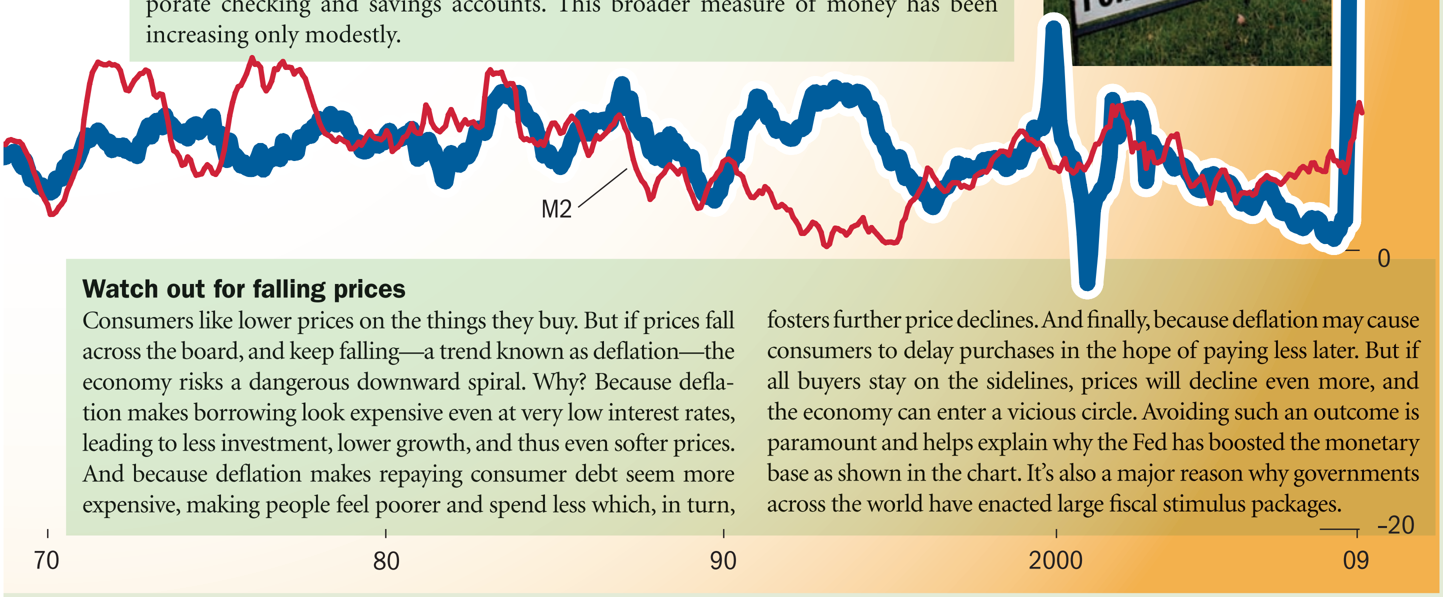
Once the economy starts recovering, and banks no longer feel so reluctant to lend their reserves, the Fed will need to shrink the monetary base quickly to forestall inflation. Knowing the right time to do this is, of course, tricky.

But even if it's obvious when to start shrinking the money supply, how to do it may be less evident, since the Fed now has some assets on its balance sheet that are relatively long term and illiquid and thus not easy to sell off quickly. The Fed is considering a range of policy options—some of which would require new legal authority—to address this issue.

It's basically cash

The fat blue line in the chart shows the annual growth in the adjusted U.S. monetary base—that is, the amount of cash in the economy, and banks' reserves that could be lent and spent too. Apart from a spike as the year 2000 arrived, when people feared computer systems would go down and hoarded cash, growth in the U.S. monetary base was fairly steady from World War II until late in 2008.

The thinner red line in the chart shows why there is no imminent threat of inflation despite the explosion of the monetary base. All that money pumped into banks' reserves has stayed right there: in the banks' vaults. The thin red line shows the trend in M2, which is the monetary base in the blue line plus what's in personal and corporate checking and savings accounts. This broader measure of money has been increasing only modestly.



Watch out for falling prices

Consumers like lower prices on the things they buy. But if prices fall across the board, and keep falling—a trend known as deflation—the economy risks a dangerous downward spiral. Why? Because deflation makes borrowing look expensive even at very low interest rates, leading to less investment, lower growth, and thus even softer prices. And because deflation makes repaying consumer debt seem more expensive, making people feel poorer and spend less which, in turn, fosters further price declines. And finally, because deflation may cause consumers to delay purchases in the hope of paying less later. But if all buyers stay on the sidelines, prices will decline even more, and the economy can enter a vicious circle. Avoiding such an outcome is paramount and helps explain why the Fed has boosted the monetary base as shown in the chart. It's also a major reason why governments across the world have enacted large fiscal stimulus packages.

Asset Price Booms
How Can They Best Be Managed?

Giovanni Dell'Ariccia

Unfinished development in Maryland, United States.

Not all booms are alike—making the right call on which policies to deploy depends on how assets are held and who is exposed to a possible bust

ASSET price booms are fairly common occurrences in market economies. One of the first to be documented was the tulip mania of 1637 in Holland, when, at its peak, contracts sold for more than 10 times the annual income of a skilled craftsman. One of the most recent was the U.S. housing boom of the past decade, whose bust triggered the current global economic crisis.

But not all booms are alike. Some booms have been associated with crises and episodes of financial distress. But others have led to growth and the creation of tangible long-term assets, such as during the "railway mania" that took place in the 1840s in Britain. The scope and severity of the current crisis have reignited the debate over whether economic policy should be concerned with asset price booms and increases in leverage. If so, does this fall under monetary policy or should the burden be on regulatory measures? What, if any, should be the role of fiscal policy? This debate will continue to occupy economists and policymakers for a while, but a few preliminary conclusions can be drawn.

Leveraged booms more dangerous

What matters may be not so much the asset price boom in itself, but who holds the assets and the risk, how the boom is financed, and how an eventual bust may affect financial institutions. The degree of leverage associated with the funding of a boom and the degree of involvement of banks and other financial intermediaries will determine the magnitude of balance sheet effects and the dangers to the supply of credit in a bust.

As we have learned in recent months, busts are far more costly when banks are implicated in the boom and prices are supported through credit from highly leveraged institutions. This is because when asset prices deflate, the balance sheets of borrowers, and thus those of banks, deteriorate sharply (especially when maturity mismatches are pervasive), resulting in a credit freeze that can have a severe impact on economic activity. During an upswing, higher collateral values relax credit constraints. The resulting increase in credit in turn contributes to fuel the rise in asset prices. The opposite spiral can ensue in a downswing, as falling collateral values prevent borrowers from obtaining credit, further depressing asset prices (Kiyotaki and Moore, 1997).

In contrast, booms with limited leverage and bank involvement tend to deflate without major economic disruptions. For example, the bust of the dot-com bubble in 2001 was followed by a relatively mild recession. In that boom, banks played a minor role. The sharp fall in stock prices did have a wealth effect, but it didn't result in the kind of negative feedback between deteriorating borrower and lender balance sheets that has characterized the current crisis. For this reason, it did not result in the weakened banking system and impaired supply of credit we are witnessing now.

Assuming that policymakers have decided a dangerous boom is building and want to deflate it before it wreaks havoc on the real economy, what tools are at their disposal?

Stronger focus on macrofinancial stability

The first approach has traditionally been monetary policy. But central bankers are cautious people, and most of them remain wary of using interest rates to deflate asset price booms. Those in favor of benign neglect argue that central banks should focus on inflation (and, if so mandated, on growth). Asset prices can be monitored for useful information on the state of the economy (for example, quickly rising asset prices can signal more generalized inflationary pressures), but should not be targeted in themselves.

This view rests on four main arguments:

- The role of monetary policy is to control inflation.
- It is difficult to identify asset price booms.
- Monetary policy may be too blunt a tool.
- Policy intervention can do more harm than good.

For these reasons, the argument goes, monetary policy is better suited for picking up the pieces after a bust than preventing a boom from building up in the first place.

But as the current crisis has shown, boom-bust cycles can be very costly. And it has shown us that the traditional policy levers—reducing interest rates and pumping liquidity into the economy—don't work well when the financial system is seriously impaired. Furthermore, although speculative booms may indeed be difficult to identify with certainty, this task can be made easier by narrowing the focus to episodes involving credit and the banking system. In addition, even if spotting "bad" booms is difficult, it may be best to undertake policy actions on the basis of a judgment call (as with inflation) if there is a real risk that inaction could result in a catastrophic scenario. It follows that—to the extent that the buildup of systemic risk can portend a sharp economic downturn, and to the extent that regulation cannot fully prevent such a buildup—central banks cannot follow a benign neglect approach to asset price and credit booms. Price stability should be an objective within a wider mandate for macrofinancial stability.

Yet monetary policy alone may be too blunt to deal effectively with speculative booms. Would you want to put a million people out of a job because your banks are too highly leveraged? In addition, during booms, the expected return on assets is much higher than what can be affected by a marginal change to the interest rate. Capital account openness further limits the effectiveness of interest rates—people and companies seeking loans can, for instance, just take their business to the branch of an international bank. This is especially true in small open economies and in countries with more advanced financial sectors, where banks have easy access to foreign credit. Tighter monetary conditions are also likely to attract foreign capital and further fuel the demand for coveted assets.

So because the main problem with booms is the potential for widespread bank failures, prudential and administrative measures may offer a more targeted solution. They should, therefore, be a central element of an integrated policy response.

Better regulation can help

A major problem is that existing regulatory tools do not dampen the procyclicality of financial markets and the buildup of leverage. In fact, quite the opposite.

Prudential regulation has largely failed to prevent the buildup of systemic risk during good times and tends to aggravate economic downturns. Existing regulations require banks to hold more capital during downturns as risk measures increase, when capital is already depleted. The internal-ratings-based approach under Basel II contributes to this problem because default probabilities are likely to be countercyclical (Repullo, Saurina, and Trucharte, 2009). This forces banks to cut back on lending and thus contributes to a worsening of the downturn.

To be effective, regulations should provide incentives to firms to smooth the impact of macroeconomic shocks. But the question of how to design effective countercyclical prudential policies is one economists and policymakers have only recently started to address.

In designing such policies (IMF, 2009), authorities should consider the following:

- ***Introducing shock absorbers.*** Countercyclical capital regulation and loan loss provisioning requirements could play an important role in fighting booms.
- ***Limiting leverage.*** To prevent excess leverage during upswings, risk-weighted capital requirements could be accompanied by relatively simple, but explicit, limits on leverage.
- ***Limiting property lending volatility.*** The volatility of property lending could be reduced through countercyclical loan-to-value limits. These could be based, for instance, on output growth, house pricing dynamics, or aggregate house-related lending. Stricter loan requirements could restrain the rapid growth of unhedged foreign currency credit.
- ***Limiting risk taking.*** Policies could target specific sources of risks, for instance, by requesting tighter eligibility and collateral requirements for certain types of loans and imposing limits on foreign exchange exposure.
- ***Discouraging excessive lending and borrowing.*** This could be done by eliminating implicit foreign exchange guarantees or fiscal incentives for particular types of loans and through public risk-awareness campaigns (Enoch and Ötker-Robe, 2007).
- ***Monitoring problem banks.*** Finally, measures that improve the economy's ability to withstand busts should be introduced. Such measures include more intensive surveillance of potential problem banks and stronger disclosure requirements of risk-management policies. It's worth remembering that before the crisis, the widespread belief was that securitization had transferred risk outside of the banking system.

Designing and implementing such rules will not be easy (see "Europe under Stress," in this issue), especially in a globalized world. Financial integration limits the effectiveness of unilateral measures because individuals and companies can circumvent restrictions by transferring their money to offshore centers and foreign parent banks.

What is needed, of course, is more international cooperation. Measures will be more effective if supervisory agencies work together to close loopholes, for instance, by preventing people from switching from domestic lending in foreign currency to direct foreign credit. This type of cooperation will be increasingly vital as financial systems become more integrated.

Taxing away the boom

The last tool at the disposal of policymakers is fiscal policy. Fiscal measures can help contain booms. By reducing overall demand, a tightening of fiscal policy can stem the buildup of vulnerabilities. Taxes can, in particular, impact asset prices, but they are blunt instruments, and it remains controversial whether tax increases should be used to contain booms.

Still, the current crisis should prompt policymakers to reexamine long-standing measures favoring leverage, such as allowing deductions for mortgage interest payments. Even though most observers believe that fiscal policy played little role in the current crisis, tax rules in many countries have clearly been conducive to high levels of household and corporate debt, possibly increasing macroeconomic vulnerabilities. Tax provisions may also have affected the level, growth, and volatility of key asset prices, raising questions as to whether discretionary tax policy could have a role in dampening or supporting such prices. The effect of mortgage tax relief is a case in point.

The way forward

An emerging boom can be hard to spot, and coming up with an effective policy response is difficult, which explains why policymakers have tended to shy away from firm policy action.

Bank-financed booms can lead to busts that can disrupt the supply of credit to the economy, as we have learned the hard way. Other booms, such as stock market booms, can more safely be left to take care of themselves. The lesson from the current crisis is clear: if the boom is being inflated through increased leverage provided through the financial system, policymakers should think twice before deciding to stay on the sidelines.

The case for policy intervention depends on how a boom is financed and how risk is held. Boom episodes with limited leverage and financial intermediary involvement tend to deflate without major economic disruptions. The risks for the economy are greater when the asset price upswing is fueled through leverage and risk resides primarily within the banking system.

A mix of policy tools is likely to be the best way of deflating a boom. In future, monetary policy will have to take asset price booms and financial stability more into account. But the policy response has to involve greater recourse to new flexible prudential measures aimed at limiting the procyclicalities of financial intermediation. ■

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The Perfect Storm

Olivier Blanchard's view of the underlying causes of the crisis

The IMF's Chief Economist explained in a November 2008 lecture how a crisis that began in mortgage-backed securities turned into the worst recession since the 1930s.

FOR A TIME after the start of the financial crisis, its effects on real activity appeared limited, but this did not last. Lower housing prices, lower stock prices—triggered initially by the decreased stock market value of financial institutions—higher risk premiums, and credit rationing started taking their toll in the second half of 2007. In the fall of 2008, however, the effect suddenly became much more pronounced. Concern that the financial crisis was worsening, and might lead to another Great Depression, led to a sharp decrease in stock prices and to a dramatic fall in consumer and corporate confidence around the world.

This happened as a result of a buildup during the preceding good times of underlying conditions that helped shape the crisis, plus the triggering of amplification mechanisms that dramatically boosted its impact.

Blanchard identified two related, but distinct, mechanisms: first, the sale of assets to satisfy liquidity runs by investors and, second, the sale of assets to reestablish capital ratios. Together with the initial conditions, these mechanisms helped create the worst global recession since the 1930s.

Four initial conditions

The trigger for the crisis was the decline in housing prices in the United States. But the initial losses from the subprime crisis were not huge in comparison with a measure such as U.S. stock market capitalization and were greatly overshadowed by subsequent world stock market declines (see chart). However, over the years, the stage was being set for a much larger crisis. Blanchard cited four preconditions: the underestimation of risk contained in newly issued assets; the opacity of the derived securities on the balance sheets of financial institutions; the interconnection of financial institutions, both within and across countries; and the high degree of leverage of the financial system as a whole.

Assets were created, bought, and sold that appeared much less risky than they truly were. With the expectation of stable or rising housing prices, most subprime mortgages appeared relatively riskless: the value of a mortgage might be high relative to the price of a house, but that imbalance would slowly disappear over time as prices increased. In retrospect, the fallacy of this proposition was in its premise: if housing prices actually declined, many mortgages would exceed the value of the house, leading to defaults and foreclosures. Why did the people who took on these mortgages, and the institutions that held them, so underestimate the true risk? Many explanations have been given, and many potential culprits have been named. Each of these explanations contains a grain of truth, but only a grain.

Blanchard said he believed that the fundamental explanation is more general. History teaches that benign economic environments often lead to credit booms and to the creation of marginal assets and the issuance of marginal loans. Borrowers and lenders look at recent historical distributions of returns and become more optimistic, indeed too optimistic, about future returns. The environment was benign in the 2000s in most of the world, with sustained growth and low interest rates. And, looking in particular at U.S. housing prices, both borrowers and lenders could point to the fact that housing prices had increased every year since 1991, and had done so even during the recession of 2001.

Securitization led to complex and hard-to-value assets on the balance sheets of financial institutions. Securitization had started much earlier, but ramped up in the past decade. In mid-2008, more than 60 percent of all U.S. mortgages were securitized—pooled to form mortgage-backed securities—and the income streams from these securities were separated ("tranched") to offer riskier flows to some investors and less risky flows to others.

Why did securitization take off in such a way? Because it was, and still is, a major improvement in risk allocation and a fundamentally healthy development. Indeed, looking across countries before the crisis, many (including Blanchard) concluded that the U.S. economy would withstand a decrease in housing prices better than most economies: the shock would be absorbed by a large set of investors, rather than by just a few financial institutions, and thus would be much easier to absorb. This argument ignored two aspects that turned out to be important. The first was that, with complexity, came opacity. Although it was possible to assess the value of simple mortgage pools, it was harder to assess the value of the derived tranched securities, and even harder to assess the value of the securities derived from tranches of derived securities. Thus, worries about the original mortgages translated into a large degree of uncertainty about the value of the derived securities. And, in that environment, the fact that the securities were held by a large set of financial institutions implied that this considerable uncertainty affected a large number of balance sheets in the economy.

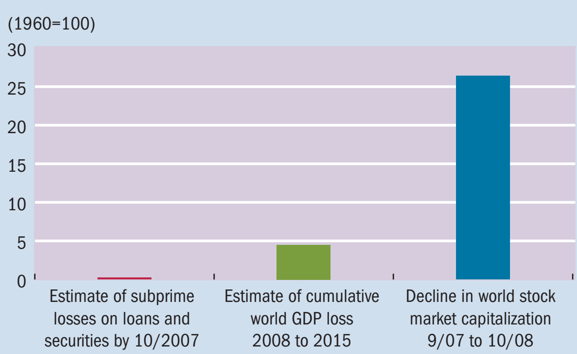
Securitization and globalization led to increasing interconnection of financial institutions, both within and across countries. One of the early stories of the crisis was the surprisingly large exposure of some regional German banks to U.S. subprime loans. But the reality goes far beyond this one example. Foreign claims by banks from the five major advanced economies increased from \$6.3 trillion in 2000 to \$22 trillion by June 2008. In mid-2008, claims by these banks on emerging market countries alone exceeded \$4 trillion. Think of what this implies if, for any reason, those banks decided to cut back their foreign exposure, as is happening now.

Leverage increased within the financial system. The final key initial condition was the increase in leverage. Financial institutions financed their portfolios with less and less capital, thus increasing the rate of return on that capital. What were the underlying reasons? Certainly optimism and the underestimation of risk were at play. Another important factor was the number of regulatory holes. Banks were allowed to reduce their capital requirement by moving assets off their balance sheets in so-called structured investment vehicles. In 2006, the value of the off-balance-sheet assets of Citigroup, \$2.1 trillion—exceeded the value of the assets on the balance sheet, \$1.8 trillion. The problem went far beyond banks. For example, at the end of 2006, "monoline insurers," which insured a particular risk—such as default on municipal bonds—and operated outside the perimeter of regulation, had capital equal to \$34 billion to back insurance claims against assets valued at more than \$3 trillion.

The implications of high leverage for the crisis were straightforward. If, for any reason, the value of the assets became lower and more uncertain, then the higher the

Crisis magnified

The losses from subprime loans were small relative to subsequent stock market declines.



Sources: IMF, *Global Financial Stability Report* and *World Economic Outlook* (November update and estimates); and World Federation of Exchanges. Estimates as of November 2008.

leverage, the higher the probability that capital would be wiped out and institutions would become insolvent. And this is exactly what happened.

How the crisis was amplified

The larger crisis is the result of two mechanisms that amplified the initial crisis: the inability of some banks to finance themselves and the effects of capital adequacy requirements for banks.

The first amplification mechanism is the modern version of bank runs. In traditional bank runs during the Great Depression, it was the depositors who took their money out of the banks. Two changes have taken place since then. First, in most countries, depositors are for the most part insured, so they have little incentive to run to the bank. And banks and other financial institutions finance themselves largely in money markets, through short-term "wholesale funding."

"Modern runs are no longer literal runs: what happens is institutions perceived to be at risk can no longer finance themselves on the money markets."

Modern runs are no longer literal runs: what happens is institutions perceived to be at risk can no longer finance themselves on the money markets. The result is the same as in the old bank runs: faced with a decrease in their ability to borrow, institutions have to sell assets. To the extent that this is a macroeconomic phenomenon, there may be few deep-pocket investors willing to buy assets. If, in addition, the value of the assets is especially difficult for outside investors to assess, the assets are likely to sell at "fire-sale prices," prices below the expected present value of the payments on the asset. This, in turn, implies that the sale of the assets by one institution further contributes to a decrease in the value of all similar assets, not only on the seller's balance sheet, but on the balance sheets of all the institutions that hold these assets. This, in turn, reduces their capital, forcing them to sell assets, and so on.

The amplification mechanism is at work, and it is easy to see how the size of the amplification is determined by initial conditions: to the extent that the assets are more opaque and thus difficult to value, the increase in uncertainty will be larger, leading to a higher perceived risk of solvency, and thus to a higher probability of runs. For the same reasons, finding outside investors to buy these assets will be more difficult, and the fire-sale discount will be larger. To the extent that securitization leads to exposure of a larger set of institutions, more institutions will be at risk of a run. And finally, to the extent that institutions are more leveraged, that is, have less capital relative to assets to start with, the probability of insolvency will rise, again increasing the probability of runs. As has been seen, all these factors were very much in evidence at the start of the crisis, which is why this amplification mechanism has been particularly strong.

The second amplification mechanism comes from financial institutions' need to maintain an adequate capital ratio. Faced with a decrease in the value of their assets, and thus lower capital, financial institutions need to improve their capital ratio, either to satisfy regulatory requirements or to satisfy investors that they are taking measures to decrease the risk of insolvency. In principle, they then have a choice. They can either get additional funds from outside investors or deleverage, decreasing the size of their balance sheets by selling some of their assets or reducing their lending. In a macroeconomic crisis, finding additional private capital is likely to be difficult, for the reasons cited earlier: there may be few deep-pocket investors willing to put up funds. And to the extent that the assets held by the financial institutions are difficult to value, investors will be reluctant to put their funds in institutions that hold them. In that situation, the only option for these institutions is to sell some of their assets. The same mechanism then goes into effect: the sale of assets leads to fire-sale prices, affecting the balance sheets of all the institutions that hold them, leading to further sales, and so on. And, again, opacity, connectedness, and leverage all imply more amplification.

The two mechanisms are distinct. Theoretically, runs can happen even in the absence of any initial decrease in the value of assets. This is the well-known multiplicity of equilibria: if funding stops, assets must be liquidated at fire-sale prices, justifying the stop in funding in the first place. But runs are more likely, the higher the doubts about the value of the assets. Theoretically, firms may want to take measures to reestablish their capital ratio, even if they have no short-term funding problem and do not face runs.

The two mechanisms interact, however, in many ways. A financial institution subject to a run may, instead of selling assets, cut credit to another financial institution, which may in turn be forced to sell assets. One of the channels through which the crisis has moved from advanced economies to emerging market economies has been through cuts in credit lines from financial institutions in advanced economies to their foreign subsidiaries, forcing them in turn to sell assets or cut credit to domestic borrowers.

In short, underestimation of risk, opacity, interconnection, and leverage, all combined to create the perfect (financial) storm. After Blanchard gave this lecture, other amplification mechanisms further combined to transform the financial turmoil into an even bigger macroeconomic storm. ■

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Playing with Fire

Firms across the spectrum of emerging markets entered into exotic derivative contracts that caused massive losses

Randall Dodd

THE NAMES sound as if they were toys or children's stories—KIKO in Korea, TARN in Brazil and other countries. But they are part of a business model based on the use—or misuse—of exotic derivatives whose results are anything but imaginary. Transactions in these derivatives have resulted in massive losses that fueled currency market panics and helped transmit the financial crisis to emerging markets. The very real consequences led the head of Poland's business roundtable to call them a "product from hell."

The first reported losses were at private firms in the tradable goods sector. Most of the firms were exporters that appeared to be using the derivatives to hedge against ill effects if their domestic currency were to appreciate. But when the currencies depreciated instead and the losses were disclosed, foreign exchange markets reeled as the firms had to scramble and sell local currency for dollars to cover their losses. The direct losses have been deep and wide. An estimated 50,000 firms in the emerging market world have been affected. This includes 10 percent of Indonesia's exporters and 571 of Korea's small and medium-size exporters. Losses in Brazil are estimated at $28 billion, in Indonesia at $3 billion, and in Mexico and Poland at $5 billion each. Not all the losses are private. Sri Lanka's publicly owned Ceylon Petroleum Company lost $600 million, and China's Citic Pacific suffered $2.4 billion in losses.

The phenomenon appears to be widespread. Losses were also reported by exporters and other firms in Hong Kong SAR, India, and Malaysia. Firms in Brazil and Mexico also suffered large losses (see "A Hedge, Not a Bet," in this issue).

A subject of debate

Policymakers in many countries have been engaged in often acrimonious debates over how to deal with benignly named KIKOs and TARNs—and other exotic derivatives (see box). There are two fundamental questions at the core of the debate: Did the firms intend to hedge—that is, insulate themselves from currency movements—or speculate? And did banks, acting as derivatives dealers, merely meet the needs of their clients or did they engage in deceptive trading practices?

It is nearly impossible to establish the mindset of customers or dealers. So the debate has created more heat than light. This article seeks to describe these derivatives, analyze their appropriateness for hedging and speculation, and suggest some policy measures to help prevent their misuse.

The public interest concern surrounding these exotic financial products arose because their impact on the respective emerging market economies was greater than the direct impact on the firms involved. Once the local currency began to depreciate sufficiently to generate big losses for KIKO or TARN investors, the reports of those losses roiled the local currency markets and amplified selling pressures. The lack of transparency in the market for these exotic derivatives meant that currency markets could not know either the amounts of the outstanding transactions, who held them, or the size of the potential losses. Uncertainty led to fear, then to panic that fed on itself. Fears further depressed currency values, which generated larger losses on the derivatives.

Snappy but potent

Derivatives sellers often give snappy names to exotic derivatives as part of their marketing effort. KIKO stands for "knock-in knock-out" option—"knock out" representing the point at which further investor gains are cancelled. TARN stands for "target redemption note," signifying that further gains would end after they reached a "target redemption" amount. TARN is also often used to refer to a forward or swap. Other comparable derivatives include Snowball and Accumulator, whose names evoke their potential for accumulating extra gains (and losses).

Investor confidence also took a hit. Emerging equity market prices tumbled, and credit spreads spiked. Foreign investors withdrew capital, and the prospects for refinancing maturing foreign currency debts were thrown into question. The global financial crisis that began in the U.S. housing market arrived in emerging market economies.

First appearance

The problems came to light last year as seemingly unrelated instances of nonfinancial firms getting into trouble with their currency hedges, which are transactions designed to offset losses that occur when the value of their export earnings falls relative to that of their local currency (which they must use to pay production costs). Currency hedges are especially important to firms in export and import sectors because they earn or pay in currencies other than their domestic currencies and want to protect their income in their home currencies. In most cases, these exotic hedges involved an exporter taking a long position in its country's currency—that is, buying a derivative contract that anticipates a rise in the value of the domestic currency, usually vis-à-vis the dollar.

But a pattern quickly emerged. In at least seven Asian countries—China, India, Indonesia, Japan, Korea, Malaysia, and Sri Lanka—plus Brazil, Mexico, and Poland, the losses arose from very similar exotic derivative contracts traded between sophisticated derivatives dealers and their often less sophisticated nonfinancial corporate customers. In Korea, these derivatives went by the name KIKO (knock-in, knock-out); in other countries they were called TARNs (target redemption forwards, swaps, or notes), callable forwards, or dual currency deposits. Currency coupon swaps was the label used in Japan.

What made the losses alarming was their size. Disclosed losses were excessive relative to reasonable estimates of firms' export revenues, and some firms were quickly forced into filing for bankruptcy protection. This was not consistent with the outcomes from normal hedging activities. Instead, the mounting losses generated financial policy firestorms—they became scandals.

What were they?

Although the names varied from country to country, the basic economic structure of KIKO- and TARN-like transactions was the same.

- The derivative provided a long position—that is, one in which the investor gains from an increase in the value of the underlying currency. The position was usually in the local currency, although in Sri Lanka the transactions were in crude oil and in Japan in Australian dollars.
- The derivative generated monthly payments for a period of one or sometimes two years. A KIKO structure used long call options (giving the buyer the right to buy the currency at a certain price over a certain period of time) and short put options (granting the right to sell). That created the economic equivalent of a futures or forward contract—the investor gains from an upward movement in the underlying price and losses from a downward movement.
- Potential gains on the transaction were capped or limited. In some cases it was a so-called knock-out provision that canceled the monthly payment if the foreign currency appreciated beyond a specified exchange rate, while in other cases the contract would terminate if the accrual of gains reached a target amount.
- Potential losses were not limited, and indeed the derivatives were structured in such a way that the losses would occur at a rate that was usually twice as fast as the decline in the underlying exchange rate or reference price.
- The initial cost or premium to enter into these transactions was zero.

Proper debate

It is hard to know whether the nonfinancial firms intended to hedge against further strengthening of their currency or merely to speculate. It is also hard to know how thoroughly they understood the risk-return profile of these transactions. It is similarly hard to ascertain whether the derivatives dealers offering these transactions were meeting the demands of their clients or taking advantage of them.

Whatever the motivations, the outcome was clear, as was the economic character of these contracts. These exotic derivatives were inappropriate for either hedging or speculating, and no knowledgeable investor would be likely to enter into these contracts intentionally. The policy debate should shift from trying to discern the mindset of derivatives traders and investors to discussing how best to ensure that appropriate derivatives are indeed used for hedging, that hedgers are protected from abusive trading practices, and that speculative trading is restricted to "qualified" firms and individuals.

These exotic derivatives are not appropriate for hedging because they do not closely match the firms' existing risk exposures. Although the firms do need to hedge against an appreciation in the local currency, the KIKO and TARN instruments do not function as a hedge if the currency appreciates enough to "knock out" payments or trigger redemption of the contracts. Moreover, an exporter's potential gains from a currency depreciation—because their products become more competitive—are not matched by the doubling of the rate of losses from a depreciation.

Nor are such derivatives appropriate for firms that are not capable of absorbing the possible hit arising from the doubling of potential losses from currency depreciation. The resulting bankruptcies suggest this was the case. A fundamental principle of suitability is that the investor should be capable of absorbing potential losses.

Moreover, even if firms in the tradable goods sector intended to speculate, these derivatives were far from the best instruments. Either a currency future or a standard forward or swap would offer the same or better upside potential, while not exposing the speculator to doubled downside risk.

If the KIKOs and TARNs were not suitable for hedging and not the best alternative for speculating, why were they traded in such large quantities? One hypothesis is that the investors were either unsophisticated or that they were not informed or knowledgeable of the risks. Indeed, the international financial markets had been benign for so long that investors in many markets began to underestimate certain risks. And the nonfinancial firms were presumably less sophisticated than the major banks offering these trades.

Another hypothesis is that investors were sometimes pressured into the contracts by banks as a condition for rolling over their loans. Some emerging market financial authorities, in interviews with the author, said that investors complained to them of bank pressure when the investors were refinancing loans. Yet one other explanation for the popularity of the derivatives is that the KIKOs and TARNs were priced in a way that attracted investors to the higher risks because the exotic derivatives offered exchange rates that were better than those prevailing in the market for standard forwards and options. This last point implies that investors were somewhat aware of the products and their risks. However, it does not follow that such exotic investments were their best choice. If investors knowingly accepted that risk-return trade-off, it would amount to a dangerously inefficient trade in which nonfinancial firms were selling insurance against large amounts of extreme risks to more sophisticated financial firms.

What regulators should do

There are substantial incentives for firms to hedge, and there would be more actual hedging activities were firms not afraid of being abused or defrauded. Hedging would not have generated the losses that have made these exotic derivative transactions so scandalous across emerging markets. To promote more hedging and to help avoid a repetition of recent losses and disruptions to the foreign exchange markets caused by these exotic investments, there are measures that can be taken:

- At a national level, investor protection laws and antifraud provisions should be clarified and strengthened to discourage the use of inappropriate derivative transactions.
- Reporting requirements for derivative transactions should be established. Reporting price and other transaction data for derivatives would make the market more transparent and would endow national and multinational surveillance authorities with greater capability to detect potential problems before they escalate.
- The introduction of new and complex derivatives, or at least their use by firms other than qualified speculators, should be regulated through the use of either “positive” lists of acceptable financial instruments or “negative” lists of prohibited ones.
- Multilateral surveillance is needed to monitor markets globally and, among other functions, identify patterns of market misconduct and trading abuses such as occurred with KIKOs and TARNs. The authority, through its established relationships with national supervisory authorities, should be capable of promptly notifying them of alarming or suspicious developments. As a multinational body, the IMF could perform this task and already possesses some of the necessary resources and formal channels of cooperation among member countries. ■

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New Paths to Funding

When financing is scarce, developing countries may try innovative approaches to raise capital

Restaurant kitchen in Vermont, United States: pools of migrants are potential purchasers of diaspora bonds.

Suhas Ketkar and Dilip Ratha

DEVELOPING countries have an outstanding short-term debt of nearly a trillion dollars. According to the World Bank, they face a financing gap of $370–$700 billion. Given the severe crisis of confidence in debt markets, it will be extremely difficult for countries to obtain private financing using traditional financial instruments. Innovative financing approaches are required, especially for private sector borrowers in developing countries, who face even harsher credit rationing than public sector borrowers.

Scarcity of capital threatens to jeopardize long-term growth and employment generation in many developing countries, which have limited access to capital even in the best of times. Official aid alone will not be adequate to bridge near- or long-term financing gaps. Ultimately, it will be necessary to use official funding to catalyze private flows to developing countries—adopting innovative financing approaches such as targeting previously untapped potential investors or using structures with credit enhancements to tap existing investors.

Stimulating such approaches is easier said than done, especially during the deepening financial crisis. But the debt crisis of the 1980s was ultimately resolved via an innovation—the creation of Brady bonds in 1989. Those bonds, named for then–U.S. Treasury Secretary Nicholas Brady, securitized the bank debt of mainly Latin American countries into tradable bonds that could be purchased by a broad investor base.

Some innovative market-based financing mechanisms that developing countries could use include borrowing from their expatriate (diaspora) communities, securitizing future revenues, and issuing bonds indexed to growth. Preliminary estimates suggest that sub-Saharan African countries could raise $5–$10 billion by issuing diaspora bonds and $17 billion by securitizing future remittances and other future receivables.

Diaspora bonds

The governments of India and Israel have raised about $40 billion, often during liquidity crises, by tapping into the wealth of their diaspora communities to support balance of payments needs and finance infrastructure, housing, health, and education projects. Diaspora bond issuance by the Development Corporation for Israel (DCI) has been a recurrent feature of that nation's annual foreign funding program, raising well over $25 billion since 1951. The State Bank of India (SBI) has issued diaspora bonds on just three occasions—in 1991, following the balance of payments crisis; in 1998, after the country conducted nuclear tests; and in 2000. The SBI has raised $11.3 billion. Jewish diaspora investors paid a steep price premium (perhaps better characterized as a large patriotic yield discount) when buying DCI bonds. Indians living abroad purchased SBI bonds when ordinary sources of funding for India had all but vanished.

The rationale behind diaspora bonds is twofold. For the countries, diaspora bonds represent a stable and cheap source of external finance, especially in times of financial stress. For investors, diaspora bonds offer the opportunity to display patriotism by helping their country of origin. Furthermore, the worst-case scenario for diaspora bonds is that debt service payments by the issuer are in local rather than hard currency. But because diaspora investors often have liabilities in their country of origin, they are likely to view the risk of receiving payments in local currency with much less trepidation than would nondiaspora investors.

Among countries with large diaspora communities are the United States (which has large groups from the Philippines, India, China, Vietnam, and Korea, in Asia; El Salvador, the Dominican Republic, Jamaica, Colombia, Guatemala, and

Haiti, in Latin America and the Caribbean; and Poland, in eastern Europe), Japan (with a major diaspora presence of Koreans and Chinese), the United Kingdom (with large Indian and Pakistani communities), Germany (with people from Turkey, Croatia, and Serbia), France (with diaspora communities from Algeria and Morocco), and South Africa (home to migrants from neighboring countries in southern Africa). Large pools of migrants from India, Pakistan, the Philippines, Bangladesh, Indonesia, and Africa in the oil-rich Gulf countries are also potential purchasers of diaspora bonds.

If banks and other issuers want to tap the U.S. retail market, they likely will have to register their diaspora bonds with the U.S. Securities and Exchange Commission, whose customary disclosure requirements could prove daunting for countries with weak financial institutions. But countries with a significant diaspora presence in Europe, where regulatory requirements are relatively less stringent, may be able to raise funds there. Diaspora bonds might also be issued in Hong Kong SAR, Malaysia, Russia, Singapore, and South Africa.

Future-flow securitization

Securitization is a much maligned term at present because the global crisis had its roots in securitized debt in the United States. Securitization, however, was not the main problem. It was overaggressive valuation of the underlying assets. As long as this error is not repeated and ample excess coverage is provided to allow for declines in the value of the underlying collateral, debt securitized by future hard-currency receivables will be a viable option for developing countries seeking to raise funds in the prevailing environment of low global risk appetite.

Ever since Mexico's Telmex undertook the first securitized transaction based on future U.S. dollar revenue flows, the main credit rating agencies have assessed more than 400 such transactions, valued at $80 billion. A wide variety of future receivables have been securitized—including exports of oil, minerals, and metals; airline tickets, credit card vouchers, electronic and paper remittances, and international telephone calls; oil and gas royalties; and tax revenue. Securitization of diversified payment rights (DPRs)—which include all hard-currency receivables that come through the international payments system—is a more recent innovation. DPRs are deemed attractive collateral because the diversity of their origin makes such flows stable. During 2002–04, when Brazil had difficulty accessing international capital markets, many Brazilian banks securitized future hard-currency DPRs to raise $4.9 billion.

By pledging future hard-currency receivables, securitized transactions subordinate the interests of current and future creditors. In a world of perfect capital markets, this might raise the cost of future borrowing and eliminate the principal rationale for securitization (Chalk, 2002). But many developing countries face capital markets that are far from perfect, and creditors may have trouble distinguishing between good and bad risks, paving the way for securitization.

Transactions backed by future revenue streams are structured so that the payments do not enter the issuer's home country until obligations to bond investors are met. Although this structure reduces sovereign transfer and convertibility risks, several other risks remain. These include:

- ***performance*** risk associated with the issuing entity's ability to generate the receivable,
- ***product*** risk associated with the stability of receivable flows because of price and volume fluctuations, and
- ***diversion*** risk if the issuer's government forces sales to customers not designated to direct their payments into the trust.

Many of these risks can be reduced through the selection of future-flow receivables and excess coverage. The latter has now become critical as a result of the recent dismal performance of mortgage-backed securities. Unlike the securitization of existing assets such as local-currency mortgage loans, future-flow securitization structures (involving foreign-currency export revenue or diversified payment rights) have held up very well during this financial crisis.

Still, issuance of securitized bonds is far below potential. Constraints include a lack of good receivables and strong (investment-grade) local entities and the absence of clear laws, particularly bankruptcy laws. There are, however, fewer barriers today than a decade ago.

Performance-indexed bonds

Debt service payments on fixed-coupon bonds can conflict with a country's ability to pay. When an internal or external shock cuts growth, revenue falls and social safety net expenditures rise. The resulting increase in fiscal pressure can force a country to choose between defaulting on foreign debt and adopting policies that increase the funds available for debt service but exacerbate the decline in output. Growth-indexed bonds are designed to overcome this problem. Coupons on such bonds are set to vary according to the growth performance of a country's gross domestic product (GDP), a proxy for its ability to pay. This feature lets a developing country follow countercyclical fiscal policy, paying less during an economic slowdown and more during an expansion. It is plausible that developing countries would be willing to pay a higher rate on indexed bonds than they would pay on fixed-coupon bonds to be able to avoid potential debt defaults.

This idea has been around for a while, but despite their apparent attractiveness, growth-indexed bonds have not caught on. Only a few developing countries—Argentina, Bosnia and Herzegovina, Bulgaria, and Costa Rica—have incorporated clauses or warrants that increase the payoff to bondholders if GDP growth exceeds a threshold. The GDP-indexed warrants in the Argentine program, for instance, represent the government's obligation to pay 5 percent of the excess annual GDP in any year in which the GDP growth rate rises above the trend. The market's initial low valuation of these warrants improved throughout 2007 as the Argentine economy posted strong growth.

Widespread use of growth-indexed bonds has been held back because of concerns regarding the accuracy of GDP data, the potential for deliberate underreporting of growth, and the complexity of the bonds. These obstacles are not overwhelming, but the liquidity of growth-indexed bonds has been low so far, and there appears to be a novelty premium (Costa, Chamon, and Ricci, 2008).

Similar to the growth-indexed bonds issued by sovereigns, subsovereign borrowers could issue performance-indexed bonds (PIBs). A PIB's coupon would be linked to a well-defined indicator of the performance of the borrowing entity. For a provincial or municipal government, for example, it could be a fiscal revenue target; for a public sector port authority, the indicator could be clearance or transit time; and for a private corporation, it could be earnings (Ramachandran, Gelb, and Shah, 2009). Such instruments have not yet been tested, but they seem potentially useful for large subsovereign borrowers in emerging markets.

Sovereign ratings and market access

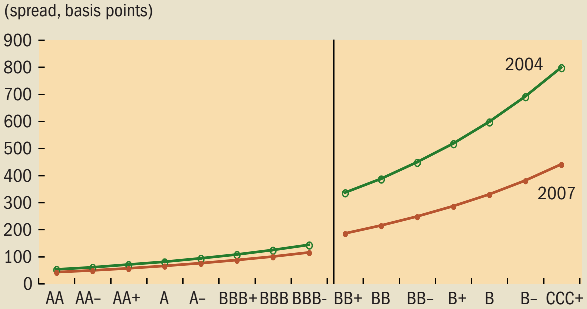
Developing countries' access to credit markets is affected not only by the type of debt they are offering but by the quality judgments of the rating agencies, which, when applied to a nation, are called sovereign credit ratings. Sovereign ratings also provide a benchmark for subsovereign borrowers.

In general, sovereign debt spreads fall as sovereign credit ratings improve. But the major effect occurs when a rating rises to investment grade (see chart). Still, not having a sovereign rating may be worse than having a low rating. In 2005, foreign direct investment (FDI) accounted for 85 percent of private capital flows to the 70 developing countries that have no rating. Bank loans made up most of the rest. In comparison, capital flows were much more diversified for rated countries—roughly 55 percent from FDI, 15 percent from bank loans, as much as 25 percent from bonds, and nearly 5 percent from equity flows. Even B-rated countries were better off. An examination of 55 unrated countries reveals that they were more creditworthy than previously believed: eight of those 55 countries would likely be above investment grade; another 18 would likely be in the B to BB category. This suggests that there is hope for some of the unrated developing countries to obtain financing in global capital markets. Access to debt, however, must be accompanied by prudential debt management practices. In addition, countries benefiting from the IMF and World Bank's Heavily Indebted Poor Countries Initiative and Multilateral Debt Relief Initiative should observe caution in taking on debt from opportunistic free riders.

Ratings pay

The higher its credit rating, the more cheaply can an emerging market government raise funds. Costs rise dramatically when ratings fall below investment grade.

(spread, basis points)



Sources: Authors' calculations; and Dealogic Analytics.
Note: Ratings from Standard & Poor's. Investment grade ranges from AA to BBB-. Spreads represent the difference between the interest rate an emerging market government pays on a sovereign debt issue and the interest rate on comparable U.S. Treasury securities. A basis point is 1/100th of a percentage point.

Public policy issues

Like earlier financial innovations, diaspora bonds, future-flow-backed securities, and performance-indexed bonds facilitate access to funding for developing countries. Future-flow securitizations are designed to transfer credit risk from borrowers, thereby enhancing credit ratings and expanding liquidity. Diaspora bonds are meant to enhance liquidity. Growth- or performance-indexed bonds are designed to reduce credit risk by linking coupons to the ability to pay and to enhance liquidity by giving creditors an option on the performance of sovereign and subsovereign borrowers in developing countries.

Multilateral institutions and official donors can play an important role in promoting market-based innovations. They can provide credit enhancements to developing country borrowers facing severe financing gaps. They can offer technical assistance on legal frameworks, structuring, pricing, and risk management—and in the design of projects financed by innovative instruments. The institutions can help establish sovereign ratings, opening up access to international capital markets for poor countries in Africa, many of which are unrated (see box). They can also provide seed money to cover investment banking fees and rating costs incurred in structuring transactions supported by future-flow receivables. They may also offer partial guarantees on future flows to mitigate risk and catalyze private flows. They have a clear role to play in improving the accuracy and transparency of GDP data to support the issuance of growth-indexed bonds. ■

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This article draws on Innovative Financing for Development *by Suhas Ketkar and Dilip Ratha, published in 2008 by the World Bank.*

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A Hedge, Not a Bet

Latin American companies used new techniques to protect against currency swings. But a few used them to gamble—and lost big

Herman Kamil, Bennett W. Sutton, and Chris Walker

BORROWING in foreign currency can be a double-edged sword for companies in emerging markets. Foreign currency liabilities often give firms the ability to secure funding at a lower cost and at longer maturities than if they borrowed in their domestic currency. But those same liabilities can leave balance sheets vulnerable to swings in exchange rates. In the late 1990s and early this decade, sharp currency depreciations in several countries in Latin America drove up the value of firms' foreign currency debt relative to their assets and income, impairing many firms' ability to service debt. This, in turn, exacerbated the banking difficulties that many of these countries experienced.

Over the past decade, firms have faced higher day-to-day fluctuations in exchange rates as many countries sought greater exchange rate flexibility. Those more flexible rates provided for better adjustment to external shocks and allowed monetary policy more independence. Crucially, it also provided incentives for firms to better manage their currency risk because they no longer could rely on central banks to keep currency movements within a preannounced range. What had been essentially free currency risk insurance to the private sector ended.

In a recent study (International Monetary Fund, 2008) we looked at the vulnerability of the corporate sector in Latin America to exchange rate changes between 1994 and 2007. We found that firms have sharply cut their balance sheet exposure to a sudden devaluation by reducing the share of debt contracted in foreign currency. We also found that firms have been more actively using "natural" currency hedges (export proceeds and dollar assets) to offset the dollar risk arising from their debt portfolio. But after the bankruptcy of Lehman Brothers in September 2008, a new vulnerability became apparent. Some firms (especially larger, more sophisticated ones) had used financial derivative contracts to place bets on currency movements—and lost big when the currencies depreciated steeply. That not only led to financial problems for the companies, but presented authorities with difficult issues in foreign exchange markets.

Stronger balance sheets

To examine corporate sector vulnerability, we drew on a new database that links corporate balance sheet and stock market data for 1,200 publicly traded firms (financial and nonfinancial) in Argentina, Brazil, Chile, Colombia, Mexico, and Peru. We first described the evolution of firms' net foreign currency positions over a relatively long time span (1992–2007), then complemented this balance sheet analysis with an exploration of the sensitivity of firms' stock market valuations to exchange rate changes in two subperiods, 1995–98 and 2004–07. We then tested whether the response of firms' market values to currency fluctuations has changed over time.

We found that over the past decade, publicly listed firms in Latin America have in general cut their vulnerability to exchange rate risk by substantially reducing currency mismatches *on their balance sheets*. They did this by relying less on foreign currency debt and by more systematically matching the liabilities they did have to foreign currency assets or to expected flows of dollar income. Consequently, on average, firms more recently became substantially more insulated from currency risk. We also found that for a significant fraction of firms, the impact of exchange rate changes on equity prices had declined considerably since mid-2000. These results suggest that firms had become more aware of exchange rate risk and took steps to adapt their balance sheet structure and risk management practices to meet the potential challenges posed by greater exchange rate flexibility.

Corporate speculation proved disastrous

But a number of large corporations in Brazil and Mexico engaged in speculative derivative transactions in foreign currencies that left them exposed to currency movements. Rather than using these financial derivatives to *hedge,* or *insulate,* their on-balance-sheet exposure from unexpected exchange rate movements, exporters and other nonfinancial firms in Brazil and Mexico took large speculative positions in derivatives with the aim of profiting from local currency appreciation and from positive differentials between local interest rates and generally lower U.S. dollar interest rates. When the Brazilian real and the Mexican peso depreciated sharply in September–November 2008, these firms incurred big losses (see table). The central banks in each country intervened heavily in their foreign exchange markets to contain the effect of these losses and meet the resulting extraordinary demand for dollars. Similar derivative activities occurred in a number of emerging markets, with negative consequences, including the Republic of Korea, Poland, and India (see "Playing with Fire," in this issue).

Currency derivative exposures often involved currency options, which give investors the right to buy or sell a currency at a specified price during a certain period of time. In Brazil and Mexico, some firms entered into complex option structures, either as an outright bet against depreciation of the domestic currency or as a source of funding that would be cheaper but also riskier than a dollar bank loan. Many of the resulting positions were structured so that losses accumulated more rapidly after local currencies depreciated past a certain price. Although these transactions were profitable when the domestic currency was appreciating, or even if exchange rates did not fluctuate too much, losses mounted after the currencies depreciated sharply following the failure of Lehman Brothers in September 2008.

How much these companies lost is difficult to ascertain, but in Brazil and Mexico the losses were large enough to prompt a significant response from the central banks. Exposure to currency risk through derivatives led to substantial accounting losses and threatened to amplify the post-September shock to foreign exchange markets—the result of firms' increased demand for dollars to provide the additional collateral needed to cover their mark-to-market losses. For instance, in Mexico, the central bank—which had long intervened in the foreign exchange market with a regular, rules-based approach—for the first time in a decade intervened on a large, discretionary basis, with no preannounced rules. In Brazil, the central bank sold dollar futures contracts to help affected corporations hedge or unwind their positions and reduce market volatility.

The sharp drop in firms' stock prices following their disclosure of derivative losses provides strong evidence that the exposure to derivatives was "news" to the markets. Our results for Mexico, for example, suggest that before the October crisis, share values of most of the firms that reported the biggest derivative losses tended to rise with a domestic currency depreciation.

Policy implications

A plausible interpretation of our results is that the trend in most countries in the region to adopt flexible exchange rates over the past decade has given firms sufficient incentives to manage currency risk and be more resilient to external shocks. Yet, as the recent episodes in Brazil and Mexico suggest, as financial derivatives become more sophisticated and complex, regulatory frameworks must adapt to market developments as well as reinforce prudential supervisory practices.

Losing a bet

Several big companies in Brazil and Mexico had major losses in the fourth quarter of 2008 as a result of using exotic foreign currency derivatives.

Firm	Loss (million dollars)	Loss (percent of total assets)
Mexico		
Comerci	2,200	60
Cemex	911	2
Gruma	852	27
Vitro	358	15
Alfa	194	2
GISSA	161	34
Brazil		
Sadia	2,400	41
Aracruz Celulose	2,100	42
Grupo Votontarin	1,000	55

Sources: Mexico—quarterly financial reports for firms. Brazil—press reports; Bloomberg LLP; and Reuters.

Supervisors as well as the public need more detailed information on the exposures of nonfinancial corporations to derivative positions. The global crisis revealed gaps in financial data disclosure and understanding of underlying risks. Financial activities by nonfinancial corporations expanded in areas such as offshore derivative contracts with limited disclosure requirements or enforcement, leaving regulators unable to assess risk concentrations. The surprises in the exposure of Brazilian and Mexican firms to currency derivatives, and the reaction of currency markets and the central banks, illustrate the potential macroeconomic consequences of insufficient information on the financial activities of the corporate sector.

The recent episodes in Brazil and Mexico exposed problems with financial risk management at the firm level as well. Derivative losses were also caused by varying combinations of governance failures at the firm level (poor risk management) and lack of appropriate disclosure from suppliers of instruments (banks that were supposed to have advised options buyers of the embedded risk). Authorities should be aware of the skewed incentives generated by low-volatility environments and the potential for banks and their clients to overreach in tranquil times and take too many risks.

Supervisors in countries with significant over-the-counter derivatives markets could improve the transparency and disclosure of information of these operations. Financial institutions operating in these markets could report these transactions more frequently and include more detailed information on instruments and counterparties. In particular, there may be benefits to requiring nonfinancial publicly traded corporations to report their derivatives exposures undertaken in offshore markets, which in the past have not been monitored systematically by regulators. There may also be advantages to encouraging exchange-based trading of derivatives to reduce counterparty risk and enhance transparency. Such measures would help better assess any buildup of systemic risks associated with derivative transactions. It would also strengthen market discipline, helping final investors perform some of the due diligence currently outsourced to rating agencies. Authorities in Mexico and Brazil are already moving in this direction. ■

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Latin America: When Is Fiscal Stimulus Right?

For some countries stimulus is appropriate during the global economic crisis. But for others the answer is less clear

Nicolás Eyzaguirre, Benedict Clements, and Jorge Canales-Kriljenko

THE role of fiscal policy in ameliorating the adverse effects of the global economic downturn is at the center of the policy debate in Latin America, as it is in other parts of the globe. Economic growth in the region is projected to decline from a healthy 4 percent in 2008 into negative territory in 2009, reversing some of the impressive gains in employment and poverty reduction of recent years. Fiscal, or government, revenues are also coming under pressure, making it difficult for countries to achieve targets for budget deficits, even without new spending initiatives. At the same time, many countries are constrained by limited access to financing and still-high levels of public debt, making it difficult to expand public borrowing. In these circumstances, how do policymakers assess whether or not a fiscal stimulus is appropriate? Under what conditions are markets likely to permit this kind of fiscal expansion to be effective in helping support living standards during a period of economic downturn?

Fiscal effects of the downturn

The contraction in economic activity and falling commodity prices are placing substantial pressure on government revenue. After several years of increases, revenue-to-GDP ratios for Latin American countries, on average, are projected to fall by about 2 percentage points of GDP in 2009 (see chart). The revenue declines among commodity producers are especially noteworthy. Fiscal revenues are likely to drop significantly below their estimated long-run levels, and a key issue is whether it is desirable and feasible to protect public spending from falling as well.

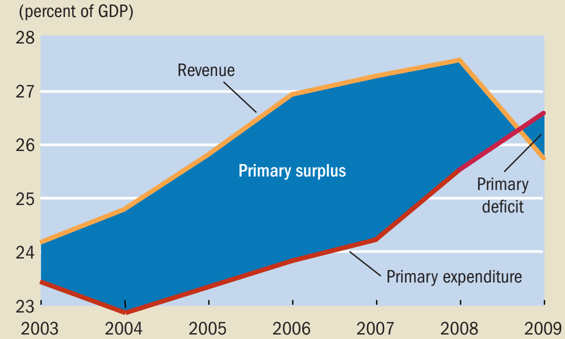
In deciding on the appropriate fiscal stance, an important consideration for policymakers is the effect of the budget deficit on financing conditions and interest rates. An increase in the government's budget deficit raises the demand for funds and public debt levels, and under some circumstances may raise interest rates substantially.

In emerging markets in Latin America, the effects of higher budget deficits on interest rates are potentially much stronger than in advanced economies. Many governments have yet to establish credible medium-term, typically three- to five-year, fiscal frameworks to assure markets that extraordinary increases in deficits will be reversed once economic activity recovers. As a result, the path for public debt—and public borrowing needs over the medium term—may appear uncertain. In addition, most governments are unable to borrow for as long a period as those in industrial countries. That means that they have to refinance, or roll over, a substantial share of the public debt in any given year. The debt of emerging market countries is also highly vulnerable to shifts in investors' risk appetite. This last factor is especially important, because shifting perceptions of risks regarding fiscal sustainability—or the government's ability to finance a higher deficit over the medium term—can lead to substantial upward pressure on interest rates and capital outflows. Furthermore, the large increase in public debt levels in industrial countries adds to uncertainty with respect to world interest rates and the availability of financing for emerging markets over the medium term.

Shifting fiscal fortunes

Government revenues are projected to decline in 2009 and Latin America is now expected to run a primary budget deficit.

(percent of GDP)



Source: IMF staff calculations.
Note: Revenues and expenditures are a simple average of balances in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. Primary expenditure reflects government outlays less interest expense.

A street market in La Paz, Bolivia.

Fiscal policy effectiveness

Consider the case of a government that enjoys a high level of credibility in the fiscal framework and a low public debt burden. Under normal financing conditions, an increase in government expenditure, financed by the issuance of domestic debt, can lead to higher output growth. Interest rates rise relative to what they would have been (the baseline), in part because of higher levels of public debt. These effects are unlikely to constrain the effectiveness of fiscal policy, however, in part because the current baseline already incorporates low interest rates caused by the global slowdown and glut of savings.

For example, in a simulation exercise on a representative small Latin American economy, using the IMF's Global Integrated Monetary and Fiscal Model (Kumhof and Laxton, 2007), an increase in public investment of about half a percent of GDP could raise output, on average, by slightly less than half a percentage point in the first year. The net results of fiscal expansion on growth also depend on the response of monetary policy and the initial conditions assumed in the baseline.

However, in a situation in which the higher deficit leads to concerns about financing over the medium term or the sustainability of public debt, fiscal policy is much less effective in stabilizing output. Under these types of circumstances, concerns about financing lead investors to demand a higher risk premium for holding government debt, which pushes up interest rates. In economies with flexible exchange rates, the higher risk premium also contributes to a depreciation of the exchange rate—which boosts the cost of imported inputs, switches spending toward home goods, and reallocates resources toward exports and import-substituting activities. In economies with predetermined exchange rate policies (such as a fixed exchange rate or a crawling peg), interest rates must increase by even more to protect the exchange rate, undermining the effect of the fiscal expansion on economic activity. Depending on the credibility of the fiscal framework, the public debt level, and the monetary policy framework, these higher interest rates can even lead to a decline in output in response to higher budget deficits.

Composition of stimulus matters

Beyond issues of financing, the efficiency of the proposed measures as an instrument of fiscal stimulus must also be considered. The general lessons for Latin America, in this regard, are similar to those for other regions. As indicated in Spilimbergo and others (2008), preference should be given to measures that have large fiscal multipliers, can be implemented quickly, and can be reversed once the economy stabilizes. Policy actions that meet these criteria include accelerating planned investment and/or maintenance, temporary tax cuts targeting those with a high propensity to consume (rather than save the cut), and the expansion of unemployment benefits. Spending that cannot be easily reversed once the economy stabilizes, and is not well targeted—for example, an increase in public wages—is less desirable from this standpoint. The long-term trend in Latin American spending toward rising primary current outlays (expenditure minus interest payments) also suggests caution in this regard. These outlays, for example, increased by about 2 percentage points of GDP between 2000 and 2008.

The bottom line is that the scope for fiscal stimulus must be analyzed on a case-by-case basis. In several countries, the slowdown in private sector activity may provide room for a temporary and well-designed fiscal stimulus. Governments with high policy credibility, low debt burdens, and flexible monetary frameworks are well positioned to conduct effective countercyclical fiscal policy. In countries with low credibility, however, countercyclical fiscal policy efforts may be counterproductive. In intermediate cases, efforts to boost credibility may pay handsome dividends.

For example, governments that have not already done so will benefit from making additional progress in developing sustainable medium-term fiscal frameworks. These frameworks should incorporate specific strategies of the government for dealing with transitory shocks (such as a deterioration in the global environment or commodity prices that sharply reduces economic growth). They should also include specific plans for addressing long-term fiscal challenges, such as pension spending. Finally, they should also delineate how the government would react if contingent or possible fiscal risks materialize. Building this kind of credible, rules-based framework will assure markets that there is sufficient room for fiscal expansion in the shorter term, without threatening fiscal sustainability over the longer term. ■

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VIEWPOINT

Regulatory Philosophy

S. Raihan Zamil

THE causes of the financial crisis are widely acknowledged, but what is less well understood in the public debate is how the philosophical approach to the regulation and supervision of the global financial system played an enabling role in the runup to the current financial crisis. This philosophical approach is often described as the "risk-based supervision" (RBS) framework. It has been adopted by the leading developed economies, as well as many other countries throughout the world. Although the RBS framework can be used to describe a general philosophical approach to regulation and supervision of the entire financial system, I will use the term more narrowly—as it applies to official oversight of the banking system.

Risk-based supervision sought to spur innovation and reward good behavior but helped bring about the global financial crisis

At the core of the RBS philosophy lies the view that a banking organization can engage in virtually all forms of financial activity, as long as it has robust risk management systems and sufficient earnings and capital to support those underlying risks. In short, RBS seeks to liberalize the powers of well-managed banks, to spur innovation, and to reward good behavior.

The RBS framework also aims to promote proactive financial sector supervision by early identification and resolution of weak risk management practices, *before* their effects threaten the stability of both individual banks and the banking system as a whole. Virtually all countries that have adopted this approach have aligned their legal, regulatory, and supervisory approach to support this overarching philosophy.

Where risk-based supervision falters

Although the ideals of RBS are admirable and the framework has yielded tangible benefits, its shortcomings are rarely discussed, given the presumption that the RBS approach is the best way to oversee a nation's banking system. The unfolding of the current financial crisis has exposed fundamental cracks in this approach to banking system oversight.

First, ***the RBS philosophy outsources critical public policy matters***—such as whether certain financial activities are permissible and the implications for broader financial system stability—to individual bank supervisors. To take a recent notorious example, should banks be allowed to originate and/or purchase via securitization home mortgage loans that require a very small or no down payment and that do not require any documentation of customers' ability to repay? Should banks be allowed to sell complex structured products to their retail depositors?

On the one hand, proponents argue that creative financing and the availability of a wide range of financial products facilitate innovation and provide greater access to credit and choice of products to a broader range of consumers. On the other hand, critics—among them, Nobel Prize–winning economist Joseph Stiglitz—argue that it is necessary to differentiate between good and bad innovation.

Whatever the relative merits of these arguments, if we are to view the reasonableness of such activities solely through the lens of individual banks' risk management and financial capacity, we may be missing the larger public policy and systemic risk implications: whether

Matters

such activities are on balance good or bad for the financial system. Issues of such magnitude are best addressed at the institutional, rather than individual bank supervisor, level.

Judgment skills

Second, ***the RBS approach relies on the ability of both bank supervisors and risk managers at individual banks to make sound judgments.*** And because good risk management cannot be judged as black or white—but in shades of gray—it is often subject to intense debate between the regulator and the regulated. This judgment-based process has become more complex over time, as larger banks have developed increasingly sophisticated risk models that few people within central banks and regulatory authorities—and, as it turns out, within banking organizations themselves—fully understand.

The implications of the explicit links established under the RBS model—between a banking organization's risk management capacity with the scope of its permissible financial activities—must be considered against this backdrop. As such, the stakes for arriving at erroneous risk assessment are high, and, as the unfolding of the current financial crisis has shown, it could, on a collective basis, bring down the entire financial system.

Third, although a key aim of the RBS framework is to allow banking supervisors to identify and resolve problems in the banking system at an early stage, ***it is difficult to constrain the risk-taking activities of banks when their earnings and capital positions still appear strong.*** Early regulatory intervention is more prominent under the RBS philosophy, particularly because it also liberalizes a banking organization's scope of permissible financial activities. In practice, problems are encountered on two fronts, at both the firm level and the political level.

At the firm, or micro, level, for example, if regulators were to identify a significant relaxation of banks' loan origination standards as an area of concern, the bank's management could point to the bank's superior earnings and capital position as "evidence" of its ability to manage risk. Thus, to the extent that bank supervisors identify these shortcomings, they typically make "soft recommendations" as opposed to issuing "mandatory directives." These challenges are compounded by the procyclical nature of bank capital requirements, which allow banks to hold less capital during good times, precisely when heightened competition and rapid credit growth lead inevitably to an overall increase in risk appetite and an erosion of risk-assessment standards. The current financial crisis has revealed that risks both at individual banks and in the banking system as a whole were building to unsustainable levels, at a time when the global banking industry was reporting record profits and seemingly healthy capital levels.

At the political level, there may also be pressure to keep the credit flowing. After all, what politician wants to be blamed for taking away the punchbowl when the party is just getting started? As a result, weak risk management practices can continue to persist in the banking system, until bank regulators step in with a too-little-too-late response—after the cumulative effects of weak risk management practices have penetrated the bank's balance sheet and adversely affected reported earnings and capital.

Policy implications

Because of these shortcomings, any meaningful reform of official banking system oversight must take a critical look at, and attempt to mitigate, the enabling role the RBS philosophy played in the current financial crisis.

- First, banking supervisors must be willing and able to constrain banks' risk-taking activities—as needed—at an early stage, even when their financial condition is strong on paper. That is easier said than done, because it would require bank supervisors to ignore conventional wisdom and say "no" to powerful banking organizations, which—if they happen to be systemically important banks—are likely to have strong political backing at the highest levels of government. As such, early regulatory intervention can succeed only if it is backed by a credible bank regulatory authority that has the institutional wherewithal to carry out effectively its "safety and soundness" mandate.
- Second, banking authorities must find a better balance between the use of "regulatory" and "supervisory" tools to oversee the safety and soundness of individual banks and the banking system. The implementation of risk-based supervision has led to a greater—and perhaps excessive—reliance on discretionary methods to ensure a healthy banking system. In short, this philosophical approach has been used as the basis to liberalize banking activities and to delegate critical decisions to individual bank supervisors, based on their assessment of banks' risk management and financial capacity.

While this system of supervision is here to stay, we must attempt to formulate more explicit regulatory backstops to mitigate its unintended consequences and to provide a more tangible means to curb excessive risk in the banking system.

Among those new regulations should be the establishment of countercyclical capital and loan loss provisioning requirements during economic upswings. It will no doubt be a challenge to strike an appropriate balance between drawing a line in the sand regarding a banking organization's risk-taking activities and continuing to encourage innovation in the global financial system. Authorities must be willing to confront this challenge and—critically—get the balance right. Given the scale and severity of the current financial turmoil, we simply cannot afford to be so wrong again. ■

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BACK TO BASICS

What Is Fiscal Policy?

Mark Horton and Asmaa El-Ganainy

FISCAL policy is the use of government spending and taxation to influence the economy. Governments typically use fiscal policy to promote strong and sustainable growth and reduce poverty. The role and objectives of fiscal policy have gained prominence in the current crisis as governments have stepped in to support financial systems, jump-start growth, and mitigate the impact of the crisis on vulnerable groups. In the communiqué following their London summit in April, leaders of the Group of Twenty industrial and emerging market countries stated that they are undertaking "unprecedented and concerted fiscal expansion." What do they mean by fiscal expansion? And, more generally, how can fiscal tools provide a boost to the world economy?

Historically, the prominence of fiscal policy as a policy tool has waxed and waned. Before 1930, an approach of limited government, or laissez-faire, prevailed. With the stock market crash and the Great Depression, policymakers pushed for governments to play a more proactive role. More recently, countries scaled back the size and function of government, with markets taking on an enhanced role in the allocation of goods and services. Now, with the financial crisis in full swing, a more active fiscal policy is back in favor.

How does fiscal policy work?

When policymakers seek to influence the economy, they have two main tools at their disposal—monetary policy and fiscal policy. Central banks indirectly target activity by influencing the money supply through adjustments to interest rates, bank reserve requirements, and the sale of government securities and foreign exchange; governments influence the economy by changing the level and types of taxes, the extent and composition of spending, and the degree and form of borrowing.

Governments directly and indirectly influence the way resources are used in the economy. The basic equation of national income accounting helps show how this happens:

$$GDP = C + I + G + NX.$$

On the left side is gross domestic product (GDP)—the value of all final goods and services produced in the economy (see "Back to Basics," *F&D*, December 2008). On the right side are the sources of aggregate spending or demand—private consumption (C), private investment (I), purchases of goods and services by the government (G), and exports minus imports (net exports, NX). This equation makes it evident that governments affect economic activity (GDP), controlling G directly and influencing C, I, and NX indirectly, through changes in taxes, transfers, and spending. Fiscal policy that increases aggregate demand directly through an increase in government spending is typically called expansionary or "loose." By contrast, fiscal policy is often considered contractionary or "tight" if it reduces demand via lower spending.

Besides providing goods and services, fiscal policy objectives vary. In the short term, governments may focus on macroeconomic *stabilization*—for example, stimulating an ailing economy, combating rising inflation, or helping reduce external vulnerabilities. In the longer term, the aim may be to foster sustainable growth or reduce poverty with actions on the *supply side* to improve infrastructure or education. Although these objectives are broadly shared across countries, their relative importance differs depending on country circumstances. In the short term, priorities may reflect the business cycle or response to a natural disaster—in the longer term, the drivers can be development levels, demographics, or resource endowments. The desire to reduce poverty might lead a low-income country to tilt spending toward primary health care, whereas in an advanced economy, pension reforms might target looming long-term costs related to an aging population. In an oil-producing country, fiscal policy might aim to moderate procyclical spending—moderating both bursts when oil prices rise and painful cuts when they drop.

Response to the crisis

The crisis has had a negative impact on economies around the globe, with financial sector difficulties and flagging confidence hitting private consumption, investment, and international trade (recall the national income accounting equation). Governments have responded by aiming to boost activity through two channels: automatic stabilizers and fiscal stimulus—that is, new discretionary spending or tax cuts. Stabilizers go into effect as tax revenues and expenditure levels change and do not depend on specific actions but operate in relation to the business cycle. For instance, as output slows or falls, the amount of taxes collected declines because corporate profits and taxpayers' incomes fall. Unemployment benefits and other social spending are also designed to rise during a downturn. These cyclical changes make fiscal policy automatically expansionary during downturns and contractionary during upturns.

Automatic stabilizers are linked to the size of the government, and tend to be larger in advanced economies. Where stabilizers are larger, there may be less need for stimulus—tax cuts, subsidies, or public works programs—since both approaches help to soften the effects of a downturn. Indeed, in the current crisis, countries with larger stabilizers have tended to resort less to discretionary measures. In addition, although discretionary measures can be tailored to stabilization needs, automatic stabilizers are not subject to implementation lags (for example, design, approval, and implementation of new road projects), and their impacts are automatically withdrawn as conditions improve. Stimulus may be difficult to design and implement effectively and difficult to reverse when conditions pick up. In many low-income and emerging market countries, however, institutional limitations and narrow tax bases mean stabilizers are relatively weak. Even in countries with larger stabilizers, there may be a pressing need to compensate for the loss of economic activity and compelling reasons to target the government's crisis response to those most directly in need.

The exact response ultimately depends on the fiscal space a government has available for new spending initiatives or tax cuts—that is, its access to additional financing at a reasonable cost or its ability to reprioritize its existing expenditures. Some governments have not been in a position to respond with stimulus, because their potential creditors believe additional spending and borrowing would put too much pressure on inflation, foreign exchange reserves, or the exchange rate—or take too many resources from the local private sector (also known as crowding out), delaying recovery. For other governments, more severe financing constraints have necessitated spending cuts as revenues decline (stabilizers functioning). In countries with high inflation or external current account deficits, fiscal stimulus is likely to be ineffective, and even undesirable.

Fine-tuning the response

The size, timing, composition, and duration of stimulus matter. Policymakers generally aim to tailor the size of stimulus measures to their estimates of the size of the output gap—the difference between expected output and what output would be if the economy were functioning at full capacity. A measure of the effectiveness of the stimulus—or, more precisely, its translation in terms of output (also known as the multiplier)—is also needed. Multipliers tend to be larger if there is less leakage (for example, only a small part of the stimulus is saved or spent on imports), monetary conditions are accommodative (interest rates do not rise as a consequence of the fiscal expansion), and the country's fiscal position after the stimulus is viewed as sustainable. Multipliers can be small or even negative if the expansion raises concerns about future sustainability, in which case the private sector would likely counteract government intervention by increasing savings or even moving money offshore, rather than investing or consuming. Multipliers also tend to be higher for spending measures than for tax cuts or transfers and for larger countries (in both cases, because of fewer leakages). As for timing, it often takes time to implement spending measures, and once in place they may no longer be needed. However, if the downturn is expected to be prolonged (as in the current crisis), concerns over lags may be less pressing. For all these reasons, stimulus measures should be timely, targeted, and temporary—quickly reversed once conditions improve.

Similarly, the responsiveness and scope of stabilizers can be enhanced; for instance, by a more progressive tax system—taxing high-income households at a higher rate than lower-income households. Transfer payments can also be explicitly linked to economic conditions (for instance, unemployment rates or other labor market triggers). In some countries, fiscal rules aim to limit the growth of spending during boom times, when revenue growth—particularly from natural resources—is high. Elsewhere, formal review or expiration ("sunset") mechanisms for programs help ensure that new initiatives do not outlive their initial purpose. Finally, medium-term frameworks with comprehensive coverage and assessment of revenues, expenditures, assets and liabilities, and risks help improve policymaking over the business cycle.

Big deficits and rising public debt

Fiscal deficits and public debt ratios have expanded sharply in many countries with the fiscal response of the crisis. Support and guarantees to financial and industrial sectors have added to concerns. Many countries can afford to run moderate fiscal deficits for extended periods, with domestic and international financial markets and international and bilateral partners convinced of their ability to meet present and future obligations. Deficits that grow too large and linger too long may, however, undermine that confidence. Aware of these risks in the present crisis, the IMF is calling on governments to establish a four-pronged fiscal policy strategy to help ensure solvency: stimulus should not have permanent effects on deficits; medium-term frameworks should include commitment to fiscal correction once conditions improve; structural reforms should be identified and implemented to enhance growth; and countries facing medium- and long-term demographic pressures should firmly commit to clear strategies for health care and pension reform. ■

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Suggestions for further reading:

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Start This Engine

Africa's policymakers should prepare for global recovery by priming their private sectors

Donald Kaberuka is President of the African Development Bank.

AFRICA'S limited integration into global markets has provided little protection from the direct effects of the global financial crisis. But Africa should brace itself for the consequences of the global crisis on its real economy. The speed at which African economies have been affected has exceeded earlier expectations. Although the extent and depth of contagion are uneven across the continent—with mineral-exporting countries, large open economies, and fragile states affected most through one or several transmission channels—the continent as a whole has seen its growth prospects reduced from an average of 6 percent to less than 3 percent.

Widening current account and budget deficits pose an immediate threat to macroeconomic stability that years of economic reform helped establish. The ability of African governments to undertake needed crisis response, let alone sustain basic services and development programs, will be seriously tested. At this stage, it is difficult to predict how long African growth will continue at half its previous pace, because the global crisis is still relatively young. It is safe to assume, however, that whenever the global economy returns to a growth path, Africa's recovery is likely to be asymmetrical.

But African policymakers can prepare right now to take advantage of a global economic recovery. They can start hooking up more of their domestic economies to the most reliable and potent short-term engine of growth at their disposal: the private sector. The African Development Bank (AfDB) is one of several international financial institutions standing ready to help Africa harness the private sector. This important endeavor can and should start promptly, so that Africa's economies participate fully with the rest of the world in the global upswing that follows the downturn.

Booms and busts

Africa's growth trajectory over the past 30 years has been one of episodic growth phases followed by prolonged decline, typically on the back of commodity booms and busts and with internal factors aggravating the trend. The current global crisis, however, probably marks the first time in many years that, for a large number of African countries and not just for the big commodity exporters, the primary cause of an economic slump has been external and out of their control. But whatever its source, the effects of a growth slowdown in Africa are severe. The AfDB projects that this year, for the first time since 1994, per capita income growth will be negative for the continent as a whole—in mineral-rich economies and also in agricultural export–dependent countries.

Decades of policy reform helped deliver Africa's hard-won gains of recent years—sustainable debt levels, lower inflation, progress with liberalizing trade, export diversification, and other structural changes. Although it is true that before the current global crisis took hold, Africa was not on target to achieve the poverty reduction targets set by the UN Millennium Development Goals (MDGs), advances toward a few of the eight goals, notably universal primary education, had shown that real progress was feasible.

The slowdown caused by the global crisis should supply whatever extra impetus is needed to renew Africa's drive for growth. The really hard work has been done: the continent's big-picture reforms are in place and had begun to deliver before the world downturn came along. Africa's need now is to keep improving the environment in which its reformed policies and institutions can operate. This is where nurturing the private sector becomes a priority.

The AfDB has itself recently upgraded the importance of the private sector in the pan-African economy. The bank's first Strategic Plan, covering 2003–07, assigned private sector development a secondary role in support of sustainable economic development, and placed relatively little emphasis on private sector operations. This has been revised in light of individual country experiences: the bank's middle-income country members want to compete in the global marketplace without protection from trade preferences, and the bank's low-income country members want to improve their investment climate so that they can achieve middle-income status. The AfDB believes that an important means to achieving both objectives rests in cultivating the private sector.

The AfDB's Medium-Term Strategy for 2008–12 recognizes that the international community is looking more closely at Africa: existing donors have pledged more aid; new donors are coming to the fore; and private investors, although still interested mainly in natural resources, are assessing the possibilities in Africa. Accordingly, the bank now ranks as a high priority the development of a more robust private sector, and acknowledges vital private sector roles in equally important areas of focus such as infrastructure and higher education.

That "sweet spot"

In particular, the bank can play a constructive catalytic role in promoting and enabling creative public-private partnerships in what the bank believes is a growing "sweet spot" between traditional public and private sector domains. The AfDB's private sector investment tripled in 2007, and a strong pipeline of projects through innovative public-private partnerships presents significant opportunities for growth, synergy, and catalytic impact. The bank's private sector transactions will be further scaled up in the context of mutually agreed country strategies to promote private sector–led growth.

History tells us that in countries like Africa's, when economic times are bad, social indicators, such as maternal and infant mortality, educational enrollment and completion rates, and women's employment opportunities decline rapidly—particularly in fragile states where weak institutions and limited fiscal space often make it impossible to offer safety nets. Short-run crisis management requires budget adjustments to match expected resources, at the expense of human development. Greater private sector activity can help to boost social indicators in certain areas, such as higher education, that have multiplier effects in other social areas. Thus the AfDB is seeking to develop partnerships with the private sector to design and implement national and regional tertiary-level training projects. The bank will also support technical and vocational education and training operations to build skills and address chronic high unemployment.

A quick recovery for Africa from the effects of the global crisis will depend on many factors: the extent of damage to macroeconomic stability, the investment climate, and progress on infrastructure. In particular, maintaining the pace of infrastructure development at this time in the face of lower private investment and tight government revenue will be critical for a speedy recovery. Modern agriculture, services, and industry depend on infrastructure. Failing to fill the infrastructure financing gap will entrench Africa's position as a competitive laggard when global economic activity recovers. Here again, the private sector has a key role. Over the past two decades, there has been a significant shift in both industrialized and developing countries toward more private sector provision and financing of infrastructure—but this has happened least of all in Africa. The AfDB will strengthen partnerships to improve water and sanitation, transport, telecommunications, and energy infrastructure in its member countries.

Development of a vibrant and dynamic private sector requires a functional and enabling commercial environment in any country that wants to host such an engine of growth. It will therefore be critical for all countries on the African continent to make even faster progress in improving the investment climate by lowering the cost of doing business. This easily calculable cost is now a widely published yardstick by which all aspiring middle-income countries can be and are very publicly ranked. Minimizing it will allow such countries to position themselves much better and participate fully in an eventual recovery of global demand and investment.

Financing gap

Beyond regulatory and governance reform, it is important to stress that to achieve pre-crisis growth rates, Africa would need $50 billion to finance the investment-savings gap. To achieve the 7 percent growth rate that is deemed necessary to achieve the MDGs, the financing gap rises to $117 billion. Although some middle-income countries may be able to effectively mobilize both domestic and foreign investment, low-income countries and fragile states will need support.

The Group of Twenty industrialized and emerging market countries' commitment at their April summit to increase support for low-income countries, particularly in Africa, in response to the current global crisis, is a necessary but not sufficient condition for recovery. It must be accompanied by a determination not to reverse the gains from economic reforms that have contributed so much to African economies' resilience to the world recession.

We at the AfDB have responded expeditiously to the international slowdown. We have used our convening capacity to provide a platform for debate, sharing experience and advocacy for Africa's voice among the continent's economic leaders. In full realization that close collaboration among international financial institutions will be critical at this time, the bank has intensified its cooperation with other development partners in a search for targeted crisis intervention strategies through which we can pool our resources, expertise, and comparative advantage to enhance pan-African economic prospects.

The most critical issue for the bank at this stage is how to strike a balance between enacting short-term crisis responses and remaining focused on the long-term issues. It must not be forgotten that longer-term strategies—such as the development of infrastructure, encouraging economic integration, and establishing a skilled labor force—hold the key to Africa's growth trajectory. For that reason they are also all core areas in the AfDB's Medium-Term Strategy.

There is no doubt that the impact of the global crisis on Africa constitutes a major setback. Our firm belief remains that the long-term economic prospects for Africa are strongly positive, provided we respond to the impact of the current crisis on Africa in a coordinated way, while remaining focused on the long-term needs for a continent that aspires to earn its livelihood through trade and investment. ■

DATA SPOTLIGHT

Roller Coaster

The latest sharp rise and fall in commodity prices is not the first nor the last

COMMODITY prices collapsed in the second half of 2008 after a spectacular runup from early 2002 until the middle of last year.

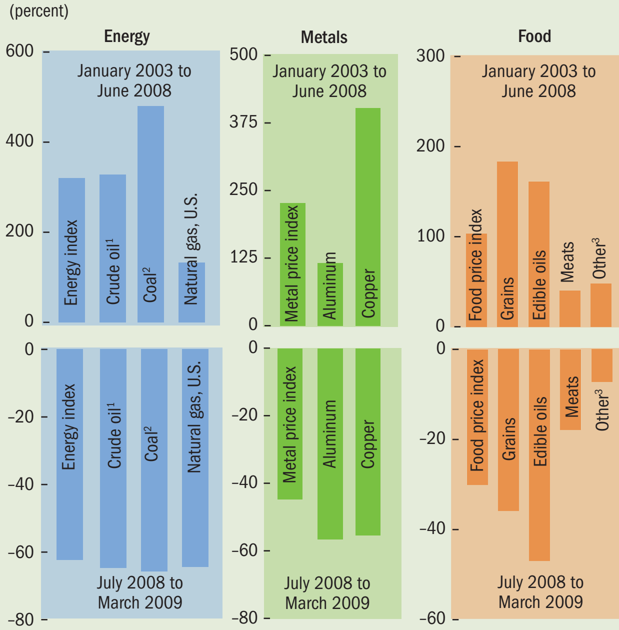
Although commodity markets are often treated as if they were integrated, individual commodities vary widely in their demand and supply characteristics. A key question therefore is whether or not commodity price index changes are dominated by fluctuations in the prices of a few commodities.

Indeed, the most recent price boom was first and foremost an energy and metals price boom. Prices of these commodities tripled between mid-2002 and mid-2008. For metals, whose demand rises and falls with the global industrial cycle, the roughly 200 percent increase in prices during the strong global expansion was broadly in line with previous experience.

Nevertheless, major price gains were also recorded for other commodities. Prices of major grains and edible oils in particular almost tripled, reflecting a number of factors, including a pickup in demand growth because of changing diets and the rapid growth in biofuels, low inventories, adverse weather conditions, and rising energy costs (see “Riding a Wave,” *F&D*, March 2008).

Commodity price changes during the 2003–09 boom and bust.

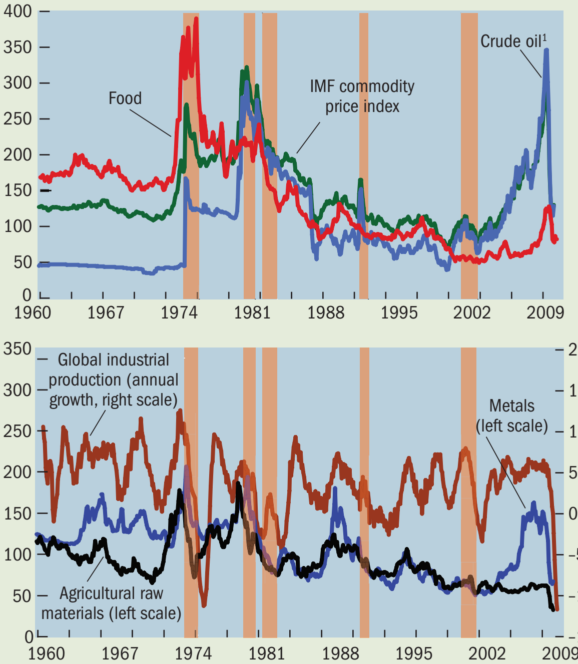
(percent)



Source: IMF, Commodity Price System database.
[1]Average Petroleum Spot Price; average of Brent, West Texas Intermediate, and Dubai crude spot prices.
[2]Includes South African and Australian coal prices.
[3]Average change in fish, shrimp, sugar, banana, and orange prices.

Historically, commodity prices have been volatile and subject to large swings.

(real commodity prices, constant U.S. dollars, 1990=100)



Sources: IMF, Commodity Price System database; and IMF staff calculations.
Note: Shading denotes periods of global recession (identified on the basis of a monthly index of global industrial production).
[1]Average Petroleum Spot Price; average of Brent, West Texas Intermediate, and Dubai crude spot prices.

In the second half of 2008, prices of most commodities fell with unprecedented speed. Energy prices declined by about 70 percent, while metals prices eased by more than 50 percent. Even food prices, which tend to fluctuate less with global cyclical conditions, decreased by about 30 percent. In 2009, prices have recovered, but remain well below their 2008 peaks.

The IMF’s commodity price database

The IMF has long prepared price indices for primary commodities using weights based on 2002–04 world trade data. The indices cover a set of 51 commodities—with some prices going as far back as 1980—that are widely traded and for which transaction prices are publicly available. The database also includes price indices for major subgroups and the underlying raw price data. The database is available at *www.imf.org/external/np/res/commod/index.asp*

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