World Bank Research Digest

VOLUME 5 ✯ NUMBER 2 ✯ WINTER 2011

Growth and Development at the Center of the G-20 Agenda

With developing countries now generating nearly half of global economic growth, their resilience is vital to sustaining the recovery

The 2008–09 financial and economic crisis showed that the world economy is more fragile and interdependent than previously thought. It is a world of increasing multipolarity, with multiple sources of growth and with powerful links between developing and developed countries and among developing countries. As the recovery begins to mature, the long-term growth and development agenda should be at the center of the broader G-20 agenda, in a way that allows all developing countries to close development gaps and achieve the Millennium Development Goals.

Developing countries now produce a greater share of global output—up from 35 percent in 2000 to 43 percent in 2008 (in purchasing power parity terms). And trade in developing countries is rising—up from 36 percent of GDP in 1988 to 60 percent in 2008. Economic links among them are also becoming more important, with South-South trade now accounting for about 40 percent of developing country imports. But even though developing countries have been leading the way out of the global crisis, they still face enormous poverty and huge gaps in health, education, infrastructure, and financial development.

During its G-20 presidency, the Republic of Korea put development high on the G-20 agenda and worked with the World Bank to host a High Level Conference on Development in Busan in June 2010. The conference helped shape the final development agenda by focusing on four areas for G-20 priority action. A new volume edited by Fardoust, Kim, and Sepúlveda captures the analytical underpinnings of key policy recommendations.

Infrastructure and sustainable development. Provision of infrastructure is critical to growth and sustainable development over the long term. Rough estimates of developing countries' infrastructure needs range around $900 billion annually. To facilitate such efforts, the G-20 should develop action plans for increasing public and private financing of infrastructure, improving its efficiency and environmental sustainability, and providing greater technical and financial assistance. In addition to integrating economic and environmental concerns, it will be essential to promote collaborative efforts to collect and share data on infrastructure coverage and quality—and on investments and impacts.

Agriculture and food security. According to the Food and Agriculture Organization, more than 1 billion people were undernourished in 2009, about 100 million more than before the crisis. Given the importance of agricultural productivity to economic growth—and of food security to the fight against malnutrition and social unrest in developing countries—multilateral action and coordination are needed on many fronts, including food and commodity price volatility.

(continued on page 8)

IN THIS ISSUE

FOCUS
Food Price Inflation in South Asia: Crisis Revisited?

Experiences during the 2007–08 global food crisis offer lessons for dealing with current and future food price inflation

The price of food had been steadily declining for about three decades when the global food crisis hit in 2007–08. The crisis seemed to be over in 2009. But many analysts thought it could well repeat itself. And in South Asia it soon became clear that the 2007–08 food crisis was never really over. Domestic prices of rice and wheat never returned to their pre-2007 levels, despite substantial declines in world market prices.

Now that food price inflation is rapidly resuming in both global and domestic markets, governments in South Asia and elsewhere are again struggling to find appropriate policy responses. This makes it important to review experiences during 2007–08 and draw lessons for current and future food price inflation, as Jansen and Mghenyi have done in a recent paper and data collection exercise.

In 2007–08 the price rises were especially strong for cereals and oilseeds, food staples throughout South Asia that account for particularly large expenditure shares among the poor. While the current food price inflation is driven largely by rises in prices of noncereal commodities, cereals (and oilseeds) are again becoming increasingly expensive. This has important poverty implications; for example, a 50 percent increase in the price of rice in Bangladesh leads to a rise in the poverty headcount of five percentage points, even after taking into account the responses of consumers and producers to the price increase. Contrary to popular belief, throughout South Asia the majority of rural as well as urban households are net buyers of cereal staples and therefore suffer welfare losses from price increases.

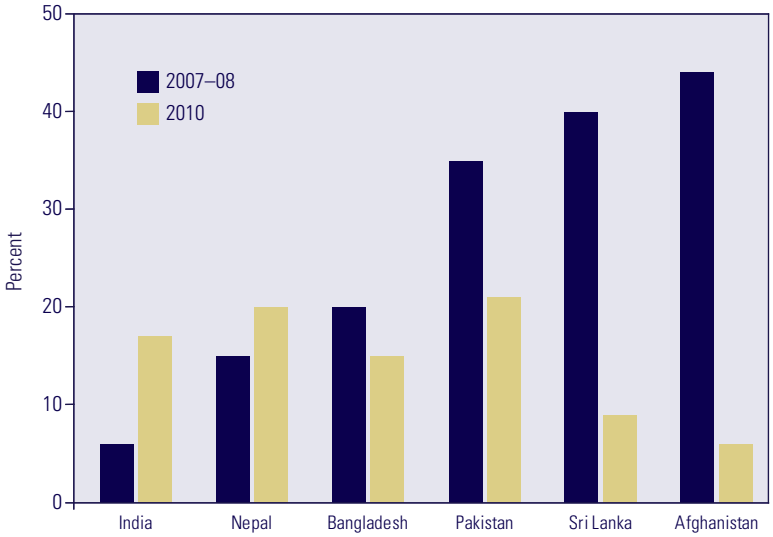
At the heart of food policies throughout South Asia is the political economy of the trade-off between consumers' and producers' interests, reflected in the degree to which international prices get transmitted to domestic prices. Large differences between countries in price transmission led to wide differences in food price inflation in 2007–08, ranging from 7 percent per year in India to 40–50 percent in Afghanistan. That country and Nepal are the only two in the region where domestic prices are left largely to market forces. The differences in price transmission reflect several factors: the share of domestic consumption met by imports, fiscal and institutional capacity to manage public food stocks and social protection, supply response capacity, and trade and price policies. In 2010 food price inflation had increased greatly in India and somewhat in Nepal compared with 2007–08 rates, while it had not yet reached those rates in other South Asian countries (figure 1).

In 2007–08 South Asian countries introduced short-term measures aimed at alleviating the negative effects of the food price rises on consumer welfare. Most popular have been trade policy measures to dampen price increases (such as abolishing import tariffs) or to ensure adequate supplies on domestic markets (such as restricting exports); building up or expanding public grain reserves; controlling prices; and extending existing social protection measures or, to a much lesser extent, introducing new ones. But price controls alone (such as in Sri Lanka) have not been very effective at limiting food price inflation, while efforts to curtail food exports (for example, Pakistan's ban on wheat exports) rarely succeed and often generate significant negative externalities (as in Afghanistan). Public grain reserves have played an important part in dealing with the food crisis in Bangladesh, India, and Pakistan. But they pose significant challenges of size, management, and fiscal costs. Simulations with a global trade model show that the potential impact of trade liberalization under the current South Asian Free Trade Area agreement for mitigating food price inflation is limited.

Measures to address traditional constraints on agricultural production, or to otherwise facilitate a supply response, have been much less common. Continuing demand increases driven by growth in population and income, combined with lagging growth in supply, are likely to create further upward pressure on food prices in South Asia. Dealing with higher food prices in the future will require a two-track approach: protecting the poor through increased investments in safety nets,

(continued on page 5)

Figure 1. Food Price Inflation in Selected South Asian Countries, 2007–08 and 2010



How Fast Can Egypt Grow?

Current rates of national saving in Egypt will not lead to high rates of economic growth unless accompanied by forceful productivity improvements

With per capita GDP growth averaging 3 percent over the past five decades, the Arab Republic of Egypt ranks among the top 25 percent of all countries. This growth performance has been enabled by major private and public investment and, at times, significant productivity gains. This process would not have occurred if national saving had not been up to standards. Indeed, Egypt's national saving rate was well above that of the median country from the 1960s to the 1990s. But since the 1990s Egypt's national saving rate has stopped increasing and has fluctuated around 20 percent of GDP. If Egypt is to have any plausible chance of meeting its development aspirations, it needs a stronger performance in both economic growth and national saving.

Some of the relationship between growth and saving reflects the positive impact of higher income on saving. But no less important is the causality that runs from higher saving to higher growth, with the mechanism being the process of capital accumulation. Higher national saving provides the funds to take advantage of more and larger investment opportunities. This in turn increases the capital stock—which, used effectively for economic production, contributes to higher output growth.

Although in theory domestic investment does not have to be supported by national saving, in practice the connection between the two is quite close. This is especially true in the long run, when external sources of funds can be tapped in only a limited way: large current account deficits cannot be sustained indefinitely. This is exemplified by the strong relationship between the average saving and investment rates across countries in the past three decades. Mirroring its saving-growth situation, Egypt conforms to the cross-country pattern in the relationship between saving and investment.

If Egypt is to have any plausible chance of meeting its development aspirations, it needs a stronger performance in both economic growth and national saving

The links in the relationship between saving and growth are not mechanical, however, but depend on the quality of the financial system and public institutions in general. Without an efficient financial system, the best investment opportunities will not be matched with the available saving. Similarly, without proper public institutions (guaranteeing macroeconomic stability and contract enforcement, for example), accumulated capital may remain idle or ineffectively used. This points to the importance of the efficiency or productivity with which physical capital, human capital, and labor are used in the production process. The growth of factor productivity is what in the end determines whether or not a saving and investment effort will result in improved economic growth.

A new paper by Hevia and Loayza aims to illustrate the mechanisms linking national saving and economic growth in Egypt. This is done through a simple theoretical model, calibrated to fit the Egyptian economy and simulated to explore different potential scenarios. The goal is to understand the two-way connection between saving and growth and the possibilities and limits of a saving-based growth agenda in the Egyptian economy. The dynamic model used makes it possible to follow the evolution of the economy for an extended period, 25 years in this case. The results are summarized in tables 1 and 2, which reflect three scenarios for growth in total factor productivity: pessimistic (0 percent), moderate (1 percent), and optimistic (2 percent).

The main conclusion is that without gains in productivity—stemming from technological innovation, improved public management, and private sector reforms—a high rate of economic growth is not feasible at the current rate of national saving. Indeed, the saving effort required would be highly unrealistic. If productivity growth rises to at least moderate levels, sustaining (and improving) high rates of economic growth becomes viable. But only through forceful and purposeful productivity improvements would it be possible to achieve high economic growth at the current national saving rate.

Constantino Hevia and Norman Loayza. 2011. "*Saving and Growth in Egypt*." *Policy Research Working Paper* 5529, *World Bank*, *Washington*, DC.

Table 1. Saving Rate Required to Finance 4 Percent Per Capita GDP Growth

	National saving rate over time (% of GDP)		
Productivity growth (%)	5 years	10 years	25 years
0	41	48	81
1	32	34	42
2	24	23	21

Table 2. Projected Growth Rate If Saving Rate Remains at 20 Percent of GDP

	Per capita GDP growth rate over time (%)		
Productivity growth (%)	5 years	10 years	25 years
0	1.0	0.9	0.8
1	2.1	2.2	2.4
2	3.1	3.6	4.2

Sustainable Energy Policy and Nuclear Power

Views on the role nuclear power can and should play in sustainable energy policy diverge widely. A thorough evaluation is warranted

More than 40 developing countries have recently approached United Nations officials to express interest in starting nuclear power programs. In East and South Asia 40 new reactors are under construction and an additional 270 have been approved or are being proposed. China, Japan, the Republic of Korea, and India are expected to experience the strongest growth in the region. Indonesia, Malaysia, the Philippines, Thailand, and Vietnam are also expressing strong interest in nuclear power. In 2007 Egypt announced that it would build several nuclear power plants to meet rising energy demands. South Africa is contemplating the installation of almost 10 gigawatts of nuclear power. Brazil announced its intention to build 4 new nuclear power plants by 2030. Argentina, Chile, Mexico, Uruguay, and República Bolivariana de Venezuela are also interested in expanding or installing nuclear power capacity.

Several factors are driving this global resurgence of interest in nuclear power:

- A desire to make energy supplies more secure and energy prices more stable by diversifying fuel sources and reducing dependence on fuel imports.
- Pressures to reduce air pollution.
- The increasing urgency of mitigating climate change.

Proponents argue that in relation to the objectives of electricity supply security, resource efficiency, and mitigation of the threat of climate change, nuclear power performs very well. Nuclear power represents a well-established technology for generating electricity that produces almost no carbon dioxide or other climate-relevant emissions. It can be scaled up significantly and thus provide large amounts of power. It uses a natural resource (uranium) that is found in abundance in the earth's crust and, with advanced technologies, could provide enough fuel to meet the world's electricity needs for several centuries. Moreover, advances in nuclear reactor technology have substantially improved the underlying economics and safety profile of nuclear power.

Skeptics claim that nuclear power is costly and technically complex. It involves the use of highly toxic materials that must be kept secure from attack or theft. Moreover, a viable technology for the permanent disposal or reprocessing of spent nuclear fuel has not yet been fully demonstrated. Finally, even in a carbon-constrained world, nuclear power may be less economically attractive than a host of decentralized energy efficiency and distributed generation technologies.

To assess the potential of nuclear power, its role as a relatively secure, largely carbon-free alternative to fossil fuels must be weighed against its technical risks. In three recent papers Kessides examines the challenges and opportunities of nuclear power in meeting the projected large increase in energy demand throughout the industrial and developing world while helping to mitigate the threat of climate change. He assesses the current status and future plans for expansion of nuclear power, the advances in nuclear reactor technology, and their effects on the associated risks and performance of nuclear power. Advanced nuclear reactors have been designed to be simpler, safer, and lower cost than currently operating reactors. By addressing many of the public health and safety risks that have plagued the industry, these reactors offer some promise for breaking the political deadlock over nuclear power.

Still, the views on nuclear power and its potential role in meeting the projected growth in global energy demand while mitigating the risks of serious climate disruption remain highly divergent. Part of the controversy is due to the large risks and uncertainties underlying the cost elements of nuclear power, as reflected in the wide range of cost estimates. The cost overruns and schedule delays of Finland's new Olkiluoto plant are rekindling old fears about nuclear power being far too complex and costly and raising new questions about the viability of new nuclear plants, especially in deregulated electricity markets. Indeed, the costs of nuclear power stations (and large coal-fired power stations, particularly those with carbon capture and sequestration) remain uncertain. Yet countries' continuing interest in building nuclear power stations suggests that their cost relative to low-carbon alternatives seems attractive to at least some potential investors.

Kessides calls for a thorough evaluation of the issue, proposing the fundamental elements of a comprehensive analysis of the costs and benefits of nuclear power relative to investments in alternative base-load technologies. These include identifying the set of expected parameter values under which nuclear power becomes cost competitive relative to alternative generating technologies; identifying the main risk drivers and quantifying their effects on the costs of nuclear power; estimating the option value of nuclear power; assessing the nexus between electricity market structure and the commercial attractiveness of nuclear power; evaluating the economics of smaller nuclear reactors; identifying options for strengthening the institutional underpinnings of the international safeguards regime; and evaluating the proliferation resistance of new generation reactors and fuel cycles.

Achilles G. Adamantiades and Ioannis N. Kessides. 2009. "*Nuclear Power for Sustainable Development: Current Status and Future Prospects*." Energy Policy 37: 5149–66.

Ioannis N. Kessides. 2010. "*Nuclear Power and Sustainable Energy Policy: Promises and Perils*." World Bank Research Observer 25(2): 323–62.

———. 2010. "*Nuclear Power: Understanding the Economic Risks and Uncertainties*." Energy Policy 38: 3849–64.

Access to HIV/AIDS Treatment and Risky Sexual Behaviors

Access to HIV/AIDS treatment, by changing perceptions about the risk of AIDS, may lead to an increase in risky behaviors

In December 2009 an estimated 5.2 million people in developing countries were receiving antiretroviral therapy (ART) and in Sub-Saharan Africa nearly 37 percent of people eligible for treatment were able to access those lifesaving medicines, according to the Joint United Nations Programme on HIV/AIDS (UNAIDS). This is an extraordinary achievement when one considers that as recently as 2003 only a few privileged HIV/AIDS patients had access to ART in Africa. The scaling up of ART in Africa has saved many lives and will continue to do so.

At the same time, access to HIV/AIDS treatment might have transformed the perception of AIDS from a death sentence to a manageable chronic condition, not necessarily different from any other chronic disease. Such a change in perception could lead to a change in sexual behaviors. If AIDS is no longer perceived as a killer disease, this might induce complacency and increase risky behavior and mixing between higher- and lower-risk groups in the population. This has been described as the "disinhibition" hypothesis.

Using data from Mozambique, a new paper by de Walque, Kazianga, and Over tests for disinhibition behaviors resulting from increased access to ART for HIV/AIDS patients. The main hypothesis tested is that people may alter their sexual behaviors in response to a perceived decrease in the opportunity costs of contracting AIDS that results from expected access to ART. Such compensating behaviors, if large enough, could potentially offset some of the positive effects of greater access to ART.

The analysis draws on household panel data that cover both randomly selected HIV-positive individuals and the general population in 2007 and 2008. After controlling for individual fixed effects, the authors find suggestive evidence of disinhibition behaviors, consistent with earlier literature on risk taking in the United States and Europe following the introduction of ART.

The findings suggest that men and women responded differently to perceived changes in risk that occur with greater access to ART. Men's demand for risky sexual behaviors increases with the false belief that AIDS can be cured and decreases with the correct belief that AIDS can be treated but not cured. Women's demand for risky sexual behaviors increases only with the correct belief that AIDS can be treated. While the authors do not have a straight explanation for the observed gender difference, one possible explanation may stem from the cultural context of Sub-Saharan Africa. Men generally have greater autonomy in sexual choices than women, so in general it would be easier for men than for women to adjust their sexual behaviors when new information becomes available.

Regardless of the reason, it appears that providing the correct information on ART is associated with reduced disinhibition for men and increased disinhibition for women. If these associations were to be confirmed as causal relationships, then overall women may be benefiting less from ART scale-up than men. But the authors also observe that the share of individuals who wrongly believe that AIDS can be cured remains small and is declining (from 8 percent in 2007 to 6 percent in 2008). The impact of programs correcting the wrong perceptions about AIDS treatment is therefore bound to be limited.

The results suggest that scaling up access to ART without prevention programs may not be optimal if the objective is to contain the disease, since people would adjust their sexual behavior in response to the perceived changes in risk. Prevention programs therefore need to include educational messages about ART and address the changing beliefs about HIV in the era of increasing availability of ART. In addition, prevention messages need to account for the gender difference in disinhibition behaviors.

The authors' results also provide a framework for assessing the public effects of occasional media coverage of false cures for AIDS. Their findings suggest that men may respond to these types of announcements by increasing their demand for risky sexual behaviors, thus contributing to the spread of the disease.

Damien de Walque, Harounan Kazianga, and Mead Over. 2010. "*Antiretroviral Therapy Awareness and Risky Sexual Behaviors: Evidence from Mozambique.*" *Policy Research Working Paper* 5486, *World Bank, Washington*, DC.

(continued from page 2)

FOCUS

Food Price Inflation in South Asia: Crisis Revisited?

which tend to be better targeted than economy-wide policies; and investing in stimulating broad-based agricultural productivity growth to increase food production and lower consumer prices without hurting farmers' incomes.

Hans G. P. Jansen and Elliot Mghenyi. 2010. "*Food Price Increases in South Asia: National Responses and Regional Dimensions.*" *Sustainable Development Department, South Asia Region, World Bank, Washington*, DC.

The Investment Climate When Firms Have Climate Control

Comparing measures of official regulation with firms' actual experience suggests new ways of thinking about investment climate

Two World Bank initiatives examine the investment climate that firms face. The Doing Business project (DB) provides measures of the time and costs associated with fully complying with an array of business regulations. Enterprise Surveys (ES) ask a wide range of firms about their actual experiences in doing business. A new paper by Hallward-Driemeier and Pritchett uses three comparable indicators from both—time to get an operating permit, time to get a construction permit, and time to import goods—to compare these distinct *de jure* (DB) and *de facto* (ES) approaches to assessing the investment climate in more than 100 countries. The analysis finds that the relationship between them is neither one for one nor linear. Four patterns emerge in each of the three indicators.

First, while DB, of necessity, reports a single estimate of the days for compliance for each indicator, firms in the same country report significantly different times to complete the same transaction. For example, the DB indicators show that it takes 65 days to start a business in Ecuador, while the distribution of the 265 firms that reported getting an operating license was between a 10th percentile reporting 1 day and a 90th percentile reporting 60 days.

Second, regulatory compliance appears to be "underwater," because firms report actual times much shorter than the DB-reported times. For example, the median DB time to obtain a construction permit across all countries is 210 days, while the median across countries of the average days firms reported was 59. The median "underwater" gap between DB and ES measures was 145 days.

Third, cross-nationally there is very little association between the ES distributions and DB numbers. A naive view of full compliance might suggest that actually reported days would rise one for one with DB days, but the patterns are much more complex. The *de jure* environment appears to affect only some firms. Thus favored firms (for example, at the 10th or 25th percentile) show minimal variation, so Doing Business has little predictive power for the times they report. For disfavored firms (for example, at the 75th or 90th percentile) the variation is greater, although still not significantly correlated with DB numbers. For example, as the *de jure* DB time to get a construction permit rose across countries by 524 days (from 77 to 601), the predicted time reported by the 25th percentile firm rose by just 2.7 days. In contrast, the time reported by the 90th percentile firm rose by 130 days, but all of this rise comes in the lower range of the DB numbers.

Comparing the de jure and de facto measures of regulation provides a way to capture the importance of implementation and governance more broadly

Fourth, for countries with multiple Enterprise Surveys that span a change in the DB indicator, the authors find little association over time. Reductions in DB days are as likely to be accompanied by increases in ES days as they are by decreases or no change. One possible hypothesis for explaining the differential responses to policy reform is that when *de jure* and *de facto* policy have diverged, *de jure* reform might have very different effects, depending on how it affects the distribution of firms' expectations (both mean and variance) about their future experienced policy.

To use a temperature analogy, the average daily high temperature in July in Phoenix is 105 degrees—but most people are not hot, they are indoors. How much would the experienced temperature change if the daily high were reduced to 100? To 95? It might actually be somewhat higher because more people would be outdoors while those indoors would be experiencing the same temperature as before. But if air conditioning were banned, experienced temperature would skyrocket with no change in the climate. Given the study's evidence, it is an open question how much DB indicators (as proxies for costs of compliance) would have to be changed before the experienced investment climate of most firms was affected—or became attractive to compliance-constrained investors.

Comparing the *de jure* and *de facto* measures of regulation provides a way to capture the importance of implementation and governance more broadly. While the paper provides no direct evidence of corruption, the massive, firm-specific deviations in reported compliance times and the deviation from the DB-estimated times for compliance are at least consistent with environments of policy implementation that are permeable. Indeed, the authors' earlier work focusing on Africa found that where the gaps between DB and ES were larger, the frequency of bribes paid increased. The evidence also highlights how elusive a level regulatory playing field is. Comparing the two sets of measures suggests very different ways of thinking about policy versus policy implementation, about what *climate* means, and about what the options for policy reform really are.

Mary Hallward-Driemeier and Lant Pritchett. 2011. "How Business Is Done and the 'Doing Business' Indicators: The Investment Climate When Firms Have Climate Control." Policy Research Working Paper 5563, World Bank, Washington, DC.

Bank Capital: Lessons from the Financial Crisis

What type of capital should banks hold to ensure that they can better withstand periods of stress?

The recent financial crisis demonstrated that existing capital regulation, in its design or implementation, was inadequate to prevent a panic in the financial sector. Once again governments around the world had to step in with emergency support to prevent a collapse. Widespread calls to reform bank regulation and supervision naturally followed. In redesigning capital standards, it is important to incorporate lessons from the latest crisis. Is capital regulation justified? What type of capital should banks hold to ensure that they can better withstand periods of stress? Should a simple leverage ratio be introduced to reduce regulatory arbitrage and improve transparency?

Since the first Basel capital accord, adopted in 1988, the prevailing approach to bank regulation has put capital front and center. The premise is that banks holding more capital should be better able to absorb losses with their own resources, without becoming insolvent or needing a bailout with public funds. In addition, by forcing bank owners to have some "skin in the game," minimum capital requirements help counterbalance incentives for excessive risk taking created by limited liability and amplified by deposit insurance and bailout expectations. But many of the banks that were rescued in the latest turmoil appeared to be in compliance with minimum capital requirements shortly before and even during the crisis. In the current debate over how to strengthen regulation, capital continues to play an important role. A consensus is being forged around a new set of capital standards (Basel III) aimed at making capital requirements more stringent.

In a new paper Demirgüç-Kunt, Detragiache, and Merrouche investigate whether banks that were better capitalized experienced a smaller decline in their stock market value during the financial crisis. They use a panel of quarterly bank data for 12 countries over the period 2006–09 to study the impact of bank capital and its various definitions and components on changes in the market valuation of banks. If bank capital truly helps in curbing banks' incentives for risk taking and in improving their ability to absorb losses, one would expect that when a large unexpected negative shock to bank value materializes—as was the case with the financial crisis that began in August 2007—equity market participants would judge better-capitalized banks to be in a better position to withstand the shock and that the stock price of these banks would fall less than that of poorly capitalized banks.

The authors also investigate which concept of capital was more relevant to stock valuation during the crisis. Existing capital requirements are set as a proportion of risk exposure. But if the risk exposure calculation under Basel rules did not reflect actual risk, equity traders might have considered capital measures based on cruder proxies of risk exposure, such as total assets, to be more meaningful.

Another issue is the quality of different types of capital used for regulatory purposes. As recognized by the Basel Committee, under current standards some banks were able to demonstrate strong capitalization while holding a limited amount of tangible common equity, which is the component of capital that is available to absorb losses while the bank remains a going concern. So it is important to see whether banks with higher-quality capital were really viewed more positively by equity market participants.

What do the results show? Before the crisis, differences in initial capital—whether risk adjusted or not, however defined—did not consistently affect subsequent bank stock returns. But during the crisis period the importance of capital for returns became evident, particularly for the largest banks in the sample. These are the banks of systemic importance, as well as those holding capital of lesser quality at the inception of the crisis. The results also show that during the crisis the stock returns of large banks were more sensitive to the leverage ratio than to the risk-adjusted capital ratio. This suggests that market participants viewed the risk adjustment under Basel rules as being more subject to manipulation or, at the very least, not reflective of true risk in the case of large banks. Finally, the results show that the positive association with subsequent stock returns is stronger for higher-quality capital (Tier 1 leverage capital and tangible common equity).

These results have potential policy implications for the current process of regulatory reform. First, they support the view that a stronger capital position is an important asset during a systemic crisis, suggesting that emphasis on strengthening capital requirements is appropriate. Second, they indicate that introducing a minimum leverage ratio to supplement minimum risk-adjusted capital requirements is important, because properly measuring risk exposure is very difficult, especially for large and complex financial organizations. But this finding also calls into question the usefulness of emphasizing risk-weighted concepts of bank capital, which remain at the core of Basel regulations. Finally, the results suggest that greater emphasis on higher-quality capital, in the form of Tier 1 capital or tangible equity, is justified.

Aslı Demirgüç-Kunt, Enrica Detragiache, and Ouarda Merrouche. 2010. "*Bank Capital: Lessons from the Financial Crisis.*" *Policy Research Working Paper* 5473, *World Bank, Washington, DC.*

(continued from page 1)

The G-20 should provide additional resources to scale up agricultural and food security assistance to eligible developing countries, including through the Global Agriculture and Food Security Program. Priority interventions in agriculture include research and extension relevant to smallholder farmers, better management of land and water resources, investment in rural infrastructure, and institutional improvements that allow the public and private sectors to mobilize resources and share costs for country-led plans that are inclusive and evidence based.

Aid for trade. Trade is among the most powerful mechanisms for ensuring sustained global growth. Recognizing the importance of trade capacity and market access for growth, the G-20 should provide full "duty free, quota free" access for the least developed countries, resist protectionism, recommit to the Doha trade agenda, and maintain aid-for-trade levels. Research shows that investing in aid-for-trade policies has a large multiplier effect in trade outcomes.

Financial inclusion. Greater access to finance has a strong positive impact on economic growth and employment generation. An estimated 2.7 billion working-age adults still lack access to basic formal financial services. And small and medium-size enterprises, important drivers of job creation and GDP growth in developing countries, face financing gaps: enterprise and investment climate surveys consistently show that they are 30 percent more likely than large firms to rate financing constraints as a major obstacle to growth. The G-20 could improve financial access by forming a global partnership to advance progress toward universal access and focus on a range of financial products beyond credit.

Building on the foundation laid at Busan, the G-20 development agenda received a boost at the Toronto Summit with the creation of the Development Working Group. Efforts culminated at the Seoul Summit with the adoption of the Seoul Development Consensus for Shared Growth and Multi-Year Action Plan, which consists of nine development pillars: infrastructure, human resource development, trade, private investment and job creation, food security, growth with resilience, financial inclusion, domestic resource mobilization, and knowledge sharing. With France now assuming the G-20 presidency, the commitment to development continues, with a focus on food security and food price volatility, infrastructure, and financial inclusion.

Shahrokh Fardoust, Yongbeom Kim, and Claudia Paz Sepúlveda, eds. 2011. Postcrisis Growth and Development: A Development Agenda for the G-20. *Washington*, DC: *World Bank*. *http://bit.ly/Postcrisis*.

Recent Policy Research Working Papers

5528	Do Procurement Rules Impact Infrastructure Investment Efficiency? An Empirical Analysis of *Inversão das Fases* in São Paulo State *Luis Blancas, Laura Chioda, Tito Cordella, Alexandre Oliveira, and Felix Várdy*
5530	Equity and Public Governance in Health System Reform: Challenges and Opportunities for China *Hana Brixi, Yan Mu, Beatrice Targa, and David Hipgrave*
5531	Crossing the Threshold: An Analysis of IBRD Graduation Policy *Jac C. Heckelman, Stephen Knack, and F. Halsey Rogers*
5538	Small and Medium Enterprises: A Cross-Country Analysis with a New Data Set *Oya Pinar Ardic, Nataliya Mylenko, and Valentina Saltane*
5539	Toward a Sustainable Global Energy Supply Infrastructure: Net Energy Balance and Density Considerations *Ioannis N. Kessides and David C. Wade*
5543	Empowering Women: The Effect of Women's Decision-Making Power on Reproductive Health Services Uptake—Evidence from Pakistan *Xiaohui Hou and Ning Ma*
5546	Foreign Aid and Business Bottlenecks: A Study of Aid Effectiveness *Esteban Ferro and John S. Wilson*
5548	Can We Rely on Cash Transfers to Protect Dietary Diversity during Food Crises? Estimates from Indonesia *Emmanuel Skoufias, Sailesh Tiwari, and Hassan Zaman*
5549	The Two Poverty Enlightenments: Historical Insights from Digitized Books Spanning Three Centuries *Martin Ravallion*
5550	Using Repeated Cross-Sections to Explore Movements in and out of Poverty *Peter Lanjouw, Jill Luoto, and David McKenzie*
5553	Agriculture and Development: A Brief Review of the Literature *Jean-Jacques Dethier and Alexandra Effenberger*

Working Papers can be downloaded at ***http://econ.worldbank.org***
To download the ***World Bank Research E-Newsletter***, go to Data & Research at ***http://www.worldbank.org***

The World Bank Research Digest is a quarterly publication disseminating findings of World Bank research. The views and interpretations in the articles are those of the authors and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent.

The Research Digest is financed by the Bank's Research Committee and managed by DECRS, the research support unit of the Development Economics Senior Vice Presidency (DEC). The Research Digest is not copyrighted and may be reproduced with appropriate source attribution.

Editorial Committee: Jean-Jacques Dethier (managing editor) and Aslı Demirgüç-Kunt. Research assistance: Nicola Limodio; editor: Alison Strong; production: Roula Yazigi. For information or free subscriptions, send email to research@worldbank.org or visit http://econ.worldbank.org/research_digest.

The World Bank
1818 H Street, NW
Washington, DC 20433, USA

Printed on Recycled Paper