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## De Rato cites financial globalization and trade risks

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IMF Managing Director Rodrigo de Rato said that in an increasingly interdependent world, two of the greatest areas of opportunity and risk lie in financial globalization and trade. He cited concerns about hedge funds, which are now attracting large sums of money from usually cautious pension funds. He also called for a successful conclusion to the Doha trade round to forestall rising protectionist sentiment.



Eugene Salazar/IMF

## Latin America: better able to withstand adversity

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Although Latin America is still sensitive to economic and financial developments outside the region, it would not suffer too much were world economic conditions to deteriorate moderately. But real GDP growth in Latin America would be seriously hurt in the unlikely event of a sharp decline in global growth or commodity prices or if credit conditions tightened dramatically, the IMF concluded in a special analysis of Latin America and its sensitivity to the external environment.



Mauro Lima/AFP

## Iraq trying to stabilize and reform economy

page 122

Iraq, hit by a deterioration in security, has struggled to maintain macroeconomic stability and create conditions for growth. While inflation has come down from over 65 percent in 2006, growth ended the year at only 3 percent. Despite attempts to boost oil output, production has remained around the 2 million barrels per day mark. The authorities have initiated a series of structural reforms to modernize the financial sector, cut fuel subsidies, and liberalize imports of fuel products.



Aref Hassani/Reuters

## Research highlights issues from Africa to Brazil

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Recently published research by the IMF underlines the range and diversity of studies by Fund economists. Highlighted are five recent IMF Working Papers, covering subjects as different as the prospects for sustained growth in Africa, the role of capital flows in Europe, the underreporting of Brazil's real growth, lessons learned from global trends in central bank autonomy, and the optimal level of reserves for emerging market economies.



Gianluigi Guercia/AFP

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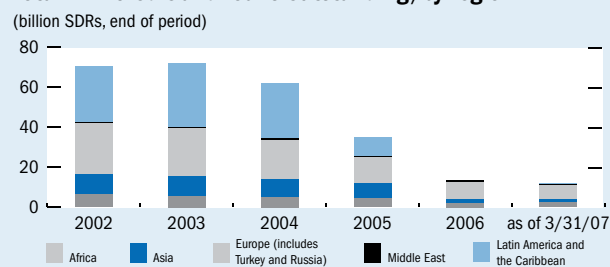
*IMF Survey* is changing with the times. To improve the accessibility of our content and enable more frequent updates, *IMF Survey* will shortly launch a new web version hosted on the Fund website ([www.imf.org](http://www.imf.org)). Simultaneously, the print version of *IMF Survey* will be published once a month, instead of bi-weekly.

**Reasons for change:** Research among readers has highlighted the need for more immediate and frequent access to *IMF Survey* content. At the same time, readers have expressed a need for a digest of news and research from the Fund. To accommodate these differing requirements, and taking account of the varied levels of access to the internet around the world, *IMF Survey* plans to launch a regularly updated electronic edition, accessible via [www.imf.org](http://www.imf.org), while continuing to offer monthly a digest of content in print format.

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## *IMF financial data*

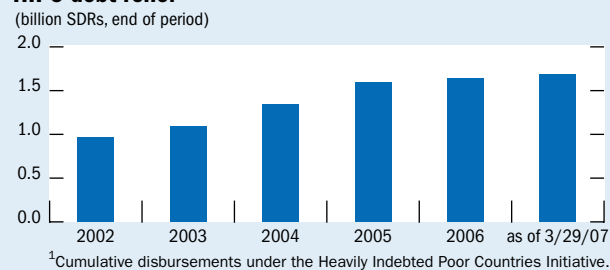
### Total IMF credit and loans outstanding, by region



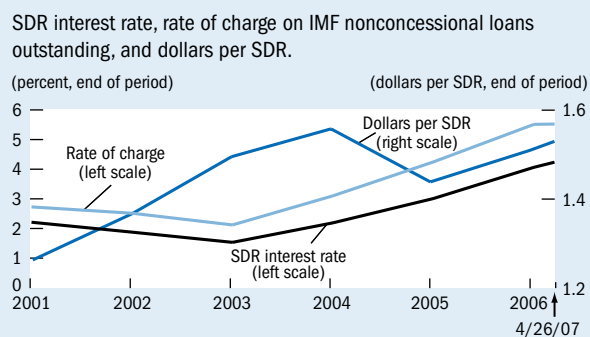
### Major currencies, rates per SDR

	April 30, 2007	Year ago (April 28, 2006)
Euro	1.120	1.173
Japanese yen	182.29	168.14
U.K. pound	0.764	0.813
U.S. dollar	1.52	1.52

### HIPC debt relief<sup>1</sup>



### Related rates



Note: Special Drawing Rights (SDRs) are an international reserve asset, created by the IMF in 1969 to supplement the existing official reserves of member countries. SDRs are allocated to member countries in proportion to their IMF quotas. The SDR also

serves as the unit of account of the IMF and some other international organizations. Its value is based on a basket of key international currencies.

## De Rato cites hedge fund worries, presses on trade

IMF Managing Director Rodrigo de Rato said on May 2 that in an increasingly interdependent world, two of the greatest areas of opportunity and risk lie in financial globalization and trade. He cited concerns about hedge funds, which are now attracting large sums of money from usually cautious pension funds. He also called for a successful conclusion to the Doha trade round to forestall rising protectionist sentiment.

In an address to the Washington Conference of the Council of the Americas, de Rato said that pension funds provide about 30 percent of the investment in hedge funds, pools of well-heeled investors that often make higher-risk investments in search of larger than normal returns. “It may be that pension funds are using hedge fund investment to diversify their own risks, but a situation where almost one-third of the capital for institutions on the cutting edge of financial risk comes from institutions whose first priority is safe investments certainly bears watching,” he said.

In general, de Rato said, recent developments call into question whether hedge funds are delivering on the benefits they can bring to financial market efficiency: improving market liquidity and spreading risks to those investors “most prepared to take them.” Not only are hedge funds—which he estimated number 9,500 worldwide—raising money from sources such as pension funds that historically are cautious risk takers, returns for some hedge funds are close to average market returns, “casting doubt on their contribution to risk diversification,” de Rato said.

He said that he broadly agrees with the approach to hedge funds being taken by the Bush administration’s Presidential Working Group on Financial Markets—that hedge fund risks should be controlled “mainly through investor due diligence, counterparty risk management, and the exclusion of unsophisticated investors.” But he said that as the structure of markets changes, regulators may need to adapt the framework of supervision “to improve investor protection and reduce systemic risks and vulnerabilities.”

De Rato said there are several other developments in U.S. financial markets that “bear watching” by policymakers in the United States and Latin America, a region that could suffer from spillover



IMF Managing Director Rodrigo de Rato is concerned that pension funds are increasingly investing in hedge funds.

effects of a tightening of financial market conditions in the United States (see related story on page 120). Problems in the subprime mortgage lending market “may not yet have played out fully in terms of financial distress and foreclosures and may well extend the downturn in the housing market,” he said. He also sees “significant risks in the recent increase in large private equity buyouts financed by a rising proportion of debt” because if some of the deals turned sour investors might become more risk averse, which would curtail market access for lower-rated corporate borrowers and hurt investment and growth prospects.

De Rato said it is important to bring the Doha round of trade negotiations, which began in late 2001, to “a conclusion that delivers ambitious reforms.” Although it will take “many hands” to complete the talks successfully, the United States is crucial to a good outcome, he said. “An extension of the U.S. administration’s fast-track negotiating authority,” which expires June 30, will almost certainly be necessary. “The terms of such an extension are a matter for the U.S. Congress, but the results of their decision are important not only for the United States but also for the rest of the world,” de Rato said. ■

### Murilo Portugal highlights IMF technical assistance in trip to Africa

IMF Deputy Managing Director Murilo Portugal said that Tanzania is a good example of how the Fund, through its regional technical assistance centers, can help countries build sound public management. Tanzania and the IMF’s East Africa Technical Assistance Center are collaborating in building capacity in the areas of public financial management, revenue administration, and monetary and banking operations.

Portugal, on a tour of Tanzania, Burundi, and Rwanda, cited efforts in Tanzania to strengthen the tax revenue authority and the large taxpayers department, which “have resulted in an impressive increase in revenue collections over the past two years.” He said that technical assistance is building the stock of know-how in Africa and that improving government operations is important to reducing poverty.

## Risk scenarios

### Latin America: better able to cope with adversity

Latin America has been growing at its fastest sustained pace in more than three decades. Part of that success is attributable to solid economic policies, but part is due to benign external factors: strong global growth, high commodity prices, and favorable financial conditions.

The IMF's *World Economic Outlook (WEO)* predicts a continued favorable external environment that would result in at least another two years of solid growth in Latin America, with real GDP increasing a little less than 5 percent in 2007 and 4¼ percent in 2008. But because Latin America has traditionally been sensitive to global conditions—the IMF estimates that about half the medium-term variance in Latin American growth since the mid-1990s can be attributed to external factors—the Fund's Western Hemisphere Department sought in its regional economic outlook to quantify that sensitivity. It developed a model that encompasses six of the region's biggest economies—Argentina, Brazil, Chile, Colombia, Mexico, and Peru—which together account for 90 percent of Latin American output, a group it called the “LA6.”

The model projected that Latin American growth would not suffer too much from changes in the external environment that might happen with reasonable probability over the medium term. But real GDP growth would be more seriously damaged were there to be a sharp deterioration in credit conditions, a big decline in commodity prices, or if world economic growth were dramatically lower than projected—events the IMF deemed very unlikely.



John Maier/ARF Photos

A Brazilian farmer harvests soybeans, one of the commodities whose rising prices have helped Latin American economies.

#### Assessing sensitivity to external shocks

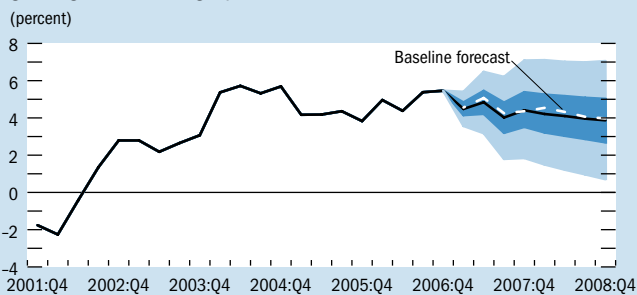
Using the *WEO* as a base, the IMF identified four types of risks from outside the region:

- A moderate deviation from the world growth forecast, either up or down.
- A sharp decline in world growth, a scenario given a low probability that would probably occur were there a “disruptive unwinding” of global imbalances.
- Declines in the prices of nonfuel commodities greater than envisioned in the *WEO* forecast.

Chart 1

#### A moderate slowdown

Real GDP growth in LA6<sup>1</sup> countries would not be affected significantly if global growth were slightly below forecast.



■ 50 percent of deviations from the baseline growth forecast will be within this range. ■ 90 percent of deviations from the baseline growth forecast will be within this range.

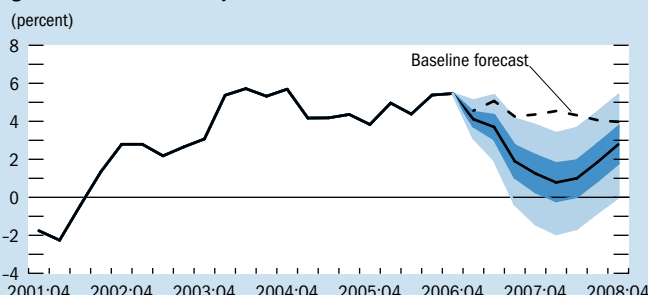
Sources: IMF, *World Economic Outlook 2007*, and staff calculations.

<sup>1</sup> The LA6 countries are Argentina, Brazil, Chile, Colombia, Mexico, and Peru.

Chart 2

#### If the global economy plummets

Real GDP growth in LA6<sup>1</sup> countries would be severely affected if world growth were substantially below forecast.



■ 50 percent of deviations from the baseline growth forecast will be within this range. ■ 90 percent of deviations from the baseline growth forecast will be within this range.

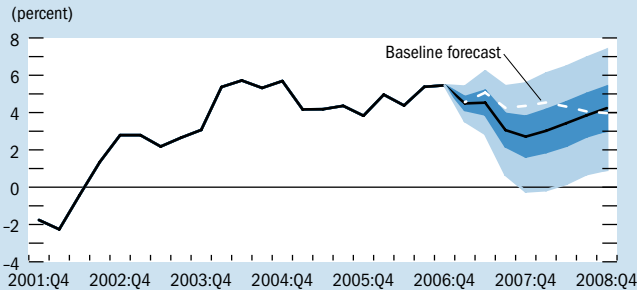
Sources: IMF, *World Economic Outlook 2007*, and staff calculations.

<sup>1</sup> The LA6 countries are Argentina, Brazil, Chile, Colombia, Mexico, and Peru.

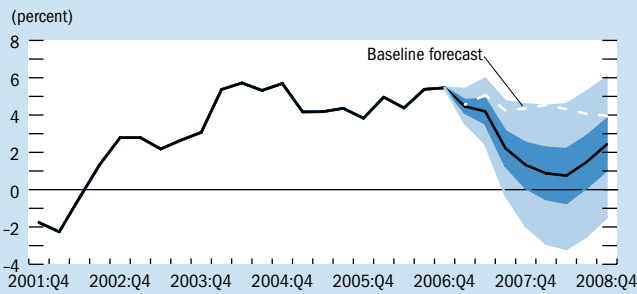
Chart 3

### Commodity price impact

A 20 percent decline in commodities' prices would result in lower, although still robust real GDP growth in LA6<sup>1</sup> countries.



But a 50 percent fall would lead to a severe slowdown in real GDP growth in LA6<sup>1</sup> countries.



50 percent of deviations from the baseline growth forecast will be within this range. 90 percent of deviations from the baseline growth forecast will be within this range.

Sources: IMF, *World Economic Outlook 2007*, and staff calculations.  
<sup>1</sup>The LA6 countries are Argentina, Brazil, Chile, Colombia, Mexico, and Peru.

- A big tightening of world credit conditions—probably triggered by a global retreat from risk, an emerging market crisis, or some other shock that would cause rates on emerging market debt to rise substantially.

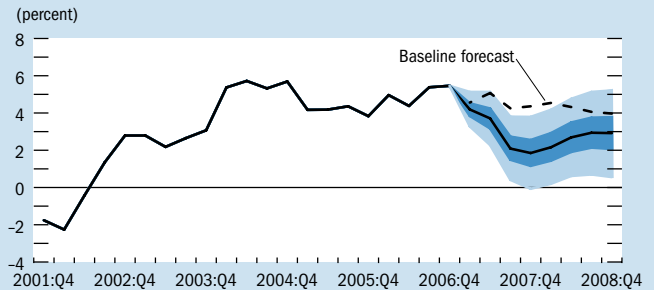
Of the three growth scenarios, “only the sharp world slowdown would have a significant impact on Latin American growth,” the IMF concluded. Even a bigger-than-expected slowdown in the United States “would have a muted impact on LA6 growth” (see Chart 1). But a “disruptive adjustment of global imbalances,” although considered highly improbable, “would not only have stronger effects through trade links, but would also be expected to lead to sharply higher risk and maturity” premiums in the United States. In that case, the model forecasts a severe slowdown in Latin growth to about 2¾ percent this year and 1½ percent next (see Chart 2).

The IMF model paints a similar scenario for commodity prices, a major source of Latin American growth for the past three years that the *WEO* already forecasts will moder-

Chart 4

### Financing shock

If credit conditions deteriorate, real GDP growth in LA6<sup>1</sup> countries would suffer, but not as badly as during a sharp global growth decline or a 50 percent falloff in commodities' prices.



50 percent of deviations from the baseline growth forecast will be within this range. 90 percent of deviations from the baseline growth forecast will be within this range.

Sources: IMF, *World Economic Outlook 2007*, and staff calculations.  
<sup>1</sup>The LA6 countries are Argentina, Brazil, Chile, Colombia, Mexico, and Peru.

ate slightly. Latin America could weather even a 20 percent decline. Growth would slow, but would still be robust at about 3½ percent to 3¾ percent this year and next (see Chart 3). A 50 percent decline, however, “would lead to a severe slowdown, of almost the same magnitude as a disruptive unwinding in global imbalances.” LA6 growth would fall to an average of 3 percent this year (worse in the last half) and 1¼ percent in 2008.

A financing shock in the form of a 400-basis-point rise in emerging market bond spreads and a 200-basis-point increase in the U.S. high-yield bond spread would also seriously damage LA6 growth, “but by less than either a global crisis or a 50 percent drop in commodity prices” (see Chart 4). Growth would fall to just under 3 percent this year and 2¾ percent next.

Because the external environment has been so benign for so long, the IMF economists concluded that, overall, the risk that growth will deviate from projections is “moderately tilted to the down side.” Some, although improbable, risks could lead to much lower-than-projected growth, while there is “no offsetting scenario ... that involves much higher growth in the short run.”

The report concluded that reducing Latin America’s vulnerability to shocks “requires additional efforts to lower public debt, make budgets and exchange rates more flexible, strengthen financial systems, and diversify its export structure.” ■

Copies of *Regional Outlook: Western Hemisphere*, April 2007, are available for \$31.00 each from IMF Publication Services. Please see page 128 for ordering details. The full text is also available on the IMF’s website ([www.imf.org](http://www.imf.org)).



## Iraq takes steps to stabilize and reform its economy

When the IMF Executive Board approved a 15-month, precautionary Stand-By Arrangement for Iraq in December 2005, the country set out on a broad economic reform program. Under the program, the government aimed to rebuild the oil sector, which represents two-thirds of Iraq's GDP; gradually reduce pervasive and inefficient subsidies while making more resources available to improve such public services as infrastructure, education, health care, and security; and keep the Iraqi dinar broadly stable against the U.S. dollar as an anchor for macroeconomic stability. Fifteen months later, in March 2007, the IMF reviewed Iraq's reform program. Here we assess how the economy has fared.

The unforeseen deterioration in the security situation, especially in the second half of 2006, resulted in a dramatic increase in human suffering and the displacement of large numbers of people. The authorities have also struggled to maintain macroeconomic stability and create the conditions for sustainable growth over the medium term.

In 2006, the authorities put in place a budget that aimed to control the growth of current spending and reduce fuel subsidies so that they could concentrate resources on reconstruction, in particular in the oil sector. Despite very difficult circumstances, they largely succeeded in achieving several of their goals. However, because of the prevailing violence, weak implementation capacity, and difficulties with procuring oil-related investment goods in a tight world market, the investment execution rate was only about 40 percent. Although the government had an overall budget surplus of about 11 percent of GDP, this came at the expense of much-needed investment, especially in the oil sector.



Iraqi authorities have had difficulties expanding oil output because of lower than anticipated investment.

The lack of investment prevented an expansion of oil output, which remained unchanged from the previous year at about 2 million barrels a day. Real GDP growth, which was initially projected at more than 10 percent, ended the year at only 3 percent.

### An ambitious reform program

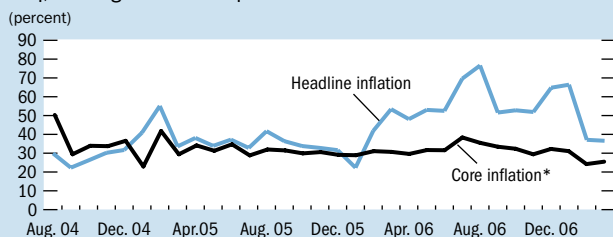
To spur Iraq's transition to a market economy, the authorities also embarked on an ambitious agenda of structural reforms. In the fiscal area, they introduced a modern financial management information system, and the Iraqi parliament is reviewing amendments to make the pension law sustainable. Because of the lack of security and capacity constraints, some other measures were delayed. These include a census of public service employees and the adoption of a new budget classification system, in line with IMF guidelines.

In the financial sector, the authorities, with assistance from the IMF, set up a modern payment system and initiated an overhaul of the central bank's accounting, reporting, and auditing systems. Simultaneously, they are working on restructuring the state-owned banks and on implementing a new banking supervisory system.

Chart 1

### A surprise spike

Ongoing security problems led to shortages of key commodities in Iraq, causing inflation to spike between end-2005 and end-2006.



\*Excludes fuel and transportation

Source: Central Bank of Iraq

Oil sector reforms included enacting legislation to liberalize the imports of fuel products; approval by the Council of Ministers of a much-needed draft hydrocarbon law; and, starting this year, elimination of all direct budgetary fuel subsidies, except on kerosene.

### An unwelcome development

However, a surprise jump in inflation from 32 percent at end-2005 to 65 percent a year later raised serious concerns (see Chart 1). The increase was caused mainly by shortages of key commodities, especially fuel products, which were largely the result of the continuing lack of security in Iraq. In a recent poll, 62 percent of Iraqi respondents complained about the availability of basic household goods, up from 38 percent in 2005. But underlying inflation (excluding fuel and transportation costs) was also stubbornly high, at about 30 percent. Given that the Central Bank of Iraq (CBI) maintained a tight grip on Iraqi dinars in circulation while the budget was in surplus, the high inflation appears to have been accommodated by the pervasive cash dollarization of the economy.

In mid-November 2006, the authorities initiated a strong policy response to the inflationary pressures. One of the objectives of the government budget for 2007 was to prevent current spending from putting further inflationary pressure on the small non-oil economy. The CBI, meanwhile, raised its policy interest rates sharply and allowed the dinar to appreciate against the dollar, which was possible in view of Iraq's comfortable level of international reserves (almost six months of import cover). These measures were intended to dedollarize the economy to enhance the CBI's control over monetary conditions and also to reduce imported inflation. This policy appears to have had some success in increasing the demand

for local currency. Moreover, in February 2007, overall inflation came down to 37 percent, and core inflation fell to 24 percent. Similar rates of inflation were recorded for March. But it is too soon to declare victory over inflation.

### Fuel price adjustments

Despite strong initial political resistance, the authorities began in December 2005 to increase fuel prices gradually. Before the adjustments, fuel prices were extremely low, even by regional standards, with regular gasoline selling in Baghdad for 3 cents a liter and, outside the capital, for less than half that price. But fuel shortages worsened and inflation increased during 2006, making it an urgent priority to ease supply bottlenecks in the fuel market.

The authorities took action on two fronts: first, raising the price of fuel products to reduce the incentive for smuggling; and second, allowing the private sector to import fuel products. By March 2007, the prices of regular and premium gasoline were near the average levels in other oil-exporting countries in the Middle East and North Africa, and prices for diesel exceeded the regional average (see Chart 2).

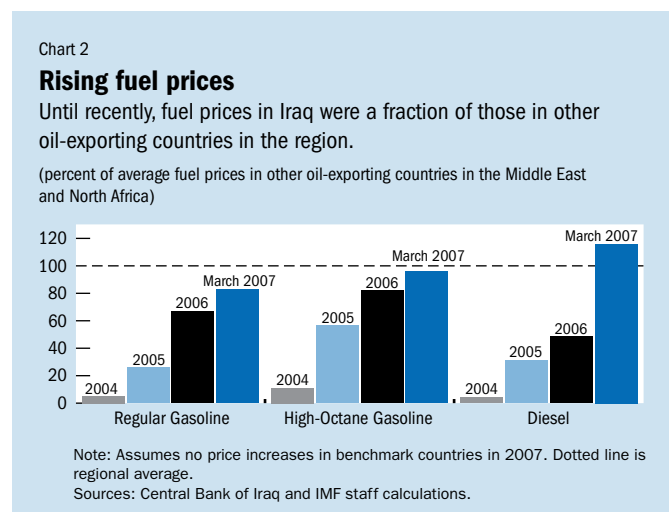
One important outcome of the price increases was a reduction in budgetary subsidies, which allowed budgetary resources to be shifted to priority public services. Despite the increases, official fuel prices are still lower than the black market prices that most people have to pay. By and large, Iraqis seem to have largely accepted the higher prices because they consider it more important to have a regular supply of fuel.

With the passage of new legislation last October to allow private fuel imports, the increase in fuel prices is expected to make it more attractive for the private sector to become active in this area. It is hoped that better fuel availability in 2007 would help reduce black market prices and ease inflationary pressures.

### The way forward

Iraq is entering a crucial period in its economic stabilization and recovery. Over the past 15 months, encouraging progress was made in strengthening economic policies and implementing structural reforms. However, much remains to be done. In the period ahead, the economic policy framework supported by the Stand-By Arrangement will also contribute to the International Compact with Iraq. It is hoped that this new partnership with the international community will help improve the political and security situation, which is essential to securing Iraq's future economic development. ■

*Erik de Vrijer, Edward Gemayel, and Udo Kock  
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## Does sovereign debt restructuring help restore sustainability?

A number of emerging market economies have experienced sovereign debt distress in recent years. The reasons were manifold and complex and often included overborrowing, prolonged recessions, banking or political crises, and exchange rate misalignments. As a result, the countries needed to restructure their sovereign debt obligations to restore sustainability. A recent IMF Occasional Paper reviews the experiences of eight countries that restructured their debt to private creditors between 1998 and 2005: Argentina, the Dominican Republic, Ecuador, Moldova, Pakistan, Russia, Ukraine, and Uruguay. It examines the initial conditions that gave rise to the debt operations, discusses the results of the restructurings, and asks whether sustainability was actually restored.

### Paths into crisis

Although countries had quite different public debt-to-GDP ratios before the crises, these ratios tended to increase rapidly as economic and financial conditions worsened. The deterioration was largely because of the effects of rapid currency depreciation on foreign currency-denominated debt, declining economic activity, increasing interest obligations, and the fiscal cost of supporting a distressed financial sector (see chart). Higher debt paired with reduced market access typically generated debt servicing difficulties, ultimately culminating in either default or the urgent need for a preemptive restructuring to avoid a default.

### How much debt relief?

Ultimately, all eight countries reached agreement on debt restructuring terms that were acceptable to creditors (though, among the cases considered, significant holdouts remain in Argentina). The scope of debt restructuring generally depended on the share of debt owed to private creditors, and the degree of debt relief varied widely across countries (see table). The amount of debt relief should, in principle, be tailored to ensure a return to debt sustainability. Because economic and financial

conditions varied so much from country to country, it is not surprising that debt relief was quite varied. A key question is, however, whether the relief helped restore sustainability in the various cases. This is a difficult question to answer, because debt operations, in practice, took place in the context of contemporaneous changes in the economic environment and in domestic policies. However, it is possible to examine whether the debt operations, combined with supporting economic policies, contributed to a return to sustainability.

### Criteria to assess sustainability

The Occasional Paper applies a number of economic criteria to assess the restoration of sustainability, taking into consideration both

the solvency and liquidity aspects that the concept of sustainability encompasses (without, however, attempting an evaluation of other factors, such as political risks, that may also affect crisis probabilities). Given that these concepts are inherently forward looking, any assessment is necessarily subject to judgments, including on the probability of future debt distress.

- **Developments in public debt levels and early warning systems.** Debt crises have occurred at a very large range of debt ratios, and there are no obvious cutoff points for the debt ratio that would allow a clear distinction between sustainable and unsustainable debt levels. However, over the past 30 years, 60 percent of sovereign debt crises occurred when debt levels in the year preceding the crisis had been higher than 39 percent of GDP. Moreover, a 50 percent probability of being in a debt crisis is associated with a debt-to-GDP ratio of 80 percent. In addition, with the help of an early warning system model, the paper gauges debt-related vulnerabilities based on the historical experience of a large sample of countries.

- **Liquidity indicators.** A sovereign faced with large financing needs and/or a small pool of available resources stands an

- **The issue:** What does cross-country experience tell us about the restoration of debt sustainability in sovereign restructuring cases?
- **Findings:** Overall, the experience is positive, but a few cases of preemptive restructuring were left with considerable vulnerabilities.
- **The debate:** Given the limited number of observations, there is no firm consensus on whether debtors' incentives in preemptive restructuring cases systematically influence the outcome.

### Debt reduction

Post-default restructurings have received more debt relief than the preemptive restructurings.

	Debt affected <sup>1</sup>	Debt reduction <sup>2</sup>		Debt affected <sup>1</sup>	Debt reduction <sup>2</sup>
<b>Preemptive:</b>			<b>Post-default</b>		
Argentina, 2001	48	10	Argentina, 2005	53	75
Dominican Republic, 2005	14	1	Ecuador, 2000	45	25
Moldova, 2002	3	6	Moldova, 2004	9	58
Pakistan, 1999	1	8	Russia, 2000	39	44
Ukraine, 2000	21	5			
Uruguay, 2003	49	8			

Data: IMF; authors' calculations

<sup>1</sup>Percent of public debt.

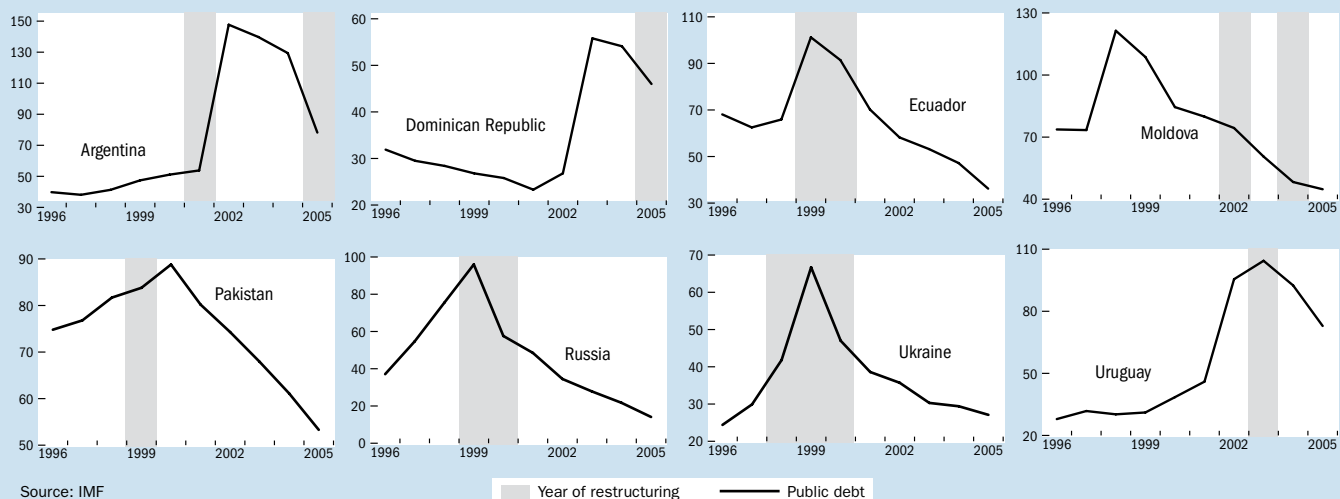
<sup>2</sup>Net present value reduction (in percent) at a common discount rate of 10 percent.



## Crises and recovery

Debt ratios increased rapidly as economic and financial conditions worsened, then declined following the crises.

(public debt-GDP ratios, percent)



increased risk of incurring debt servicing problems. The study focuses on the ratio of reserves to short-term debt and the overall fiscal financing need in percent of GDP.

- **Medium-term debt dynamics.** IMF staff's medium-term debt projections and sensitivity analyses to a variety of shocks are used to gauge the likelihood that the debt-to-GDP ratio would stay on a stable or declining path over the medium term.

### Key findings

Based on the battery of criteria and indicators considered, as of late 2005, relatively low debt vulnerabilities were found in Pakistan, Russia, and Ukraine; medium-range debt vulnerabilities in Argentina, the Dominican Republic, Ecuador, and Moldova; and somewhat higher, though declining, vulnerabilities in Uruguay.

All countries that restructured after defaulting exhibited clear symptoms of solvency problems and received substantial debt relief. The indicators presented in the paper no longer point to high debt-related vulnerabilities. Ecuador, Russia, and Argentina after its 2005 restructuring were all found to have low- or medium-range debt-related vulnerabilities. In Argentina's case, resolving arrears with creditors not participating in the debt exchange remains key to ensuring sustained access to international capital markets.

Countries that restructured preemptively had quite diverse experiences. In Moldova and Pakistan, the scope of restructuring of private sector held claims was too limited to have a significant impact on sustainability. In Ukraine and the Dominican Republic, liquidity more than solvency was the issue, and the focus consequently was on debt service relief rather than debt reduction. A

few other countries, however, where evidence pointed to solvency problems, could not secure sufficient debt relief. This was the case in Argentina's 2001 pre-default restructurings (the 2001 mega swap and subsequent Phase I restructuring) and in Uruguay. Argentina defaulted shortly after the Phase I restructuring, while in Uruguay considerable debt-related vulnerabilities remained after the crisis, although they have recently declined significantly, also reflecting, in part, favorable global liquidity conditions.

Although the limited sample of restructuring cases implies that broad conclusions are highly tentative, the difference between the preemptive and post-default cases is rather striking. The preemptive group achieved considerably smaller debt reductions and, in cases that pointed to solvency problems, did not fare well in reducing debt vulnerabilities. The causes of this observation are not fully explained, but incentives may have played a role. In a preemptive restructuring, with mounting pressures on resources available to service debt obligations, a failure to reach agreement could subject the debtor to significant reputational, political, and economic costs because the country could be pushed into default. Debtors may therefore be under pressure to acquiesce to debt restructuring terms that may not be sufficient to restore debt sustainability. The factors that affect creditors' and debtors' negotiation strategies are, however, complex and difficult to ascertain. Moreover, although countries that restructured their debt after defaulting have tended to receive greater debt reduction than those that restructured preemptively, they have also experienced, on average, more severe recessions. ■

Harald Finger and Mauro Mecagni  
IMF Policy Development and Review Department

## Studies spotlight investment, reserves, and inflation

Recently published research by the IMF, covering subjects as diverse as the prospects for sustained growth in Africa and the role of capital inflows in Europe, underlines the range and diversity of studies by Fund economists. Below are highlights from five recent IMF Working Papers. The full text is available at [www.imf.org](http://www.imf.org).

### Examining prospects for sustained growth in Africa

*"The Prospects for Sustained Growth in Africa: Benchmarking the Constraints," Simon Johnson, Jonathan D. Ostry, and Arvind Subramanian, IMF Working Paper No. 07/52.*

Africa is experiencing its strongest growth in years. But for those who view Africa's prospects through the perspective of the "deep" determinants of development—geography, institutions, and history—the outlook still seems somewhat bleak. The paper tries to assess Africa's prospects by comparing Africa *today* with countries that were similarly weak in the *past*—in terms of their institutional development—and yet managed to escape from poverty.

The authors say the data suggest that these deep indicators, especially for a group of "promising" countries, are not much worse in Africa today than they were in much of East Asia in the early 1960s or in Vietnam and China around 1980. There are inherited institutional weaknesses in Africa—and internal conflict and social fragmentation remain concerns—but the East Asian experience demonstrates that some institutional weaknesses can be fixed. So the good news for countries seeking to escape their current poverty trap is that breaking away from their institutional legacy is possible because it has been done by others.

Creating a stronger and more dynamic manufacturing export sector is likely to be one of the keys to sustaining growth. To achieve this, though, reducing direct regulatory costs for exporters

and avoiding real exchange rate overvaluation will be essential. And on these scores, the authors see risks going forward that were less of an issue for the East Asian escapees: commodity-based growth and sizable aid inflows that partly underpin the positive prognosis for Africa may impede institutional development and make it harder to avoid real exchange rate overvaluation. Sub-Saharan Africa's escape from poverty, although certainly possible, may be more challenging than it was for East Asia.

### Brazilian growth is better than reported

*"The Myth of Post-Reform Income Stagnation in Brazil," Irineu de Carvalho Filho and Marcos Chamon, IMF Working Paper No. 06/275.*

Brazil, the largest economy in South America, has exhibited lackluster growth for almost three decades. Although reforms in the mid-1990s helped raise the growth rate somewhat, it is still below that of the 1960s and 1970s. Economists have been puzzled by Brazil's inability to boost economic growth despite widespread privatization and trade liberalization that transformed it from one of the world's most closed economies to a relatively open one. Reforms also helped improve the productivity of Brazilian industry and brought inflation under control.

The authors suggest that there may be no need to explain the disappointing performance because household income growth in Brazil has been far more robust than published data indicate. That's because Brazil's consumer price index (CPI), which is used to deflate nominal growth figures, seriously overstated inflation. The CPI failed to fully take account of new goods and quality improvements following trade liberalization. For households in the metropolitan areas covered by the CPI, the difference between the estimated true cost of living and the official figure was 3 percent per year between 1987–88 and 2002–03.

### Central banks are becoming more independent

A large body of research suggests that operational freedom of central banks from political interference has considerable benefits. For example, autonomy can help countries maintain low inflation or improve the stability of financial systems. The authors find that both political and economic autonomy of central banks have been growing and have helped to sustain low inflation worldwide. Although central bank autonomy is greatest in advanced economies, central banks in emerging markets and developing countries were on average more independent at the end of 2003 than central banks in advanced economies were in the late 1980s.

In the paper, the authors present indexes of central bank autonomy for 163 central banks representing 181 countries

as of the end of 2003. They also calculate comparable indexes for 68 banks at the end of the 1980s.

The authors find that most central banks have been mandated to make price stability a goal of monetary policy, have been given independence to set the policy interest rate, and are not required to provide loans to the government. But the picture is mixed on bank supervision. In many emerging market and developing countries, central banks have kept their supervisory role, but in advanced economies relatively few have. The paper also finds that central bank autonomy tends to increase when the country is part of a currency union.

*"Central Bank Autonomy: Lessons from Global Trends," Marco Arnone, Bernard J. Laurens, Jean-François Segalotto, and Martin Sommer, IMF Working Paper No. 07/88.*



Shopping in Brazil: An overstated consumer price index in Brazil has resulted in severely underreported real growth, two IMF economists say.

Brazil recently revised real GDP figures upward by about 11 percent. Given the share of household income in GDP, the authors' estimates would indicate that Brazil's revisions have eliminated about one-third of a roughly 35 percent understatement.

### Capital flows downhill in Europe

*"International Finance and Income Convergence: Europe Is Different," Abdul Abiad, Daniel Leigh, and Ashoka Mody, IMF Working Paper No. 07/64.*

Crisis in emerging markets have made economists and policymakers more aware of the potential dangers arising from large-scale capital flows. This skepticism has been on the rise recently, because research (including by IMF economists) has found little evidence that capital inflows can lift long-term economic growth in developing countries. But in this new Working Paper, IMF economists Abdul Abiad, Daniel Leigh, and Ashoka Mody show that in eastern and central Europe, capital flows facilitated by financial integration have helped support a more rapid income convergence between the new European Union members and their richer neighbors in western Europe.

Standard economic theory predicts that capital should flow from richer to poorer countries. But capital has in recent years been flowing instead from some fast-growing poor countries to some rich countries, most notably demonstrated by China's large current account *surplus* and the United States' large current account *deficit*. Some economists believe that this reflects a new state of affairs: fast growing developing countries run surpluses because they generate more savings than they can use, in part because their financial systems are underdeveloped. Which is fine, the argument goes, because there seems to be no growth dividend associated with capital inflows.

The authors argue that "it is important to recognize that growth processes around the world differ in substantive ways."

They find that in a global sample of economies, capital *does* flow downhill from rich to poor countries, and this downhill flow is most evident in Europe, owing to its much higher level of financial integration. What is more, these European capital inflows have supported an impressive process of income convergence. When it comes to the role of international capital flows in economic development, "Europe is different," they conclude.

The question, which the authors leave unanswered for now, is whether the patterns seen in Europe are a bellwether of a new and more positive role for international capital in helping increasingly integrated developing countries catch up with rich countries.

### Finding the right level for reserves

*"The Optimal Level of International Reserves for Emerging Market Countries: Formulas and Applications," Olivier Jeanne and Romain Ranciere, IMF Working Paper No. 06/229.*

Since the Asian crisis in 1997–98, when a sudden reversal of investor sentiment led to withdrawals of massive amounts of capital in countries ranging from Thailand to Indonesia, emerging market economies in Asia and elsewhere have been accumulating foreign exchange reserves at a rapid rate, leading to levels of reserves not previously seen, worth trillions of dollars.

Although such reserves may help countries feel more secure in a world of open capital flows, countries pay a price for keeping all those U.S. treasury bills and other forms of bonds and notes in a vault. Reserves yield a lower return than the interest rate governments pay on their long-term external liabilities. Keeping the money locked up also prevents it from being invested in more productive endeavors that could help lift the country's growth rate.

In this paper, IMF economists Olivier Jeanne and Romain Ranciere come up with a model that seeks to calibrate the optimal level of reserves for emerging market economies. Their model predicts a reserves-to-GDP ratio of 10 percent as being close to optimal. Incidentally, the 10 percent level is close to that observed in 34 middle-income countries during the period 1980–2003. It also in many instances closely matches the "Greenspan-Guidotti rule" for international reserves. This rule—named after Alan Greenspan, the former chairman of the U.S. Federal Reserve Board and Pablo Guidotti, a former deputy finance minister of Argentina—suggests that countries should aim for a level of reserves that fully covers all short-term external debt. The more traditional rule of thumb used by policymakers has been to aim for a level of reserves covering three months' worth of imports. ■

Copies of IMF Working Papers are available for \$18.00 each from IMF Publication Services. The full texts of all Working Papers are available on the IMF website ([www.imf.org](http://www.imf.org)).

## Eschewing happy talk

The exchange rate analysis in the IMF's flagship publication, *World Economic Outlook* (*WEO*), came in for praise—and some constructive criticism—at an April 19 seminar at the Peterson Institute for International Economics (IIE), where a small group of academics and policymakers debated the role that adjustments in real exchange rates can play in reducing global economic imbalances. But the audience was more skeptical about the outcome of the IMF's first multilateral consultations. William Cline, IIE fellow and author of a recent book on the United States as a debtor nation, captured the mood when he said the IMF seemed very hands-off in its approach by calling only for “market-led exchange rate adjustment.”

Simon Johnson, the Fund's new Economic Counsellor, said “the consultations represented a perhaps unprecedented—and certainly impressive—development.” He pointed out that the report on the first multilateral consultation, released during the April 2007 IMF-World Bank meetings, “provides a set of benchmarks against which one can assess and discuss progress made toward reducing global imbalances.” Johnson also told the audience that reducing global imbalances is not only about exchange rates—rebalancing global demand will have to play an important role as well.

### Scenario for a dollar decline

A lively discussion followed Roberto Cardarelli's presentation of Chapter 3 of the *WEO*, which argues that a correction in the U.S. trade balance can be achieved through a smaller depreciation in the real value of the dollar than is commonly assumed. Most of the participants—who included Michael Mussa, the IMF's former Economic Counsellor and now an IIE fellow; Nancy Jacklin, former IMF Executive Director for the United States; and a number of participants from the U.S. Federal Reserve Board—all welcomed the *WEO*'s analysis. But most of them wanted to know how the conclusions would translate into policy actions in the real world, especially when it came to China and its exchange rate policies. Mussa said the *WEO* analysis placed the IMF “pretty much at the center of what most respon-



The IMF's Roberto Cardarelli discussed ways of correcting the U.S. trade deficit at a conference at the Peterson Institute for International Economics in Washington, DC.

sible economists understand to be the nature of the problem of global imbalances.” But like Cline, he argued that, while necessary, expenditure switching between the United States and the rest of the world would not be enough to solve the global imbalances problem and that “substantial exchange rate adjustment” was needed.

Jacklin said that to move the policy debate forward “we need research that shows that fixed exchange rates don't work and are in fact damaging to the global economy.” And while positive and encouraging feedback was an essential tool in policy discussions with countries, surveillance should not be “all happy talk,” she said.

In his closing remarks, Johnson said the IMF would strive to be “an honest truth teller” in its bilateral and multilateral surveillance, and that it would carefully evaluate progress toward the benchmarks to which the participants in the multilateral consultations had agreed. “If the policies outlined by the five countries are implemented, this would reduce global imbalances by 1–1¼ percent of world GDP over the next four years from a baseline of about 6 percent,” he said. ■

Camilla Andersen  
IMF Survey

Copies of *World Economic Outlook: Spillovers and Cycles in the Global Economy*, April 2007 are available for \$57.00 (\$54.00 academic rate) each from IMF Publication Services. The full text is also available on the IMF's website ([www.imf.org](http://www.imf.org)).



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