INTERNATIONAL MONETARY FUND

## IMF Sees World Growth Slowing, With U.S. Marked Down

U.S. performance, world growth is projected to slow to 4.1 percent in 2008, down from an estimated 4.9 percent last year, the IMF said in its quarterly update for the global economy.

Financial market strains originating in the U.S. subprime sector—and associated losses on bank balance sheets—have intensified, while the recent steep sell-off in global equity markets was symptomatic of rising uncertainty, the IMF stated.

#### **Growing risks**

While projecting growth of above 4 percent for the global economy, the IMF said there was a risk that the ongoing turmoil in financial markets would further reduce domestic demand in the advanced economies, with more significant spillovers to emerging market and developing countries. "Growth in emerging market countries that are heavily dependent on capital inflows could be particularly affected, while the strong momentum of domestic

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Store in New York, United States, where recent indicators show weaker consumption in the fourth quarter of 2007.

## **IMF Intensifies Work on Subprime Fallout**

ollowing the recent subprime mortgage crisis in the United States and the resulting global market turmoil, the IMF has recalibrated its work program and launched a number of initiatives with the aim of developing policy proposals both to deal with the present crisis and to



The U.S. subprime mortgage crisis forced writedowns at some of the largest financial institutions.

improve the Fund's capacity to identify potential trouble spots.

The crisis, which erupted in mid-2007, has had far-reaching and still-evolving consequences. The shock has forced significant writedowns at some of the world's largest financial institutions and required, in some cases, significant capital injections from existing and new shareholders, including sovereign wealth funds.

Some central banks have responded by lowering policy interest rates and by amending the terms of their usual lending facilities to provide much-needed liquidity to interbank markets. Financial regulators too are reexamining the extent to which existing prudential norms and regulations may need to be amended.

Notwithstanding these responses, the impact of the crisis is likely to be pro-

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### Investors Eyeing Sub-Saharan Africa

wo African countries successfully tapped international capital markets in the second half of 2007, demonstrating global investors' rising confidence in sub-Saharan Africa's economic performance and prospects. The IMF's latest forecast shows growth in Africa rising to 7.0 percent in 2008, up from 6.0 last year.

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### **World Growth Seen Slowing**

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demand in some emerging market countries provides upside potential," the *World Economic Outlook Update* said.

A number of other risks remain elevated. "Monetary policy faces the difficult challenge of balancing the risks of higher inflation and slower economic activity, although a possible softening of oil prices could moderate inflation pressures," the IMF said.

The IMF commented on and supplied projections for key areas of the global economy.

#### **United States**

Economic growth in the United States appeared to slow notably in the fourth quarter of 2007, with recent indicators showing a weakening of manufacturing and housing sector activity, employment, and consumption.

U.S. growth is projected by the IMF to slow to 1.5 percent this year, down from 2.2 percent last year, but the update points out that this number for 2008 reflects the carryover from 2007. Projections on a quarterly basis (Q4–Q4) give a better sense of the slowing growth momentum. On this basis, growth is projected at 0.8 percent in the fourth quarter of 2008, compared with 2.6 percent during the same period of 2007.

The IMF has said that the recent move by the U.S. Federal Reserve to cut the federal funds rate by 75 basis points was "appropriate and helpful."

#### **Western Europe**

Growth has also slowed in western Europe, and confidence indicators have generally deteriorated. For the euro area, growth on an annual basis is projected at 1.6 percent in 2008, down from 2.6 percent last year. On a Q4–Q4 basis, growth is projected at 1.3 percent, compared with 2.3 percent in 2007.

At a January 29 news briefing in Washington, IMF research head Simon Johnson said that inflation remained a serious concern in Europe and that the European Central Bank had done a good job of managing liquidity.

#### Japan

Japanese growth has been dampened by a tightening in building standards, while consumer and business sentiment has weakened. Japan's growth is forecast on an annual basis at 1.5 percent in 2008, down from 1.9 percent last year, although on a Q4–Q4 basis, growth is forecast to improve somewhat to 1.6 percent, from 1.2 percent in the fourth quarter of 2007.

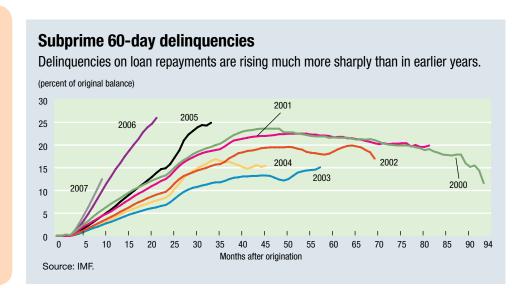
# Emerging markets and developing countries

Despite some slowing of export growth, emerging market and developing countries have thus far continued to expand strongly, led by China and India. These countries have benefited from the strong momentum of domestic demand, more disciplined macroeconomic policy frameworks and, in

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the case of commodity exporters, from high food and energy prices.

Growth in emerging market and developing countries is also expected to ease, moderating from 7.8 percent (annual basis) in 2007 to 6.9 percent in 2008. In China, growth is projected to decelerate from 11.4 percent to 10 percent, which should help alleviate overheating concerns. But growth in Africa is projected to pick up to 7.0 percent from 6.0 percent in 2007.

#### Inflation and interest rates

Headline, or total, inflation has increased since mid-2007 in both advanced and emerging economies. Core inflation has also drifted upward. In the United States, the Federal Reserve has been cutting interest rates in response to increasing downside risks to activity, while policy has been on hold in the euro area and Japan. Meanwhile, central banks have continued to tighten monetary policy in many emerging market economies, where food and energy represent a higher share of consumption baskets and overheating is more of a concern.

#### Financial market outlook

In its *Global Financial Stability Report* (*GFSR*) *Market Update*, the IMF said that deteriorating economic conditions could exacerbate pressures on major financial institutions that have already suffered big losses from the subprime crisis.

A possibly deeper economic downturn in the United States or elsewhere could also widen the crisis beyond the subprime sector, as credit deteriorates more broadly, it stated. Already, delinquency rates in 2007 vintages of U.S. prime mortgages (those

#### Global slowdown

Growth in most advanced economies is decelerating. (annual percent change unless otherwise noted)

		Est.	Proj.	Est.	Proj.
	2006	2007	2008	to	2007: Q4 to 2008: Q4
World output	5.0	4.9	4.1		
Advanced economies	3.0	2.6	1.8	2.6	1.5
of which					
United States	2.9	2.2	1.5	2.6	0.8
Euro area (15)	2.8	2.6	1.6	2.3	1.3
Japan	2.4	1.9	1.5	1.2	1.6
Other advanced economies	3.7	3.8	2.8	3.9	2.9
Emerging market and developing economies	7.7	7.8	6.9		
Africa	5.8	6.0	7.0		
Central and eastern Europe	6.4	5.5	4.6		
Commonwealth of Independent States	8.1	8.2	7.0		
Developing Asia	9.6	9.6	8.6		
of which					
China	11.1	11.4	10.0	11.2	9.4
Middle East	5.8	6.0	5.9		
Western Hemisphere	5.4	5.4	4.3		
•					

Source: IMF, World Economic Outlook, January 2008.

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during December 4, 2007–January 2, 2008.

to the most creditworthy borrowers) are rising faster than in previous years, albeit from low levels, and other forms of consumer credit show signs of deterioration (see chart, page 18).

In western Europe, signs of a future slowdown in credit growth are just now emerging, and there is some potential for worsening credit quality, as lending has been robust in some countries and in several countries housing markets are considered overvalued, the IMF warned.

Lending in some segments of the corporate sector also expanded rapidly in the first half of 2007 with the rise in leveraged buyouts. Weaker-quality corporates have already seen a substantial rise in the cost of credit although yields of investment grade debt have remained relatively stable. Additionally, a slowing economy will likely exacerbate the tighter credit environment further as unemployment picks up and job growth slows.

Emerging markets have so far been resilient, but face challenges ahead. Emerging market equities have outperformed mature equity markets, but prices in some markets have declined steeply since the start of the year on expect ations that the U.S. economy may slow more rapidly. "Signs of spillover are most evident in the sharp fall in private emerging market bond issuance, particularly in some emerging European economies whose banks have relied heavily on external financing to support rapid domestic credit growth," the *GFSR Market Update* stated. Generally, flows to emerging markets have remained positive to date.

#### **Calculating Projections on a PPP Basis**

The latest IMF projections are calculated using revised purchasing power parity (PPP) data published by the International Comparison Program (ICP) in December 2007. This has resulted in a downward revision of the previous estimates of global growth during 2005–07 of about ½ of 1 percentage point a year relative to the estimates in the October 2007 World Economic Outlook.

The IMF uses PPP exchange rates provided by the ICP as the basis for calculating the relative sizes of economies. The ICP revisions imply a substantial reduction in the PPP rates of some key emerging market countries and an upward revision in others (including oil exporters).

PPP rates are an alternative way of calculating the exchange rate between countries based on the comparison of prices of similar goods and services in different countries. The PPP rate is defined as the amount of currency that would be needed to purchase the same basket of goods and services as one unit of the reference currency, usually the U.S. dollar.

## **IMF Intensifies Work on Subprime Fallout**

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tracted, and most forecasters—including the IMF—have scaled back their estimates of growth for this year. (See pages 18–19 for the IMF's latest estimates for global growth and an update of its views on financial markets.)

The IMF will provide an updated and in-depth look into the state of financial markets worldwide in its next *Global Financial Stability Report (GFSR)* in early April, building on the Fund's policy prescriptions contained in its October *GFSR*.

#### Focusing on member countries

To better understand the complex interactions between financial markets, the IMF has ramped up its work—both in-house and with its member countries and other international institutions—to analyze the causes of the crisis, its spillovers to the world economy, and the possible policy responses.

The IMF's first priority is to help its member countries address their economic and financial vulnerabilities in this new, volatile environment, even if these vulnerabilities are not directly related to the subprime crisis.

At the bilateral level, the preparation and delivery of country assessments and updates under the joint IMF–World Bank Financial Sector Assessment Program (FSAP) to member countries, which was already on the rise, was stepped up further following the crisis, as national authorities are becoming more aware—sometimes painfully so—of the critical linkages between the financial sector and the macroeconomy.

The financial sector component of regular annual consultations with IMF members has also been stepped up, and more effort has gone into analyzing regional implications.

#### New generation of analytical tools

The IMF's Monetary and Capital Markets Department (MCM) has also speeded up the development of tools to test for vulnerabilities and for the risk of contagion, as well as to probe the resilience of the financial system at the national and global levels.

A new generation of stress tests and macrofinancial risk modeling is being gradually rolled out that aims to capture the highly complex interactions between the macroeconomy and financial markets, the second-round effects of shocks, liquidity risks, and the possible impact of "extreme events"—exactly the elements that have been at the heart of the recent crisis. The related article on quantitative financial stability modeling (see page 26) describes the different directions along which this work is developing.

The emphasis is on creating practical, user-friendly tools that IMF teams and country authorities can easily use to assess and monitor risks (see page 21).

#### Five key areas for further investigation

In addition to these activities, last October the IMF's policy guidance body, the International Monetary and Financial Committee, asked the Fund to investigate the implications of the subprime meltdown. In response, the IMF's MCM Department set up five working groups, each focusing on an area related to the recent crisis:

- risk management practices related to complex financial products, including in the biggest financial institutions;
- treatment of complex products by rating agencies and their impact on investor behavior:
- basic principles of prudential oversight for regulated financial entities;
- valuation and accounting for offbalance-sheet instruments; and
- liquidity management.

In this effort, the IMF is working in close cooperation with national authorities, supervisors, international standard setters, the Financial Stability Forum, and the private sector, among others. Its analysis

will feed into ongoing work by a number of international and national bodies to identify information gaps and make policy recommendations, including on risk management practices, valuation models, financial regulation, and supervisory practice. Here's what the five working groups are looking at:

**Risk management.** This working group will evaluate risk management practices from the perspective of both buy-side investors (pensions, insurance companies, asset and money managers, and hedge funds) and sell-side institutions (investment banks and commercial banks). The immediate focus is on the risk management practices at the largest global financial institutions and best practice examples relevant for policymakers; structural influences on risk management practices, such as regulatory, capital, and accounting guidelines; lessons learned by risk managers from the recent market turmoil; and what new risk management tools may be needed, if any, in the broader market to help address current and potential new challenges.

Role of credit rating agencies. Is there a conflict of interest for rating agencies that are paid to rate complex structured products, yet often actively consult with issuers on the specific structures required to achieve a desired rating? This working group is examining whether this potential conflict of interest may have contributed to excessively high ratings for structured products—particularly those associated with subprime mortgages.

This group is also looking at the potential benefits of differentiated rating scales that highlight composite risks and different dynamic risk characteristics inherent in many structured products not found in ordinary debt securities.

Basic principles of prudential oversight. A third group is working with other international bodies to develop principles and operational advice to better align supervisory structures with financial stability objectives, including arrangements for coordinated actions among agencies responsible for liquidity provision, supervisory oversight, and bank resolution. Among other topics, the group is focusing on implications for capital adequacy frameworks, minimum underwriting and disclosure standards, and deposit insurance systems.

Valuation and accounting. Are the prevailing accounting and valuation processes for sparsely traded and complex products destabilizing? As market liquidity declined in mid-2007 amid concerns about the exposure of structured products to U.S. nonprime mortgage—related asset-back securities, market participants found it increasingly difficult to value

these products. Many used pricing models that relied on historical patterns that were no longer relevant, causing the models to break down. This working group is examining issues related to the valuation and accounting of structured products, including how the process has been handled by major financial institutions.

Liquidity management. The recent market turmoil presented major challenges to a number of industrial-country central banks, notably the European Central Bank, the U.S. Federal Reserve, and the Bank of England. It illustrated shortfalls in the ability of central banks to respond effectively and provide needed liquidity in the face of a major loss of

confidence in asset markets and market participants. This working group is examining how the world's major central banks addressed these shortcomings and whether there are additional lessons to be learned.

As the related article on central banks' response to the recent turmoil explains (see page 22), several factors had a bearing on the effectiveness of the central banks' response to the liquidity crisis, in particular the range of collateral they were prepared to accept, the ability to interact directly with a large number of counterparties, and the extent to which reserves are remunerated. This experience also highlighted the need for closer coordination of their activities in turbulent times.

### **IMF Develops New Risk Measurement Framework for Public Debt**

esponding to the need to better assess the risks involved in managing bonded public debt, the IMF has recently developed practical tools for use by both country authorities and IMF economists to measure such risks.

The new Risk Measures framework can be used to analyze the soundness of a country's public debt management, while providing a method to determine a sustainable public debt strategy and a consistency check for macroeconomic policies.

Establishing a sound debt strategy, in the context of strong monetary and fiscal policies, can help immunize a country against sudden, adverse market changes and financial turmoil.

Public debt managers need to consider a number of factors to manage public debt effectively, including the degree of market, credit, and liquidity risks; the level, maturity, and composition of debt; the availability of information on the debt portfolio; potential costs associated with the debt management strategy; and the coordination of debt management with fiscal and monetary goals.

By considering these factors, public debt managers can become more aware of the impact of changes in financial and economic circumstances on their debt obligations and be in a better position to develop policy responses quickly.

Measuring the risks of public debt is therefore a critical first step in managing the debt. A key benefit from this step is the reduction of vulnerabilities, including to international financial shocks. Smaller and emerging market countries are more vulnerable because their economies are less diversified, have a smaller base of domestic financial savings and less developed financial systems, and are more susceptible to financial contagion.

The new Excel-based Risk Measures templates provide an operational framework for evaluating risks of bonded public debt and for managing these risks through debt management opera-

tions. The framework also offers the possibility to develop a clear understanding of the relative position of a country's public debt riskiness with respect to that of other countries at a similar level of development. Accordingly, it provides an indication of a country's credit rating, access to international capital markets, and prospects for the placement of its debt with international investors.

The templates allow the calculation of a number of measures, both conventional and new. Among these are indicators that capture interest rate and exchange rate risks (duration, convexity, and value at risk, or VAR), credit risk (contingent claims approach), and liquidity risk arising from a possible lack of sufficient tradability in government debt market instruments.

They also estimate a measure for potential costs associated with a particular debt management strategy (cost at risk). These measures are estimated for both individual debt instruments and sets (or portfolios) of debt instruments. Such measures offer guidance in assessing debt vulnerabilities, evaluating debt management operations, and developing a debt management strategy that minimizes the cost of servicing debt obligations.

Going forward, the templates will be enhanced to include loans—of particular interest for assessing the debt vulnerabilities of low-income countries—and other methodologies to assist with the management of the bonded debt for a particular risk appetite, such as the use of efficient frontiers.

Carlos Medeiros, Michael Papaioannou, and Marcos Souto IMF Monetary and Capital Markets Department

For information on how to obtain a copy of the Risk Measures templates, contact Marcos Souto (202-623-8283; msouto@imf.org) or Michael Papaioannou (202-623-7799; mpapaioannou@imf.org).

## **IMF Assesses Central Banks' Reaction to Subprime Crisis**

he IMF is assessing the different approaches taken by the major central banks in response to financial market turmoil sparked by the subprime crisis. This will allow the IMF to help draw lessons for developing a more effective liquidity management framework.

The IMF has already held discussions with central bankers and market participants in Europe, Asia, and North America. The IMF believes that an examination of the different approaches followed by the European Central Bank (ECB), the U.S. Federal Reserve (Fed), and the Bank of England (BoE) holds lessons that could be useful to all central bankers.

#### Big challenge for central banks

The financial turmoil that broke out in August 2007 presented major challenges to a number of industrial-country central banks, in particular the ECB, the Fed, and the BoE.

Central banks in normal times aim to provide sufficient liquidity to the financial markets at or around the policy interest rate (the monetary policy interest rates set by the ECB's Governing Council, the Fed's Federal Open Market Committee, and the BoE's Monetary Policy Committee), with the expectation that

- their counterparties—the commercial banks and securities firms that deal directly with the central bank in open market operations (OMO)—will distribute liquidity among market participants as needed, and
- there is a reasonably stable relationship between, on the one hand, the very shortterm interbank rate that the central bank targets and, on the other, the longer-term money market rates that influence demand in the economy.

The subprime crisis, which began in the United States, disrupted market functioning, with the result that previously stable relationships in the wholesale money markets in both the United States and Europe broke down; the yield curve became steeper and

more volatile; and the gap between secured and unsecured rates widened. For the Fed, in particular, the impact of the subprime crisis also required a reappraisal of its monetary policy stance: the target rate was cut in several steps from 5.25 percent immediately prior to the crisis to 3 percent by the end of January, to offset economic weakening and tighter credit conditions.

#### **Need for liquidity**

Central banks typically make available a standing credit facility—which banks can use at their discretion—for overnight borrowing, but the interest rate is significantly higher than the policy rate to discourage banks from making excessive use of this facility.

In the days following the onset of the crisis, there was an increase in demand for liquidity, and both the ECB and the Fed provided additional OMO funding to avoid a spike in short-term rates. The BoE preferred to let its existing standing credit facility take the strain, although this involved higher overnight interest rates. Chart 1 shows how market rates differed against a background of different operational frameworks and central bank actions.

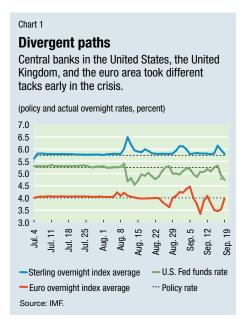
that commercial banks did not want larger central bank balances; rather, they wanted more liquid assets (very short-term or repo loans) and longer-term liabilities (because term funding in the market disappeared). The yield curve became steeper and more volatile, making it harder to determine the impact of the central banks' policy rate on the economy (see Chart 2).

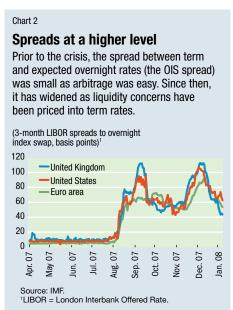
As time progressed, it became evident

#### IMF examination

In response to a request from its policy guidance body, the International Monetary and Financial Committee, the Fund has set up a working group to analyze how the central banks reacted to the crisis. The working group, organized by the IMF's Monetary and Capital Markets Department, is examining developments in the context of each country's financial market structure, with a view to drawing conclusions that would benefit the entire membership.

Differences in how each central bank acted are more prominent in three areas: the number of the central bank's direct counterparties, the provision of more long-term lending, and the acceptance of a broader array of collateral.







The Bank of England, which let existing standing facilities take the strain of increased liquidity demand.

#### Central banks' operational response

The Fed normally operates directly with about 20 primary dealers, who distribute the liquidity provided by the Fed around the market, while some 7,500 banks have access to the discount window. The ECB normally operates with about 300 banks, though 1,700 are able to participate in its regular operations and another 700 have access to standing facilities. The BoE operates in a smaller market, with about 40 normal counterparties in its OMO, and a further 20 or so that can access standing facilities. When money market relationships broke down, the ability to operate directly with a wide group of counterparties proved important.

In support of market liquidity, the central banks involved did not provide liquid assets directly, but effectively freed up collateral for interbank transactions by accepting less liquid collateral themselves. For the ECB, which already had a wide definition of eligible collateral, this was automatic: banks increased the amount of nontradable collateral pledged to the ECB.

The Fed and the BoE had to adjust their instruments to accept a broader range of collateral at market rates: the Fed lowered the discount rate spread over its target rate in September, and in December introduced the Term Auction Facility (TAF) to provide \$40 billion in one-month funds. (A further \$14 billion was made available to European banks via a swap facility arranged with the ECB and the Swiss National Bank.) From

December, the BoE accepted a wider range of collateral in its existing three-month funding operation.

#### Massive liquidity provision

Longer-term lending has been provided in different ways. The ECB and BoE had existing OMO at maturities of three months and longer, conducted at market rates. The ECB doubled the amount of its three-month maturity OMO from €150 billion in July 2007 to around €300 billion in January 2008, while its short-term (seven-day maturity) OMO lending was roughly halved from around €300 billion to compensate.

The BoE faced a more difficult task: the massive liquidity provision to Northern Rock—a mortgage lender that was deemed solvent but illiquid as it proved to be overreliant on wholesale market funding—meant the BoE had to reduce its OMO lending to compensate.

Lending through seven-day maturity OMO dropped from over £30 billion in the first half of 2007 to under £5 billion in early 2008. An increase of £6 billion in commercial banks' contractual reserve holdings was needed to enable the increase in three-month OMO lending to the market in January. The Fed also had to adjust its asset structure—by redeeming at maturity some of its holdings of U.S. government securities, it withdrew liquidity to create room to set up the TAF (a one-month OMO) with an initial volume of \$40 billion.

#### Discount window stigma

The Fed and the BoE also had to address collateral issues (the ECB's broader range of collateral is eligible for both OMO and standing facilities). In the United States, lending through the discount window (the Fed's Standing Facility) has a much broader definition of eligible collateral than for OMO, and a much larger number of institutions have direct access, but the stigma associated with this lending restricted its effectiveness. The TAF bridged the gap by providing OMO funding using discount window collateral and counterparties (93 institutions bid in the first TAF, and 73 in the second).

In the United Kingdom, offers of threemonth OMO funding at a spread above the standing facility rate (in September and October) met no demand, but a broadening of the eligible collateral pool for the three-month OMO offered from December did elicit some response.

#### **Further investigation**

The nature of the market pressures and the different approaches taken by the three major central banks raise a number of issues that the group will investigate further.

- The ability to operate directly with a wide range of counterparties is helpful in times of stress.
- Reserve averaging provides useful flexibility in response to market shocks, but banks are reluctant to hold a high level of reserves if they are not remunerated.
- The acceptance of a broad pool of collateral can facilitate central bank lending during times of stress. However, it is important that collateral pricing policy be reviewed periodically to ensure that it provides banks proper incentives to hold and use more liquid and better-quality collateral, thereby limiting the risk to the central bank and promoting better liquidity management.
- A flexible asset structure is important in allowing a central bank to manage liquidity conditions.

Simon Gray and Peter Stella IMF Monetary and Capital Markets Department

### **Subprime Notes**

## **Credit Market Turmoil Makes Securities Valuation Key**

ollowing the collapse of the U.S. subprime mortgage market in mid-2007, market concerns about the exposure of structured securities to subprime loans dramatically slashed liquidity.

As trading volumes declined, many market participants were forced to value the securities in their portfolios using pricing models that relied on historical data rather than current prices. However, the recent performance of some of these subprime loans has been much worse than the record would have suggested. This has caused valuation models to break down.

#### How is valuation done?

Market participants commonly use three types of valuation techniques, often described as mark-to-market, mark-to-matrix, and mark-to-model.

Mark-to-market refers to the use of quoted prices for actively traded, identical assets. Mark-to-matrix is a technique used for less actively traded assets, such as emerging market securities, municipal bonds, and asset-backed securities (ABS). It involves estimating the value of the asset by relating it to a more actively traded instrument that can be priced easily.

The third method of pricing is the mark-to-model technique that market participants are often forced to use for the least liquid assets, including real estate, private equity investments, and complex structured securities such as certain tranches of collateralized debt obligations (CDOs). Mark-to-model assigns prices based on statistical inference.

#### Why is valuation an issue?

Valuation became a problem because certain types of structured securities became relatively illiquid following the subprime crisis. The absence of market quotes forced market participants to rely more heavily on mark-to-model as opposed to mark-to-matrix techniques.

Some types of structured securities were inherently illiquid at the time of issuance. This included most CDOs because each debt tranche had different levels of credit enhancement and the composition (and quality) of the underlying collateral varied from one deal to another. The size of the global asset-backed CDO market is no more than about \$400 billion, whereas the subprime market is about \$1 trillion.

The illiquidity of complex structured securities was compounded by a lack of transparency about the exposure to underlying nonprime mortgage loans and to uncertainty about ratings. The complexity of multiple derivations of securities with cash flows from mortgage loans to various tranches of ABS and then to tranches of CDOs according to deal-specific rules made it



Agencies were forced to revise assumptions on the speed at which delinquent loans led to foreclosure.

difficult and time consuming for many investors to model these securities independently. Some therefore increasingly relied on ratings as a measure of default risk and inappropriately compared them to those on "plain vanilla" corporate debt, which has different sensitivities to market conditions.

The uncertainty about ratings was a result of multiple-notch downgrades of mortgage-related securities (ABS and CDOs) that occurred en masse. On average, during 2007, the agencies downgraded structured securities by three to four notches. A four-notch downgrade is, for example, from AAA to A+. More than 3,000 downgrades occurred in October 2007 alone.

The unexpectedly poor performance of the underlying collateral of recently originated mortgage loans required abrupt changes in the models. For instance, the agencies were forced to revise assumptions concerning the speed with which loan delinquencies translated into foreclosures and to lower the recovery amounts from the process as U.S. home prices declined. The agencies were also forced to revise modeling assumptions concerning the correlation between assets making up the collateral for structured securities.

Modeling assumptions affected the expected performance of structured securities. The higher the assumed correlation on underlying assets, the more likely it is for a loss to appear on senior debt tranches. On the other hand, a relatively low assumption of correlation is likely to affect only the equity tranche. Separately, ratings uncertainty increases exponentially with a linear increase in the size of the underlying portfolio of assets (see Chart 1).

The impact of correlation on the equity tranche of CDOs may appear nonintuitive; thus the analogy to a ship going through a strait that contains hidden mines may help. When the mines are clumped together (high correlation), the ship will likely miss the

mines (that is, avoid losses), unlike when they are widely scattered (low correlation). In the higher correlation case, if the ship hits one mine, then it will hit some of the others too, leading to a larger loss compared with a low correlation case, when the ship will likely hit just one mine.

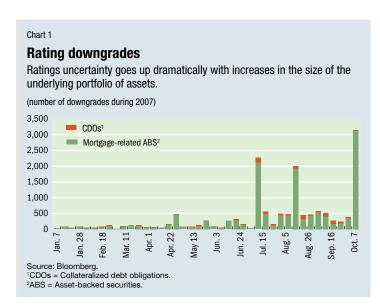
Rating downgrades further complicated valuation. Agency downgrades qualified as credit events, which diverted cash flows from junior to senior tranches of CDOs. Also, regulatory pressures forced many investors (such as insurers and pension funds) to sell at distressed prices.

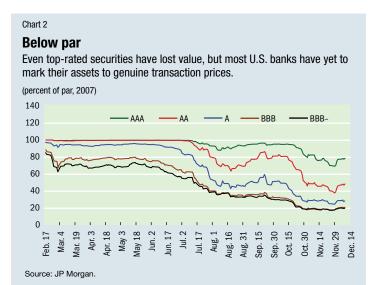
#### Are valuations realistic?

Some market participants are seeking to trade at artificial prices. Anecdotal reports suggest that some holders of structured products may be marking their portfolios using favorable bilateral quotes. Other market participants have created off-balance-sheet vehicles that effectively allow them to trade with themselves; the prices paid for these distressed assets are likely to be higher than the fire sale prices that would be obtained if they were unwound in the market. A good comparison of such off-balance-sheet structures is the Reconstruction and Collection Corporation of Japan, which was a conduit for the resolution of nonperforming loans (see IMF Working Paper 04/86).

Recent moves to bring such off-balance-sheet structures onto the balance sheet are not at explicit "transfer prices," and thus the associated capital charge (for recapitalization) may not be a full reflection of potential losses. The market for such structures is similar to a monopsony (dominated by a few buyers of subprime products); thus, it has been in the vested interest of the financial institutions to explicitly take on such liability and not jeopardize the relationship with these buyers.

The amount of capital injected simultaneously when off-balance-sheet structures are taken onto the balance sheets may appear to fill the capital loss; however, some analytical work modeled on conservative assumptions suggests that potential losses may be higher. Further capital injections are thus likely.





#### What is being done to help?

Central banks in mature markets injected liquidity that temporarily improved trading in some structured securities. These liquidity operations helped stabilize markets for some structured products, such as asset-backed commercial paper, which was declining in outstanding stock at a rate of \$50 billion a week during late August and early September.

Nonbanks (such as institutional investors, pension and insurance funds, and hedge funds) do not benefit from such liquidity injections, but regulations allow them more room to maneuver when pricing such assets on their books.

#### How can valuation difficulties be resolved?

In the short term, market participants should seek to transact a portion of their holdings of complex structured securities periodically to obtain valid market quotes. Some have come out clean, such as a few U.S. hedge funds that have written off the value of all junior notes issued by their structured vehicles.

However, most banks in the United States have not yet marked their assets to genuine transaction prices, or to proxy ABX indices (see Chart 2). Distressed or "vulture" funds are expecting large price declines this January and February, after the bonus season (see IMF Working Paper 03/161 for a summary of returns from distressed debt). Although many market participants assume that resets will be over by 2008, there is an 18-month lag from end-2008 (or mid-2010), when such resets lead to delinquencies that result in cash-flow problems.

Elsewhere, the valuation (and thus losses) may take longer to surface; for example, in Japan, it is a widely accepted practice that many institutions need not mark all their assets to markets, since they hold them to maturity (*Euromoney*, September 2005, page 216).

In the longer term, policymakers should encourage investors to reduce their reliance on ratings as measures of risk for structured securities. From a longer-term, structural point of view, policymakers should create incentives for market participants to transact on exchanges rather than in over-the-counter operations.

Manmohan Singh and Mustafa Saiyid IMF Monetary and Capital Markets Department

## **IMF Developing New Tools to Identify Financial Trouble Spots**

he IMF is developing new applications for stress tests and other quantitative risk-assessment models to help identify financial system vulnerabilities in member countries, in the wake of the U.S. subprime crisis.

The recent turmoil in credit markets is a clear reminder that financial globalization brings not only benefits—the deepening of financial markets and internationalization in capital allocation—but also new risks and challenges for policymakers. Globalization links national economies in a vast network of closely interconnected on- and off-balance-sheet positions, creating the potential for financial instability to be transmitted from one country to other countries or to affect regional and global markets.

A range of analytical tools being developed by the IMF's Monetary and Capital Markets Department (MCM) will be able to better account for the complex linkages between the global economy and modern financial markets and thereby help sharpen the IMF's monitoring of member countries' financial systems.

#### Complex models for complex realities

Specific areas of the IMF's work include further developing credit risk analysis; focusing more on "second-round effects" of shocks—both interactions within the financial sector and feedback between the financial sector and the macroeconomy; and expanding existing approaches to liquidity risk modeling.

• *Credit risk modeling.* Work in this area revolves around three broader methodologies, each of which can be applied either at an aggregated level (a group of banks) or at the bank-by-bank level, and each of which has already been used for stress testing or scenario analysis in a number of countries.

For example, one application models *portfolio credit risk based on CreditRisk*+, a tool that is already being used by financial institutions and supervisors to compute the credit portfolio loss distribution—that is, the probability of losses on a given credit portfolio. This application can be useful for scenario stress testing when complemented with models of the probability of default (the likelihood that a credit will not be repaid) and loss given default (the fraction of the credit that will not be recovered in the event of default).

Another relatively new direction of work is *macro stress testing under data constraints*, an approach that allows the impact of macroeconomic shocks on banks' economic capital in the presence of short time series of default probabilities to be quantified. It simultaneously accounts for changes in the correlation among banks' assets through the economic cycle.

The contingent claims approach (CCA)—a method that combines balance sheet and market information with widely used finance techniques to construct risk-adjusted balance sheets that better reflect credit risk—is also being used to conduct scenario



The Swiss headquarters of the Bank for International Settlements, one of several institutions working with the IMF.

analysis, and it can be applied to a wide range of financial institutions that issue securities in sufficiently deep markets.

• Measurement of second-round effects. Stress tests need to look beyond "first-round" effects—the impact of macroeconomic shocks on financial institutions—and incorporate the second-round effects of shocks. One way of doing this is to develop a measure of financial fragility at the system level—a banking stability index—based on banks' joint probability of default. This approach can also be applied at the global level by looking at joint probabilities of default (or other measures of stability) for key large, complex financial institutions.

Another approach to modeling contagion uses the *extreme value theory* framework to capture the possibility that large, extreme shocks are transmitted across financial systems differently than are small shocks. A third approach is to develop a *CCA-based framework* that provides risk indicators and can be linked to more macroeconomic models of varying degrees of complexity.

• Liquidity risk modeling. Work is under way to enhance the range of tools and methods available to stress-test exposures to liquidity risk—a risk area that the current turmoil has made more apparent. The three main directions of work in this area are building on existing methodologies to identify funding liquidity risk (including nontraditional sources, such as securitization) and expanding them to incorporate market (asset) liquidity risk (including the effects of asset fire sales and crowded trades); capturing off-balance-sheet concentration risk—for example, excessive committed and uncommitted credit lines to a single counterparty; and extending the CCA-based framework using information from equity option prices to capture the effects of increased uncertainty of asset values, market illiquidity, potential for fire sales, and funding liquidity risk.

Marina Moretti IMF Monetary and Capital Markets Department

### **Private Capital Flows**

### **Investors Eyeing Sub-Saharan Africa**

(continued from page 17)

Ghana entered the international capital market in September 2007 with a \$750 million bond issue. It was more than four times oversubscribed; total bids exceeded \$3.2 billion. Despite increased volatility in international capital markets, Gabon followed in December with a \$1 billion bond issue to repay Paris Club debt, with terms similar to those for Ghana.

These bond sales are the logical outcome of the growing interest of international investors in Africa and in emerging and developing countries worldwide. The economic situation of sub-Saharan African (SSA) countries has improved markedly; collectively, they are experiencing the highest growth and lowest inflation in 30 years.

Countries in the subcontinent have substantially improved their economic policies, they have received significant debt relief through the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative, and the external environment is favorable. That is why investors are looking at SSA countries in their search for yield, diversification, and potential, despite recent outbreaks of violence in Chad and Kenya.

#### Foreign holdings

Besides raising funds on international capital markets, several African "mature stabilizers"—countries that have made significant progress toward macroeconomic stability and debt sustainability—have succeeded in selling treasury bills in their own currency to foreign investors. At the end of June 2007, foreigners held about 11 percent of Ghana's domestic currency government debt valued at more than \$400 million. In Zambia, foreigners reportedly hold more than 14 percent of local currency government debt, and they hold a significant share in Tanzania and Uganda.

This heightened international investor interest presents SSA countries with signifi-

cant opportunities but also with significant challenges. The opportunities are obvious. With international donors not yet delivering on their Gleneagles promise to double aid to help low-income countries meet the Millennium Development Goals, funds from private investors offer SSA governments an alternative and readily available source of financing for major projects, including urgent infrastructure needs.

But unless these new sources of debt financing are carefully managed, SSA countries could once again find themselves in debt distress. It will therefore be critical for



New banknotes in Ghana, where the improved economy helped leave the recent \$750 million bond issue oversubscribed.

those countries to ensure that new borrowing does not undermine their newly earned debt sustainability. Sound management of external and total debt and of public finances to ensure that debt proceeds are used effectively will be vital.

#### **Debt sustainability**

SSA countries will need to make debt sustainability central to their economic planning. The focus needs to be on total debt because the line between external and domestic debt is becoming increasingly blurred. SSA countries need comprehensive debt management systems that allow them to choose between different financing options in a way that is consistent with their economic policy objectives.

Strengthening public financial management is essential, so that the spending financed by loans is efficient. SSA countries also need to broaden the domestic investor base for local currency debt so that sudden capital inflows or outflows do not destabilize the market.

The IMF is helping SSA countries in all these areas. In close collaboration with the World Bank, IMF staff are working to help national authorities build their capacity for debt sustainability analysis and for managing public finances. The IMF/World Bank external debt sustainability framework can help countries detect debt vulnerabilities early and guide the design of policies.

#### **Development finance**

Despite the increasing importance of nonconcessional financing, concessional financing should remain the main source of development finance for the foreseeable future. The challenge here is for donors rather than recipient countries: It is important that they not only increase their support, in line with international commitments, but also make it more predictable and more timely.

Another factor SSA countries must take into account is the increased role of emerging creditors, such as China; the main challenges here are transparency and integration with the country's debt sustainability and macroeconomic frameworks.

But, ultimately, financing of the private sector, including non-debt-creating foreign direct investment, will be the key to financing sustainable growth in SSA. For this, it will be essential to continue to improve the environment for doing business to encourage international investors to provide money not just to the governments, but also to the private sector in SSA.

John Wakeman-Linn and Piroska Nagy IMF African Department

## **Debt Relief Yields Results in Niger**

ebt relief from multilateral and bilateral creditors is showing results in Africa. In the landlocked western African country of Niger, lower debt service, together with continued significant budgetary aid and higher domestic revenue mobilization, is having an impact on spending in education, health, and the rural sector (see Chart 1). Budgetary allocations in these areas increased by 4 percent of GDP between 2002 and 2007. Debt cancellation yielded a drop in debt service of about 2 percent of GDP between 2003 and 2006. The external debt was trimmed by \$1.3 billion, from 76 percent of GDP at end-2002 to 14 percent at end-2006.

The strong budgetary support, averaging 3.5 percent of GDP

over the past four years, and higher domestic revenue because of a widening of the tax base (domestic budgetary revenue rose from 7.2 percent of GDP in 1998–99 to 12.6 percent in 2007) have also increased the country's fiscal space. In addition to being used for higher-priority spending, the revenues have been used, in part, to reduce the large stock of domestic arrears accumulated through 1999.

#### Social indicators improve

The higher spending associated with debt relief has resulted in progress in improv-

ing Niger's key social indicators, which are among the weakest in Africa. The country is finally moving up in the rankings of the UN Human Development Index.

- The infant mortality rate dropped from 156 deaths per 1,000 in 1997 to 81 deaths per 1,000. Under-5 mortality is still among the highest in Africa.
- The primary school completion rate improved from 16 percent in 1997 to 28 percent in 2005. Overall primary school enrollment remains among the lowest in Africa.
- Access to potable water increased from 40 percent in 1996 to 69 percent in 2005.

#### **Growth accelerates**

With the restoration of political and social stability in the country in 1999 and the authorities' strong commitment to reform, growth performance has improved (see Chart 2). Average annual real GDP growth, which was lower than population growth in

the 1990s, accelerated in 2000–06. It attained 4 percent, or about 1 percent in per capita terms. After a downturn in 2004 because of a severe drought, GDP growth picked up and, in 2005–07, is expected to average close to 5½ percent.

The restoration of stability and the commitment to reform in Niger have spurred higher external aid and higher domestic and external private investment. The overall investment ratio increased from a very low 9 percent of GDP on average in 1998–99 to 22 percent in 2005–06, with both private and public investments contributing to the increase. Private sector investment has been particularly strong in construction, transportation, tele-

communication, and mining, reflecting the need for improved infrastructure and new opportunities in mining, particularly uranium, because of the commodity price boom.



With technical assistance from the IMF, the World Bank, and other donors, Niger is managing its public finances more effectively. Among recent steps, the Ministry of Finance and the Economy was reorganized, the taxation and customs

directorates were strengthened, and the tax code was simplified for smaller taxpayers.

Broadening the domestic tax base and improving compliance compensated for trade liberalization and the abolition of customs duties for intraregional trade. Although the ratio of tax revenue to GDP rose by 3.1 percentage points between 2000 and 2007, it is below the regional average. Niger's ratio is in line with Burkina Faso's (12.2 percent of GDP), better than Chad's (10.1 percent of non-oil GDP), but lower than Mali's (15.1 percent of GDP).

To improve expenditure management, Niger adopted a new budget nomenclature to identify and monitor poverty-related spending. Better monitoring of budget execution allowed for timely reporting to donors. After financial mismanagement at the Ministry of Education emerged in 2006, procurement and control procedures were strengthened and the Directorate General for Control of Public Procurement was established.



In Niger, access to potable water increased from 40 percent in 1996 to 69 percent in 2005.

#### **Medium-term prospects**

Annual GDP growth could increase to 5½ percent in the period to 2015, according to IMF staff projections. The improvement would result largely from expanded mining and exploration activity. Uranium companies operating in Niger plan to more than double their production by 2013. Also, since 2006, 110 new exploration permits have been issued to mining companies, the majority for uranium, but some also for other minerals and petroleum.

The key to faster growth, however, will be an increase in agricultural productivity, livestock and agricultural diversification, and the development of agribusinesses. Niger's rural development strategy for 2007–15—which has been integrated in the newly issued Growth Acceleration and Poverty Reduction

Strategy 2008–12—emphasizes the ample potential for development in these sectors.

#### Facing up to difficulties

But Niger faces significant risks because of its susceptibility to drought. As a result, implementation of investment projects in the past has been slower than envisaged. The authorities can tackle the challenge in a number of ways:

- Effective irrigation would increase the production of cereal and vegetables, for both the domestic and foreign markets. Currently, about 85,000 hectares of land are irrigated. It is estimated that another 270,000 hectares could be brought under irrigation.
- Also, Niger could increase its use of fertilizers and modern agricultural implements.
- Improved conservation techniques and marketing could help boost exports of agricultural products in high demand in neighboring countries and beyond. Similarly, better processing could strengthen exports stemming from Niger's large livestock resources.
- Sustained production growth needs to be underpinned by both improved

infrastructure—for example, electricity production and the road network—and increased private sector involvement. Recent improvements in the business climate should therefore be reinforced with further reductions in the cost of doing business and better training for the labor force.

• Finally, a return to a stable security situation in the northern mining region, where a number of insurgent attacks took place in 2007, is essential for continued investment and growth in the mining sector.

#### A reform agenda

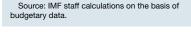
Niger has made significant progress in reforming the financial sector and reducing the cost of doing business, but further steps are needed in these areas. The banking system is sound: nonperforming loans are largely provisioned, profitability is good, and capitalization is adequate. Although credit to the economy has been expanding rapidly, financial intermediation is still underdeveloped, and the deposit-to-GDP ratio is among the lowest in the region.

Important actions undertaken in 2006–07 included restructuring microfinance networks experiencing difficulty, establishing a microfinance supervisory authority, privatizing Crédit du Niger, and restructuring the post office to separate postal from financial services. In the period ahead, the focus should be on further strengthening microfinance institutions, which are a main channel for credit

to the agricultural sector.

Some progress has been made in reducing the cost of doing business through the establishment of a one-stop window for new businesses, simpler procedures for registration at the social security agency, deferral of payment of the license tax for new businesses, and cuts in fees for registering contracts. But additional measures are needed, including reducing the cost of business licenses and the minimum capital for companies, and improving the reimbursement system for the value-added tax.

#### Chart 1 **Creating fiscal space** Higher revenue and lower debt service allow more resources for high-priority spending. (percent of GDP) 25 20 15 10 99 2001 05 1995 03 Total revenue ■ Total expenditure - Domestic financing Capital expenditure





### Ongoing challenges

Reaching the Millennium Development Goals (MDGs) by 2015 will be extremely challenging for Niger. To halve poverty by 2015, as required by the MDGs, the new Poverty Reduction Strategy for 2008–12 estimates that real GDP growth must average 7 percent. Even if aid is substantially scaled up, from about 10 percent of GDP in 2007 to about 15 percent of GDP—a level attained in other African countries—Niger may have difficulty achieving this high growth rate.

However, a significant improvement in social indicators is within reach, owing to the favorable prospects for higher government revenue because of the uranium boom, the widening of the tax base, and donor support for the reform program, provided that

efforts to improve the delivery of services throughout the country are redoubled.

Revenue from the uranium sector, which amounted to 0.4 percent of GDP in 2005, could exceed 1 percent of GDP in 2008 and rise further in subsequent years. With the widening of the tax base, government revenue could reach 14 percent of GDP in 2010, allowing more room for social expenditures.

Emilio Sacerdoti and Philippe Callier IMF African Department

## **Transparency Aiding Latin American Growth**

rospects for stronger and more stable economic growth in Latin America hinge on stronger fiscal management and higher-quality public spending.

Despite a sharp rebound in growth after a serious economic downturn during 1999–2002, concerns have been raised about the region's ability to maintain strong and stable growth, according to a recent IMF Working Paper. The pace of expansion still lags behind other emerging market and developing countries, and periods of rapid growth have tended to be followed by sharp slowdowns.

Fiscal priorities for the region include continued debt reduction, avoiding procyclical fiscal policy, improving the equity of tax systems, making investment more productive, and promoting a fairer and more transparent business environment. Fiscal transparency can play a critical role in meeting these challenges and remedying weaknesses in fiscal management practices that have been associated with past financial crises.

#### Why fiscal transparency?

Fiscal transparency refers to the practice of a government disclosing to the public information about its structures and functions, fiscal policy intentions, public sector accounts, and fiscal projections. The lack of such transparency contributed to a loss of confidence and fed global instability in the late 1990s. Particularly in Latin America, weaknesses were related to poor monitoring of off-budget fiscal activities that eventually had large fiscal consequences.

Fiscal transparency permits a clear assessment of past fiscal performance, the current fiscal position, fiscal risks, and the future direction of fiscal policy. Most important, identifying and better monitoring fiscal risks can prevent unpleasant fiscal surprises. More generally, improvements in the quality and timeliness of fiscal data can help improve the analysis of fiscal data and the quality of fiscal policy decisions.

#### **Key points**

The issue: Latin America remains vulnerable to financial crises and global slowdowns. Better fiscal management and transparency will help increase economic growth, as well as its stability and quality, and help avert a repeat of previous economic crises.

The evidence: Despite a decade of structural reforms, Latin America suffered an extended economic downturn during 1999–2002. Many countries were hurt by financial crises of major Latin American countries and by the global slowdown in 2001. Although growth has rebounded sharply in recent years, it remains lower and less stable than in emerging market countries in other regions.

Policy considerations: Priorities for fiscal policy include avoiding procyclical fiscal policies, continuing to reduce public debt, improving the quality of the tax system, and promoting a better business environment. Stronger fiscal transparency can play a critical role in meeting these challenges.

But fiscal transparency is more than improved monitoring of fiscal risks. It can also help to

- strengthen governance and reduce corruption;
- enhance public understanding and boost support for important fiscal reforms;
- aid the efforts of donors and civil society to promote social spending, cut poverty, and achieve greater social equity; and
- invigorate the business environment and attract investment by simplifying tax and business regulations and limiting administrative discretion.

#### Fiscal management weaknesses

Improvements in Latin America's fiscal policy and a decline in its ratios of public debt to GDP have helped fuel the growth

resurgence of recent years. But important weaknesses remain, including a poorly designed and administered tax system, weak budget institutions, and rigid government spending patterns that cannot be easily adapted to changing needs.

Key fiscal weaknesses in Latin American countries include

- the lack of a sound medium-term budget framework, which has undermined the credibility of fiscal policy, led to pro-cyclical public spending (which precludes the stabilizing role of fiscal policy in macroeconomic management), and (owing to the rigidity of public spending patterns) limited pro-poor spending to address social inequities.
- fiscal surprises, which have occurred because of poor monitoring of contingent liabilities and a lack of awareness of the fiscal impact of off-budget fiscal activities associated with public enterprises or public financial institutions (referred to as "quasi-fiscal activities"). Some of the most costly hidden liabilities were related to implicit guarantees in the banking and corporate sectors, court-mandated spending, and central government bailout of overindebted subnational governments.
- weak monitoring of subnational governments that led, in many cases, to incomplete coverage in budgeting and reporting of fiscal activities. Inadequate monitoring is partly the result of weak financial management at the subnational level of government and insufficient oversight because of the lack of fiscal information.
- the lack of a strong and centralized budget authority and a hard budget constraint in most countries in the region. Chile is the only country that has notably stronger budget institutions, which may have helped it pursue sound fiscal policy and better weather economic volatility. The evidence from Reports on the Observance of Standards and Codes (ROSCs) suggests that clear lines of

accountability to the public are critical to promoting fiscal prudence. In a number of countries in Latin America, lack of information on proposed and final budgets obscured responsibility for fiscal policy decisions. A number of countries in Latin America have adopted fiscal responsibility laws or fiscal rules to try to overcome institutional weaknesses and achieve sounder fiscal outcomes. While the laws have contributed to the transparency of policy intentions, the transparency of budget decisions could be furthered by publishing the executive budget proposal along with the budget passed by the legislature, as well as any budget amendments.

• an unsupportive business environment, characterized by extensive bureaucracy and weak enforcement of the rule of law, that has impeded growth and diminished resiliency in the face of crises.

#### How to improve fiscal transparency

Increased fiscal transparency in Latin America will strengthen the investment environment and address weaknesses in fiscal management.

Latin American policymakers need to institute a number of reforms:

Introduce a medium-term budget and forward-looking analysis of fiscal policy that emphasizes sustainability and medium-term policy goals. While some have made progress in this area, others need to give higher priority to specifying medium-term plans. Since medium-term plans need to be built on a realistic annual budget, improving the quality of budget estimates is an important first step for some countries.

**Report and analyze all fiscal risks**, especially those arising from hidden liabilities



Market in Valparaiso, Chile-the only Latin American country with notably strengthened budget institutions.

and quasi-fiscal activities. Improving coverage and diminishing budget rigidity by reducing extrabudgetary activities is important for many countries in Latin America, while extending coverage to general government is an important priority for the more decentralized countries in the region.

Keep the public informed and strengthen oversight of fiscal activities: publish the draft budget as well as more relevant and more frequent fiscal data, particularly on general government activities. Strengthen oversight by extending the coverage of institutions subject to regular audit, and publish all audit reports.

Promote transparent intergovernmental relations: countries that have pursued

decentralization need to give higher priority to promoting fiscal transparency in intergovernmental relations. Welldesigned decentralization policies include a clear, and usually exclusive, assignment of responsibilities, and transfers based on stable and transparent criteria.

Promote a transparent business environment: simplify the tax system, reduce discretion in dealing with the private sector, and reinforce oversight to promote investment. These are areas where much of the region clearly falls behind other parts of the world. Simplified tax regimes would not only be more transparent, but would improve revenue collection while reducing the costs of collection. Regulations affecting business operations need to be streamlined with minimal discretion to promote fairness, permit easy entry and exit of firms, and reduce uncertainty faced by businesses.

Of course, priorities will vary from country to country, but the common goal should be to maintain economic growth and prevent future crises through high-quality and more sustainable public finances.

Taryn Parry IMF Fiscal Affairs Department

#### **Fiscal Transparency Reports on Standards and Codes**

The accompanying discussion of fiscal transparency is based on the analysis of the Reports on the Observance of Standards and Codes (ROSCs) on fiscal transparency for 12 Latin American countries. ROSCs summarize the extent to which countries observe certain internationally recognized standards and codes. The IMF and the World Bank have identified 12 areas and associated standards as useful for their operational work—one of these being fiscal transparency. ROSCs are used to help sharpen the policy discussions of the Fund and the Bank with national authorities and in the private sector (including by rating agencies) for risk assessment. For more information, see <a href="https://www.imf.org/external/np/ROSC/ROSC.asp">www.imf.org/external/np/ROSC/ROSC.asp</a>

#### At Davos, Strauss-Kahn Calls For Multilateral Coordination



The global economy plenary session at the annual meeting of the World Economic Forum in Davos, Switzerland, is an eagerly awaited event. The session, chaired by the *Financial Times*' Martin Wolf, is the centerpiece of the Davos meetings, particularly so in 2008 because of the market volatility and uncertain prospects for the United States.

Wolf said that the "Davos consensus" on the health and prospects for the global economy was "always proven wrong." This year, he said, the consensus is that we may be on the brink of a U.S.— if not world—recession, adding that the deep

pessimism displayed by the delegates in 2008 may be excessive.

In the panel discussion, IMF Managing Director Dominique Strauss-Kahn offered the Fund's perspective on the global economy, saying that he expects a significant slowdown in the U.S. economy that would need a strong response.

Strauss-Kahn said that low interest rates, high liquidity, a breakdown in credit and risk management practices, and a shortcoming in U.S. financial regulation and supervision had produced an economic "perfect storm" in the financial world. "I think we have to recognize the failure in this system and the overall regulation," he said.

Strauss-Kahn stressed that central bank coordination is needed to deal with the coming slow-down. "Central banks must continue to provide liquidity to financial markets with as much or more coordination than we have seen in the past weeks."

Monetary policy alone will not be enough to address persistent global economic problems—systemic countries with strong fiscal positions need to take fiscal measures, Strauss-Kahn cautioned. "Some countries are not in a situation to increase the deficit, but other countries are in a position where there is some room for fiscal loosening," he said.

With regard to the effects of a U.S. slowdown on the rest of the world, Strauss-Kahn said that while emerging markets appear to be "doing well," they are not immune from problems, noting the complex links between emerging markets and industrial countries. Today's economic and financial globalization requires multilateral coordination of economic policies, he stressed.

### Central African Republic Gets HIPC Help

The IMF Executive Board approved in January about \$5.5 million in interim assistance to the Central African Republic under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative. The aid will help the country meet debt-service payments on its existing debt to the IMF in 2008.

The January 14 decision followed the September 2007 Board agreement that the Central African Republic qualified for debt relief under the HIPC Initiative and had reached the decision point. The total HIPC debt relief required to bring the country's debt to a sustainable threshold was estimated at \$583 million. When the Central African Republic reaches the HIPC completion point—and is thereby eligible to receive its full debt relief—the IMF's overall contribution to HIPC assistance will be about \$27.5 million.





#### Burkina Faso Receives Poverty Reduction Loan Installment

The IMF Executive Board approved on January 9 a disbursement of \$5.5 million to Burkina Faso, following the completion of the first review of the country's \$9.5 million Poverty Reduction and Growth Facility (PRGF) arrangement. The Board also approved a \$14.3 million increase in access under the arrangement. Burkina Faso's total disbursements thus far under the three-year arrangement, approved on April 23, 2007, amount to about \$6.3 million.

Following the January Board action, IMF Deputy Managing Director Murilo Portugal said that "the Burkinabè authorities have maintained a strong policy performance in a difficult macroeconomic environment," with the fall in international cotton prices, the appreciation of the euro, and rising oil prices all posing severe challenges.

#### **IMF Adjusts HIPC Initiative**

The IMF Executive Board amended in January the Poverty Reduction and Growth Facility-Heavily Indebted Poor Countries (HIPC) Trust Instrument to add Staff-Monitored Programs (SMPs) that meet certain standards to the range of instruments that countries may use to build a track record to reach the decision point under the HIPC Initiative. This amendment will facilitate debt relief to Liberia and other HIPC countries that show strong performance under certain qualifying SMPs.

The IMF Executive Board subsequently agreed that Liberia would be eligible for debt relief under the enhanced HIPC Initiative, provided the country continues its good SMP performance and fulfills other related criteria.