

Global Markets Face Protracted Adjustment

Markets are likely to go through a protracted adjustment period following recent financial turbulence triggered by the collapse of the U.S. subprime mortgage market, according to the IMF's latest *Global Financial Stability Report (GFSR)*.

The report, released on September 24, said the turbulence represents the first significant test of innovative financial instruments and markets used to distribute credit risks through the global financial system, with markets recognizing the extent that credit discipline has deteriorated in recent years. This has caused a repricing of credit risk and a retrenchment from risky assets that, combined with increased complexity and illiquidity, have led to disruptions in core funding markets and increased market turbulence in August.

Central banks in several countries have stepped in to help stabilize markets and mitigate the impact on the broader economy. But the *GFSR* said the period ahead may still be difficult because bouts

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Exposure to losses in U.S. subprime mortgage market rocked global markets and triggered repricing of credit risk.

Arnes Nathan/Sipa

Managing Director Selection

Strauss-Kahn Named to Head IMF

Former French finance minister Dominique Strauss-Kahn was selected September 28 as the new Managing Director of the IMF. The IMF's Executive Board said it selected Strauss-Kahn, 58, by consensus to succeed Rodrigo de Rato for a five-year term beginning November 1.



Dominique Strauss-Kahn, a French national, will be the IMF's tenth Managing Director.

IMF Photo

The IMF Board considered two candidates for the post after de Rato's June 28 announcement that he intended to leave the institution in October. Strauss-Kahn, a French national, was nominated by IMF Executive Director for Germany Klaus Stein on behalf of the European Union. Josef Tošovský, a Czech national and former Czech prime minister and central bank governor, was nominated by Executive Director for Russia Aleksei Mozhin.

The Managing Director is the chief of the IMF's operating staff and Chairman of the Executive Board. He is assisted by three Deputy Managing Directors.

Speaking at a Paris press conference on October 1, carried live on the IMF's website, Strauss-Kahn stressed that the IMF is at a turning point in its existence when

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Quota Reform

De Rato Hopes for Quota Progress

Rodrigo de Rato said he hopes to make progress on reform of country representation at the Fund during his final weeks as IMF Managing Director. "I see quota and voice reform as crucial for the continued effectiveness of the Fund," he said at the end of a trip to Russia on September 25.

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Dominique Strauss-Kahn will take up duties as Managing Director of the IMF on November 1.

Mehdi Taamallah/Abaca Press

it must adapt to the problems of today, including globalization, new types of economic crisis, and changes in the balance of power within the global economy. “I defined myself as the candidate for reform. Now I’m the designated managing director for reform. What I want to do after November 1 is to really *be* the managing director for reform,” he declared.

Transparent process

De Rato welcomed Strauss-Kahn’s selection, noting in a statement that he had known and worked with Strauss-Kahn for many years. “I know he possesses the experience, vision, and dedication to public service needed to successfully lead the IMF at this important juncture,” de Rato said. He also expressed appreciation to the Executive Board for having conducted the selection “through a transparent and competitive process.”

World Bank Group President Robert B. Zoellick congratulated Strauss-Kahn on his appointment, saying he looked forward to enhancing cooperation between the IMF and the World Bank. “This partnership is crucial to ensure that developing countries receive the best possible support, advice, and financial services,” Zoellick said. “Our cooperation is important to ensuring globalization becomes more inclusive and sustainable so more people will share in the benefits of improved economic growth.”

Tošovský and Strauss-Kahn were interviewed by the IMF Board in Washington in September. In his September 20 state-

ment to the Board, Strauss-Kahn said the IMF was at a crossroads. Its very existence as the major institution providing financial stability to the world might be at stake, and rebuilding its relevance and legitimacy would be a hard task.

World tour

Following his July nomination as the EU’s candidate to head the IMF, Strauss-Kahn embarked on a world tour to, as he said in his statement to the IMF Board, visit as many IMF members as possible. “I tried to focus on emerging, developing, and less developed countries in order to collect information, complaints, and wishes about the future of the IMF,” he told the Board. Strauss-Kahn visited countries in Africa, Asia, Latin America, and the Middle East.

In a *Wall Street Journal* op-ed on September 6, Strauss-Kahn said: “As the candidate of reform, I would aim to steer the IMF on a path to confront and surmount its major challenges: adapting the institution to a changing world while reflecting the views and needs of all members.” He added he was confident that, if appointed, he would “find the necessary support to implement an ambitious reform program to ensure the enduring relevance of the IMF in a rapidly changing world economy.” ■

Biography

Strauss-Kahn has been a member of the French National Assembly and is Professor of Economics at the Institut d’Etudes Politiques de Paris. He served as Minister of the Economy, Finance and Industry from June 1997 to November 1999. He also served as Minister of Industry and International Trade from 1991 to 1993. Between 1993 and 1997, Strauss-Kahn worked in the private sector as a corporate lawyer.

Since 2000, Strauss-Kahn has taught economics at the Institut d’Etudes Politiques de Paris, and he has been a visiting professor at Stanford University. He holds a PhD in economics from the University of Paris. He is married and has four children.

De Rato Sees Signs That World Can Meet Climate Challenge

IMF Managing Director Rodrigo de Rato said that he finds “some encouraging signs that climate change is a challenge that the world can meet.” In an address to a Club of Rome conference held in Madrid on September 24, he called climate change “the most pressing environmental issue of the day.”

He also told the conference, which was sponsored by the international think tank, that although increasing life expectancy and falling birth rates are generally welcome developments in many countries, there are also some unpleasant economic effects of changing demographics that countries will have to cope with.

In remarks about the threat of global warming, de Rato said, “many suggest that we are closer to the tipping points that would turn change that is damaging into change that is catastrophic.” But he told the conference that he saw progress in how the world is dealing with dangerous climate change.

Emerging consensus

De Rato said the social consequences of greenhouse gas emissions are not borne mainly by those who do the emitting, and many of those at fault are “often among the most powerful individuals, companies, and countries,” whereas those most affected are often the least powerful, including future generations, who have no voice.

Still, he said, a consensus is emerging about the need to combat global warming. “Around the world, there are examples of individuals and companies voluntarily reducing their own emissions and lobbying their governments for political responses to the problem.”

Authorities must look for answers in the “same place that the problem originates, in economics,” and come up with a “reasoned assessment of the economic costs and benefits of climate change and of the policies that can be adopted to com-

bat it. These include policies to mitigate climate change—to prevent what can be prevented—and also policies to adapt to climate change—to respond to what cannot be prevented.”

Cost estimates

He said the IMF has a role in helping analyze the impact of climate change. Its semiannual *World Economic Outlook*, released this month, will discuss estimates of the cost of climate change and evaluate some of the economic issues involved in the choice of methods to mitigate climate change—especially the main options of imposing taxes on greenhouse gas emis-



Drying lakebed in Yingtan, China: Those most affected by climate change are often the least powerful, de Rato said.

Reuters

sions or of setting caps on them, combined with a system of internationally traded permits.

He spoke on the same day that United Nations Secretary-General Ban Ki-moon met with top officials of 150 countries at UN headquarters in New York. Ban is trying to secure political commitments in advance of the UN Climate Change Conference in Bali in December, when negotiations are to begin on an international agreement to succeed the 10-year-old Kyoto Accord.

Demographic strains

In his Club of Rome speech, de Rato also discussed the impact of aging populations, which are likely to cause societies to produce less because of a relatively smaller labor force, place greater demands on health care systems, and strain pension systems. He noted that when the international think tank was founded nearly 40 years ago, the focus was on the risks of overpopulation, which continue in some parts of the globe.

But increasingly the concern has shifted to the economic effects of aging populations in both developed and major emerging market economies, he said. To “anticipate and manage the economic effects of demographic changes,” governments with aging populations will have to take a number of steps:

- Make structural reforms to improve productivity, “so that a relatively smaller active labor force will be able to produce more.” Such reforms as reducing tariff and legal barriers, opening markets to competition, and creating a more business-friendly environment “can all help to produce such an increase in productivity.” De Rato noted that today in the euro area there are four people in the age range of 15–65 for every person over 65, a ratio that will be closer to 2 to 1 by mid-century.
- Reduce labor market shortages by encouraging immigration and putting in place policies to integrate immigrants into their societies.
- Reform health care systems to improve efficiency, reduce market failures, emphasize preventive medicine, and improve health behavior by individuals.
- Raise retirement ages to reduce the pressure on pension systems, something that is already happening, accompanied by labor market changes that would improve job opportunities for younger and older workers alike. ■

Europe Seeks to Boost Economic Growth Through Integration

Recent turmoil in the world's financial markets, sparked by concerns about subprime mortgage lending in the United States, seems to have hit Europe particularly hard. European banks are also less profitable than their counterparts in the United States and less sophisticated in terms of their ability to pass on risk to other financial players.

Would pushing ahead with financial integration help Europe address these problems? What can policymakers do to reduce the risk of financial crises? And who should be responsible for supervising financial institutions in a unified European market?

These are some of the questions discussed in a new book published by the IMF, entitled *Integrating Europe's Financial Markets*. In a recent interview, Michael Deppler, head of the IMF's European Department, and Wim Fonteyne, a Senior Economist in the same department and one of the book's three editors, discussed the findings of the book with the *IMF Survey Magazine*.

IMF Survey Magazine: The book talks about the need to rethink Europe's framework for ensuring financial stability. Does the recent volatility in the financial markets hold any lessons for policymakers?

Deppler: It's a bit early to be drawing lessons from the latest developments. However, to the extent that the problems reflect an imbalance between supervisors' understanding of what was happening and what markets were in fact up to, then, yes, the book does speak to the recent market turmoil. Basically, there is a risk that Europe's supervisory arrangements are not keeping up with the explosion in cross-border financial flows within Europe.

Europe is torn when it comes to financial integration. On the one hand, there is a strong impulse toward achieving integrated financial markets, with new



European financial integration enables savings of German pensioners to finance Bulgarian entrepreneurs, to the benefit of both parties, according to the IMF's Wim Fonteyne.

legislation being enacted to that end. On the other hand, oversight of financial markets remains fundamentally national rather than integrated.

In our view, this has resulted in insufficient oversight of new risks that have emerged in the wake of the explosion in cross-border transactions. Europe needs to work out stronger arrangements to oversee these risks. This raises a whole range of issues.

But, ultimately, what is needed is to make supervisors responsible not only for what is happening in each individual country, but for what happens in Europe as a whole. That is the core message of the book.

IMF Survey Magazine: The book argues that financial integration would boost economic growth in Europe. Why would more integrated markets make a difference?

Fonteyne: The financial sector plays a key role in the economy and also in our lives. It makes economic growth possible by ensuring that good ideas and investment projects can be funded. It also provides people with the means to manage discrepancies between their incomes and their needs—for example, credit allows us to finance a house early in life, and savings and investment products make it possible for us to be financially secure in retirement.

By making all of this possible, the financial sector boosts people's lifetime incomes and helps them spend their money in ways that are more advantageous to them.

Financial integration reproduces these benefits on a European scale. As a result, the benefits are bigger and go to more people. For example, financial integration makes it possible for the pension savings of an elderly German couple to find their way to a young entrepreneur

in Bulgaria, benefiting both parties in the transaction.

Financial integration also boosts financial development. Currently, there are still big differences in financial development across the European Union (EU), but integration helps the less financially developed countries catch up with the more developed ones.

This is particularly important for the new EU member states in central and eastern Europe. But not only laggards benefit—financial integration can accelerate the pace of financial development everywhere, including in more developed countries. This, in turn, provides a boost to the whole economy.

IMF Survey Magazine: Many banks based in western Europe have already established branches in central and eastern Europe, helping spark a credit boom in those countries. How has that affected financial stability?

Deppler: First, let me underscore what Wim said about the benefits of financial integration. There is no question that the huge inflows of capital channeled through the banking system have fostered economic growth and strengthened prospects in central and eastern Europe. At the same time, however, those inflows have also created risks to financial stability—risks that must now be managed by the authorities.

For most of the host authorities in central and eastern Europe, the inflows pose both macroeconomic risks and prudential risks. The immediate macroeconomic risk is that an unsustainable credit boom will develop.

But the rapid expansion of credit also creates prudential risks, partly because the screening of credit applications might suffer as their numbers rise, and partly because credit booms typically lead to increased balance sheet mismatches for the borrowers and, at one level removed, additional credit risks for the banks.

This interview is an edited version of the audiofile, “Integrating Europe’s financial markets.” It is not a transcript of the podcast interview. For exact quotes, listen to the audiofile on the Podcasts and Videos page at <http://www.imf.org/imfsurvey>



Deppler (left), Fonteyne: Europe’s setup is a “recipe for mishandling shocks and makes it difficult to prevent crises or manage them.”

But supervisors have uneven access to relevant information. The home supervisors in western Europe are responsible for supervising the consolidated banks, but they have access only to partial information about what is going on in the foreign subsidiaries.

Correspondingly, the supervisors in the host countries have, at best, an incomplete view of the position of the parent bank. All in all, this means that supervisors in Europe have become interdependent.

Yet decision making remains decentralized, which means that valuable information may not be immediately available to those who need it most. This setup is a recipe for mishandling shocks and makes it difficult to prevent crises or to manage them when they happen.

So coming back to the main theme of the book, integration is creating new risks and increasing the challenges confronting supervisors. The fragmented, country-based orientation of the supervisory arrangements does not fit well with the cross-border character of the operations of the new financial institutions.

There is, in other words, a mismatch between the actual degree of financial integration and the way supervisory accountability is currently structured. There is a need to strengthen information sharing among supervisors and for supervisors to get on top of the linkages within various banking groups across countries.

IMF Survey Magazine: So it sounds like there is a good case for more integration. Yet it seems like an impossible feat to try to reconcile the legal systems of 27 different countries. Is it really realistic to aim for fully integrated financial markets?

Fonteyne: Throughout the history of the EU, people have questioned whether it was realistic to seek economic integration or, indeed, integration in other areas. But if we look back at the past 50 years, many of these self-proclaimed realists have been proved wrong. How realistic something is depends on the time frame one considers, as well as on other factors, such as political will.

It is clear that we will not have fully integrated financial markets tomorrow or next year. But, even though a fully integrated market might not be achieved in the foreseeable future, making progress toward that objective is beneficial in itself.

Deppler: Europe needs to balance its commendable—and growth-enhancing—impulse toward integrated financial markets with the impulse to retain a national approach to controlling the risks associated with such integration. In our view, this basically requires more integrated—integrated, not centralized—approaches to supervision. I have little doubt that Europe will eventually get there. But how and how fast they get there and how many risks they run along the way are open questions. ■

Order the Book

Integrating Europe’s Financial Markets

Edited by Jörg Decressin, Hamid Faruqee, and Wim Fonteyne

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Demand for *Shariah*-Compliant Securities Expands Rapidly

The market for Islamic financial instruments is thriving. Awash with liquidity, thanks to the ongoing oil boom, Islamic financial institutions are increasingly eyeing investments that are compliant with Islamic law (*Shariah*) to accommodate their excess capital.

Similarly, hedge funds and conventional institutional investors have increasingly been drawn to Islamic securities in search of yield pickup and diversification. This has resulted in a flurry of Islamic securitization transactions, with the issuance of *sukuk* (non-interest-bearing securities based on Islamic principles) quadrupling to more than \$27 billion in 2006 from \$7.2 billion in 2004 (see Chart 1).

Adhering to principles

Among the various forms of securitization in Islamic finance, the most popular is commonly referred to as *sukuk*. These instruments operate similarly to conventional asset-backed securities but are structured to ensure compliance with Islamic finance principles, which, among other things, prohibit the receipt and payment of interest and stipulate that income must be derived as profits from



Mosque in Abu Dhabi: The Gulf Cooperation Council countries are a center for Islamic securities.

Karim Sahib/AFP

shared business risk rather than as guaranteed return.

As such, Islamic principles require *sukuk* investors to own the underlying asset via a special-purpose vehicle (SPV), which funds payments to investors from direct investment in real, religiously sanctioned economic activity.

Fourteen types of *sukuk* are recognized by the Accounting and Auditing Organization of Islamic Finance Institutions; their structure relies on one of the three basic forms of legitimate Islamic finance: *murabahah* (synthetic loans/purchase orders), *musharakah/mudharabah* (profit-sharing arrangements), and *ijara* (sale-leasebacks), or some combination of them.

A simple example of such a securitization (in this case *ijara*, which is typically associated with leasing projects (usually equipment or real estate)) is depicted in Chart 2: assets are sold by the issuer into an SPV and leased back for the duration of the project. When the notes mature, the obligor buys back the asset. The acceptance of these Islamic investment struc-

tures has considerably contributed to the development of local capital markets.

The big players

Sukuk issuance has been concentrated in parts of Asia and countries of the Gulf Cooperation Council (GCC)—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. There, the development of the *sukuk* market has been facilitated by sovereign benchmark issues that have been growing strongly (up 40 percent in the first six months of 2007 compared with 2006 as a whole). In value terms, about half these issues originate in Asia (primarily Malaysia and also Brunei) and the other half in the GCC.

Corporate issuance—both public and private—has also expanded rapidly, doubling both between 2004 and 2005 (from \$5.7 billion to \$11.3 billion) and between 2005 and 2006 (to \$24.8 billion). Although Asia (specifically Malaysia) accounted for the bulk of *Shariah*-compliant corporate issues in 2004 (close to 90 percent), issuance in the GCC has picked up rapidly and now

Chart 1

Successful *sukuk*

The issuance of Islamic securities grew to more than \$27 billion in 2006 from \$7.2 billion in 2004. (billion dollars)



Source: Islamic Finance Information Service.
¹Includes both private and public corporations.

accounts for close to half of all issues in the marketplace.

Many corporate issues, particularly large ones, are quasi-sovereign and, as such, are seen to benefit from an implicit sovereign guarantee. Thus, although these issues may be linked to an underlying asset, investor appetite may be driven primarily by the sovereign nature of the risk. It also helps to explain successful large-scale placements that have been made in recent years, including two Dubai-based issues of \$3.5 billion in 2006.

Currently, the top five originators (including the Malaysian government, Nucleus Avenue of Malaysia, and Nakheel Development of UAE) represent more than 40 percent of global *sukuk* issuance.

Favored structure

While there may be a cyclical element of current demand stemming from high oil revenues in the GCC, this demand supplements a long-term upswing in demand for *Shariah*-compliant securities from Islamic institutional investors. And, in the absence of conventional securitization in many Islamic countries, *sukuk* issuance will remain a favored structured finance funding option in these markets. In addition, hedge funds and conventional investment institutions are beginning to hold *sukuk* for purposes of either yield pickup or diversification.

Outside Asia and the GCC, the demand for *sukuk* has been limited, but they are beginning to gain popularity. The German State of Saxony-Anhalt was the first sovereign obligor to issue *sukuk*

and capital market development, and has advised member countries on *sukuk* issuance as an alternative to more traditional financing instruments.

This increase in demand, along with

“According to recent market reports, governments and corporates are expected to issue more than \$30 billion in *sukuk* annually over the next three years, which would lift the market size of *sukuk* to more than \$150 billion.”

in a non-Islamic jurisdiction, and several corporate *sukuk* were issued in the United Kingdom and the United States in recent years. The World Bank also issued its first local-currency-denominated 760 million Malaysian ringgit (\$200 million) *sukuk* in 2005.

Room to grow

The current level of *sukuk* issuance remains a fraction of the issuance of either conventional bonds or asset-backed securities in emerging markets. But a growing number of countries are considering tapping the *sukuk* market to diversify their investor base and deepen domestic capital markets.

In this context, the Fund is receiving a growing number of requests for technical advice as part of its expanded work on sovereign liability risk management

the standardization of Islamic securities, is expected to fuel further growth of the *sukuk* market. According to recent market reports, governments and corporates are expected to issue more than \$30 billion in *sukuk* annually over the next three years, which would lift the market size of *sukuk* to more than \$150 billion.

Overcoming obstacles

Despite the strong potential for the *sukuk* market, as for any evolving securitization market, a number of economic, legal, and regulatory challenges remain, irrespective of *Shariah* compliance. These include the substitution of standard structural features in conventional securities, such as credit enhancements, which are not normally contractually permissible in the Islamic context; legal uncertainty arising from the fact that the transaction structure needs to satisfy both commercial and Islamic law, in particular in non-Islamic countries; and regulatory differences between national regulators.

Ongoing efforts by key Islamic regulators—notably the Accounting and Auditing Organization for Islamic Financial Institutions, the International Islamic Financial Market, and the Islamic Financial Services Board—to facilitate harmonization of standards and practices should help overcome some of these teething pains. ■

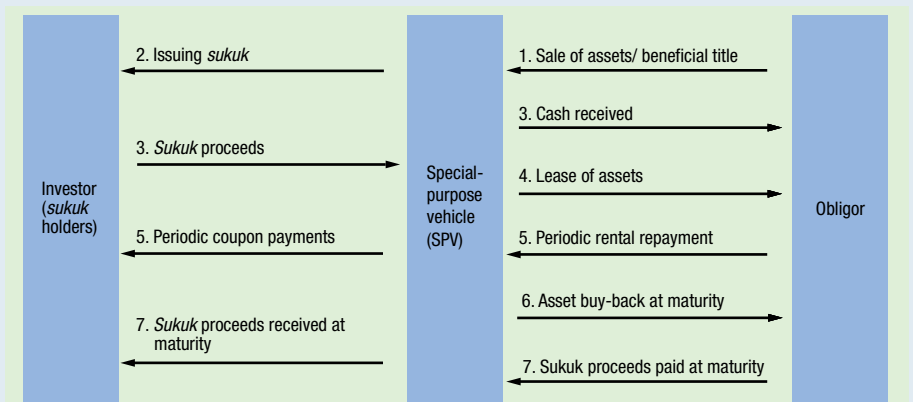
Andy Jobst, Peter Kunzel,
Paul Mills, and Amadou Sy

IMF Monetary and Capital Markets Department

Chart 2

A simple *ijara sukuk* structure at work

Under an *ijara sukuk* structure, assets are sold by the issuer into a special-purpose vehicle and leased back for the duration of the project.



Global Markets Face Protracted Adjustment *(from page 177)*

of turbulence are likely to recur and the adjustment process will take time. “Credit conditions may not normalize soon, and some of the practices that have developed in the structured credit markets will have to change,” it stated.

Slowing global growth

The report, prepared by the IMF’s Monetary and Capital Markets Department, said the turbulence could affect global economic growth. “Although the dislocations, especially to short-term funding markets, have been large and, in some cases, unexpected, the event hit during a period of above-average global growth. Credit repricing and the constriction of liquidity experienced to date will likely slow the global expansion,” it stated. The IMF will give its next forecast for world growth on October 17.

The *GFSR* noted that systemically important financial institutions began this episode with adequate capital to absorb the likely level of credit losses. “Corporations have, for the most part, been able to secure the financing they need to maintain their operations. However, the adjustment period is continuing and, if the intermediation process stalls and financial conditions deteriorate further, the global financial sector and real economy could experience more serious negative repercussions,” the report added.

Risks to macroeconomy

The report said that tighter monetary and credit conditions could reduce economic activity through a number of channels. A tightening of the supply of credit to weaker household borrowers could exacerbate the downturn in the U.S. housing market, while falling equity prices could reduce spending through the wealth effect and a weakening of consumer sentiment. Capital spending could also be curtailed owing to a higher cost of capital for the corporate sector. In addition, the dislocations in credit and funding markets could slow the overall provision and channeling of credit.

So far, emerging markets have weathered the turbulence relatively well, in part because global growth has been strong and domestic macroeconomic policymaking has improved, though vigilance is still needed (see article on page 185). Lower sovereign risks and their improving balance sheets supported by strong fundamentals are balanced against rising risks in some economies experiencing rapid credit growth, particularly where banks are using capital markets to finance credit growth. Furthermore, some private sector borrowers in certain emerging markets are adopting relatively risky strategies to raise financing.

Building a stronger system

Jaime Caruana, IMF Counsellor and Director of the Monetary and Capital Markets Department, told reporters in Washington that the task for policymakers and market participants was to learn lessons from the turbulence and use them to help make the global financial system stronger. “This does not require, as some have suggested, a new regulatory paradigm, but we must be ready to reexamine some elements of the framework we have and to enhance it where necessary,” he stated.

That framework includes the following key components:

- **Greater transparency.** Accurate and timely information about underlying risks is critical for the market’s ability to properly differentiate and price risk. Importantly, financial institutions need to make sure that they have robust funding strategies appropriately suited for their business model and that such funding strategies can accommodate stressful conditions. Greater transparency is needed on links between systemically important financial institutions and some of their off-balance-sheet vehicles.
- **Better risk monitoring.** Securitization—and financial innovation more generally—has made markets more efficient, enhanced risk distribution, and facilitated the ongoing globalization of markets. But there is a need to understand how securitization contributed to the current situation—in particular, how the incentive structure may have weakened credit discipline, including incentives for originating lenders to monitor risk.
- **Improvements by rating agencies.** Ratings and rating agencies will continue to be a fundamental component in the functioning of financial markets. Differentiated ratings scales for structured products could alert investors to the scope for a more rapid deterioration of ratings in such instruments, compared, for instance, with traditional corporate or sovereign bonds. Similarly, investors should ensure that their portfolio allocation decisions are not overly reliant on letter ratings and that such ratings are not used as a substitute for appropriate due diligence.
- **Better valuation.** The valuation of complex products in a market in which liquidity is insufficient to provide reliable market prices requires more consideration, in particular when assessing the appropriate allowance for liquidity risk premiums and financial institutions holding such securities as collateral. More work on best practices in liquidity management is necessary.
- **A wider risk perimeter.** The relevant perimeter of risk consolidation for banks has proved to be larger than the usual accounting or legal perimeters. The result is that risks that appear to have been distributed may yet return in various forms to the banks that distributed them. Reputational risk may force banks to internalize losses of legally independent entities, and new instruments or structures may mask off-balance-sheet or contingent liabilities. ■

Vulnerability on the Rise in Some Emerging Markets

Although emerging markets have not felt the recent financial market turbulence as much as developed economies have, some emerging market countries may be vulnerable to a decision by investors to pull back capital, the IMF said in its *Global Financial Stability Report (GFSR)*. This vulnerability may continue after funding problems in more mature markets subside, the twice-yearly report said.

Overall, emerging market risks are balanced between slightly lower sovereign risks because of their generally good economic fundamentals and “rising risks in some economies experiencing rapid credit growth and increasing reliance on flows from international capital markets.”

Risky strategies

Reflecting the same weakening in credit discipline that has led to problems in mature markets, “private sector borrowers in certain emerging markets are adopting relatively risky strategies to raise financing. Most noticeably, in some countries in Eastern Europe and Central Asia, banks are increasingly using capital markets to help finance credit growth,” the report, released on September 24, said.

Although the indicators suggest that banking systems in emerging markets are profitable and well capitalized, and have diverse sources of earnings and sound asset quality, credit issues “warrant increased surveillance as circumstances vary considerably across countries. Authorities in some emerging markets need to ensure vulnerabilities do not build to more systemic levels.”

The *GFSR* highlights areas that warrant increased surveillance in some emerging markets:

- The growing market for **privately placed syndicated loans** for corporations that in some cases “may allow issuers to avoid the more extensive disclosures required by public listings.” In some cases, credit discipline appears to be declining, with weaker credits

and more first-time issuers becoming involved in the high-yield debt market. The private placement market has grown rapidly in emerging Europe, the Middle East, Africa, and, to a lesser extent, Asia, “partly at the expense of public bond and equity markets.”

- Rapid **domestic credit growth funded by foreign borrowing**, mainly “in emerging Europe and central Asia, which now absorbs nearly half of all international bank and bond financing.” Foreign



Construction site in Nanjing, China: Report notes the convergence of mature and emerging market investment returns.

Sean Yong/Reuters

financing “has enabled banks to increase liabilities more rapidly than the expansion of local deposits would allow,” but it puts at risk, especially, lower-rated banks “if appetite from international investors suddenly declines, potentially raising systemic risks for some banking systems.”

The report noted that international banks are often unwilling to lend to these banks through the interbank market because of the “difficulty of assessing their true financial condition” but that “these same banks can still issue international bonds, though the risk is reflected in wider spreads.”

- Increasing use of **carry trade-style external borrowing and growing use of complex credit products**, especially in Asia. For instance, some emerging Asian firms borrow in lower-yielding currencies, primarily the Japanese yen, which are a cheaper source of funding than what is available in local currency.

The search for higher returns has also led to growing issuance of complex credit products, such as structured and synthetic instruments, possibly exposing investors to greater volatility.

The report also explored foreign investment flows to emerging markets. It found that “contrary to what might be expected from reports of foreign investors crowding into small local markets,” there appears to be little effect on equity prices from activities of institutional investors, such as pension funds, mutual funds, and insurance companies, although there is evidence consistent with switching from one country to another within a region (herd behavior).

Hedge fund growth

Hedge funds and other highly leveraged pools of investment capital are becoming more active in emerging market countries. They have moved away from their traditional fixed-income instruments and are seeking other higher-yielding assets—in both equity markets and structured products.

Some are operating with a higher tolerance for risk and may raise important regulatory questions. But, the line between hedge funds and institutional investors appears to be blurring, with some investment horizons lengthening for hedge funds and narrowing for institutions.

One outcome of the strong investment in emerging market securities is the convergence of returns on mature market and emerging market investments. This “suggests that some global investors may be inclined to reassess the diversification benefits available from emerging market investments,” which also means that emerging markets behave more in line with mature markets “as the ‘cushion’ of excess returns is reduced.” ■

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Lessons from Subprime Turbulence

The recent wave of turbulence in credit markets has now directly affected hedge funds, investment funds, and the commercial paper market. It has prompted a bank rescue in the United Kingdom, collective rescue operations in Germany and Canada, and intervention to supply greater money market liquidity by the world's major central banks. The initial trigger was problems in the U.S. subprime mortgage market.

A recent IMF Working Paper traces the origins and current problems of the subprime market and reviews the policy options. The new loan origination and funding technology employed in the subprime area has protected depository institutions from significant losses at the risk of greater dependence on wholesale funding liquidity and at the expense of undermining consumer protection.

What is subprime lending?

Subprime mortgages are residential loans that do not conform to the criteria for “prime” mortgages, and so have a lower expected probability of full repayment. This assessment is usually based on the borrower’s credit record and score, ratio of debt service to income (DTI), and, in some cases, ratio of the mortgage loan to home value (LTV).

Several legal milestones during the 1980s, coupled with the introduction of automated underwriting during the 1990s, encouraged the growth of the market (see Chart 1). Securitization also facilitated market growth by dispersing risk, providing investors with a supply of highly rated securities with enhanced yield, and opening up the mortgage origination business to specialty finance companies. These developments allowed a relaxation of credit rationing for marginal borrowers previously considered too risky by traditional lenders, resulting

Key Points

Background: Subprime mortgage lending was facilitated by the introduction of automated underwriting during the 1990s. Securitization (the repackaging and sale of loans) further encouraged market growth by dispersing risk.

The issue: New loan origination and funding technology has protected lenders from significant losses but has made them more dependent on wholesale funding liquidity. In the process, consumer protection has been undermined.

Policy implications: Regulators should tighten oversight while preserving the viability of the securitization model.

in a substantial expansion of the U.S. homeownership rate since the mid-1990s.

Closing the affordability gap

Recent subprime lending growth was boosted by more highly leveraged lending against rapidly rising house prices. However, by 2005–06, higher DTI and LTV ratios were insufficient to close the housing affordability gap for many subprime borrowers, so lenders started to offer “affordability” products. These included “hybrid” and “option” adjustable-rate mortgages (ARMs) that require payments at low, initially fixed “teaser” rates—which can result in negative amortization during the first few years.

As long as house prices were rising, borrowers could avert the rate-reset shocks that occurred when the teaser rates expired, by refinancing the mortgage into another hybrid or option ARM. But many lenders and borrowers knew, or should have known, that such loans were not viable at the full interest rate.

The combination of fee-driven remuneration at each stage of the securitization process and the dispersion of credit risk weakened

prudent lending incentives. For example, it became common to reduce or eliminate income verification requirements—so-called low- and no-doc loans. By the end of 2006, subprime mortgages comprised about 15 percent (\$1.5 trillion) of outstanding U.S. mortgages, of which \$600 billion were originated in 2006. Of these, about 90 percent were ARMs, most of which incorporated affordability features.

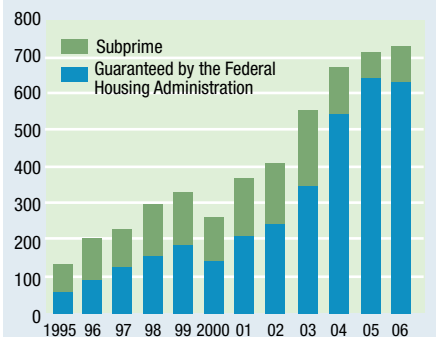
Rise and fall of subprime lending

As house price appreciation decelerated in 2006, despite a benign economic backdrop, delinquencies and defaults on subprime mortgages originated in 2006 soared (see Chart 2). While prices were rising, distressed borrowers had the equity to renegotiate their loans or could sell their homes and prepay their mortgages. However, slowing house price appreciation and rising interest rates left many stretched borrowers with no choice but to default. The highest delinquency rates have been associated with hybrid and option ARMs, particularly those that involved risk “layering”—high LTV loans to high DTI borrowers, with little income verification.

Chart 1

No more guarantees

Most U.S. subprime loans are no longer guaranteed by the Federal Housing Administration (FHA), as lending standards were relaxed below FHA standards for less creditworthy borrowers. (billion U.S. dollars)



Source: Inside Mortgage Finance.

The speed with which delinquency and default rates have risen for the 2006 vintage of loans has been striking. The first sign of trouble was the high volume of “early payment defaults” (EPDs)—when borrowers missed one or two of the first three monthly payments—followed by rising delinquency rates. Fraud also appears to have played a key role in accelerating the deterioration of the subprime market, resulting in the failure of a number of originators in 2006–07 as securitizers exercised “put-back” options—forcing lenders to take back delinquent mortgages.

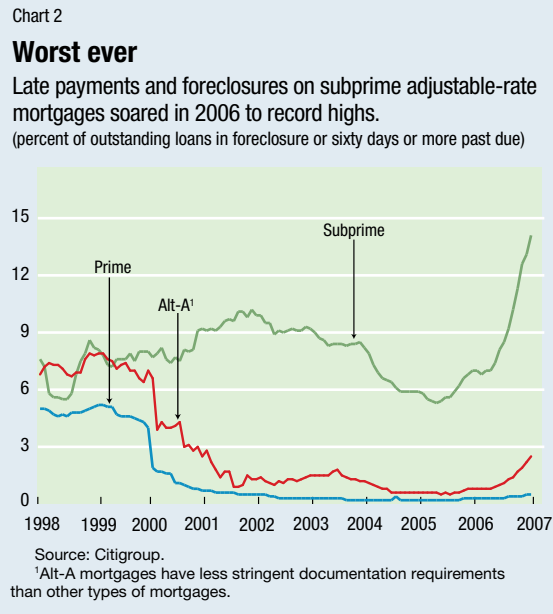
Sizing up the losses

The rapid rise in EPDs and delinquencies initially affected the thinly capitalized specialist mortgage lenders (representing about 40 percent of 2006 subprime originations), who have either closed operations, declared bankruptcy, or been bought out. Commercial and investment banks have declared losses from holding subprime mortgages outright or residual interests in securitization transactions they have arranged, but these have been limited thus far.

Losses have appeared primarily among the holders of securitization products (mortgage-backed securities and collateralized debt obligations), with particular exposure to 2006 subprime and Alt-A mortgages (mortgages to prime borrowers relying on limited documentation). The size of these losses will depend on the dollar volume of defaults among the underlying mortgage loans and on the timing of loss realizations.

Almost all of the losses will be absorbed by collateralized debt obligations, with mark-to-market loss estimates ranging from \$100 billion to \$200 billion. By comparison, the Savings and Loan crisis of the early 1990s resulted in total losses of approximately \$150 billion, much larger as a share of the then U.S. banking sector assets.

Losses have crystallized in hedge funds specializing in lower-rated subprime mortgage-backed securities, as investor withdrawals and margin calls have forced the funds to sell holdings in falling and illiquid markets. Also, some other funds and inves-



tors with exposures have announced losses and restricted redemptions, prompting wider concerns over counterparty and liquidity risk—especially in asset-backed commercial paper markets.

Lessons learned

Investors have placed excessive trust in rating agencies’ structured credit evaluations. The ratings methodology for corporate credit risk is fundamentally different from that used for structured credit, yet the ratings that result are placed on the same scale, implying similar potential losses. To avoid future confusion, ratings for the different types of obligation should be clearly distinguished and investors should never rely solely on ratings to determine investment policy.

The combination of interest rate resets will create significant payment shocks for borrowers in 2007–09. In the recent past, subprime borrowers were able to limit payment resets by refinancing. However, with lending standards tightening and house equity falling, this will now be significantly harder. Hence, imminent payment resets mean that defaults on riskier U.S. mortgages are likely to continue rising in the short to medium term.

What can policymakers do to avoid a similar crisis in the future?

- **Improve consumer protection.** With lending standards tightening, the appropriate policy response needs to balance

improving consumer protection with maintaining the viability of the securitization model that has successfully dispersed credit risk away from systemically important financial institutions. This is a challenging task within a regulatory and legal framework ill suited to provide effective consumer protection against predatory lending in an originate-to-securitize financial model.

Securitizers have access to relevant information over loan quality, and one option could be to assign (capped) liability to them if checks against fraud and predatory lending in the pools of securitized loans are inadequate.

- **Tighten oversight.** Federal banking regulators have recently tightened guidance on nontraditional and hybrid ARM mortgage lending. However, the fragmented nature of U.S. financial regulation means that observance and enforcement of such standards is not uniform. The five regulators can enforce compliance by their regulated institutions but, because nonbank lenders and loan brokers are regulated at the state level, such initiatives also rely on consistent enactment and enforcement by the states. The U.S. Federal Reserve is reviewing its powers to regulate mortgage transactions, and tighter restrictions, especially those related to the clarity of disclosures to borrowers and the availability of the riskiest loans, appear warranted.

- **Resist pressure for bailouts.** Policymakers will face continuing pressure to bail out or subsidize stretched subprime borrowers. However, such pressures generally should be resisted because of the danger of reinforcing speculative or fraudulent behavior; losses should be dispersed to exposed investors rather than taken over by taxpayers if borrowers cannot be assisted through loan modifications. ■

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This article is based on IMF Working Paper 07/188: “Money for Nothing and Checks for Free: Recent Developments in U.S. Subprime Mortgage Markets,” by John Kiff and Paul Mills.

Fresh Impetus Toward Maghreb Integration

The Maghreb region of northern Africa is enjoying broadly stable macroeconomic conditions and increasing prosperity. But per capita incomes are still below the levels in other emerging market economies. In addition to trade facilitation and financial integration, the region needs to make the private sector an engine for growth.

The Maghreb countries are preparing to give a new push toward regional integration at a conference in November to promote the private sector's role in generating growth. The conference, the third in a series aimed at fostering greater ties among the five Maghreb countries—Algeria, Libya, Mauritania, Morocco, and Tunisia—will seek ways to strengthen the business environment and foster private investment. The first two conferences covered trade integration and financial integration.

The five Maghreb countries are economically diverse and bound by a common heritage. They are at various stages of economic development and have different endowments of natural resources. They can be broadly classified into three groups: major oil producers (Algeria and Libya), a low-income country that recently became an oil producer (Mauritania), and two emerging market countries (Morocco



Market stall in Marrakech, Morocco—one of the Maghreb countries aiming to improve business conditions and foster private investment.

and Tunisia). Together, they form a bloc of more than 83 million people, populating an area roughly 50 percent larger than the European Union (EU).

All five countries have undertaken important reform efforts over the past two decades and have made strides toward economic prosperity in recent years. The region enjoys broadly stable macroeconomic conditions (see table), and per capita incomes are on the rise. In

addition to ongoing reforms, the region's increasing openness—including in the context of separate agreements between the EU and Algeria, Morocco, and Tunisia—has been a key factor behind these favorable developments.

More to be done

Although policies that favor private initiative and investment are starting to bear fruit in the Maghreb countries, per capita income growth still lags behind that in other emerging market economies. The region's leaders, exploring how they can further accelerate growth to reduce unemployment and raise living standards, identified greater regional economic integration as one avenue.

First, integration would create a large market, similar in population size to many leading trading economies, bringing efficiency gains and increasing the region's attractiveness to investors.

Second, it would help stimulate trade flows by maximizing the expected benefits of existing bilateral free trade agreements, notably with the EU, and create

Economically diverse

Despite their differences, the Maghreb countries are all making good progress. (percent, unless otherwise indicated)

	Population (millions) 2006	GDP per capita (dollars) 2006	Real GDP growth ¹				Average inflation		
			1991–2000	2001–05	2006	2007 ²	1991–2000	2001–05	2006
Algeria	33.5	3,400	1.7	4.9	3.6	5.3	16.9	2.7	2.5
Libya	6.0	8,430	1.8	4.9	5.6	7.9	5.9	-4.2	3.4
Mauritania	2.9	921	3.0	4.0	11.4	1.0	5.2	8.2	6.2
Morocco	30.4	2,165	2.4	4.2	8.0	2.5	4.1	1.4	3.3
Tunisia	10.3	2,751	4.8	4.4	5.4	6.0	4.4	2.6	4.5
Average	83.5 ³	3,533	2.7	4.5	6.8	4.5	7.3	2.1	4.0

Sources: Country authorities and IMF staff calculations.

¹Average annual growth rate.

²Figures are projections.

³Total population.

opportunities for mutually beneficial trade within the region.

Third, regional financial integration would provide a new impetus for financial sector reform, which in turn would help stimulate investment and facilitate broader financial integration. Finally, enhanced regional dialogue on policy issues would facilitate the dissemination of experiences and best practices within the region and create cross-fertilization for the ongoing reform effort.

Role of the IMF

Visiting the region in March 2005, IMF Managing Director Rodrigo de Rato proposed stepping up efforts toward regional integration and offered the institution's support. Discussions with the authorities identified three areas in which further progress would be key to deepening regional integration and enhancing growth prospects: trade facilitation, financial sector reforms and financial integration, and the role of the private sector.

The IMF co-organized three high-level conferences focusing on these issues. The first conference, on trade facilitation, was held in Algiers in November 2005; the second, on financial sector reforms and financial integration, took place in Rabat a year later. The third, on the role of the private sector, is scheduled to take place in Tunis in November.

How trade facilitation helps

Integration with the global economy provides enormous opportunities in terms of investment, growth, and economic efficiency, and strengthening trade flows among the Maghreb countries is an important first step toward deeper global integration. The countries have already made substantial progress in liberalizing their external trade.

In line with worldwide trends, bilateral and regional trade agreements have proliferated in the region. Dominant among these are the agreements that the EU signed with Algeria, Morocco, and Tunisia. Furthermore, all five Maghreb countries have demonstrated strong progress over the past few years in lowering tariff barriers.

However, tariff protection is still high, averaging nearly 20 percent in the region (simple average tariffs based on most-favored-nation applied rates), roughly 10 percentage points above the world average.

Although the Maghreb countries are beginning to reap the benefits of trade liberalization, trade among them is still limited. Greater regional integration would foster trade among the countries and help reduce so-called hub-and-spoke effects, which create incentives for firms to locate in the "hub" (the EU) because it gives them access to all the "spokes" (the five Maghreb countries).

One major obstacle to the development of regional trade is the relatively burdensome regulatory environment. The first regional conference thus focused on trade

preferential origin based on those used in trade between the European Community countries and the countries participating in the Euro-Mediterranean partnership ("pan-Euromed system").

Financial integration

Efficient and well-integrated financial systems provide a vital underpinning for sustained growth. Financial integration in the Maghreb countries would help deepen financial markets, increase their efficiency, and enhance the economies' resilience to shocks. It can also catalyze the region's global financial integration. The second regional conference, focused on these issues, produced an action plan that aims to

- eliminate financial barriers to intra-regional trade, including weaknesses in

"Efficient and well-integrated financial systems provide a vital underpinning for sustained growth."

facilitation issues and agreed on a work program to promote trade within the region and with the rest of the world. A detailed action plan, entailing four main measures, came out of that conference.

- Activating the intra-Maghreb customs committee to reduce trade distortions and informal trade.

- Continuing customs reforms and developing a one-stop document processing system. Because of other administrative hurdles, customs reform alone may not reduce the delays that hamper trade. An important step toward trade facilitation would be to simplify administrative procedures and organize the transmission of relevant information and documents.

- Setting up a website with comprehensive and up-to-date information on trade regulations and taxation.

- Establishing a private sector-led unit to monitor foreign trade in the Maghreb region.

Other measures that would boost trade in the region are the elimination of discriminatory tariff and nontariff barriers, extension of the tariff preferences accorded to the EU on an intra-Maghreb basis, and adoption of Maghreb rules of

regional payment systems and lack of facilities to finance trade;

- streamline administrative requirements for trade-related banking operations;

- establish the Maghreb Bank for Investment and Foreign Trade to facilitate and promote trade and investment within the region;

- harmonize regulatory and supervisory frameworks and payment systems; and

- improve coordination and cooperation between regional financial institutions and central banks and set up a website with comprehensive financial information.

Successful financial integration also requires maintaining macroeconomic stability; pursuing reforms, where needed, to modernize domestic financial sectors; and gradually liberalizing the capital account.

The Maghreb countries will focus on the third prong of their strategy to spur integration when they meet in Tunis later this year to discuss the role of the private sector—the important engine for higher and sustainable growth. ■

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Oil Boom Tests Producing Countries

Consumers around the world may cheer when the price of gasoline to fill their cars falls even slightly. But the frequently sharp changes in the price of oil and related foreign exchange inflows, together with the nonrenewable nature of the resource, complicate macrofiscal management in oil-producing countries.

In response, a number of oil producers have established special fiscal institutions (SFIs), such as oil funds, fiscal rules, fiscal responsibility legislation, and budgetary oil prices, to help fiscal management (see box). In some cases, the establishment of these institutions has also been triggered by political economy and institutional considerations, for example in some countries in which governments have had difficulties containing spending.

A study by the IMF's Fiscal Affairs Department examines how governments of oil-producing countries have managed their fiscal policies in response to the recent oil revenue boom, and the role of SFIs in fiscal management in these countries. The IMF study covers countries in which fiscal oil revenue accounted for at



Refinery in Anzoategui, Venezuela: Fiscal balances improved in many oil producers following the sharp oil price rise since 1999.

Jorge Silva/Reuters

least 20 percent of total fiscal revenue in 2004 and for which sufficient information was available.

Fiscal responses

The study notes that the average price of oil tripled from \$18 a barrel in 1999 to \$53 in 2005 and rose further in 2006. The associated increase in oil exports and fiscal oil revenues has had major macroeconomic and fiscal implications for oil producers that depend heavily on oil revenues. The paper outlines three main

fiscal responses of oil producers to the oil boom:

- On average, during 2000–05 governments used close to half of the additional fiscal oil revenue to increase non-oil primary spending and/or lower non-oil primary revenue. Oil producers turned overall fiscal deficits in the late 1990s into growing fiscal surpluses. The variance across countries, however, is significant.
- Higher oil revenues allowed oil producers an opportunity to increase public spending on priority economic and social

Special Fiscal Institutions Help to Manage Oil Revenues

Oil funds have proliferated in recent years. Their policy objectives include stabilization, financial savings, asset management, and fiscal transparency. They typically have relatively rigid operational rules for depositing and withdrawing resources, often based on the expectation that removing “high” oil revenues from the budget will help moderate and stabilize expenditures, and reduce policy discretion. But the evidence shows that in some cases rigid oil fund rules have been changed, bypassed, or eliminated. As oil prices have risen, oil funds are increasingly focusing on long-term saving objectives. The resources of some oil funds are earmarked for specific purposes.

Fiscal rules and fiscal responsibility laws are mechanisms intended to permanently

shape fiscal policy design and implementation. They are often enshrined in constitutional or legal provisions. Oil funds are more common, but fiscal rules and fiscal responsibility laws can have a more critical role because they are intended to constrain overall fiscal policy. In several cases, fiscal rules or frameworks have been weakened over time or ignored.

Budgetary oil price forecasts. Most oil producers have used a conservative oil price or revenue forecast to determine a budget's resource envelope. Such assumptions are viewed as a prudent way to reduce the risk of a large deficit or fiscal adjustment in the event of an unanticipated decline in oil revenue. However, while there is a case for an element of prudence in budget oil forecasts, the use of

artificially low oil prices as a strategy to contain spending is unlikely to be sustainable and may lead to spending inefficiencies.

The IMF study covers oil-producing countries in which fiscal oil revenue accounted for at least 20 percent of total fiscal revenue in 2004 and for which sufficient information was available: Algeria, Angola, Azerbaijan, Bahrain, Brunei, Cameroon, Chad, Republic of Congo, Ecuador, Equatorial Guinea, Gabon, Indonesia, Iran, Kazakhstan, Kuwait, Libya, Mexico, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, Sudan, Syria, Timor-Leste, Trinidad and Tobago, United Arab Emirates, Venezuela, Vietnam, and Yemen.

goals, which could be an appropriate response to rising oil prices. At the same time, many oil producers that have increased spending rapidly show low indices of government effectiveness, which may raise questions about their ability to use the additional resources effectively and efficiently.

- The long-term fiscal sustainability of a number of oil producers improved between 2000 and 2005, assessed on the basis of a standardized sustainability benchmark, but in a few it deteriorated, mainly because of the expansion in non-oil primary deficits. Some countries remain vulnerable to oil price shocks and the possible need for adjustments.

Fiscal management, role of SFIs

Countries' experiences highlight the importance of sound institutions, public financial management systems, and medium- to long-term perspectives to ensure the quality of spending and the sustainability of fiscal policies. The evidence suggests that the quality of institutions (including in such areas as accountability and the quality of public administration) matters for fiscal outcomes and that priority should be given to enhancing public financial management systems where appropriate.

Developing a medium-term framework can help link annual budgets to longer-term policies and fiscal sustainability objectives, and enhance risk analysis. The budgets of many oil-producing countries are characterized by short-term horizons, with little reference to longer-term policies and objectives.

Medium-term frameworks that explicitly incorporate a longer-term perspective can help promote predictability, improve resource allocation, and enhance transparency and accountability. They can also be specifically designed to help address the fiscal risks posed by volatile, unpredictable, and exhaustible oil revenues.

Strong institutions

The study also finds that, under appropriate institutional frameworks, well-designed SFIs may help support sound fiscal policies, though they are not a panacea. Successful SFIs require strong institutions and political commitment.

The development of SFIs should not detract from other, more fundamental public financial management and governance reforms as appropriate. In addition, international experience suggests the advisability of adopting some specific principles for the design and implementation of effective SFIs.

Oil funds should be integrated with the budget to enhance fiscal policy coordination and public spending efficiency, the study says. They should not have the authority to spend. Financing funds should be preferred to funds with rigid rules. Mechanisms to ensure transparency, good governance, and accountability should be in place.

Although the implementation of quantitative fiscal rules remains challenging in oil-producing countries, fiscal responsibility laws with comprehensive procedural and transparency requirements may work better to sustain the credibility of the

Finance for Africa's Post-Oil Deficits

Oil prices—more so than those of most other commodities—have proved highly volatile and are hard to predict. In the current oil-price boom, many oil-producing governments are seeking to draw the right lessons from previous boom-bust cycles and are trying to avoid basing long-term spending plans on fickle revenue streams. In Africa, this is particularly pertinent because oil reserves (which will run out fairly soon in some countries) have largely failed to translate into accelerated rates of socioeconomic development.

Governments face a choice between designing a path of gradual fiscal adjustment while overall fiscal balances are in surplus or having to reduce public expenditure abruptly once oil revenues start to decline, often to the detriment of the most disadvantaged segments of society. To that end, the research literature has used estimates of oil (and gas) reserves to define a long-term fiscal policy strategy that has governments accumulate (net financial) assets during the years of oil production, generating additional fiscal space during the post-oil years.

Within this forward-looking framework, the optimal policy would set (consumptive) spending at a constant level of GDP, equal to the expected annuity value of oil wealth and non-oil revenue. By implication, governments invest the remainder of current oil revenues in alternative forms of wealth (in this case, financial). These assets generate a rate of return from which governments can finance a primary deficit indefinitely when oil reserves are depleted.

These benchmarks of sustainability, simulated in the IMF Working Paper "Old Curses, New Approaches? Fiscal Benchmarks for Oil-Producing Countries in Sub-Saharan Africa" (IMF Working Paper 07/107, May 2007), imply that the current fiscal policy stance of most sub-Saharan African oil producers will need to be adjusted. Even on the basis of optimistic assumptions on key parameters, including those on the size of economically exploitable oil and gas reserves, most of these oil producers will not be able to maintain the current level of public expenditure.

A clearly defined medium-term policy path thus defines current budgets in line with the benchmark ratios on public consumption, combined with efforts to increase the effective rate of returns on (financial and physical) investments. Improving public financial management can help prevent a repetition of previous boom-bust cycles and improve socioeconomic indicators in countries where large segments of the population have, thus far, benefited only marginally from national oil wealth. ■

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fiscal framework, the study says. Success, however, hinges on proper design, consistency with public financial management capacity, and enforcement of the provisions. ■

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Attack Poverty, Inequality, de Rato Urges

High growth and low inflation are essential to economic development, but there is a “powerful case” for attacking poverty directly, said Rodrigo de Rato in a speech in Peru on September 20. On his final visit to Latin America as IMF Managing Director, he said the biggest contributions can be made in fiscal policy, financial sector reform, and institutional reform.

Dominican Republic Gets \$118 million

The IMF’s Executive Board approved a disbursement to the Dominican Republic of \$118 million as part of its \$672 million Stand-By Arrangement, agreed on in 2005. IMF Deputy Managing Director Murilo Portugal said the country’s macroeconomic performance had been commendable. “The challenge ahead is to persevere with fiscal consolidation during the upcoming electoral period, which will require firm control of public spending,” he said in a press statement.

Brazil Sees Surplus

Despite a significant appreciation of the real and a sustained increase in imports, Brazil’s external current account is expected to register another moderate surplus in 2007, reflecting the continued strength of exports, according to data presented to the IMF Executive Board, published on September 18.

New IMF Booklet Explains Macroeconomic Statistics

The IMF’s Statistics Department has released “The System of Macroeconomic Accounts Statistics,” which describes the four main sets—national accounts, balance of payments and international investment position, monetary and financial statistics, and government financial statistics—and shows the linkages among them.

Indonesia Better Set to Ride Out Storms

The 1997–98 Asian financial crisis triggered reforms aimed at Indonesia’s deep-rooted institutional problems. Together with sound policies and a more benign external environment, these reforms have helped cut Indonesia’s financial and macroeconomic vulnerability.



Beawiharta/Reuters



Russell Boyce/Reuters

Australia at Forefront

Executive Directors, reviewing Australia’s economic performance at the end of August, commended the Australian authorities for their “exemplary macroeconomic management,” which is widely recognized as being at the “forefront of international best practice,” according to an IMF Public Information Notice published in September.

Information Curbs Financial Risk

In a world of money laundering and electronic transfers, it is easy to see that the need for rapid transmission and exchange of information between law enforcement agencies is critical.

A new book, *Working Together: Improving Regulatory Cooperation and Information Exchange*, examines the issues.

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