# MESURVEY

# IMF Executive Board Completes First Review of Indonesia's Economic Program

Stanley Fischer, the First Deputy Managing Director of the IMF, announced on May 4 that the IMF's Executive Board had approved the completion of the first review of Indonesia's stand-by credit with the IMF. Mr. Fischer said:

"In approving the release of the next disbursement of SDR 733.8 million (about \$989.4 million), Executive Directors noted that the revised program benefited from a number of important prior actions by the authorities, including a strengthened monetary framework. Directors stressed the importance of sustained implementation of the program for restoring confidence in the Indonesian economy. They noted the close collaboration between the IMF and the World Bank in the design and implementation of the program in Indonesia, and in the associated financing.

"In the coming weeks, the managements of the World Bank and the Asian Development Bank are expected to bring proposals for loans to Indonesia to their respective Boards. The governments of Japan, Australia, and Malaysia have agreed to provide bilateral financing to support the Indonesian economy. In addition, a number of countries have announced that they will be providing support for trade financing and export insurance.

"In order to permit close monitoring of the program, it is proposed to conduct monthly reviews in May and June, so that the disbursement of about SDR 2.2 billion (about \$3 billion) that is scheduled to be available after March 15 will be split into three equal monthly installments, including today's disbursement." (See press briefing, page 142.)

Fconomic Forum on Asia

# Panel Agrees Rapid Response to Crises Is Vital to Avoid Costly Market Reactions

As the East Asian countries weigh far-reaching measures to strengthen financial systems, increase transparency, and open markets, a number of critical questions arise. Could the Asian financial crisis have been avoided, if the core principles of banking adopted by the Bank for International Settlements (BIS) Committee on Bank Supervision had been observed? Can anything be done to prevent asset bubbles, macroeconomic distortions, and weak financial infrastructure from building up elsewhere? What lessons can we learn from the crisis?

To tackle these questions, the IMF sponsored an Economic Forum on April 21 at IMF headquarters.

> Moderated by Anoop Singh, Deputy Director of the IMF's Asia and Pacific Department, the seminar featured Zeti Akhtar Aziz, Assistant Governor of Bank Negara Malaysia; Jonathan Fiechter, Director of the World Bank's newly created Special Financial Operations unit, which designs financial sector programs for countries experiencing financial distress; and Carl-Johan Lindgren, Assistant Director of the IMF's Banking Supervision and Regulation Division of the Monetary and Exchange Affairs Department, which has been spearheading the IMF's work on banking soundness issues. (Continued on page 144)



May 11, 1998

### Contents

### 141 First Review of Indonesian Program Completed

141 Lessons from Asian Crisis

142 Fischer Press Conference on Indonesia

143 Head of Singapore Institute Named

144 Bank Conference on Development Economics

Swiss Grant for IMF Technical Assistance

149 Military Expenditures Level Off

Regulatory Issues in Islamic Banking

From the Executive Board

153 Selected IMF Rates

154 Recent IMF Publications

Role of Hedge Funds in Asian Crisis



Zeti Akhtar Aziz (left), Anoop Singh, Carl-Johan Lindgren, and Jonathan Fiechter at the Economic Forum.



# Fischer Emphasizes Success of Indonesian Program Depends on Rigorous Implementation

Following are edited excerpts of a press briefing by IMF First Deputy Managing Director Stanley Fischer, May 4, in Washington, following the conclusion of the IMF Executive Board's first review under the Stand-By Arrangement for Indonesia. Hubert Neiss, Director of the IMF's Asia and Pacific Department, also responded to questions.

FISCHER: The Board had a very thorough discussion of the revised Indonesian letter of intent and program. They agreed to disburse \$1 billion as the first of three

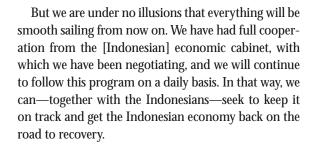
> tranches covering the \$3 billion that could originally have been disbursed on completion of the first review on March 15, if it had happened then. The Board review for disbursement of the next \$1 billion will be June 4, and the one after that will be July 6.

> The Board supported the

revised program, which it said is a strong one, but emphasized the need to implement it rigorously. The Board particularly supported the strengthening of monetary policy and also emphasized the importance attached to those provisions, including subsidies, that are designed to soften the impact of the economic crisis on the poorer people in Indonesia.

This decision to disburse this first \$1 billion is to be followed by the submission of loan proposals by the managements of the World Bank and the Asian Development Bank to their respective boards. The boards are likely to act within the next few weeks. In addition, Japan, Australia, and Malaysia have agreed to disburse to Indonesia significant amounts of the second line of defense financing that they had earlier indicated a willingness to provide. Japan will provide \$1 billion; Australia, \$300 million; and Malaysia will lend \$250 million.

In addition, a number of countries have agreed to make financing available in the coming weeks to support exports through export credit agencies and via the financing scheme proposed by Singapore. We can interpret this as a signal of the international community's willingness to provide assistance to Indonesia—with the expectation and on the condition that it continues to implement the agreed-upon program.



QUESTION: Indonesia announced today [May 4] that the government was going to raise fuel prices, sparking concerns that this would lead to riots and hurt the poor. What provisions, if any, are you taking to protect the people who might get hurt, given the removal of subsidies?

FISCHER: The structure of the subsidies is designed to deal with their impact on different strata of society. The highest price increases—70 percent—are for gasoline, which is most relevant to high-income people. The lowest increase—25 percent—is for kerosene, which is the cooking fuel of the poor.

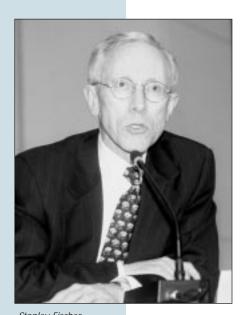
QUESTION: Could you tell us what prior actions the authorities took to ensure the disbursement would be made and what needs to be done to make sure that the second disbursement is made?

NEISS: The most important prior action was taken by IBRA, the Indonesian bank restructuring agency, which took over 14 banks. This was a difficult and courageous action, demonstrating political independence as well as operational capacity. It was handled very well, and unlike the earlier closure of 16 banks, did not result in any large-scale withdrawals or loss of confidence.

Other important prior actions were substantive increases in interest rates, increases in food prices, and—also very important—a commitment to observe a monetary program.

As for requirements for disbursement of the next tranche, a review mission will go to Jakarta soon to work out new measures. There will be a new letter of intent, which again will be submitted to the Executive Board for approval and, if approved, will trigger the second disbursement of \$1 billion.

FISCHER: To elaborate on the monetary side: there will be no expansion in money supply; net international reserves may not decrease; and there will be no intervention in the foreign exchange markets. Interest rates should be driven largely by this process but would also, in case the monetary aggregates are inappropriate, have to be adjusted if the exchange rate goes off track.



Stanley Fischer

There are also assumptions on structural measures. Those are in the letter of intent, which is available on the IMF's web site [http://www.imf.org/external/].

QUESTION: I know the IMF does not normally admonish countries about their human rights policies, but what impact would it have, in your judgment, if there were some sort of brutal crackdown on demonstrations in Indonesia?

FISCHER: Obviously, every government that votes in the IMF Board to support a loan like this is making a calculation about which way does more good: to try to mitigate economic hardship and work with a government on these issues to try to persuade them to improve their record; or to withdraw support and let the economic circumstances worsen—possibly leading to political change—and hope in that way to achieve improvements. That is a tough call for anybody—for any person, for any government—and it must depend on how you judge the governments with which you are dealing. There are cases where, clearly, withdrawal of support is the only course you could justify. There are cases where governments [IMF members] will decide, as they have in this one, that they would rather try to work with the government concerned to change the way it behaves.

QUESTION: How convinced are you that President Suharto stands behind this latest program?

FISCHER: The economic cabinet kept President Suharto fully briefed during our negotiations. The evidence since the mission went to Jakarta in mid-March has been that, possibly as a result of the persuasive efforts of world leaders, including U.S. President Bill Clinton, German Chancellor Helmut Kohl, Japanese Prime Minister Ryutaro Hashimoto, and others, President Suharto decided this was the better course to take and that he is behind it. But the real test will be whether the program is implemented and how rigorously it is implemented.

QUESTION: Based on how the Indonesians have implemented the program thus far, and taking into account what has been happening with some of the other countries that have been affected by the crisis, what is your prognosis for the economies of the region as a whole, and when might we see some kind of a turnaround?

FISCHER: If financial stability returns to Indonesia, then the three countries most severely affected by this crisis will see a turnaround and the restoration of some financial stability. But the real restructuring has still to be done in Korea and Thailand and in Indonesia. If all goes on schedule, we could see turnarounds in the real side of the economy late this year or early next year. In Thailand and Korea, it could be late this year.

Is this the end of the crisis? There are problems that require us to watch very carefully what is happening,

such as the recurring weakness of the Japanese economy, including the financial system. The Japanese government announced last week that it would take strong fiscal action. We hope it will do more on the financial sector side soon.

There is another possibility we need to bear in mind. A prime determinant of capital flows to developing countries is interest rates in the industrial countries. If there is a sustained period of increasing interest rates in the industrial countries, that could make the situation more difficult in the crisis countries and in the developing countries in general.

In sum, the situation is far better in the crisis countries than it was two months ago, but—as the IMF's unofficial motto says—complacency must be avoided. If Indonesia stands by its program, there is reason to hope that the three worst-affected countries will begin to come out of the crisis, barring external disturbances.

The full text of this press briefing appears on the IMF's web site at http://www.imf.org/external/.

### Donal Donovan Named Director of Singapore Regional Training Institute

*I*MF Managing Director Michel Camdessus announced the appointment of Donal J. Donovan as Director of the IMF-Singapore Regional Training Institute in Singapore.

Donovan, 46, an Irish national, is currently Senior Advisor in the IMF's European II Department, which

deals with the Baltic States, Russia, and other countries of the former Soviet Union. He holds a B.A. from Trinity College, Dublin, and a Ph.D. from the University of British Columbia. Donovan, who joined the IMF staff in 1977 as an economist, previously held senior positions in the IMF's African and Statistics Department.

The IMF and the government of Singapore inaugurated the Singapore Training Institute on May 4, 1998. The new Institute will allow the IMF to expand the training it offers in Asia,

and in its first year of operations it will offer 12 training courses aimed at officials from the Asia-Pacific region.



Press Release No. 98/17, May 5

An article on the inauguration of the Singapore Training Institute will be published in the next issue of the *IMF Survey*, May 25, 1998.

**IMFSURVE** 



# Financial Reforms Key to Resolving Asian Crisis

(Continued from front page) Until the financial crisis erupted, the East Asian economies enjoyed a long period of strong and uninterrupted economic growth, Anoop Singh said in his introductory remarks. For over 20 years, they registered growth rates of 6 percent to 8 percent a year. This exceptional achievement concealed some important structural weaknesses, however, particularly in financial sectors and in corporate governance. A lack of transparency in key areas compounded these shortcomings, he pointed out, so that the true weaknesses became fully apparent only after market sentiment had shifted. The financial sectors in Indonesia, Korea, and Thailand all lacked proper prudential standards and supervision. Banks and other financial institutions failed to meet the capital adequacy standards, and supervision fell well short of the 25 core principles adopted by the BIS Committee.

The countries hit by the crisis were also subject to government interference, as the authorities channeled funding to particular sectors of the economy as part of their economic development plans. These distortions created incentives that resulted in poor investment decisions, excessive risk taking, asset price bubbles, and an overaccumulation of short-term external debt. As market confidence began to erode, capital—which had flowed in strongly during the boom years—began to flow out, and exchange rates came under severe downward pressure, making the servicing of foreign-currency-denominated debt extremely difficult. The ultimate solution to the crisis lies in strengthening financial institutions. Restoring financial sector health is, however, not a simple or quick task, Singh noted. While confidence is returning in some parts of the region—with exchange rates appreciating and financial markets beginning to stabilize-much remains to be done.

### Assisting Troubled Institutions

Should capital be injected into cash-strapped banks, when Asian countries are sitting on hundreds of billions of dollars of bad debts? Carl-Johan Lindgren addressed this question, noting that a well-functioning banking system is essential for any economy. This requires that core banks be adequately capitalized—and profitable enough to remain so-to provide the necessary intermediation, liquidity, payments, and corporate governance services required for economic activity. Capital should not, however, be injected into insolvent and nonviable institutions, he cautioned. To alleviate moral hazard, their losses should be distributed first among existing shareholders and also, to the extent possible, among creditors. In Asia, because most of the troubled banking institutions are privately owned, recapitalization should come from private sources. In Thailand,

Lindgren said, the "dust is beginning to settle," and a fair amount of market-based bank recapitalization is beginning to take place.

### Preventing and Containing Crises

Could the crises have been avoided if countries had observed the 25 core principles of effective banking supervision adopted by the BIS? The panelists agreed that while these principles would be necessary to foster financial sector resilience during periods of macroeconomic and financial stress, they would be insufficient. Zeti Akhtar Aziz pointed out that although Malaysia has adopted all of the 25 core principles—with the exception of one on deposit insurance—the country was not immune to the crisis as it unfolded in Southeast Asia. Implementation of these principles would have lessened the severity and cost of the crisis, but it would not have prevented it, Lindgren explained, because the crisis did not stem simply from a lack of prudential regulations or supervisory arrangements. Several other elements played a role, including a lack of corporate governance, poor data availability and disclosure, weak legal and institutional structures, misuse of government guarantees and lender-of-last-resort facilities, and macroeconomic imbalances.

How can policymakers minimize the impact of a crisis, if not prevent it? Jonathan Fiechter felt that not much could be done to prevent crises; the mere existence of private banking systems and inevitable irresponsible lending would eventually lead to flare-ups. Policymakers would therefore need to concentrate on reducing the size, magnitude, and depth of future crises. Financial stability depends on the macroeconomic and structural environment in which the financial system operates, and on the robustness of the financial sector itself, Zeti said.

For financial arrangements, banking institutions, and financial markets to function efficiently, the economy must be able to adjust to macroeconomic shocks. Flexibility is key, and the more diversified an economy is, the less vulnerable it is to domestic and external shocks. An efficient and competitive economy is likely, she said, to be more flexible, allowing it to maneuver during times of crisis. A highly developed, flexible financial system will also ease adjustment to stress, and limits on exposure to external borrowing will help minimize the impact of a crisis. Lindgren agreed, adding that macroeconomic turbulence, combined with a fragile banking system, could be particularly destabilizing. He identified a robust banking system as an important crisis-prevention tool; policymakers should seek to strengthen banking systems during periods of relative macroeconomic stability by allowing the system to weed out weak institutions.

### Lessons Learned

What lessons can be drawn from the overhaul of the U.S. savings and loan institutions in the early 1990s? From his extensive experience in helping solve the U.S. crisis, Fiechter identified several lessons that could be applied to the Asian crisis:

- Allowing nonviable institutions to continue to conduct business had an extremely adverse effect on the profitability of other institutions. Nonviable institutions had no return-on-equity constraints; they therefore underpriced their loans, overpaid for deposits, and, in so doing, destroyed other institutions that might have survived.
- Temporary measures to deal with insolvent institutions (such as conservatorship, recapitalization with government managers, merging several weak institutions to create a large weak institution) simply added to the overall cost of resolution.
- Resolution should be orderly, predictable, and absolutely transparent.
- The cost and complexity of resolution far exceeded expectations.
- Resolution requires a significant number of talented and expert staff.
- The private sector must be fully involved from the outset of the resolution process.
- Initial auctions of assets from failed thrifts produced windfalls for early bidders; these windfalls were necessary to attract additional bidders to future auctions.

The panelists agreed that one lesson—perhaps the most obvious one—from the Asian crisis is that in a globalized economy, policymakers need to respond quickly and forcefully to financial imbalances, policy inconsistencies, and structural weaknesses, especially in their financial systems, to avoid costly financial market reactions. Another lesson is that countries may find that they are more vulnerable to crises in other markets than their own economic fundamentals would suggest. Consequently, they may need to take pre-emptive—rather than reactive—measures to strengthen policies.

The crisis has highlighted the importance of containing external deficits and curbing a reliance on foreign borrowing. Strengthening financial systems is a priority, as weak financial systems increase the vulnerability of the whole economy to domestic and external shocks. Openness and transparency along with good governance play an important role in preventing crises. When economic policies are transparent, policymakers have more incentive to pursue sound policies. Likewise, when timely, accurate, and comprehensive data are readily available, markets adjust more smoothly. Especially when governments are trying to rebuild confidence, a free flow of information allows markets to assess the extent of underlying problems and the seriousness of efforts to correct them. Transparent government operations and decision making also limits the opportunities for distortionary resource allocation, which undermines investor confidence and inhibits growth. In its surveillance work, the IMF will need to sharpen its focus on the linkages between macroeconomic policy and banking sector soundness.

There are no quick or easy solutions to the Asian financial crisis, the panel concluded. The process of reform is likely to extend over the medium term as policymakers must undertake comprehensive and sustainable measures to broaden and deepen financial sectors. Such measures, including the development of private debt and capital markets, will help diversify the source of financing of economic activity beyond the core banking system.

### Grant Expands Swiss Financing of IMF-Provided Technical Assistance

Kaspar Villiger, Switzerland's Minister of Finance, signed an agreement with IMF Managing Director Michel Camdessus on April 15 under which Switzerland will provide a grant of \$2.5 million to finance IMF-executed technical assistance projects in five countries: Azerbaijan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. The financing is to be provided by the Swiss Federal Office for



Michel Camdessus (left) and Kaspar Villiger.

Foreign Economic Affairs, which has helped to finance IMF-provided and -supervised technical assistance in selected other countries since 1995.

This new agreement is part of the IMF's growing program of technical assistance collaboration with external financing partners. The technical assistance to the five countries will focus on projects that help promote trade and investment—directly or indirectly. These include foreign exchange and banking reform, customs and tax reform, strengthening macroeconomic management capacities, and improving the quality and transparency of economic and financial statistics, particularly in the balance of payments area.





### World Bank Conference on Development Economics

# Speakers Explore Range of Development Issues And Appropriate Responses to Financial Crises

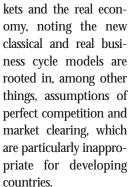
In its tenth gathering, on April 20–21, the Annual Bank Conference on Development Economics (ABCDE) examined, among a range of development-related topics, the role of knowledge and information, the impact of financial globalization on monetary sovereignty, the recent evolution of development economics, the role of competition and regulation, and the implications of financial market liberalization.

### Knowledge for Development

Revisiting themes from his ABCDE address last year, Joseph E. Stiglitz, Chief Economist of the World Bank, urged development researchers and practitioners to move beyond the "neoliberal model" and remember that reforms, such as privatization, are a means, not an end.

> He also stressed the links between financial markets and the real economy, noting the new classical and real business cycle models are market clearing, which are particularly inappro-

Tobin.



Globalization contributes significantly to the economic progress of developing and emerging economies, but it also erodes monetary sovereignty, he said. A currency board sacrifices real macroeconomic performance in production, income, growth, trade, saving, and investment to maintain the strength of the currency and indirectly prevent inflation. If countries are willing to surrender independent monetary policy, asked Tobin, why not adopt a hard currency as the medium of exchange and unit of account? While there are advantages to this, the hard currency's central bank will have no incentive to consider other countries' interests.

vate monopoly is unlikely to create a more dynamic market economy, he argued. It is also critical that policy

advice be improved. This could be done, Stiglitz

believed, by combining local and cross-country experi-

ence to improve policymaking capacity; recognizing

advisor incentive problems; clearly stating the conse-

quences of options; being explicit about the limitations

of information, the role of values, and the impact of different interest groups; and eschewing secrecy.

In his keynote address, James Tobin of Yale

University said a fixed exchange rate is intrinsically fragile, and it was hard to understand why developing

countries still clung to fixed or pegged exchange rates.

He scoffed at recurring nostalgia for a fixed rate system,

countering that floating rates should be credited with accomplishing economically desirable revaluations

without currency crises. A single global currency might

offer a viable alternative to the floating rate—but not

soon and not without its own problems, according to

Globalism and Monetary Sovereignty

Some friction in international financial institutions and markets should be retained, Tobin said, noting that "When private banks and businesses can borrow in whatever

amounts, maturities, and currencies they choose, they create future claims on their country's reserves" that may force central banks and governments to adopt policies that sacrifice prosperity and growth to protect reserves. An obvious precaution would be to limit a bank's net indebtedness in hard currency, according to Tobin.



James Tobin



Stanley Fischer (left) and Joseph Stiglitz.

Stiglitz focused on the

profoundly important role of knowledge and information in development. "The grand ideological battles are over," he declared. Markets are now almost universally seen as the center of a vital economy, with government complementing them through competition policy, regulation, funding for education, and research and development. The debate continues, however, over such details as the appropriate response to economic crises, the components of financial reform, and the proper scope and sequencing of privatization. In these debates, Stiglitz hoped economic science would not fall victim to ideology.

Ideology holds, he said, that the benefits of financial market liberalization are as obvious and universal as the benefits of goods market liberalization. He urged more caution, noting that econometric analyses have indicated that mild financial restraints have positive or no adverse effects, while financial liberalization has been associated with a higher probability of crises. Ideology would also posit, he said, that privatization always works. But efficiency requires private property and competition. Turning a state monopoly into a priHe also recommended creating or strengthening institutions tasked with financial reform and regulation and implementing the kinds of regulations that have proven useful in U.S. markets. There was still a great need, he said, for lenders of last resort. He downplayed the problem of moral hazard, noting that the costs of financial crises to ordinary people were worth "putting up with some moral hazard." Tobin believed the IMF "should concentrate on its intended function as lender of last resort for its members" and urged that its "pitifully small" resources be augmented beyond the amounts currently under debate.

### **Evolution of Development Economics**

Stanley Fischer, First Deputy Managing Director of the IMF, who had inaugurated the ABCDE in 1989 when he was Chief Economist of the World Bank, was invited to deliver its tenth anniversary address. Reflecting on where development economics was nearly a decade ago, he observed that at that point the debt crisis was winding down, the transition process was beginning in Eastern Europe, the East Asian miracle was in full bloom, and Sub-Saharan Africa's disturbing decline in average per capita GDP was drawing attention. John Williamson's "Washington consensus" had also just outlined the growing agreement on the primacy of the market and the importance of sound macroeconomic policies.

In its 1991 World Development Report, Fischer said, the Bank sketched a broad strategy for development that stressed the prime role of developing country policies and the need to invest in people, improve the climate for enterprise, open economies to international trade and investment, get macroeconomic policy right, and have government do less where markets worked, or could be made to work, reasonably well. Some debates remained—notably, the role of the state in the East Asian miracle and the speed and sequencing of reforms.

What, asked Fischer, would be the basic message if this World Development Report were to be rewritten, incorporating results of research and events since 1991, including the lessons of the transition process and recent financial crises. The basic message, he said, would not change very much. Topics mentioned in the 1991 report—many of which have featured prominently in later Bank research, including *The East Asian Miracle*—such as the regulatory role of government, especially in the critical banking and financial areas; the environment; institutional development; governance; and income distribution—would receive greater emphasis. He regarded the experience of the transition economies as supporting the view that macroeconomic stabilization, and price and trade liberalization, should be implemented very rapidly, with other reforms proceeding as fast as possible.

None of these changes would produce a radically different view of development policies and strategy. However,

the impact of globalization—particularly of capital flows—could have more dramatic implications. Vulnerability to short-term capital flows posed a problem, the effects of which could be mitigated through strong prudential regulations and close monitoring of corporate borrowing. Market-based measures could be of use in controlling the pace and volume of short-term capital flows.

The exchange rate debate will continue, Fischer noted, but he was struck that countries that had defended their exchange rates, whether fixed or floating, through the active use of monetary—and in some cases, fiscal—policy did not experience extreme crises. A successful euro might ultimately prompt not only the creation of other regional currencies but eventually a single currency. Globalization will increase pressure for capital account liberalization, which Fischer believed should be gradual and undertaken only after domestic financial systems had been strengthened.

The international economy remains accident-prone, Fischer noted, but it has also yielded unprecedented economic growth and will continue to yield benefits for those countries that follow the right policies. There is no magic ingredient for growth. In addition to pursuing the right policies, it is a matter of hard work and many people doing many things right over many years, he said.

### Competition and Regulation Policy

Discussing regulatory priorities for reforming infrastructure sectors in developing countries, Paul Joskow of the Massachusetts Institute of Technology observed that excessive costs, lack of capital, interest groups, and monopolistic providers are hampering efforts to improve infrastructure. Privatization may hold part of the solution, but it, too, faces problems—namely, much poorer performance than in industrial countries, concerns about corruption and expropriation, and the absence or underdevelopment of appropriate regulatory agencies.

The strengths and weaknesses of Peru's experience in privatizing its telecommunications system provide some lessons, he said—namely, specify goals and how these goals are to be reached, make provisions for the post-transitional stage, design effective regulatory agencies as a part of the reform process (and not as an afterthought), ensure that the regulatory environment provides balanced goals (so that quality is not sacrificed to incentives), and be alert to distributional issues (are the poor being neglected?). The privatization effort should be part of a broader environment that protects consumers from exploitation, promotes efficient supply, facilitates competition, and guards against cross-subsidization and unreasonable discrimination among competitors using these facilities. Joskow also noted that it might be best for regulatory agencies to start with simple rules and procedures and refine these as experience is gained.



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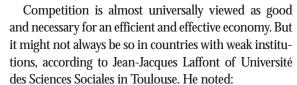
Paul Joskow

May 11, 1998 147

# **IMF**SURVEY



Jean-Jacques Laffont

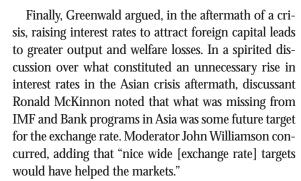


- Tax systems are an underrated problem in developing countries. Given the cost and difficulty of improving tax systems, development economists should keep a more open mind about cross-subsidies.
- The relative scarcity of auditing, monitoring, and enforcement resources makes competition a particularly valuable substitute for rent extraction but a difficult one to implement. Auctions might be useful.
- In the short run, competition may increase corruption; over the longer term, it should limit it.
- In some sectors—notably the financial sector—regulation is a complement to increased competition.
- Lack of credibility makes the emergence of a competitive environment difficult and may exacerbate excessive competition.
- Corrupt governments, whose rent seeking is threatened, will resist competition. Lending and aid should be linked to improved competition, but progress in this area will be more difficult to gauge than in privatization.

### Financial Market Liberalization

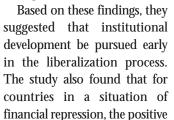
Traditional open economy models, with efficient global financial markets, shed little light on why the Mexican and Asian crises happened or why they were so severe, observed Bruce Greenwald of Columbia University. Since global financial and output markets tend to lessen rather than intensify local economic disturbances, he believed other factors—namely, market imperfections—were at work. Greenwald focused on the asymmetry between well-informed local firm and bank managements and less well-informed outside investors. These imperfect conditions led to severe limitations in financial market transactions and accounted for many of the characteristics of recent crises.

Given imperfect information, the solutions to those crises are likely, Greenwald noted, to take the form of either improved access to external finance—particularly equity finance—or efforts to immunize economies against systematic equity losses. To prevent losses, possible measures might entail bringing the net foreign debt to zero, pursuing price and exchange rate stabilization, and placing restrictions on institutional asset holdings. Once equity has been lost, it is a matter of trying to restore it, he said. Net foreign direct investment will be important, as will private debt-equity swaps or swaps of private equity for public debt. Over the longer term, establishing effective financial institutions will be crucial. Greenwald strongly urged concentrating development aid to help create efficient, comprehensive banking systems that would address payment systems, savings, and asset deployment needs.



On the basis of an econometric analysis of 53 advanced and developing countries with a variety of experiences with financial sector liberalization between

1980 and 1995, Asli Demirgüç-Kunt of the World Bank and Enrica Detragiache of the IMF explored whether increased financial liberalization spurred banking crises in developing countries. Controlling adverse macroeconomic development, bad macroeconomic policies, and vulnerability to balance of payments crises, they found a correlation between financial liberalization and banking sector instability—an effect that was offset when countries had a sound institutional environment featuring strong law enforcement, efficient bureaucracies, and little corruption.





Asli Demirgüç-Kunt



Enrica Detragiache

effects of liberalization outweigh the negative effects of a banking crisis; for countries that liberalized from a position of financial restraint, the positive and negative effects cancel each other out. All of their findings lend support, Detragiache and Demirgüç-Kunt said, to a gradual approach to liberalization—suggesting that once financial reforms secure a positive interest rate, a more deliberate pace of liberalization—one that carefully weighs benefits and risks—might be in order.

Sheila Meehan Senior Editor, IMF Survey

The full text of Stanley Fischer's speech is on the IMF's web site at http://www.imf.org/external/news.htm under "speeches." The full text of all ABCDE papers is on the World Bank's web site at http://www.worldbank.org/abcde/.



Bruce Greenwald

148

### **IMF**SURVEY

# Worldwide Military Expenditures Appear to Have Leveled Off

Worldwide military spending has virtually leveled off since 1995, according to an IMF staff analysis of 132 countries from the World Economic Outlook database (see chart, top, this page). This is consistent with trends reported previously (see IMF Survey, June 3, 1996, and April 21, 1997). Worldwide military expenditures declined to 2.3 percent of GDP in 1996 and 1997 from 3.5 percent of GDP in 1990—freeing some \$357 billion in resources over 1990-97. These freed resourcesindicative of a peace dividend-represent the difference between the dollar amount that would have been spent in 1997 if the 1990 ratio of military expenditures to GDP had been maintained and the actual outlays for 1997. The absolute resource savings stemming from declines in worldwide military spending has slowed to \$18 billion during 1995-97, compared with almost \$100 billion in the period from 1990 to 1995.

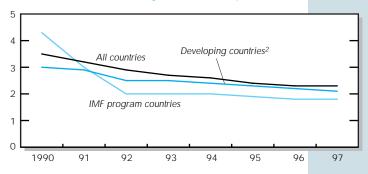
Differences in coverage in military spending data are notoriously hard to capture completely and make direct comparisons of data difficult. But data from other sources (see chart, bottom, this page) do confirm the trend observed in IMF data. For example, both the Stockholm International Peace Research Institute (SIPRI)—whose data cover 124 countries—and the London-based International Institute of Strategic Studies (IISS)—whose data include 90 countries—find that worldwide military spending fell by around 0.1 percent of GDP in 1996 from around 2.5 percent of GDP in 1995. The U.S. Arms Control and Disarmament Agency data indicate that military spending for 102 countries declined by slightly less than 0.3 percent of GDP to 2.7 percent in 1995—the last year for which such data are available.

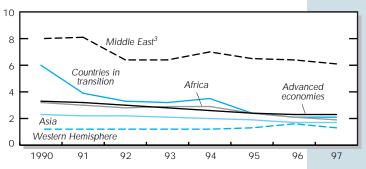
Based on the IMF's World Economic Outlook database, military spending fell by less than 0.1 percent of GDP each year in 1996 and 1997 (see table, bottom, page 150). Among the developing countries, two regions (Africa and the Middle East-including Cyprus, Malta, and Turkey) experienced a somewhat greater decline in military expenditures in relation to GDP over this twoyear period (0.5 percent and 0.3 percent, respectively). However, military spending in the Middle East remains the highest of any region, at 6.1 percent of GDP. Africa is estimated to have reduced nominal military expenditures by \$1.2 billion over 1996 and 1997, even though developing countries taken together increased their spending by \$9.7 billion. Industrial countries are estimated to have reduced their nominal military expenditures by \$33.8 billion over the same two-year period. The weighted average share of military spending in total public spending in all countries remained unchanged at slightly above 10 percent during 1996 and 1997 but has declined from 14 percent in 1990.

# Military Spending in Countries with IMF-Supported Programs

In its general policy advice and in the context of the adjustment programs it supports, the IMF has sought to improve the composition of public expenditures.

# Military Expenditures<sup>1</sup> (percent of GDP)

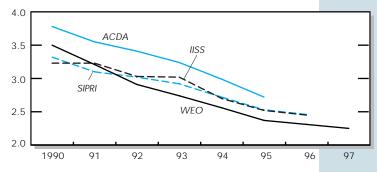




<sup>&</sup>lt;sup>1</sup>Weighted by country GDP.

Data: IMF, World Economic Outlook database

### World Military Expenditures, Derived from Alternative Sources<sup>1</sup> (percent of GDP)



<sup>1</sup>Weighted by GDP. Data drawn from varying number of countries: ACDA (102), IISS (90), SIPRI (70), and WEO (132).

Data: U.S. Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1996; the International Institute of Strategic Studies (IISS), The Military Balance, various issues; Stockholm International Peace Research Institute, SIPRI Yearbook, Armaments, Disarmament and International Security, 1997, and IMF, World Economic Outlook database

<sup>&</sup>lt;sup>2</sup>Excludes transition economies.

 $<sup>^3</sup>$ Includes Cyprus, Malta, and Turkey from Continental Europe.



The IMF seeks to promote growth and reduce poverty in its member countries by increasing productive and social expenditures and reducing unproductive outlays, such as excessive military expenditures. Sharp reductions in military spending were achieved in the early 1990s (see *IMF Survey*, June 3, 1996, and S. Gupta, J. Schiff, and B. Clements, *Worldwide Military Spending*,

### Military and Social Spending, 1990-961

		e in Expend Share of G			Change in Expenditure as a Share of Total Spending			
	Total Spending <sup>2</sup>	Social <sup>3</sup>	Military <sup>2</sup>	Social <sup>3</sup>	Military <sup>2</sup>	Number of Countries		
Total	-2.6	0.3	-1.0	1.2	-3.1	52		
IMF program countries	-3.4	-0.1	-0.9	1.5	-3.0	38		

<sup>&</sup>lt;sup>1</sup>Unweighted averages. Excludes transition economies.

Data: IMF

1990–95, IMF Working Paper 96/64, June 1996). During 1997, military expenditures as a share of both GDP and total public spending in IMF-supported programs remained broadly unchanged from their 1995 levels. Nevertheless, military expenditures as a share of GDP in IMF-supported programs remain below the worldwide average, particularly in those countries with programs of more than a two-year duration.

The sharp drop and eventual leveling off of military expenditures during the 1990s is most notable in Stand-

By and Extended Fund Facility arrangements. This is largely due to the significant number of transition economies seeking IMF assistance under these arrangements and their high levels of military expenditures before they entered into these arrangements. Low-income countries—which typically entered into Structural Adjustment Facility/Enhanced Structural Adjustment

Facility arrangements—have also managed to reduce their military expenditures significantly. For these countries, however, there remains scope for further reductions toward the worldwide averages, both in terms of GDP and total spending. This would allow for the continued reallocation of expenditures to much needed social areas.

### Military and Social Expenditures

On average, military spending appears to be declining, while investments in human capital appear to be rising as a proportion of total expenditures. For the 52 countries for which consistent data are available for 1990–96, the IMF study found that military spending declined by an average of 3.1 percentage points of total expenditures, while social spending increased on average 1.2 percentage points (see table, top, this page). At the same time, countries with IMF-supported programs increased the average share of social spending in their budget by more than the sample average.

Sanjeev Gupta, Calvin McDonald, and Edgardo Ruggiero IMF Fiscal Affairs Department

Military Expenditures <sup>1</sup>											
	1990 (p	1995 ercent o	1996 of GDP)	1997	1990 (perce	1995 ent of to	1996 tal spend	1997 ling)	Change in Dollars 1990–95		Number of Countries
All countries	3.5	2.4	2.3	2.3	14.1	10.5	10.3	10.3	-99.5	-18.3	132
Advanced economies	3.3	2.4	2.3	2.3	13.9	10.4	10.2	10.2	-10.3	-30.7	25
Industrial countries	3.3	2.3	2.3	2.2	13.6	10.1	9.9	9.9	-21.3	-33.8	21
Newly industrialized Asian economies	4.1	3.5	3.6	3.6	24.5	19.3	18.8	18.4	9.8	2.3	3
Developing countries	3.0	2.3	2.2	2.1	13.4	11.4	11.0	10.7	12.5	9.7	87
Africa	3.3	2.4	2.1	1.9	11.7	8.6	7.7	7.3	-2.3	-1.2	44
Asia	2.4	1.9	1.7	1.7	11.9	12.4	11.6	11.0	8.5	2.9	11
Middle East <sup>2</sup>	8.1	6.5	6.4	6.1	24.9	21.0	20.3	20.2	-1.5	4.0	12
Western Hemisphere	1.2	1.3	1.3	1.3	7.0	6.6	6.5	6.6	7.9	4.0	20
Countries in transition	6.0	2.4	2.1	2.1	16.1	10.6	9.9	10.9	-101.3	2.8	20
Central Europe	2.3	2.4	2.1	1.9	11.6	7.3	6.7	6.6	-4.0	-0.9	6
Former U.S.S.R.	6.9	2.3	2.1	2.2	16.6	12.7	11.4	12.7	-97.7	3.6	14
Memorandum items:											
IMF program, less than two years	3.9	2.0	1.9	2.0	15.7	9.4	9.2	9.1	-30.3	3.9	20
IMF program, more than two years	4.7	1.9	1.7	1.7	13.4	9.2	8.9	9.3	-63.5	5.2	52
Type of program											
SAF/ESAF <sup>3</sup>	4.4	3.0	2.9	2.8		12.8		12.6	-2.8	0.1	34
Extended Fund Facility	4.8	1.7	1.6	1.7	13.5	8.7	8.5	9.0	-60.4	5.7	15
Stand-By Arrangement	3.8	1.9	1.9	1.9	15.0	9.3	9.0	9.0	-30.5	3.3	23

<sup>1</sup>Weighted by country GDP.

<sup>2</sup>Includes Cyprus, Malta, and Turkey from Continental Europe.

<sup>3</sup>SAF/ESAF: Structural Adjustment Facility/Enhanced Structural Adjustment Facility

Data: IMF, World Economic Outlook database

<sup>&</sup>lt;sup>2</sup> World Economic Outlook database, IMF.

<sup>&</sup>lt;sup>3</sup>Government Finance Yearbook, 1997, and provided by country authorities.

# Unprecedented Recent Growth of Islamic Banking Calls for Specialized Regulatory Framework

In April 1997, the Basle Committee on Banking Supervision issued a comprehensive paper identifying core principles for effective banking supervision. While these internationally harmonized guidelines are generally accepted across countries, they do not always apply to Islamic banking in the same way as they do to other banking systems. In IMF Working Paper 98/30, Islamic Banking: Issues in Prudential Regulations and Supervision, Luca Errico and Mitra Farahbaksh argue that effective prudential supervision of banks is just as necessary and desirable in Islamic banking as it is in conventional banking, particularly since Islamic banking has been expanding outside its traditional borders of Muslim economies. By some estimates, Islamic banking has grown at an annual rate of 15 percent over the past five years; the market's current size is estimated at \$70 billion and is projected at about \$100 billion by the year 2000. Errico and Farahbaksh spoke with the IMF Survey about their study.

IMF Survey: How do Islamic precepts influence banking activities? To what extent has the IMF membership adopted Islamic banking practices?

Errico: The principles established in the Islamic law, *Shariah*, influence banks' structure and activities in several ways. Perhaps the most important and well known of these is the prohibition against the payment and receipt of a fixed or predetermined rate of interest, which is replaced by profit-and-loss sharing (PLS) arrangements. Under these arrangements, the rate of return to financial assets held with banks is not known and not fixed prior to the undertaking of each transaction. Also, banks operate according to specific procedures, using specific financial instruments.

Currently, 48 countries are involved in Islamic banking with varying intensity. In some countries, such as the Islamic Republic of Iran, Pakistan, and Sudan, all banks and financial institutions operate according to Islamic principles. In other countries, such as Bangladesh, Egypt, Indonesia, Jordan, and Malaysia, Islamic banking operates alongside conventional banking. In some other countries, Islamic banking is a more limited phenomenon involving credit institutions catering to specific segments of the market.

**IMF** Survey: What differentiates Islamic banking from conventional banking?

ERRICO: Banks operating according to the "paradigm" version of Islamic banking differ from "conventional" or interest-based banks in several ways. First, while the capital value of demand deposits is guaranteed insofar as they are placed with banks as *Amanat* (safekeeping),

neither the capital value nor the return on investment deposits is guaranteed; demand deposits are never remunerated. Second, returns on deposits, which depend on the banks' profits from investments and other activities, are determined ex post. Third, banks have to intermediate funds through specific Islamic modes of financing, the most important of whichsuch as Mudaraba (trustee finance) and Musharaka (equity participation)—are based on the PLS principle. Under these modes of financing, banks bear entirely and exclusively the financial risk of the transaction. When operating through PLS modes, they have a reduced ability to request collateral or other guarantees as a safeguard against credit risk. In the event of a borrower's default-barring fraud or mismanagementbanks lose the loaned funds, and entrepreneurs lose their time and effort.

These key features make Islamic banking essentially an equity-based system, where capital is always at risk and providers of capital and labor are put on an equal footing. Islamic modes of financing do, however, include non-PLS modes, such as mark-up, lease, and lease-purchase, that do not substantially differ from similar activities in conventional banking. Also, Islamic banks have an interesting similarity with conventional investment companies, including mutual funds, partly because of the way they treat investment deposits, but also because they pool depositors' funds to provide depositors with professional investment management. A fundamental difference, however, is that investment companies sell their capital to the public, while Islamic banks accept deposits from the public.

**IMF** Survey: What are some of the implications of these differences?

ERRICO: Investors in conventional investment companies are in a much stronger position compared to depositors in Islamic banks in terms of accessing information, monitoring performance, and influencing strategic decisions. Hence, corporate and market governance is markedly different. Second, Islamic banks seem to be better poised than conventional banks to absorb external shocks, given their ability to reduce the capital value of investment deposits in the event of a loss. However, solvency risks stemming from an asset-liability mismatch cannot be ruled out. This is especially true for banks operating under a two-tiered *Mudaraba* system

**Photo Credits:** Denio Zara, Padraic Hughes, and Pedro Marquez for the IMF.

May 11, 1998

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where the asset and liability sides of banks' balance sheets are fully integrated. And, third, assessing and managing operational risk is more difficult for Islamic banks because of their reduced ability to require collateral, which—in the case of Mudaraba—is coupled with a total lack of control over the management of their

clients' business for the duration of contractual relationships. This underscores the need for a greater emphasis on the management of operational risk and information disclosure in Islamic banking than is normally the case in conventional systems.

IMF SURVEY: How are Islamic banks that operate in conventional systems supervised?

Errico: The lack of uniformity in the way different Muslim countries apply Islamic principles makes it difficult to generalize as to what may be considered Islamic banking in practice. We thought it helpful, therefore, to use a

paradigm of Islamic banking as a benchmark against which to measure current practices. Our conclusion is that none of the Islamic banks presently in business in conventional systems operates according to a paradigm version of Islamic banking. For all practical purposes, they operate to varying degrees in a hybrid way—somewhere between the paradigm version and conventional banking. That said, Islamic banks operating in conven-

> tional systems are supervised as conventional banks, without recognition of the special issues that Islamic banking involves. In our view, this may result in less effective banking supervision, create an uneven playing field, and delay or even impede fuller global integration of Islamic banking.

> IMF SURVEY: What rules apply to conventional banks operating in Islamic systems?

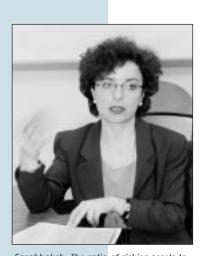
> Errico: The majority of countries influenced by Islamic banking practices apply the same regulatory framework to both conventional and Islamic banks. This regulatory frame-

work tends to follow standards and guidelines established by the Basle Committee on Banking Supervision. However, these standards are not always applicable to,

FARAHBAKSH: The absence of protection for investment depositors and the fact that capital value and returns on investment deposits depend on banks' profits indicate that information disclosure is more important in an Islamic banking framework than in conventional systems. Information disclosure should be designed to reduce information asymmetries between Islamic banks and their depositors and to reduce moral hazard. Such information disclosure should be



Errico: Islamic banking is essentially an equity-based system.



Farahbaksh: The ratio of riskier assets to total assets may be higher in Islamic banks than in conventional banks.

IMF Survey: What would be the main elements of a regulatory framework designed to address the special characteristics of Islamic banks?

or appropriate for, Islamic banks.

FARAHBAKSH: We used a CAMEL rating framework to address management of operational risks in Islamic banks. A CAMEL rating assesses a bank's capital adequacy, asset quality, management capability, level and quality of earnings, liquidity, and sensitivity to market risk. This measure of a bank's relative soundness is calculated on a 1 to 5 scale, with 1 being a strong performance. The standard CAMEL rating would need to be adjusted, however, to reflect the particular characteristics of Islamic banks. For instance, a CAMEL rating for capital adequacy in an Islamic banking environment should place greater emphasis on the volume of risky assets. This is because the bulk of assets of banks operating according to a paradigm version of Islamic banking consist mainly of PLS transactions, which are mostly uncollateralized equity financing. Therefore, the ratio of riskier assets to total assets may be higher in Islamic banks than in conventional banks. As a result, the level of the risk-weighted capital adequacy ratio would need to be higher than 8 percent, which is the minimum level recommended by the Basle Committee.

The methodology for assessing asset riskiness in an Islamic framework should be adjusted to the specific characteristics of Islamic modes of financing. PLS modes are riskier than non-PLS modes and, among the former. Mudaraba transactions seem to be riskier than Musharaka transactions or direct investment. Therefore, Mudaraba contracts should carry the highest risk weight, and non-PLS modes, the lowest.

A CAMEL rating for the adequacy of liquidity in an Islamic environment should take into account the fact that—in contrast to conventional banks—Islamic banks cannot obtain funds from lender-of-last-resort facilities, such as Lombard and discount windows. This is because such facilities involve the payment of interest. Also, while in principle appropriately designed short-term financial instruments and interbank and money markets are possible in an Islamic environment, in practice, they are rather underdeveloped. On the other hand, while investment deposits are not protected, Islamic banks have an obligation to demand deposit holders.

IMF Survey: How does the absence of protection for investment depositors affect banking supervision in an Islamic environment?

May 11, 1998 152 based on banks' investment strategies, goals, and risks. This would allow depositors to choose—according to their risk preferences—among different banks that follow different investment strategies. It would introduce an element of flexibility into the system. Given the operational similarity between Islamic banks and investment companies, we thought it useful to adapt information disclosure requirements for investment companies in conventional systems to the special needs of Islamic banks. Such requirements could incorporate investment objectives and policies of the bank, including concentration, types of securities, risk factors, internal controls, and performance data.

IMF Survey: To what extent are standards established by the Basle Committee on Banking Supervision useful in an Islamic framework?

FARAHBAKSH: As in conventional banking, an appropriate regulatory framework for an Islamic system should aim to reinforce banks' operating environment, internal governance, and market discipline. To help develop such a regulatory framework, standards and best practices established by the Basle Committee on Banking Supervision are useful and provide a valuable reference. However, the considerations that I mentioned before provide some examples of how prudential standards can be adjusted to reflect Islamic banking practices. Of course, the more Islamic banking practices diverge from the paradigm version, the more supervisory standards and best practices developed by the Basle Committee become applicable.

IMF Survey: What challenges do policymakers face in establishing closer integration between Islamic and conventional banking systems?

FARAHBAKSH: In countries where both systems operate, the supervisory authorities should recognize the need to set up a regulatory framework that, while consistent with Islamic precepts, would be pragmatic and flexible enough to meet internationally accepted prudential and supervisory requirements. In Western countries where Islamic banks have set up branches or subsidiaries, the supervisory authorities should approach Islamic banks with an open mind, recognizing the potential gains that this already sizable and growing market can bring to the global economy. Effective prudential supervision of Islamic banks in their home countries is also key to fostering closer integration between Islamic and conventional banking systems.

Copies of Working Paper 98/30, *Islamic Banking: Issues in Prudential Regulations and Supervision*, by Luca Errico and Mitra Farahbaksh, are available for \$7.00 each from IMF Publication Services. See page 154 for ordering information.

## From the Executive Board

### Chad: ESAF

The IMF approved the third annual loan under the Enhanced Structural Adjustment Facility (ESAF), equivalent to SDR 16.5 million (about \$22 million), to support Chad's economic program for 1998–99. The loan is available in two equal semiannual installments, the first of which will be made available on May 6, 1998. 1998–99 Program

The government's overall objective is to strengthen macroeconomic adjustment, with a view to reducing financial imbalances and achieving sustainable growth. The key macroeconomic targets of the 1998–99 program are to achieve annual real GDP growth of 6 percent, limit annual inflation to 3.5 percent, and contain the current account deficit at 17 percent of GDP in 1998. To achieve these objectives, the authorities will strengthen the fiscal adjustment effort launched in previous years.

#### Chad: Selected Economic Indicators 1995 1996 1997 19981 19992 2000<sup>2</sup> (percent change) Real GDP 0.9 3.5 6.0 6.1 6.5 6.0 Consumer prices (average) 9.5 11.3 5.6 3.5 3.3 3.0 (percent of GDP) Overall budget balance, commitment basis (excluding grants) $-11.9 \ -11.0 \ -9.9 \ -8.6$ -8.7External current account balance (excluding official transfers) $-18.9 \ -19.2 \ -20.2 \ -17.0 \ -19.3 \ -19.1$ (months of imports) Gross official reserves 2.7 4.0 4.3 3.1 3.0 2.7 <sup>1</sup>Program. Data: Chad authorities and IMF staff estimates and projections

Selected IMF Rates								
Week Beginning	SDR Interest Rate	Rate of Remuneration	Rate of Charge					
April 27	4.24	4.24	4.54					
May 4	4.22	4.22	4.52					

The SDR interest rate and the rate of remuneration are equal to a weighted average of interest rates on specified short-term domestic obligations in the money markets of the five countries whose currencies constitute the SDR valuation basket (the U.S. dollar, weighted 39 percent; deutsche mark, 21 percent; Japanese yen, 18 percent; French franc, 11 percent; and U.K. pound, 11 percent). The rate of remuneration is the rate of return on members' remunerated reserve tranche positions. The rate of charge, a proportion (currently 107 percent) of the SDR interest rate, is the cost of using the IMF's financial resources. All three rates are computed each Friday for the following week. The basic rates of remuneration and charge are further adjusted to reflect burdensharing arrangements. For the latest rates, call (202) 623-7171. Data: IMF Treasurer's Department

May 11, 1998 153

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### Structural Reforms

Under the program, the government will pursue structural reforms to enhance the efficiency of the productive sectors of the economy and improve government revenues. Also, actions are being taken to strengthen the banking system and increase competition, notably through the privatization of the two remaining state-owned banks.

### Addressing Social Needs

The government will continue to implement social policies to achieve a substantial reduction in poverty. These policies will aim in particular at expanding the education and training system, improving health services, controlling population growth, and strengthening the role of women in Chad's economic and social development.

Chad joined the IMF on July 10, 1963, and its quota is SDR 41.3 million (about \$56 million). Its outstand-

ing use of IMF financing currently totals SDR 44 million (about \$59 million).

Press Release No. 98/16, April 29

### Press Information Notices

Press Information Notices (PINs) are IMF Executive Board assessments of members' economic prospects and policies issued—with the consent of the member—following Article IV consultations, with background on the members' economies. Recently issued PINs include:

Malaysia, No. 31, April 27 Guinea, No. 32, April 29 Mozambique, No. 33, April 30

Full texts of PINs are available on the IMF's web site (http://www.imf.org/pins).



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Current Legal Issues Affecting Central Banks, Vol. 5, edited by Robert C. Effros. (\$65.00)

### Occasional Papers (\$18.00; academic rate: \$15.00)

No. 163: *Egypt: Beyond Stabilization, Toward a Dynamic Market Economy*, by a staff team led by Howard Handy. A collection of studies focusing on economic developments in Egypt during the 1990s.

No. 164: MULTIMOD Mark III: The Core Dynamic and Steady State Models, Douglas Laxton and others. Describes the Mark III version of MULTIMOD, the IMF's multi-region econometric model. Forthcoming in late May.

### Working Papers (\$7.00)

98/37: *The Prudential Regulation and Management of Foreign Exchange Risk*, Richard K. Abrams and Paulina Beato. Examines issues in the prudential management and regulation of foreign exchange risk.

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98/48: "Globalization" and Relocation in a Vertically Differentiated Industry, Tito Cordella and Isabel Grilo. Analyzes firms' relocation decisions following the removal of trade barriers or restrictions on capital outflows or inflows.

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# IMF Study Concludes Hedge Funds Played Generally Limited Role in Asia Crisis

It has been suggested that hedge funds have precipitated major movements in asset prices—either through sheer volume or through the tendency of other market participants to follow their lead. Yet, for all this attention, there is little concrete information about the extent of hedge funds' activities and no consensus on their implications for financial stability or how policymakers should react to these market players. IMF Occasional Paper 166, Hedge Funds and Financial Market Dynamics, provides a basis for a better understanding of the role of hedge funds in international financial markets. Barry Eichengreen and Laura Kodres of the IMF's Research Department reviewed the study's findings at an April 16 press briefing. Following are edited excerpts from the briefing.

EICHENGREEN: Hedge funds are best defined as eclectic investment pools, usually with fewer than a hundred wealthy investors, constituted through private placements, typically domiciled offshore to capitalize on tax and regulatory advantages. Because they are organized as private or limited partnerships, they are free of many reporting and disclosure requirements that apply to other institutional investors. These are some of the regularities of the hedge fund industry. Probing deeper, however, one discovers a high degree of heterogeneity. Hedge funds follow a wide diversity of investment strategies; it is impossible and counterproductive, therefore, to talk about the "typical" hedge fund.

In our study, we emphasize the distinction between two broad categories of hedge funds: the "macro" funds that take large, typically unhedged positions in markets, including, but not limited to, foreign exchange markets on the basis of a top-down analysis that focuses on a country's macroeconomic and financial fundamentals; and "relative value" funds that undertake more of a bottom-up analysis—looking at particular securities or assets—and attempt to arbitrage perceived price discrepancies. Other investors-such as pension funds, mutual funds, and commercial and investment banks-engage in many of the same practices as do hedge funds. They take large positions, use leverage, transact in derivative securities, and take long and short positions in foreign exchange markets, making it difficult to distinguish between hedge funds and other institutional investors.

Data on the size of the hedge fund industry are incomplete and fragmentary. A variety of commercial data services that rely on voluntary reporting by hedge fund managers suggest that hedge funds manage about \$100 billion and that they lever their capital, on average, by a factor of 4 to 7. At the end of 1997, the macro seg-

ment of the industry had about \$30 billion under management. While these are large numbers, they pale compared to the pool of capital managed by institutional investors as a whole, which, for Organization for Economic Cooperation and Development countries, amounts to about \$20 trillion. Concerns have been

expressed that hedge funds can nonetheless play a special role in precipitating market movements—the worry is that hedge funds can act as the "lead steer" when a financial "herd" begins to move. There is some evidence that in some markets hedge funds do in fact together—they herd change their investments in similar ways at similar times. There is not much evidence, however, that other investors herd along with hedge funds.



Barry Eichengreen and Laura Kodres at the briefing.

What does our study say about the Asian financial crisis? Here, once again, I want to emphasize the partial and incomplete nature of the data. Because of hedge funds' special regulatory status, it is impossible to know with complete confidence all the positions and trades these funds undertook. Furthermore, we emphasize the difficulty of generalizing across Asian countries and, in particular, the extent to which the role of hedge funds was different in Thailand than in the other Asian countries. The available data indicate that some macro hedge funds had large positions against the Thai baht in the summer of 1997. Other investors, however, appear to have been shorting the baht earlier, and hedge funds do not appear to have been dominant players in this market—they did not account for the majority of the short currency positions. They were at the back-not the front-of the financial herd, although their positions may have been large in the Thai case. Hedge funds do not appear to have had equally large short positions elsewhere.

Why this difference between Thailand and other Asian countries? First, hedge fund managers saw problems with Thai fundamentals and, anticipating a currency crisis there, took large positions. They were surprised, in contrast, by the extent and the virulence of the contagion to other countries, and therefore did not take equally large positions elsewhere. Second, hedge fund managers value liquidity and low transactions costs. They found it easier to put on positions in Thailand than they did in other

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Asian markets, where controls were more prevalent. Other investors, in contrast, appear to have had better access to local broker-dealer markets and to have taken larger positions.

What are the policy implications of our findings? Are there grounds for further regulation or disclosure requirements for hedge funds? The market participants we spoke to agreed that because large investors clients of hedge funds—are able to fend for themselves, there is no strong argument for further regulation of hedge funds on consumer protection grounds. While some market players expressed concern about whether all the counterparties had the necessary expertise to understand the risks associated with the derivative securities in which hedge funds transact,

they felt that counterparties and regulators are handling threats to systemic stability relatively well.

That leaves us with the concern that hedge funds might be manipulating markets. Here, again, we emphasize that hedge funds are not large relative to financial markets as a whole, although they may at times be large relative to particular emerging markets. Still, to deal with market volatility, policymakers can consider a variety of measures, such as margin and collateral requirements for all financial market participants. Such measures would affect hedge funds more than other investors who buy or sell securities on margin, hedge funds being particularly heavy users of credit. Policymakers could also consider emulating largetrader reporting requirements already in place in several countries. Governments can, however, undertake more fundamental reforms to deal with market volatility. Better information about market conditions will discourage herd behavior. If investors run with the herd, they are emulating the actions of other investors on the assumption that others know something that they themselves do not. Better information helps discourage herd behavior. Second, governments need to avoid the combination of inconsistent policies and unsustainable currency pegs that hedge funds and other institutional investors find irresistible.

QUESTION: Did speculators cause the Asian crisis?

EICHENGREEN: International investors—hedge funds and others—took large positions in Thailand in response to macroeconomic and financial fundamentals that ultimately rendered the country's currency peg unsustainable. These "speculators" were not major participants in the foreign exchange markets of the other countries that were subsequently engulfed by the crisis.

Hedge Funds: Managed Assets by Investment Style (million U.S. dollars)<sup>1</sup>

	1980	1985	1990	1995	1996	1997
Global <sup>2</sup>	193	517	1,288	14,931	20,401	30,862
Macro <sup>3</sup>	0	0	4,700	18,807	25,510	29,759
Market-neutral4	0	78	638	5,707	10,317	17,970
Event-driven <sup>5</sup>	0	29	379	3,827	5,574	8,602
Sector <sup>6</sup>	0	0	2	187	691	1,752
Short sales <sup>7</sup>	0	0	187	432	488	538
Long only <sup>8</sup>	0	0	0	85	180	376
Fund of funds9	0	190	1,339	9,416	13,163	19,717
Total	193	814	8,532	53,392	76,325	109,576

<sup>&</sup>lt;sup>1</sup>At end-period.

Data: Mar/Hedge

QUESTION: Hedge funds have much higher leverage ratios than do other investors. What are the implications of this? KODRES: Here, it is useful to look at the difference between leverage and risk. It is true that hedge funds, because they intend to earn substantially higher returns for their investors than other investment vehicles—such as mutual funds and pension funds—need to lever their positions. However, higher leverage ratios may not entail increased risk. Traditionally, banks that extend credit to hedge funds, deal with them on a "mark-to-market basis." They set up two-way collateral agreements that require daily payments between the bank and the hedge fund to compensate for changes in the value of the underlying currency or securities. The hedge fund may, therefore, have a leverage ratio of 20 to 1 by holding a forward contract in which it only puts down 5 percent, but it will have to make a payment to the bank, daily, on any losses. As a result, even though the leverage ratio is quite high, risk is limited. Margins are also set taking into account the risk of the instrument, with higher risk instruments having higher margin requirements. So, for example, eurodollar futures contracts on a U.S. futures exchange only require about 2.5 percent in initial margin, making a leverage ratio of 40 to 1. A GKO Russian bond, in contrast, has a margin requirement of almost 100 percent. While hedge funds may look risky because of their leverage characteristics, their risk is managed in a way that may not make them any more risky than the average pension fund or mutual fund which, in the United States, cannot explicitly take leverage.

Copies of IMF Occasional Paper No. 166, Hedge Funds and Financial Market Dynamics, by a staff team led by Barry Eichengreen and Donald Mathieson, will be available in late May for \$18.00 (academic rate \$15.00) from IMF Publication Services. See ordering information on page 154.

<sup>&</sup>lt;sup>2</sup>Invest in emerging markets and other specific regions of the world.

<sup>&</sup>lt;sup>3</sup>Take positions on changes in global economic conditions. <sup>4</sup>Attempt to reduce market risk by taking offsetting long and short positions.

<sup>&</sup>lt;sup>5</sup>Attempt to capitalize on events that are seen as special situations.

<sup>&</sup>lt;sup>6</sup>Have an industry focus.

 $<sup>^7</sup>$ Borrow securities they judge to be "overvalued" from brokers to sell them to the market, hoping to buy them back at a lower price when repaying the broker.

<sup>8</sup>Traditional equity funds structured like hedge funds.

<sup>&</sup>lt;sup>9</sup>Allocate their portfolio of investments among a number of hedge funds.