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$1.2 billion credit

IMF completes third Argentine review, opens way for release of funds

The IMF Executive Board completed the third review under the Stand-By credit for Argentina on May 21, approving a strengthened policy program. Completion of this review opens the way for the release of a further SDR 976 million (about $1.2 billion) from the credit, of which SDR 211.7 million (about $267 million) is available under the Supplemental Reserve Facility (SRF). The full text of News Brief No. 01/44, dated May 21, is available on the IMF's website (www.imf.org).

Argentine Minister of the Economy Domingo Cavallo.

Background

Argentina's Stand-By credit was first approved on March 10, 2000, for an amount equivalent to SDR 5.4 billion (about $6.8 billion—see Press Release No. 00/17). In January 2001, the Executive Board approved an augmentation of the credit to SDR 10.6 billion (about $13.4 billion), with SDR 2.1 billion (about $2.6 billion) of the augmented total provided under the SRF (see Press Release No. 01/3). So far, Argentina has drawn a total of SDR 3.8 billion (about $4.8 billion) from the IMF under this Stand-By credit.

Köhler welcomes reformulated program

Commenting on the Executive Board discussion, IMF Managing Director Horst Köhler, said: "The IMF welcomes the reformulation of the program proposed by the government of Argentina. *(Please turn to the following page)*

Institute of International Finance

Köhler calls for a public–private partnership to promote greater financial stability

In remarks to the Institute of International Finance (IIF) meeting in Hong Kong on May 31, IMF Managing Director Horst Köhler stressed the IMF's commitment to work constructively with private market participants in a new public-private partnership. Köhler emphasized that the IMF was giving highest priority to work on early warnings of potential crises, and also discussed efforts under way to refine the framework for private sector involvement in crisis prevention and resolution. Following are excerpts of his remarks.

I welcome the decision to hold this meeting in Hong Kong, as a demonstration of its important role in regional and international financial markets. That is also the reason that the IMF decided to open an office here last October, with the help and encouragement of the Chinese and Hong Kong SAR authorities. This has strengthened our monitoring of regional and global financial markets at a time when careful attention to market developments is particularly needed.

Global and regional economic outlook

The current slowdown in world economic activity is testing the resilience of emerging market economies. Here in Asia, the past two years have brought a sharp recovery from the financial crises of 1997 and 1998. As a result of domestic policy reforms and strong export demand from the advanced economies, growth in Asia has resumed, fiscal and external positions have strengthened, and many countries have regained access to international capital markets. Now there are concerns that the weakening of exports and capital inflows may trigger a reversal of these gains. I believe that Asia will weather the storm. In most Asian countries, the risk of a new crisis has been greatly *(Please turn to the following page)*

Argentina review completed

(Continued from front page) Continued strong implementation of the program should restore macroeconomic stability and address important structural impediments to a recovery of investment and output.

"Argentina's program aims at strengthening confidence through fiscal consolidation to achieve the program's targets for 2001 and fiscal balance by 2005, while promoting the recovery of investment and output through fiscal incentives and regulatory changes. Firm implementation of the program is needed to initiate a virtuous circle of stronger public finances, lower interest rates, and a recovery of economic activity. In this regard, it is essential that tax compliance be improved and that expenditures be contained, in accordance with the commitments under the federal pact of December 2000.

"The IMF recognizes that some policy measures, while essential in the circumstances, would be distortionary if maintained for a long period. Therefore, the IMF welcomes the commitment that the financial transaction tax and the trade tariff increases will be temporary. It also commends the authorities' initiatives to enact reforms that will put the public finances on a sustainable basis. These initiatives include the recent steps to reverse the deterioration in tax compliance, rationalize and reform public administration, address the solvency of the social security system, as well as further liberalize the trade regime. Rapid and sustained progress in these areas will be key to a lasting success of the program.

"Argentina's convertibility regime, the independence of the central bank, and the high capital and liquidity defenses of the banking system are important pillars of the country's economic strategy and have been vital in helping withstand turbulent international financial conditions in recent years. The IMF therefore welcomes the authorities' reaffirmation of their commitment to these policies.

"The IMF welcomes the authorities' efforts to engage creditors in a voluntary debt-swap operation aimed at reducing gross financing requirements in the period ahead, and looks forward to an outcome that will support medium-term financing sustainability.

"In adopting the new measures, the Argentine authorities have responded promptly and effectively in difficult circumstances. The strengthened program deserves the strong support of the international community," Köhler said. ■

Köhler stresses crisis prevention

Köhler: "Highest on our agenda for the coming months will be further work on early warning of potential crises."

(Continued from front page) reduced through stronger macroeconomic fundamentals and the adoption of more flexible exchange rate policies. Unfortunately, the record is mixed when it comes to financial sector reform, improving governance, and strengthening the investment climate, and these remain sources of vulnerability in some cases. But it is clear that markets do differentiate, and countries that stay the course on these essential reforms should experience relatively good growth performance. And it goes without saying that political stability and respect for law and order are crucial for investment, growth, and job creation.

Asian countries have demonstrated that integration into the global trade and financial systems can bring opportunities for higher productivity, increased trade, stronger growth, and more jobs and higher incomes. But the pace of change constantly challenges the ability of societies and political structures to adapt. Support for integration into the global economy is undermined by the fact that too many people in the world have so far failed to share in the benefits. And some countries in Asia feel they have been left too exposed to volatility in international capital flows. Safeguarding stability and world prosperity obliges us to find better methods of international cooperation to address all of these concerns.

Crisis prevention and financial stability

In the wake of the Asian crisis, a broad work program was launched to strengthen the international financial architecture. I do think that these initiatives are making the international financial system more resilient. And while there can be no guarantees, this should give us greater confidence that the international financial system will withstand the current period of testing.

Despite all that has been accomplished, developments in international financial markets over the past few months underscore the importance of concentrating even more on crisis prevention. Last month's meeting of the International Monetary and Financial Committee (IMFC) confirmed the IMF's strategy and work program in this area.

Highest on our agenda for the coming months will be further work on early warning of potential crises. By this I do *not* mean that the IMF would intend to become a rating agency. What is crucial is that we sharpen our ability to identify emerging problems and bring about early and preemptive policy action in member countries. For this, we need to combine quantitative indicators of vulnerability with judgment from the field and from the markets. To ensure the maximum beneficial impact, it will be important for this work to move forward with the full participation of the IMF's membership. In the process, we will need to take care that our warnings about potential crises do not become self-fulfilling prophecies.

The new International Capital Markets Department in the IMF will have to play a major role in this effort. It will serve as the IMF's center of expertise, informa-

tion, and analysis on capital market issues and as its primary point of contact with private and official institutions working in this area. By deepening our understanding and judgment about the operation of capital markets, this new department will strengthen the IMF's capacities for crisis prevention and management and for safeguarding the stability of the international financial system. This department will also play a major role in the IMF's efforts to address conceptual issues affecting global financial markets. For example, I would like to review—together with the private sector—the experiences with financial bubbles and volatility in international capital flows and, on this basis, to contribute to forward-looking financial markets policy. I also see an important role for the new department in helping members in their efforts to gain access to international capital markets.

New public-private partnership

International capital markets have been an engine of innovation and rapid economic growth in the postwar era, and they will take on an even more crucial role in the twenty-first century. There is obviously a need to adjust economic policy concepts to these developments. This change should include building a new partnership between the private financial sector and public institutions like the IMF.

A year ago, in outlining my initial thoughts on the future role of the IMF, I gave a commitment to work constructively with the private financial market participants. This approach is now reflected in a number of key elements of the IMF's work program, including our informal but regular dialogue with senior representatives of private financial institutions, through the Capital Markets Consultative Group (CMCG). Our membership has welcomed this dialogue as an integral part of the task of safeguarding the stability of the international financial system. And indeed, I see the common ground for this in the fact that we all have a strong interest in limiting the risk of financial crises and thereby contributing to sustained growth and development in the world. Such enhanced interactions should not be seen as a way for selected creditors to gain a competitive advantage, but as a way to achieve that common interest.

Last year in Prague, the IMF's membership took a major step forward with the agreement on a framework for private sector involvement in crisis prevention and resolution. Because prevention remains the first and best line of defense against crises, we are looking to private creditors to make better use of information on standards and codes, and to exploit the full potential of collective action clauses, contingent lines of credit, and procedures for a regular dialogue with borrowing country officials, as a complement to preventive actions by the IMF and its member countries. Notwithstanding these steps, the basic principle of the framework is that a market economy requires debtors and private creditors to bear the consequences of their decisions. This means they cannot expect to be "bailed out" by the official sector. I appreciate that the members of the IIF also recognize this principle. With this in mind, I do think it is right to work as much and as long as possible with market-oriented, voluntary solutions negotiated between debtors and creditors.

The Prague framework also made it clear that more concerted approaches to private sector involvement may be required in exceptional cases—including, as a last resort, the use of temporary payment standstills to provide breathing space for working out an orderly and cooperative solution. Obviously, any decision to move in this direction would need to be based on a careful weighing of the costs and benefits. We do not want to risk blocking the creativity of markets and harming emerging market economies. But we have also to recognize concerns about moral hazard. To provide a basis for sound judgment about the approach to take in concrete cases, we will need more adequate information and research—for instance, on the assessment of debt sustainability, prospects for regaining market access after a crisis, comparability of treatment among creditors, and the risks of contagion. The IMF will be engaged in a work program in these areas over the coming months, including outreach to private investors and creditors. I am confident that we will come to solutions that strike the right balance between a rules-based approach and judgment based on the situation in individual country cases. I recognize that the private sector is not one homogeneous entity, but consists of different institutions with different investor perspectives and interests. Therefore, it is all the more important to hear more concretely your views (possibly through the IIF) on the issues of rules and predictability, and how best to strengthen the role of the private sector in crisis resolution. I expect the CMCG will also play an important part in this process.

We know that "the business of business is business." But business leaders also need to be aware of a wider responsibility. There is a growing critical discussion about globalization, and there is the potential for a political backlash against capital market liberalization and integration into the global economy. Therefore, it is important for the financial industry to demonstrate not only political sensitivity but also concrete capability for self-policing. I would encourage, for example, the private sector to work more ambitiously and systematically on voluntary codes of conduct to reduce the incentives for excessive risk-taking. Or, to put it differently, I encourage you to show leadership in promoting a culture of sustainable value creation. This is an objective for which it is well worth joining forces between the private and the public sector. The IMF looks forward to working with you. ■

A market economy requires debtors and private creditors to bear the consequences of their decisions.
—Horst Köhler

Statistical analysis

IMF releases *Quarterly National Accounts Manual* to help countries meet international standards

Quarterly national accounts are an increasingly important specialty within national accounting as more and more countries recognize the importance of quarterly series of national accounts in the management and analysis of the economy. Accordingly, while only a minority of IMF member countries have the benefit of a well-established system of quarterly national accounts, their number is rapidly growing. To address the rising demand for information and training on producing these quarterly series, in May 2001 the IMF released a new *Quarterly National Accounts Manual*. The IMF Statistics Department has drafted the new *Manual* to help countries establish or strengthen their quarterly national accounts to meet international standards and best practice principles in concepts and compilation. The *Manual* takes its place alongside the other manuals the Statistics Department has prepared or is preparing, including the *Balance of Payments Manual*, the *Government Finance Statistics Manual*, and the *Monetary and Financial Statistics Manual*. The new *Quarterly National Accounts Manual*, like all of these manuals, is fully consistent with the overarching international statistical accounting standard—the *System of National Accounts 1993*.

IMF Deputy Managing Director Eduardo Aninat (left) examines the new Quarterly National Accounts Manual. *With him (left to right) are Carol Carson, Director of the IMF's Statistics Department, and the authors of the* Manual, *Adriaan M. Bloem, Robert J. Dippelsman, and Nils Ø. Maehle.*

The new *Manual* draws on the technical assistance experience of the Statistics Department in support of IMF member countries' desire to subscribe to the Special Data Dissemination Standard (SDDS), one requirement of which is the production and dissemination of timely quarterly national accounts statistics. The *Manual* also draws heavily on material prepared for regional seminars on quarterly national accounts in Thailand (1997 and 1998) and Jordan (2000). Finally, the *Manual* has benefited from comments from country experts during a focus group meeting the IMF convened in June 2000.

Like the IMF's seminars on quarterly national accounts, the *Manual*'s intended audience is compilers who already have experience in applying national accounting concepts and methods to the production of annual national accounts series and are in the process of introducing or improving a quarterly system. It will also be of interest to national accounts compilers in general and to users requiring an in-depth knowledge of sources and methods of quarterly national accounts data.

Guidelines

The *Manual* promulgates some broad guidelines for compiling quarterly national accounts:

• Quarterly national accounts should be built on a foundation of timely and accurate quarterly source data that directly cover a high proportion of the accounting aggregates being tracked. Econometric methods and indirect behavioral models are not a substitute for primary data comprising direct measurements of the concepts—such as household consumption expenditure—being measured.

• The quarterly series for any given national accounts aggregate should be consistent with the corresponding but independently derived annual series. Annual national accounts series are produced with a broader array of source data but with a longer lag than quarterly series. So-called benchmarking methods should be employed to align the quarterly national accounts series with their annual counterparts, partly for the convenience of users and partly—and more fundamentally—because the benchmarking methods anchor the quarterly series to the more comprehensive source data underlying the annual accounts.

• Data that are timely generally cannot employ all of the quarterly and annual information that eventually becomes available, because this information is not in hand within a short period—for example, three months—after the end of the quarter of interest. Timely quarterly national accounts therefore must be revised as new data sources become available for recent periods on which preliminary estimates have already been released. The potential inconvenience of revisions to users can best be handled by making revisions on a predictable and public schedule and with adequate public notice and explanation.

• Quarterly national accounts data should be presented as a long time series.

• The potential scope of quarterly national accounts is the whole *System of National Accounts 1993* sequence of accounts, comprising goods and services, income, use of income, capital, financial, and balance sheet accounts. Although GDP and its components—the usual starting point—are important selected aggregates within the first four of these accounts, the other parts of the national accounts system are critical to specific areas of economic

management and analysis and become feasible as a country's statistical system develops.

• Seasonally adjusted data, trend data, and unadjusted data all provide useful perspectives on developments in quarterly national accounts series over time, but the unadjusted data should be the foundation of national accounts compilation.

Within these guidelines, the sources, methods, and scope of each country's quarterly national accounts system will differ according to user preferences, availability of source data, and general economic conditions. Accordingly, the *Manual*'s objective is to indicate a range of acceptable alternatives and to set out general principles that can be applied to develop a quarterly national accounts system suitable to each country's circumstances. It does not give a fixed set of recommendations that must be applied to all situations.

Applications

The *Manual* will be used in future quarterly national accounts training courses presented by the IMF and as an aid in future quarterly national accounts technical cooperation and assistance projects. Beyond this, however, the IMF hopes the *Manual* will support the introduction, improvement, and wise use of quarterly national accounts in many countries. When the *Manual* was being drafted, completed chapters were posted on the IMF's website for comment. These chapters received a very large number of "hits," and the Statistics Department has received significant indirect feedback that the prepublication version has already been influential in the formulation of quarterly national accounts statistical programs around the world.

In drafting the Manual, IMF staff in the Statistics Department were able to draw on their experiences in national accounting in their home countries, as well as in their work on IMF missions providing technical assistance and advice to member countries. ■

Kimberly Zieschang
IMF Statistics Department

Copies of *Quarterly National Accounts Manual: Concepts, Data Sources, and Compilation*, by Adriaan M. Bloem, Robert J. Dippelsman, and Nils Ø. Mæhle, are available for $40 each from IMF Publications Services. See below for ordering information.

Recent publications

Books

Quarterly National Accounts Manual: Concepts, Data Sources, and Compilation, Adriaan M. Bloem, Robert J. Dippelsman, and Nils Ø. Mæhle ($40.00) (see page 184)

Working Papers ($10.00)

01/48: *The Fall and Recovery of the Cuban Economy in the 1990s: Mirage or Reality?* Ernesto Hernández-Catá

01/49: *Currency Crises and the Real Economy: The Role of Banks*, Piti Disyatat

01/50: *High Inflation and Real Wages*, Benedikt Braumann

01/51: *Securities Transaction Taxes and Financial Markets*, K. Habermeier and Andrei Kirilenko

01/52: *Indonesia: Anatomy of a Banking Crisis—Two Years of Living Dangerously, 1997–99*, Charles Enoch, Barbara Baldwin, Olivier Frecaut, and Arto Kovanen

01/53: *Financial Reforms in Sudan: Streamlining Bank Intermediation*, Alexei Kireyev

01/54: *International Trade and Poverty Alleviation*, Geoffrey Bannister and Kamau Thugge

01/55: *Transition Economies: How Appropriate Is the Size and Scope of Government?* Sanjeev Gupta, Luc Leruth, Luiz de Mello, and Shamit Chakravarti

01/56: *Interpreting Real Exchange Rate Movements in Transition Countries*, Mark De Broech and Torsten Sløk

IMF Staff Country Reports ($15.00)

01/72: Netherlands Antilles: 2001 Article IV Consultation

01/73: Netherlands Antilles: Recent Economic Developments, Selected Issues, and Statistical Appendix

01/74: Switzerland: 2001 Article IV Consultation

01/75: Switzerland: Selected Issues

01/76: Republic of Slovenia: 2001 Article IV Consultation

01/77: Mauritius: 2001 Article IV Consultation

01/78: Armenia: Recent Economic Developments and Selected Issues

Policy Discussion Papers ($10.00)

01/1: *Economic Integration and the Exchange Rate Regime: Some Lessons from Canada*, Vivek Arora and Olivier Jeanne

Publications are available from IMF Publication Services, Box X2001, IMF, Washington, DC 20431 U.S.A.
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$48 million credit

Ecuador: IMF completes second review and approves extension

On May 25, the IMF Executive Board completed the second review under the Stand-By credit for Ecuador and approved its extension to December 31, 2001. The full text of News Brief No. 01/47 is available on the IMF's website (www.imf.org).

The Executive Board's decision enables Ecuador to draw up to SDR 37.8 million (about $48 million) from the IMF. Stanley Fischer, First Deputy Managing Director, said: "The IMF welcomes the progress Ecuador has made in recent months, recouping policy slippages of the last year. Economic activity has picked up, unemployment has fallen, and inflation has decelerated sharply. In addition, the fiscal and external positions are stronger than expected and pressures on the banking system have eased. The authorities have shown considerable resolve in implementing politically difficult policy decisions needed to strengthen the public finances and the banking system, and the program is now back on track. Nevertheless, much more remains to be done to continue fiscal consolidation, strengthen the financial sector, and implement structural reforms.

"The recent reduction of energy subsidies and the increase in the value-added tax rate, together with improvements in tax administration, are crucial to sustaining a viable fiscal position by helping reduce dependence on volatile oil revenues, compensating for revenues lost from the abolition of the financial transactions tax and import tariff surcharge, and allowing for a stronger social safety net and improved public infrastructure. With tight control over spending, the fiscal deficit in 2001 is expected to be contained to about 1/4 of 1 percent of GDP. "The steps taken to strengthen the banking system include establishing a bank liquidity fund, liberalizing bank fees and interest rates, recapitalizing Filanbanco, and relaunching the scheme to restructure large household and corporate debts to banks. These measures should give further reassurance to depositors, improve private sector balance sheets, and boost credit to the private sector needed to sustain the economic recovery.

"While the limited progress on structural reforms is of concern, the IMF is encouraged by the agreement reached with a private oil consortium to construct a second oil pipeline and the good prospects for increased private sector participation in the electricity and telecommunications industries. However, Ecuador's political parties need to reach a consensus on the need for structural reforms to allow the country's economic performance and social indicators to catch up with those of many other countries in Latin America. Further substantial progress is needed to increase the flexibility of markets and strengthen the banking system to allow dollarization to be a success in the long term.

"Ecuador's medium-term prospects for achieving fiscal and external sustainability have improved following the debt relief obtained from private and official borrowers and the increase in fiscal revenue projected to result from the new oil pipeline. However, a strong fiscal effort still remains necessary. The IMF welcomes the authorities' plans to deepen fiscal reform by reforming the oil stabilization fund, reducing tax revenue earmarking, and introducing fiscal responsibility legislation," Fischer said. ■

Boorman to leave IMF after Annual Meetings

Jack Boorman, the Director of the IMF's Policy Development and Review Department, announced to the staff of his department on May 14 that he would be leaving the IMF later in the year. He indicated that he had been considering leaving for some time and had told IMF Managing Director Horst Köhler of his decision in February. At that time, he confirmed that he would continue in his position through the ongoing transition to new management, but that he wished to leave soon after the Annual Meetings.

A U.S. national, Boorman joined the staff of the IMF in 1975 from a position of Advisor to the Central Bank of Indonesia. He stayed on in Indonesia and served as the IMF's Resident Representative from 1976 to 1978. Upon returning to Washington, he served as a division chief in both the Asian and European Departments and as Assistant Director in the European Department before becoming Deputy Director of what was then the Exchange and Trade Relations Department (now Policy Development and Review Department) in 1987. He has served as Director of the Policy Development and Review Department since 1990. (An interview with Boorman, in which he discussed the important progress being made in the area of debt relief for the heavily indebted poor countries, was published in the *IMF Survey*, December 11, 2000, page 385; the *IMF Survey* May 7, 2001, page 160, carried a report on Boorman's address to the Bretton Woods Committee on the IMF's Contingent Credit Lines Facility.)

Reinhart examines theory and practice in addressing financial crises

In May, as part of its in-house training program, the IMF Institute presented an internal course on financial crises. Carmen Reinhart, Professor of Economics at the University of Maryland, organized the course, which consisted of papers presented by Reinhart and colleagues, each addressing different aspects of financial crises, their causes, and possible approaches to dealing with them. Reinhart spoke with the IMF Survey *about the causes and prevention of crises.*

IMF Survey: What are the important issues involved in addressing financial crises?

Reinhart: That is a long list. It should begin with better monitoring of risk and the likelihood of financial distress, be it a currency crisis, a banking crisis, or a combination of the two. One lesson that has been learned is that it's fine to continue to monitor all the traditional macroeconomic variables, but monitoring at the micro level is equally important; the benign neglect of financial data and balance sheet data is no longer possible if one wants to assess vulnerability.

Where I see big challenges is in tracking the corporate sector. There is no easy way of collecting and processing data on the state of health of the corporate sector. It's usually only after a crisis that you find out how much debt the corporations had accumulated.

IMF Survey: What do you see as the major exchange rate regime issues? Is there any general trend toward one or the other? What is the best choice of exchange regime for emerging markets?

Reinhart: The trend right now, at least in policy advice, is that countries should stay away from soft pegs and move toward more flexibility, although what exactly is meant by "soft pegs" is not at all clear. None of the Asian crisis countries—Korea, Malaysia, or Thailand—had a categorically soft peg before the crisis hit. They were all classified as managed floats or, in the case of the Philippines, freely floating. Thailand was the only country that had a more explicit peg—and it was to a basket. And, yet, now we're calling them soft pegs.

So the advice seems to be to introduce more exchange rate flexibility, often paired with inflation targets. But I have some doubts about whether we will actually see this in practice. There are a variety of reasons why emerging market countries are concerned about the exchange rate moving too much—what we call "fear of floating." Saying that you have an inflation target isn't going to do away with the problem of fear of floating, especially if there is an issue of high pass-through from the exchange rate to prices, which is particularly problematic for countries with a history of high inflation. For the Asian economies, the fear of floating stems from their high dependence on trade, which is invoiced in dollars, not in their own currencies. Hedging is costly, so exchange rate volatility definitely does have implications for them.

Reinhart: "One lesson that has been learned is that it's fine to monitor all the traditional macroeconomic variables, but monitoring at the micro level is equally important."

I think the common ground for fear of floating in emerging markets is that no matter where they are, they tend to have foreign currency debt, a lot of which is denominated in dollars. One can say, well, you can remedy the problem if the government stops borrowing in foreign currency and bites the bullet and issues only domestic currency–denominated debt. But that is not going to solve all your problems, because that still leaves the private sector. Banks and firms have faced very wide interest rate differentials; they do not internalize the fact that if they all borrow in dollars, that will increase the fragility of the economy. It's like a vicious circle, in that if you have inherited dollar-denominated debts, the central bank is definitely not going to treat the exchange rate with benign neglect. But then if the private sector sees that the central bank is unwilling to let the currency move around too much, it will, in turn, incur further dollar debt.

IMF Survey: Given this fear of floating and the consequences of floating, do you think that the best solution is a hard peg or even outright dollarization?

Reinhart: It makes sense for a lot of countries, clearly for a lot of countries in the Western Hemisphere. Some of them are de facto highly dollarized, with the lion's share of bank deposits already being dollar denominated and the dollar circulating widely alongside the local currency. Moving that additional step isn't as drastic a move as it would seem.

What I think does need some thinking about is sequencing. Why is Argentina in a bind today? One reason—and there are many more—is that the currency is pegged to the dollar, but a lot of its trade is with Brazil

and Europe, whose currencies have depreciated substantially against the dollar. Was it feasible for Argentina to peg to the real or to a European currency when it had the convertibility plan? Of course not. Neither the real nor the euro was in existence then. But even if the euro had been around, the fact is the Argentine economy was already dollarized. So the initial conditions were there. But what is not "natural" is that one third of Argentina's trade is with Brazil, and so much of the rest of it is with Europe. In the context of dollarization, one obvious sequencing issue is to seek a closer trade relationship with the United States to avoid the mismatch that Argentina has found itself in.

I don't think dollarization will start with the big countries; it will probably be the smaller Central American countries first, which are already de facto highly integrated with the United States. I do not see anything as momentous as the Latin America economies, which can never agree among themselves about anything, deciding en masse that they are going to form a dollar bloc. It's more likely—to the extent that it happens at all—to happen on a piecemeal basis.

Reinhart: "A currency crisis hits hard, but it's over relatively quickly. Banking crises are much more protracted."

IMF SURVEY: What about the Asian economies, which seem to be reverting to their precrisis exchange rate regimes—that is, a so-called soft peg? Is there a rationale for this move? Does it make sense in the present economic climate, especially given the slowdown in the U.S. economy?

REINHART: The rationale is that they are very dependent on trade, their trade is invoiced in dollars, and their debts are denominated in dollars. Because their trade is invoiced in dollars, they shadow the dollar. When their currencies depreciate against the dollar, as has happened recently, that's fine. But when their currency begins to appreciate against the dollar, they fight it tooth and nail. I see no evidence to suggest that this is going to change. Frankly, I don't know what route the Asian economies will eventually take, because they are not obvious dollarizers as the Latins are, and they have no obvious reasons for forming a bloc with the yen, because neither their trade nor their debts are yen denominated.

IMF SURVEY: In addition to recent currency crises, we have witnessed a spate of banking crises, which may have even longer-lasting and more serious effects than currency crises. There have been considerable efforts to strengthen the financial sector, and yet, there still seems to be considerable risk. Why is this?

REINHART: A currency crisis hits hard, but it's over relatively quickly. Banking crises are much more protracted. When the banking sector is as hard hit as it was in some of the recent crises, the recovery process is very slow. Banks need time to recapitalize and provision. The process is also very procyclical, so very little new lending goes on during the recovery. It also takes time for the bad loans to be written off. Witness Japan, for example. I think steps have been taken, but some of the banking sectors are still very shaky. Look at Mexico, which had its crisis in 1994 and 1995, and the real cleanup has taken off in earnest only in the past couple of years.

Another concern is that the quick rebound of the Asian economies from the 1997–98 crises put some of these structural issues on the back burner. For a while, the argument goes, things were going swimmingly again. International capital is flowing back, and equity markets have started to rebound. That slowed the momentum of reforms.

In my view, the Asian economies are in for a rough period. Their stock prices and their exports have been falling. And a slowdown in the United States is not trivial for the Asian economies, which stand to be hit in two important ways. First, U.S. demand for the kinds of things they export is very sensitive to changes in income. That is good when the United States is in a boom, but it works the other way when the United States is slowing down. On top of that, Asian exports are heavily geared toward the technology sector, which is being particularly hard hit. You put those two things together, and there is cause for concern, especially against a backdrop of unresolved nonperforming loan problems.

IMF SURVEY: The fallout from financial crises, especially the spread of their effects from country to country, has been a cause for concern, particularly since neither the phenomenon, nor the transmission mechanism, is well understood or easily identified. Has any progress been made recently in understanding or dealing with this problem?

REINHART: As I see it, the bottom line on contagion is that one should worry more about financial sector links as the vehicle, rather than trade links; in other words, countries that have a common lender are more likely to be prone to contagion. Take the Asian situation, for example. Emerging Asia was borrowing increasingly from Japanese and European banks in the run-up to the 1997 crisis. Bank for International

Settlements (BIS) data on the distribution of bank lending from Japan show that the highest exposure of Japanese banks was to Thailand. So when Thailand has a crisis and Japanese banks are in turn affected by this crisis, there's a rebalancing of risks that leads them to pull out of other countries they have been lending to. So when the shock begins in Thailand, it doesn't spill directly from Thailand to Indonesia, but rather via the common lender. All one has to do is check out BIS data to see what a massive reversal in bank flows there was during this period. You go from large net inflows to large net outflows at the drop of a hat. It's European banks and Japanese banks quickly pulling out of all the countries.

This does have parallels, by the way, with the U.S. banks in the late 1970s and early 1980s, which had been aggressively lending to Latin America—in particular, Mexico. So when Mexico started to fall, the banks pulled out of the region in a hurry.

Another issue is why some episodes lead to contagion, while others do not. Brazil devalued in January 1999 and not much happened. The recent devaluation of the Turkish lira also hasn't resulted in contagion. The common feature between Turkey and Brazil is that these crises were widely anticipated. These two episodes didn't have the same surprise element that Mexico had in December 1994 or Thailand in July 1997. And while many were anticipating that Russia would devalue in August 1998, few were expecting it to default, because after all these bailout packages, certainly Russia would also be bailed out.

IMF Survey: Pressure has been mounting these days for the IMF to confine its efforts, or at least focus on, crisis prevention rather than rescues after the fact. What would be the implications of such an approach for the global economy and how feasible is it?

Reinhart: Crisis prevention is clearly a laudable area of focus. Who can argue with that? These crises are so costly, not just in terms of the bailouts, but also in terms of the output losses in these countries and the setbacks in fostering a middle class, and so on.

Let's, for a moment, though, take the hypothetical case of the IMF correctly foreseeing a crisis coming in a country that does not have a program with the IMF. It advises the country to take preemptive policy action, but it's not clear to me that the country is going to do it. For one thing, the authorities may have a different view and interpretation from the IMF's. Second, we all know that where the IMF has leverage is in countries with IMF-supported programs. Let us say for a moment that the IMF had correctly pinpointed the vulnerabilities in Korea and told the Korean authorities. Would the Koreans have acted on it? I don't know. Does better tracking of potential problems lead to fewer crises? Well, the chances are good that somebody will listen. But you can't guarantee it.

IMF Survey: But should the IMF get out of the rescue business altogether?

Reinhart: You really can't if you don't know whether the crisis may become systemic. We all know after the fact whether it did or it did not, but not beforehand. And that's something that's going to weigh in. It's still not ancient history that the whole Western Hemisphere went through a lost decade in the 1980s. Something that may be worth exploring is the extent to which the relatively swift rebounds that we've seen in recent crises—in Mexico and in Asia—are associated with the fact that no one defaulted. It would seem to me that as long as the issues of contagion and potentially systemic problems are out there, you just can't simply say no.

IMF Survey: Your course is entitled "Financial Crises: Fact, Theories, and Policies." This suggests a continuum, leading, one hopes, to a solution. Given the overwhelming complexity of the problem, what is the most promising approach policymakers can take?

Reinhart: Obviously, no single answer can fit all the experiences. But it is sometimes useful to sit back and say, let's see: Did capital controls work during the crisis? If so, when and where? Can you draw lessons from that? Are certain models of, say, implicit guarantees more consistent with the data than other explanations of the crisis? If so, the implication is that you want to limit implicit and explicit guarantees and reduce moral hazard problems.

IMF staff who deal with these problems on a daily basis have to think about these issues, but absorbing all the available information and theoretical material takes a lot of time. Seminars and courses, like this Institute program, allow you to examine a broad range of conceptual issues and experience, not just the country that you happen to be working with that month or that year. The literature on crises, capital controls, contagion, resolution of crises—all of it is growing by the day. It is hard enough for somebody who specializes in that area to keep up with the literature, let alone for practitioners who have to be out there implementing policy. That's the role these courses and seminars try to fill. It is a very efficient way of bringing people up to speed on issues that are critical to their work. ■

Photo credits: Denio Zara, Padraic Hughes, Pedro Márquez, and Michael Spilotro for the IMF.

As I see it, the bottom line on contagion is that one should worry more about financial links as the vehicle, rather than trade links.
—Carmen Reinhart

IMF Institute seminar

Perotti examines economic impact of fiscal policy, weighs elements of successful adjustment

The impact of fiscal policy has garnered considerably less attention in academic circles than that of monetary policy, according to Roberto Perotti, Professor of Economics at Columbia University. Speaking at an IMF Institute seminar on April 2, Perotti reviewed recent empirical studies and highlighted several key findings. He noted that the composition of fiscal adjustment—whether pursued primarily through taxes or expenditures—was often a critical determinant of the plan's longevity and ultimate success. In particular, a reliance on expenditure cuts was more likely to sustain the adjustment effort and reduce the government's budget deficit. He also pointed out that, contrary to conventional wisdom, fiscal tightening is not always recessionary. It can have strong positive effects on private investment—in part because of an often-overlooked transmission channel of fiscal policy: the labor market.

Perotti: Expenditure cuts in successful fiscal adjustments were concentrated in government wages and social spending rather than in public investment.

Irish experience

Perotti cited the Irish experience of the 1980s as a quintessential example of fiscal adjustment. Ireland had been an economy in trouble, saddled with high levels of government debt and mired in low economic growth. On previous occasions, the authorities had attempted to reduce the public deficit largely through tax increases, only to abandon their efforts later and see the deficit balloon again. In 1986–87, however, the government broke from the "European approach" to consolidation and embarked upon an ambitious plan of reducing primary expenditures and cutting spending dramatically over the next two years—to 35 percent from 40 percent of GDP. Tax revenues (as a ratio to GDP) remained virtually unchanged during this period, though tax rates were eventually lowered in later years. Conventional or "Keynesian" logic would suggest that such a large withdrawal of fiscal stimulus should be contractionary, Perotti said. But in Ireland, growth revived, led by a boom in private consumption and investment. Unemployment initially increased but soon declined. And, interestingly, unit labor costs decelerated sharply during the adjustment period, as public sector layoffs and the avoidance of income tax increases helped moderate wage demands.

Composition matters

Could broader lessons be drawn from Ireland's experience? Searching for a more systematic relationship, Perotti and Alberto Alesina of Harvard University examined the evidence on fiscal adjustment in 20 member countries of the Organization for Economic Cooperation and Development (OECD) from 1960 to 1994. Defining periods of tight fiscal policy as years in which the cyclically adjusted primary deficit fell by at least 1½ percent of GDP in a single year (or 1¼ percent on average over a two-year period), Perotti identified 62 episodes of fiscal adjustment. Defining successful adjustments as those in which the deficit ratio in the subsequent three years remained at least 2 percentage points (or the public debt ratio remained 5 percentage points) below its level at the end of the tightening period, he further characterized 16 episodes as successful and 46 as unsuccessful.

Based on this classification, the authors found clear evidence that the composition of fiscal adjustment was pivotal for the persistence of that adjustment. While the sizes of successful and unsuccessful adjustment were broadly similar, the differences in composition were striking. In particular, successful fiscal adjustments featured (on average) reductions in primary expenditures that were twice as large and increases in tax revenues that were almost half the size (in percent of GDP) of the measures taken in unsuccessful plans. In terms of the components, expenditure cuts in the successful group were concentrated in government wages and social spending rather than in public investment, while tax hikes were concentrated on business rather than labor taxes. The reverse was true in unsuccessful cases.

Perotti cautioned that the finding regarding which spending components mattered most was not a robust one, though the importance of overall spending cuts was well supported in the case of OECD countries. The evidence in Latin America, however, was less compelling. Conducting the same type of analysis in a panel of Latin American countries, Perotti and Alesina found little supporting evidence that expenditure cuts were critical for fiscal success. If anything, tax measures appeared to be the more important ingredient in persistent adjustments, consistent with the notion that a key fiscal issue in these countries was their ability to collect revenues.

Macroeconomic consequences

The second half of Perotti's presentation focused on the macroeconomic outcomes of fiscal adjustment. The traditional Keynesian approach suggests that fiscal tightening tends to lower aggregate demand and reduce output through the standard multiplier effect.

Perotti argued, however, that in many instances fiscal contraction was not recessionary, particularly in the case of expenditure-led tightening. In a related study looking at the same panel of industrial countries, Perotti and Alesina found supporting evidence that adjustments emphasizing expenditure cuts were associated with higher growth and declining unemployment. In these instances, the negative demand effects of reduced government expenditures were more than offset by higher private consumption and (particularly) higher investment.

Why would consumption boom? A reduction in public spending, if sustained, lowers future taxes and their present value, augmenting private sector wealth, Perotti explained. Consequently, private consumption increases, provided that agents have reasonable access to capital markets and, thus, can base consumption decisions on permanent income. The pervasive role of liquidity constraints in developing countries is possibly one reason why the fiscal effects in Latin American countries appear to differ from those in OECD countries. In Latin America, consumption may depend more on current disposable income than in industrial countries and thus behave somewhat differently.

Work by Francesco Giavazzi and Marco Pagano found that private consumption booms were more likely to be associated with large cuts in the budget deficit, Perotti said. These sharp reductions in budget deficits were achieved not only by cutting public consumption but also by raising taxes or reducing transfers. This finding suggests the importance of initial conditions and not just wealth effects. Large budget cuts could steer the economy clear of a disruptive "fiscal crisis" later or resolve uncertainty about aspects of the impending adjustment. This would signal fiscal control, bolster confidence, and lower the need for precautionary saving.

To examine whether conditions of "fiscal stress" contributed to positive consumption effects, Perotti presented empirical estimates that accounted for the initial level of public debt. He found some support for the notion that at high levels of government indebtedness (namely, debt ratios in excess of 90 percent of GDP), the effects of fiscal tightening on consumption turned from negative to positive, in accordance with the "fiscal stress" hypothesis. The finding was also broadly consistent with the explanation that tax distortions are much greater at high debt levels and are materially reduced as a result of a large budgetary adjustment.

Still far from settled, however, is the question of whether consumption and output increase as a result of tighter fiscal policy. Citing recent work by Olivier Blanchard and Perotti (1999) on the same set of OECD countries, he found contradicting evidence that output and consumption fall with lower government spending (or higher taxes). This was consistent with the conventional wisdom, though the fiscal multipliers are small (that is, close to 1). Their study also found, however, that private investment does increase considerably when fiscal policy is tightened, in line with Perotti's earlier conclusions. The robustness of the investment effects of fiscal policy suggests that this relationship merits further examination and is central to an understanding of the likely macroeconomic consequences of fiscal adjustment.

Labor markets and investment

Perotti viewed the investment effects of fiscal policy as not being wholly consistent with either the Keynesian or the modern real business cycle viewpoint. In the standard Keynesian model, lower fiscal spending would raise investment through the interest rate channel but lower it through the income or accelerator channel. Depending on which channel dominated, expenditure cuts and tax increases should have opposite effects on investment. However, Blanchard and Perotti found that higher spending and (to a lesser degree) higher taxes both crowd out investment.

In real business cycle models, the positive wealth effects from a permanent decline in government consumption should induce lower labor supply (that is, higher demand for leisure—a normal good), leading to higher real wages, lower investment returns, and reduced investment spending. Again, the empirical evidence suggests the opposite result. Studies analyzing the impact of fiscal policy on firm profitability and labor costs generally found that public expenditures cuts—particularly in wage-based government consumption—or lower labor taxes were associated with lower real wages and unit labor costs and higher profits and investment.

Perotti offered several observations on how the labor channel operates. Labor taxes, he said, could have a direct impact on unit labor costs by lowering the after-tax income of workers for a given pretax wage, and could thus affect wage setting, depending on the institutional features of the labor market. On the spending side, changes in public sector employment or salaries could also influence wage demands in the private sector. Changes in social spending, such as unemployment insurance and benefits, could affect the threshold at which people decide to seek employment, thus altering labor supply and costs. Although this channel was not mutually exclusive with other avenues, Perotti viewed the labor market as an important transmission mechanism of fiscal policy, and worthy of further study. ■

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IMF Institute seminar

Roubini argues weak financial, banking sectors, compounded by panic, brought on Asian crisis

Traditionally, analysts have viewed currency crises as the result of either fundamental macroeconomic and policy weaknesses or self-fulfilling panic and liquidity runs. With the Asian crisis, however, two seemingly contradictory views no longer seemed so incompatible. In an April 13 seminar at the IMF Institute, Nouriel Roubini, Professor of Economics at New York University argued that while fundamental weaknesses in the financial and corporate sectors created serious precrisis vulnerabilities in many Asian economies, panic and liquidity runs compounded these problems. He also weighed the appropriateness of the IMF's policy advice and discussed the lessons learned from the Asian crisis.

Roubini: In Asia, the key weaknesses were in the private sector.

Causes of the Asian crisis

Several earlier currency crises, notably those in Latin America in the 1980s, occurred in the context of modest growth and large fiscal deficits, which then led to growing external debt and high inflation. By contrast, most Asian economies enjoyed strong macroeconomic fundamentals before the crisis. Gross domestic product and investment grew at high rates, and inflation, fiscal deficits, and government debt were low by international standards.

In Asia, Roubini suggested, the key weaknesses were in the private sector. He cited poor corporate structures (in which the focus too often was on increasing scale and market share rather than on economic returns), weak supervision and regulation of the financial system, connected and directed lending, and implicit and explicit guarantees of financial institution liabilities that created a degree of moral hazard. Weaknesses in the private sector contributed to a lending boom and an overinvestment in risky projects, such as real estate, with low profitability.

Domestic and international capital liberalization may have aggravated existing distortions. Domestic capital liberalization permitted increased borrowing for speculative purposes, which, in turn, led to asset price bubbles. International capital liberalization allowed domestic banks and firms to rapidly increase their borrowing in international markets at low interest rates.

Korea's experience, Roubini said, illustrated his arguments. Excessive investment by the chaebols (the large conglomerates that dominate the Korean economy) had been facilitated by the chaebols' control of financial institutions and the government's policy of directing lending toward favored sectors. Profitability in Korea's auto, steel, shipbuilding, and semiconductor industries dropped, and the corporate sector became more highly leveraged. The top 30 chaebols saw their average debt-to-equity ratio rise to more than 300 percent by the end of 1996, while return on capital fell below the cost of capital for two-thirds of the top chaebols in 1997.

Roubini also noted the problematic role that the exchange rate peg of the Asian currencies to the U.S. dollar (or to a basket of currencies where the U.S. dollar had a large weight) played in touching off the crisis. As negative terms-of-trade shocks hit Asia and as the U.S. dollar appreciated during the 1990s, Asian currencies became overvalued, and large external current account deficits emerged. Compounding matters, short-term unhedged foreign currency borrowing provided most of the financing for these deficits, as the fixed exchange rate regimes encouraged domestic corporations and banks to borrow externally without due regard for the possible currency risk.

Emergence of a "twin" crisis

When the bubble burst in 1997, a "twin" crisis emerged in Asia, meaning that the currency crisis was accompanied by a crisis in the banking and financial sector. Similar twin crises also occurred in Mexico, Russia, and Turkey. In all countries, Roubini observed, a vicious circle quickly emerged, as the depreciation of the currencies exacerbated weaknesses in the financial sector, which in turn fueled further capital outflows and pressure on the exchange rate.

Even before the emergence of a crisis, low profitability in the corporate sector had weakened the financial system, saddling it with a large and growing number of nonperforming loans. With the onset of the crisis, Roubini said, many financial institutions and corporations also found themselves with severe currency and maturity mismatches on their balance sheets. Liabilities were largely in foreign currencies and of short maturities, while assets were mostly in a domestic currency and of longer maturities.

When the Asian currencies started to depreciate rapidly, the domestic currency value of their external debt rose, resulting in severe distress in both the corporate and banking sectors. Currency and stock markets may also have overreacted, Roubini noted. Panic, herd behavior, and a general increase in risk aversion among investors fueled large capital outflows. This, in turn, exacerbated pressure on the currencies and caused liquidity problems for the banks. Moreover, as panic set in, the depreciations became exaggerated and the currencies overshot levels warranted by fundamentals, causing further stress on the financial sector and the corporations. The severe problems associ-

ated with the balance sheet mismatches also help to explain why the sharp depreciation of the currencies contributed to a severe recession in Asia.

Roubini also examined how the emergence of a currency crisis in one country can quickly result in similar crises in other countries. A number of factors can explain this contagion effect, he said, including neighboring countries devaluing their currencies to stay competitive, investors reassessing risks in countries with similar structural vulnerabilities, and international banks reducing their total exposure to a wide range of emerging market economies as they incur losses in one country.

Roubini downplayed irrationality as the chief instigator of contagion. It can be very costly for an investor to acquire complete country-specific information. Indeed, investors may rationally decide not to acquire such costly information, as a well-diversified portfolio tends to reduce the overall risk. Moreover, a certain degree of herd behavior among fund managers could be expected, as their remuneration may be based in part on the fund's performance relative to benchmarks, which discourages unconventional investment strategies.

IMF's role, lessons to learn

Did IMF-supported programs exacerbate the problems of the crisis countries or help restore confidence and growth? On balance, Roubini viewed IMF-supported programs as well designed. Some critics argued that tight monetary policy and high interest rates worsened the crisis and led to further falls of the currencies, but he countered that restoring confidence and preventing a currency free fall required a period of high interest rates. He said there was no evidence that easier monetary policy would lead to an appreciation of a currency in a panic situation. And considering the severe balance sheet problems in Asia, he added, sharper currency depreciations would have exacted a higher cost than temporarily high interest rates did.

There is a general consensus, Roubini said, that fiscal policy might have been a bit too tight in Asia relative to the fall in output. But even this consensus is subject to a few caveats, he noted. First, the fall in output was larger than expected, and fiscal policy was eased once the recession emerged; second, the fiscal costs of the banking crises were large, and fiscal policy was consequently more expansionary than perceived; and, third, additional fiscal stimulus would probably have had only a small effect on output while not restoring investor confidence.

The Asian crisis yielded two important lessons. An emerging market economy that unilaterally pegs its currency to, for example, the U.S. dollar can hope to anchor inflation expectations and avoid excessive exchange rate volatility. But the Asian crisis showed that such a regime is fragile. The peg does not necessarily provide monetary and fiscal discipline and can lead to an overvalued currency and a widening of current account imbalances. Moreover, a pegged rate may encourage excessive foreign currency borrowing, as the perceived exchange rate risk is deceptively small. It is preferable, he indicated, to let the currency float or adopt a hard fixed exchange rate regime akin to a monetary union.

The second lesson highlights the importance of avoiding balance sheet mismatches in the private sector. The Asian crisis experience vividly demonstrates that the vulnerabilities triggered by currency or maturity mismatches can exacerbate the negative effects of a shock to the economy even when overall macroeconomic fundamentals appear sound. Still, it should be remembered, Roubini suggested, that some countries may have to run current account deficits as they grow, so the question remains how such deficits could best be financed. Asia's experience suggests that if the deficits are financed through external borrowing in foreign currencies, it is important that the banks and corporations hedge their exposures. Admittedly, comprehensive hedging might prove difficult and complicated at times, he said, especially for long-term borrowing in countries with less-developed financial markets. For these reasons, he concluded, foreign direct investment remains the best financing alternative. ■

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See Nouriel Roubini's website (www. stern.nyu.edu/globalmacro/) for more information on the Asian crisis and other macroeconomic topics.

Precrisis vulnerabilities

1 = Very serious vulnerability 2 = Somewhat serious vulnerability 3 = Not an issue

	Mexico	Korea	Thailand	Indonesia	Russia	Brazil	Turkey	Argentina
Fixed exchange rates and reserves depletion	1	2	1	2	1	1	1	2
Overvalued currency	1	2	1	2	1	1	2	1
Current account deficit	1	2	1	2	2	2	2	1
Fiscal deficit	2	3	3	3	1	1	1	2
Banking sector weaknesses (twin crisis risk)	1	1	1	1	1	3	1	3
Government short-term debt as percent of total debt (debt rollover risk)	1	3	3	3	1	1	1	2
Short-term foreign debt as percent of total debt (liquidity risk)	1	1	1	1	1	2	1	2
General government and political concerns	2	2	2	1	1	2	1	1
Total foreign debt as percent of GDP or exports (solvency risk)	2	3	3	2	1	2	2	1 or 2
Net foreign currency debt as percent of GDP (balance sheet risk)	2	2	2	2	2	2	2	2

Data: Nouriel Roubini

Latest data

Spending on health and education gaining on military spending in HIPC countries

Worldwide military spending, which has been falling steadily since the end of the Cold War, has stabilized, according to various data sources, including the IMF *World Economic Outlook* (*WEO*), Stockholm International Peace Research Institute (SIPRI); International Institute for Strategic Studies (IISS); and the U.S. Arms Control and Disarmament Agency (ACDA). In 1999–2000, worldwide military spending stood at between 2.3 percent and 2.6 percent of GDP, down from 3.1 percent to 3.9 percent of GDP in 1990, depending on the data source (see table, page 195). As a share of total government expenditure, worldwide military spending fell to between 6.4 percent and 9.4 percent in 2000, from 8.4 percent to 12.5 percent in 1990.

Differences persist across regions

Military spending levels remain highest in the developing countries of the Middle East and lowest in the Western Hemisphere, in terms of both GDP and total expenditure. In the Baltic countries, Russia, and other countries of the former Soviet Union, the decline in military spending since 1990 has been faster if measured in percent of GDP than in relation to total government spending. This shows the resilience of defense spending to overall fiscal retrenchment in these countries. For countries in Africa, the latest data from various sources show military spending at between 2.0 percent and 3.4 percent of GDP.

IMF-supported program countries

At an average of between 1.9 percent and 2.6 percent of GDP, military spending stabilized in countries with IMF-supported programs in the latter half of the 1990s. For countries pursuing reform programs under the IMF's Poverty Reduction and Growth Facility (PRGF), military spending as a share of GDP remains above the world average. The heavily indebted poor countries (HIPCs) had a higher share of military spending, both as a percentage of GDP and as a percentage of government expenditure, in the first half of the 1990s than in the second half, because many were involved in intense armed conflicts. In a sample of up to 19 of the 22

Available on the web (www.imf.org)

Press Releases

01/25: Armenia: $87 Million PRGF Credit in Principle, May 21

01/26: Chad: $260 Million in Debt Service Relief Under HIPC, May 23

News Briefs

01/44: Argentina: Third Review, May 21 (see page 181)

01/45: Armenia: $87 Million PRGF Credit, May 24

01/46: Bosnia and Herzegovina: $18 Million Credit Tranche, May 25

01/47: Ecuador: Second Review and Extension, May 25 (see page 186)

Public Information Notices (PINs)

01/46: Netherlands Antilles, May 17

01/47: Hungary, May 18

01/48: Paraguay, May 18

01/49: Switzerland, May 21

01/50: Slovenia, May 21

01/51: Lesotho, May 21

01/52: Mauritius, May 22

01/53: Bhutan, May 23

01/54: Suriname, May 24

01/55: Iceland, May 24

01/56: Guatemala, May 25

Transcripts

Press Briefing, Thomas Dawson, IMF External Relations Department Director, May 23

Letters of Intent and Memorandums of Economic and Financial Policies*

Argentina, May 21

Gabon, May 25

Heavily Indebted Poor Countries (HIPC) Initiative*

Status Notes: Country Implementation, May 21

Concluding Remarks for Article IV Consultations*

Israel, May 17

Report on the Observance of Standards and Codes*

Mongolia, May 25

Other

IMF Financial Activities, May 18

IMF Financial Activities, May 25

Armenia: Joint Staff Assessment of the Interim Poverty Reduction Strategy Paper, May 25*

*Date posted

HIPCs that reached the decision point by end-2000, military spending has been stable since 1998 at around 1.5–1.9 percent of GDP and at about 6.5–8.4 percent of total government expenditures. In Uganda, the only country to reach the completion point under the enhanced HIPC Initiative so far, military spending ranged from 1.9 to 3.3 percent of GDP in 1999–2000.

Education and health expenditures

Military spending appears to have become a lower priority in HIPC government budgets than spending on education and health care (see chart, page 196). Since the launch of the HIPC Initiative in 1996, the reduction in military outlays in HIPCs has been accompanied by increases in spending on education and health

Military expenditures, 1990–2000

	Percent of GDP[1]					Percent of total expenditure[2]					Number of countries	
	1990	1995	1998	1999	2000	1990	1995	1998	1999	2000	Latest observation	Range (1990–2000)
World Economic Outlook												
All countries	3.7	2.5	2.5	2.4[3]	2.4	12.5	9.9	9.5	9.4	9.6	120	114–131
Advanced economies	3.6	2.6	2.6	2.5	2.5	12.1	9.8	9.4	9.4	9.5	25	24–25
Industrial countries	3.6	2.6	2.5	2.5	2.5	12.0	9.7	9.3	9.3	9.5	22	21–22
Newly industrialized Asian economies	4.3	3.3	3.4	3.1	3.3	23.5	20.1	18.0	16.0	15.4	3	3
Developing countries	2.5	2.2	2.1	2.1	2.1	12.2	11.3	10.2	9.8	10.1	82	78–87
Africa	3.2	2.6	2.3	2.3	2.2	12.1	9.4	8.3	7.8	7.4	43	41–46
Asia	2.0	1.7	1.4	1.5	1.6	10.2	10.4	8.2	8.1	8.4	11	9–12
Middle East	8.5	8.3	8.2	7.4	7.8	22.5	25.2	25.4	24.9	28.9	7	7–8
Western Hemisphere	1.2	1.3	1.4	1.3	1.2	7.6	7.3	7.1	6.6	7.0	18	17–18
Transition economies	6.5	2.6	2.0	2.1	2.2	16.2	9.5	7.3	7.4	8.4	16	13–21
Central Europe	3.0	2.3	2.2	2.0	1.9	6.4	6.4	5.5	5.3	4.8	7	4–8
Baltic countries, Russia, and other countries of the former Soviet Union	6.9	2.8	1.8	2.1	2.4	17.4	13.7	9.2	10.2	13.5	9	9–13
Countries with IMF programs for more than two years	4.2	2.1	1.9	1.9	1.9	15.6	10.3	8.7	8.7	9.2	67	63–68
of which:												
PRGF-program countries	4.6	4.0	3.4	3.3	3.3	16.6	13.1	11.6	11.5	11.9	35	31–36
HIPCs	3.7	3.0	2.5	2.5	2.4	12.7	12.3	10.6	10.2	9.5	30	29–32
of which:												
HIPCs to reach decision/ completion point	2.5	1.8	1.7	1.6	1.5	11.0	8.6	7.8	7.5	7.0	19	18–20
Decision point	2.5	1.8	1.7	1.5	1.5	11.0	8.3	7.7	7.0	6.7	18	17–19
Completion point	…	1.9	1.5	2.2	1.9	…	11.4	9.2	12.8	10.7	1	1
SIPRI												
All countries	3.9	2.4	2.3	2.3	…	10.7	6.4	6.5	6.4	…	85	85–141
Advanced economies	3.3	2.4	2.2	2.1	…	8.5	6.1	6.2	6.0	…	26	26
Africa	2.9	2.3	2.0	2.0	…	9.8	7.7	6.2	6.5	…	16	16–44
Asia	2.6	2.1	2.1	2.0	…	10.9	11.2	10.4	9.6	…	13	13–15
Middle East	7.6	6.4	6.7	6.9	…	20.2	19.1	20.2	20.4	…	8	8–15
Western Hemisphere	1.2	1.4	1.3	0.7	…	4.4	4.5	4.2	3.0	…	5	5–23
Transition economies	2.9	2.2	2.1	2.0	…	6.6	5.3	5.2	4.8	…	17	5–23
PRGF-program countries	3.9	3.5	2.9	2.9	…	15.7	14.6	12.7	13.4	…	19	19–39
IISS												
All countries	3.1	2.8	2.7	2.6	…	8.4	7.2	7.3	7.2	…	141	86–149
Advanced economies	3.1	2.4	2.3	2.2	…	8.0	6.1	6.1	5.9	…	26	24–26
Africa	2.9	2.9	3.4	3.4	…	9.5	9.7	11.0	11.8	…	43	17–46
Asia	2.8	2.9	3.6	3.3	…	11.2	12.7	14.8	13.1	…	12	11–14
Middle East	6.4	4.4	5.8	5.8	…	24.0	13.4	18.8	18.6	…	8	7–9
Western Hemisphere	0.7	1.4	1.9	2.0	…	3.4	4.6	6.3	6.5	…	24	17–26
Transition economies	5.0	2.8	2.4	2.4	…	10.6	6.5	5.8	5.8	…	25	6–25
PRGF-program countries	4.1	3.3	3.6	3.9	…	16.9	13.4	15.9	15.6	…	41	19–41
ACDA												
All countries	3.6	2.6	…	…	…	8.7	6.0	…	…	…	107	90–108
Advanced economies	3.3	2.3	…	…	…	8.3	5.7	…	…	…	27	27
Africa	3.6	3.0	…	…	…	11.7	9.1	…	…	…	32	28–33
Asia	6.0	4.9	…	…	…	9.3	10.5	…	…	…	12	10–12
Middle East	11.6	7.0	…	…	…	26.0	15.3	…	…	…	12	10–12
Western Hemisphere	1.6	1.6	…	…	…	9.0	5.2	…	…	…	19	17–20
Transition economies	11.4	4.7	…	…	…	24.5	10.5	…	…	…	5	5
PRGF-program countries	3.3	3.1	…	…	…	14.8	13.2	…	…	…	29	27–29

Note: *World Economic Outlook* data available until 2000; SIPRI and IISS data available until 1999; and ACDA data available until 1997.

[1] Weighted by GDP.

[2] Weighted by government expenditures.

[3] Revised from earlier figure of 2.1 percent (see *IMF Survey*, May 22, 2000, pages 175–76). The revision reflects the new presentation of military spending data for the United States, which is now on a national accounts basis. The average is wider than the public financed-based series used previously.

Data: IMF, *World Economic Outlook*; ACDA, *World Military Expenditures and Arms Transfers*; SIPRI, *SIPRI Yearbook;* and IISS, *The Military Balance.*

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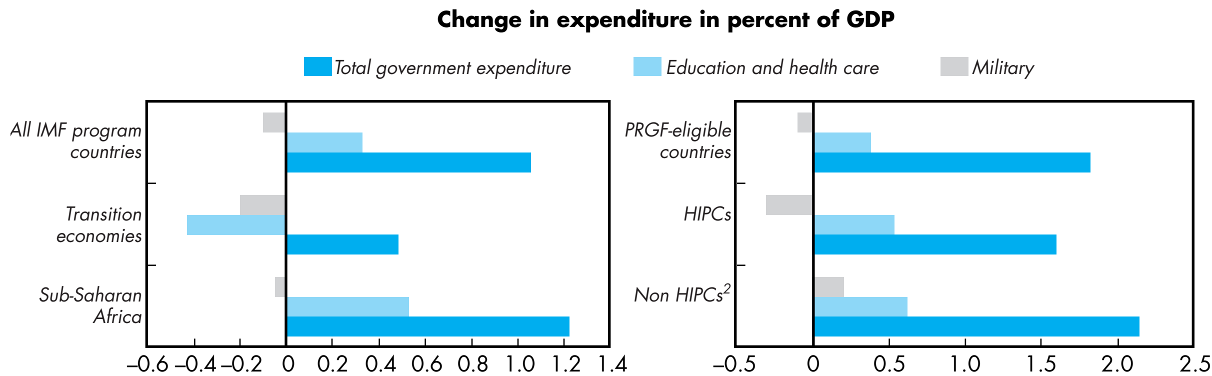
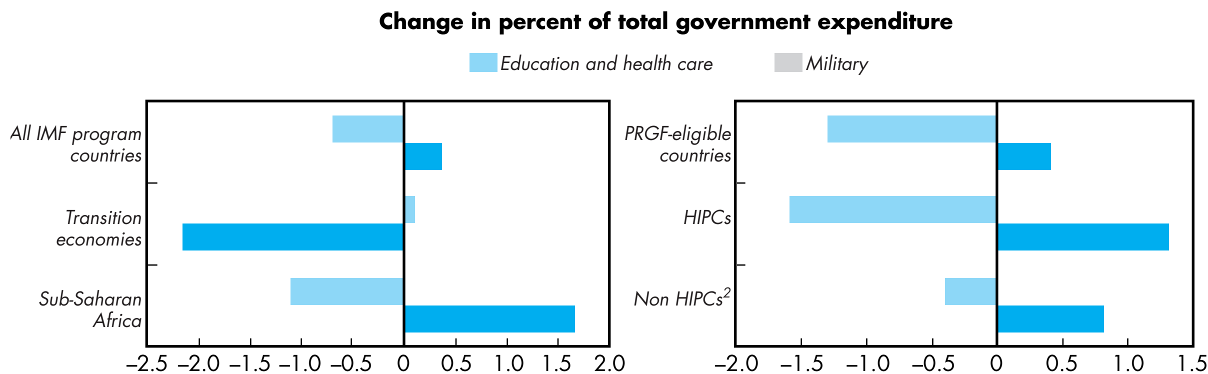
Public expenditures on military, education, and health care, 1996–2000[1]
IMF program and PRGF-eligible countries





[1]Military expenditure data refer to 1996–2000; education and health care expenditure data refer to 1996–99. IMF program countries refer to countries that have had an IMF- supported program for at least two years.
[2]Excludes transition economies.
Data: *World Economic Outlook*; country authorities; and IMF staff estimates.

care, both as a percentage of GDP and as a share of total government expenditure. The military spending data used in these comparisons are taken from the *WEO* database in order to maximize the sample size. Data from other sources may change the results somewhat, because of differences in country coverage.

Several countries (for example, Cambodia, Honduras, and Lesotho) have indicated in their interim poverty reduction strategy papers (prepared by a country in collaboration with the staffs of the World Bank and the IMF, describing the country's plan for macroeconomic, structural, and social policies) their intention to reallocate resources away from the military sector as part of the process of strengthening civilian rule and deepening the process of political democratization. In Rwanda, military outlays are projected to fall from 3.8 percent of GDP in 2000 to 2.3 percent of GDP by 2004, while social sector outlays are projected to rise from 4.1 percent of GDP to 6.9 percent of GDP over the same period. Some countries that have been affected by armed conflict (Ethiopia) or that have received IMF postconflict assistance (for example, Guinea-Bissau and Rwanda) aim to reduce military spending by implementing policies for demobilizing soldiers. Some of these programs are being implemented with the assistance of the World Bank. ■

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IMF Fiscal Affairs Department

Selected IMF rates

Week beginning	SDR interest rate	Rate of remuneration	Rate of charge
May 21	3.58	3.58	4.21
May 28	3.59	3.59	4.22

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 rate of remuneration is the rate of return on members' remunerated reserve tranche positions. The rate of charge, a proportion 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 burden-sharing arrangements. For the latest rates, call (202) 623-7171 or check the IMF website (www.imf.org/cgi-shl/bur.pl?2001).

General information on IMF finances, including rates, may be accessed at www.imf.org/external/fin.htm.

Data: IMF Treasurer's Department