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An Evaluation of the IMF's Multilateral Surveillance—Background Documents

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I. PREVIOUS REVIEWS ON MULTILATERAL SURVEILLANCE

Surveillance may well be the most frequently assessed activity within the IMF. It has been under virtually continuous review since the adoption of the 1977 Surveillance Decision, through both regular and ad hoc processes, including periodic (initially annual, now biennial) reviews mandated by the 1977 decision, frequent internal discussions among the staff, and the 1999 external evaluation (the Crow Report). To help define the parameters of this evaluation, it is useful to establish what previous reviews of surveillance have said about multilateral surveillance in the IMF.

Although the IMF has been involved in multilateral surveillance almost from the beginning, its focus has historically remained on bilateral surveillance. This in part reflects the legal origin of bilateral consultations, which derived from Article XIV of the IMF Articles of Agreement that authorized member countries to maintain exchange restrictions subject to the requirement that they held regular consultations with the IMF. Although the scope of multilateral surveillance has expanded over time in response to the increasing globalization of economic activities, it has still received far less resources than bilateral surveillance and, as expected, previous reviews of surveillance have said far more about bilateral surveillance, and multilateral surveillance as such has received rather limited attention.

While different reviews have emphasized different aspects of multilateral surveillance, it is striking that there is a common set of issues which virtually every previous review has addressed. In 1999, for example, the Chairman's Summing Up of the Executive Board discussion of the Crow Report noted "the substantial common ground between the evaluators' report and the Fund's own internal evaluations," which included the need to "(ii) give more explicit attention to international aspects of a country's macroeconomic policies and spillover issues; (iii) focus more on cross-country comparisons and regional developments;.....and (v) give more emphasis to financial sector and capital account issues." Five years later, in 2004, the internal Biennial Review still noted the need to strengthen the treatment of global spillover, regional developments, and global capital markets issues.

The key findings and recommendations of previous evaluations, including internal staff assessments, fall broadly under the following three headings:

• Integration of multilateral and bilateral surveillance;

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¹ In addition, other stakeholders have also commented on how to strengthen IMF surveillance at various times. Crockett and Goldstein (1987), for example, review the reports issued in 1985 by the Deputies of the Group of Ten and the Deputies of the Group of Twenty-Four on international financial architecture issues, including IMF surveillance.

² For example, the flagship vehicle of multilateral surveillance, the *World Economic Outlook*, originated as late as June 1969 (Boughton, 2001).

- Regional surveillance; and
- Capital market surveillance.

The fact that these are recurring themes suggests the inherent difficulty of addressing these issues, but can also mean that, in some cases, staff has not been provided with clear guidance on how to prioritize different surveillance activities. We highlight below the main findings and recommendations on these issues, as found in the four most recent external or internal reviews of surveillance: the 1999 Crow Report; and the 2000, 2002, and 2004 Biennial Reviews (Table 1.1).³

Integration of multilateral and bilateral surveillance

The Crow Report emphasized the need to focus surveillance on the international aspects of a country's policies, the linkages across countries, and the lessons countries could learn from the experience of others, and stated that a broad shortcoming of IMF surveillance was the lack of integration of multilateral and bilateral surveillance. It further observed that the forecasting exercise for the WEO was too much of a "bottom-up" process (in which inputs were provided by area departments) and thus suggested that the Research Department should be given ultimate responsibility for the WEO forecast in order to strengthen the "top-down" element.

Much of the 2000 and 2002 Biennial Reviews, while recognizing that there was still room for improvement, described how the IMF had responded to the call for better integration of multilateral and bilateral surveillance. The 2000 review, for example, stated that cross-country themes had appeared more frequently in bilateral surveillance since the Asian crisis. Likewise, the 2002 review stated that the integration of multilateral and bilateral surveillance had "evolved significantly," with the establishment in 2001 of a vulnerability exercise in which information from multilateral surveillance plays a critical role. These reviews understandably reflected the period they covered, when the frequency and global nature of financial distress affected many member countries, and the institution responded by addressing the perceived deficiencies in surveillance instruments.

³ "Biennial Review of the Implementation of the Fund's Surveillance and the 1977 Surveillance Decision" (SM/00/40), February 18, 2000; "Biennial Review of the Implementation of the Fund's Surveillance and the 1977 Surveillance Decision" (SM/02/82), March 14, 2002; and "Biennial Review of the Implementation of the Fund's Surveillance and the 1977 Surveillance Decision" (SM/04/212), July 2, 2004.

Table 1.1. Key Findings and Recommendations of Previous Reviews on Multilateral Surveillance

	1999 Crow Report	2000 Biennial Review	2002 Biennial Review	2004 Biennial Review
Integration of multilateral and bilateral surveillance	There is a lack of integration between multilateral and bilateral surveillance; there is a need for more multilateral and cross-country analyses in bilateral surveillance; RES should be given ultimate responsibility for the WEO forecast in order to increase the "top-down" element of multilateral surveillance.	Cross-country perspectives are frequently found in bilateral surveillance, but key themes from multilateral surveillance are rarely found.	Significantly greater integration has been achieved by the introduction of a vulnerability assessment framework in which information from multilateral surveillance plays a critical role.	Integration is satisfactory in terms of quantitative macroeconomic analysis, but substantial room remains for strengthening the analysis of global spillovers and for discussing the impact of global economic conditions and risks in Article IV reports.
Regional surveillance	Surveillance of the euro area should center around the ECB and other EU institutions, with reduced emphasis on bilateral surveillance; there is a need to bring regional spillover issues directly into country consultations and Board discussions	The modality for euro area surveillance has been successful, and similar arrangements are being made for other currency unions; the IMF has been providing intellectual and analytical support to other regional initiatives, including through the establishment of the Office for Asia and the Pacific.	Contacts between staff and regional economic institutions have intensified.	Despite some recent regional surveillance initiatives by area departments, regional spillovers are seldom covered in Article IV reports. Annual Board discussion of regional developments, and a further formalization of surveillance in currency unions outside the euro area, are called for.
Capital market surveillance	Greater attention should be paid to the forces driving the capital account in order to better appreciate the macroeconomic effects of international capital flows.	There has been deeper discussion of the composition of capital flows and more assessment of the risk that these flows could pose for financial intermediaries and the economy at large. Even so, staff reports would benefit from more description of the capital account policy regime and an assessment of the influences of capital flows on the macroeconomy and the financial sector	Capital market surveillance has been improved by intensified information gathering and greater interactions with market participants, which was made possible by the establishment of ICM and the Capital Markets Consultative Group. However, it is still not well integrated with macroeconomic surveillance.	There is a near absence of references to global capital markets in Article IV reports.

The 2004 review duly recognized the progress achieved through these initiatives, but observed that there was "substantial room to strengthen the analysis of regional and global spillovers." It noted the progress made in integrating the quantitative aspects of bilateral and multilateral analysis—with country data bases feeding into WEO projections and country desks making use of WEO forecasts. Yet, the staff reports for Article IV consultations contained very little discussion of the impact of global economic conditions and risks; and there was almost no reference to global capital markets in the Article IV reports. This is a criticism of bilateral surveillance, but we can also consider this as a criticism of the way multilateral surveillance is put to use within the IMF.

Regional surveillance

There are two aspects to regional surveillance. One is how to adapt the modality of bilateral surveillance to a group of countries under a currency union that share a common monetary policy, and the other relates to the need to incorporate regional spillovers and linkages in surveillance work. The Crow Report addressed both of these issues by recommending that surveillance of the euro area center around the European Central Bank (ECB) and other European Union (EU) bodies, and that regional spillover issues should be directly brought into country consultations and Board discussions.

The 2000 and 2002 reviews devoted much of their discussion to describing the progress made in implementing the recommendations of the Crow Report. The 2000 review, for example, stated that the IMF had paid increasing attention to regional issues from an institutional perspective—there had been more reporting of regional developments to the Board; and the IMF had provided analytical and technical support to regional forums, including through the establishment of the Office for Asia and the Pacific. Likewise, the 2002 review noted that contacts between IMF staff and regional economic institutions had intensified, particularly in the case of currency unions.

The 2004 review, while acknowledging that area departments had made significant efforts to strengthen regional surveillance (through the preparation of regional outlooks, occasional seminars and research papers), noted that regional spillover issues were still rarely discussed in the staff reports for Article IV consultations and, in the case of currency unions outside the euro area, called for a greater formalization of regional surveillance. It further suggested that the results of ongoing regional analysis should regularly be communicated to the Board; annual meetings be organized to discuss economic and market developments in different regions; and the timing of Article IV consultations of neighboring countries could possibly be coordinated in order to promote discussions of regional economic interactions.

Capital market surveillance

The IMF has considerably strengthened its capacity to conduct financial sector and capital market surveillance since the Asian crisis. Of these, financial sector surveillance relates more specifically to bilateral surveillance, for example, within the framework of the Financial Sector Assessment Program (FSAP) jointly administered by the IMF and the World Bank

(see IEO, 2006). In this evaluation of multilateral surveillance, our focus is more on capital market surveillance, including the surveillance of global financial linkages and international capital movements.

Following the Crow Report, which called for greater attention to the forces driving the capital account, the 2000 and 2002 reviews observed the progress made. The 2000 review noted that there had been deeper discussion of the composition of capital flows as well as more assessment of the risk that these flows could pose for financial intermediaries and the economy at large. Likewise, the 2002 review observed the extensive coverage these issues had recently received in the WEO and the GFSR, and the establishment of ICM and the Capital Markets Consultative Group designed to improve the flow of capital market information to the IMF.

Neither of these reports was complacent. The 2000 review, while stating that key capital account topics were covered in the majority of the staff reports reviewed, suggested that there should be an assessment of the influences of capital flows on the macroeconomy and the financial sector. The 2002 review noted that, despite the improvement in capital market surveillance, capital market and macroeconomic surveillance were still not well integrated. These observations are echoed by the 2004 review, which noted the near absence of references to conditions in global capital markets in Article IV reports. In particular, it stated that "less than 10 percent of all Article IV reports linked domestic financial conditions to movements in world interest rates; only about a quarter of emerging market reports referred to the impact of past or prospective capital market conditions for emerging markets; and less than 20 percent of advanced country reports mentioned the effects of movements on global equity markets."

The role of the Executive Board

In addition to the three recurring themes discussed above, the role of the Executive Board has also received occasional attention in previous reviews. The Executive Board plays various roles in the IMF's surveillance. It authorizes the release of surveillance outputs to the public; it provides guidance to the staff on how to prioritize surveillance activities; and it is the Board's discussion, and the summing up thereof, that expresses the IMF's official views. It therefore comes as no surprise that the role of the Board has also been discussed in the past in the context of multilateral surveillance.

The Crow Report, for example, noted that Executive Directors tended to "lean more heavily on the staff to modify judgments of policies in their respective countries than is healthy for the long-run reputation" of surveillance publications, and called for a simplified Board clearance procedure and the presumption that the staff drafts of multilateral surveillance reports be published as they stood. The IMF's transparency policy (under which most country documents are now released to the public), however, has made this less of an issue in more recent years.

More fundamental to the role and effectiveness of the IMF in multilateral surveillance is the emergence, over the years, of multiple channels for global policy debate. Kenen et al. (2004), for example, argue that strategic direction for the IMF has directly been provided by the G-7 in recent years and that the Executive Board has not been "the forum for debating the principal issues of international financial policy." In part responsible for this outcome were advancements in transportation and telecommunications, which allowed policymakers in national capitals to have direct inputs into the deliberations of the Executive Board (as well as other multilateral forums) and thereby diminished "the freedom of action of Executive Directors." For the IMF's multilateral surveillance to have impact, staff memorandums have noted the need to participate in the G-7 and other intergovernmental processes where key policy decisions are discussed.

II. PRINCIPAL OUTPUTS AND PROCEDURES ASSOCIATED WITH MULTILATERAL SURVEILLANCE

This background document presents an overview of the IMF's principal outputs and procedures associated with multilateral surveillance, including some of those associated with regional surveillance. The list of outputs is not meant to be exhaustive. In fact, the IMF is involved in many other multilateral surveillance activities of varying degrees of importance, including speeches delivered by management and senior officials, research papers prepared on global and regional issues, and occasional Executive Board papers on systemic themes. There is also the Annual Report, which reports on the activities of the Executive Board. Although the main purpose of the Annual Report is to establish the accountability of the Executive Board to the Board of Governors and to the public at large, it does contain some multilateral surveillance elements. Without diminishing the importance of these and other outputs, we will not consider them here, in part because their multilateral surveillance components are largely a by-product of the activities we discuss below.

We present the key outputs and procedures in the following order. First, we discuss the IMF's global reports, the WEO and the GFSR. Second, we discuss internal exercises, including the vulnerability exercise, the CGER, WEMD, FMU, Financial Systems Trends (FST), commodity market updates, and the Global Markets Monitor (GMM). Third, we take up the IMF's contributions to major international forums, including intergovernmental groups (such as the G-7 and the G-20), Working Party 3 of the OECD, the FSF, and various Basel-based committees. Fourth, we review the principal outputs of area departments' regional work. Fifth, we look at the analytical tools used in support of multilateral surveillance. Finally, we describe the IMF's database for multilateral surveillance. An overview of the global reports, internal exercises, and contributions to some multilateral forums is provided in Table 2.1.

A. Global Reports

The World Economic Outlook

Prepared by RES, the WEO is published twice a year and timed to provide input to the April and September meetings of the IMFC (see Box 2.1 for an evolution of the WEO). Although the report is cleared by management and discussed by the Executive Board, it is published with a disclaimer that "projections and policy considerations are those of the IMF staff and should not be attributed to Executive Directors or to their national authorities." The report is accompanied by a statistical appendix that provides historical data, short-term forecasts of GDP, inflation, balances of payments and fiscal variables, and a medium-term baseline scenario for groups of countries.

Box 2.1. Evolution of the WEO 1/

The WEO originated in 1969 as a background document for informal discussion by the Executive Board and remained, throughout the 1970s, an internal exercise at the IMF intended to provide information to staff and member countries confidentially. In 1971, the Executive Board began holding regular informal discussions of the WEO. By the mid-1970s, the WEO formed the basis for surveillance discussions at meetings of groups of IMF Governors, which were successively known as the Group of Twenty and the Interim Committee. By the late 1970s, "the WEO exercise had developed into a major Fund-wide forecasting project, complemented by analysis of key trends and policy developments."

The decision to publish the WEO was made in 1980, and the first published version appeared in May of that year. When a summary of the WEO was leaked two years earlier, the resulting media coverage had indicated the desirability of making the projections and policy analysis available to the public. When the Managing Director, sensing that the time was ripe, proposed that the WEO be published, there was no serious opposition from the Executive Board. Four years later, in 1984, "public interest warranted" making the publication semiannual. The semiannual publication schedule has remained ever since.

From the first discussion of publication, tension arose between the staff and the Executive Board regarding the balance between "forthrightness and sensitivity to members' political concerns." There was a concern that the WEO might include data on member countries that their authorities did not wish to have published; critical comments from the IMF about members' policies might also compromise the willingness of the national authorities to discuss confidential policy issues with IMF staff. An unwritten rule was said to have been agreed on the side of secrecy in these cases: Executive Directors were given the opportunity to delete any statement or data referring to their own countries prior to publication. As a result, objections by Board members often resulted in pointed recommendations becoming blurred and entire draft chapters were occasionally deleted before publication.

The world has greatly changed over the past quarter of a century. The amount of country-related information available to the public has increased substantially. With a greater call for accountability in public institutions, the IMF and many of its member countries have accepted the presumption that all country documents, including the staff reports for Article IV consultations, should be published. Under these circumstances, the WEO can now be expected to contain little surprise to the public, and it has become increasingly rare for the Board to request changes to the draft text.

1/ This is largely based on Boughton (2001), pp. 227–232. All the quotes are from this source.

The forecasting process commences with the U.S., Japan, euro area and U.K. desks providing six-month LIBOR projections, and RES making an assumption on oil prices. Using these initial assumptions, the staff responsible for key countries produces its initial forecasts, which in turn allow RES to forecast the export prices of nonfuel commodities. In addition to the global commodity assumptions, RES also releases Global Economic Environment (GEE) data, which include projections for individual countries.

RES takes the lead in the production of the WEO, frequently interacting with area and other functional departments to ensure the basic global consistency of forecasts. Other functional departments regularly contribute sections, boxes or other material. In addition, RES regularly communicates with ICM, which is responsible for the other main product, the GFSR (described in greater detail below). The two departments exchange their initial outlines early in the production process in order to avoid unnecessary overlaps, and at various stages cooperate on data and messages.

Table 2.1. Key Outputs and Procedures Associated with Multilateral Surveillance

Title	Coverage	Typical length	Frequency	Dissemination	Responsible department(s)
Global reports	C1.1.1	200	0 : 1/ 11	D 11:	DEC.
World Economic Outlook (WEO)	Global	200+ pages	Semiannual (normally April and September)	Public	RES
Global Financial Stability Report (GFSR)	Systemically important markets	200+ pages	Semiannual (normally April and September)	Public	ICM
Internal exercises					
Vulnerability Exercise (VE)	About 50 emerging markets		Semiannual	Internal, restricted	Area departments, PDR, RES, ICM, FAD, MFD, STA
Coordinating Group on Exchange Rate Issues (CGER)	Major industrial countries	5–10 pages of text + 8 pages of tables/graphs	Semiannual	Internal, including Executive Directors	RES, PDR
World Economic and Market Developments (WEMD)	Global	Oral + 60 page handout of tables and charts	5–6 times per year	Executive Board	RES
Financial Market Update (FMU)	Systemically important markets	12–14 page update of GFSR	Semiannual (normally June and November)	Internal, on-line	ICM
Financial Systems Trends (FST)	Global, banking and insurance	25–30 pages	Semiannual	Internal, restricted	MFD
Commodity market updates	Global	Varies, 1–10 pages	Daily to quarterly	Data are public	RES
Global Markets Monitor (GMM)	Global	Varies, 4–12 pages	Daily	Internal	ICM
Contributions to multilateral forums IMF input into intergovernmental groups (e.g., G-7 and G-20)	Global and regional		Periodic	Restricted	RES
IMF input into other international forums (e.g., WP3 and FSF)	Global and regional		Periodic	Restricted	RES, ICM, MFD
IMF input into the Basel-based committees	Global and regional		Periodic	Restricted	ICM, MFD

The Global Financial Stability Report

The GFSR, which succeeded the International Capital Markets Report and the Emerging Markets Financing, presents the views of IMF staff on potential weaknesses in the global financial system. A statistical appendix presents tables and graphs on financial market variables in industrial countries and emerging markets, with the data obtained from both external and internal sources, including the WEO, BEL,⁴ and Financial Soundness Indicators databases. Like the WEO, the GFSR is cleared by management and discussed by the Executive Board, but it is published with a disclaimer that "the analysis and policy considerations are those of the contributing staff and should not be attributed to the Executive Directors, their national authorities, or the IMF."

In choosing the issues to cover, ICM consults with the private sector and regulators; meetings in conjunction with capital market missions and intergovernmental forums are used for this purpose. In the preparation of the report, moreover, the GFSR extensively draws information from ICM's regular informal contact with market participants, including commercial and investment banks, hedge funds, securities companies, pension funds, stock and futures exchanges, and credit rating agencies. In contrast with the WEO, however, the involvement of the IMF's other departments is limited, except for a section on banking sector issues contributed by MFD.

B. Internal Exercises

Vulnerability Exercise

The vulnerability exercise, initiated in 2001 as a quarterly exercise to identify key vulnerabilities and crisis risks, is a semiannual interdepartmental activity that covers about 50 emerging market economies. The output of this exercise is a confidential report to management, drafted by PDR but also signed off by RES and ICM, which summarizes the staff's assessment of macroeconomic, financial, fiscal and external vulnerabilities as well as political risks. (Near-term crisis risks are assessed quarterly for a subset of countries with high vulnerability rating.) The rating of crisis vulnerability is based on quantitative indicators—the global outlook and corporate sector vulnerability (provided by RES), market sentiment on exchange rates and default risks (ICM), banking sector vulnerability (MFD), vulnerability in the public sector for selected countries (Fiscal Affairs Department, FAD), and external sector vulnerability (PDR). Although the report is not shared with the Executive Board, staff's assessments could be presented to the Board as part of WEMD sessions (see below).

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⁴ Bonds, Equities and Loans database. The BEL database contains information on international primary issuance in numerous asset classes, such as equities, loans, loan facilities, bonds, fixed income facilities and other fixed income instruments.

Coordinating Group on Exchange Rate Issues

The CGER was established in 1995 as an interdepartmental working group to assess the likely medium-term path of major country exchange rates, and to identify any significant misalignments that might occur. The main output of CGER is a semiannual report on the exchange rates of the euro area and 10 industrial countries (the United States, Japan, the United Kingdom, Switzerland, Canada, Australia, New Zealand, Norway, Sweden, and Denmark), the preparation of which is timed to coincide with the WEO forecasting cycle. RES and PDR co-chair the CGER, but RES's Economic Modeling Division takes the lead in preparing a major portion of the report. The report is circulated to management and department heads; following management clearance, a portion of the report is also given to Executive Directors for information. The assessments of CGER are expected to provide inputs into exchange rate surveillance by country teams in the context of Article IV consultations, and its coverage is being expanded to include emerging market economies.

World Economic and Market Developments

The WEMD exercise is a periodic updating of world economic and market developments by the IMF's Economic Counselor, aimed at informing the Executive Board. The Executive Board's WEMD session normally takes place five times a year, with another session added if warranted by global developments; sessions in June and November are coordinated with ICM, which simultaneously prepares a Financial Market Update (see below). The Board presentation is made orally by the Economic Counselor, supported by a one-page summary of the global outlook and issues for Board discussion and some 60 pages of tables and graphs. The views expressed, including on risks and potential policy responses to those risks, represent the personal judgment of the Economic Counselor and do not require management clearance before the Board discussion.

The WEMD process starts with a brainstorming session within RES and, when the WEMD is done jointly with ICM, includes RES discussions with ICM early on to coordinate how the macroeconomic and capital market aspects will be covered. An "issues for comment" outlining current developments and proposing issues for Board discussion is circulated to other departments, including PDR, ICM, MFD, the Finance Department (FIN), the Secretary's Department (SEC), and area departments. This document accompanies a set of tables and graphs that are sent to Executive Board members some days before the Board presentation. RES makes a "dry run" presentation to representatives from relevant departments to receive any final comments before the Board session.

Financial Market Update

The FMU is a 12–14 page note prepared by ICM in June and November to summarize developments in global financial markets following the latest GFSR. The note is published on the IMF's intranet and, as such, is available to all staff. The preparation of each issue coincides with the June and November WEMD sessions. The FMU does not involve a formal internal review process within the IMF, so that it is strictly an ICM take of market

developments over the most recent quarter. It is presented to the Executive Board before it is finalized and placed on the intranet.

Financial Systems Trends

The FST is a semiannual 25–30 page document on global and regional banking and insurance trends, prepared by MFD in March and September. It is intended to provide input to relevant country desks regarding vulnerabilities to contagion, and at a greater frequency than can be done through the regular Article IV cycle. It evolved out of the Quarterly Financial System Review, which were tied to the (then quarterly) vulnerability exercise. Explicit country rankings were removed from what eventually became the FST, and are discussed only in the context of the (now semiannual) vulnerability exercise. The focus is on countries with potential vulnerability concerns, though large systemically important countries are also covered. The FST distils information obtained in the course of MFD's bilateral surveillance work into lessons on cross-country themes. It is reviewed by ICM and area departments and released around the same time as the WEO and the GFSR.

Commodity Market Updates

What we call commodity market updates refers to a series of notes and reports prepared by RES's Commodities Unit, which is charged with the task of maintaining a database of principal commodity prices and producing their forecasts. These notes and reports include a WEO appendix on commodity market developments, a quarterly report on OPEC production and semiconductor markets, a weekly report on the oil market, daily email updates on oil market developments, and a fortnightly report on non-oil commodities. Oil price projections, an integral part of the WEO global assumptions, are based on information from futures markets. Forecasts for other commodities are produced two or three times in each WEO cycle, usually jointly with the World Bank. The IMF and the World Bank complement each other, with the IMF paying greater attention to commodities with large weight in world trade, and the World Bank to those which are particularly important for low income countries. The Bank and the IMF each follow about 70 commodities.

Global Markets Monitor

The GMM is an internal report prepared daily by ICM. Depending on the content, its length varies from as short as a few pages to over 10. It summarizes major global market developments in different market segments and also occasionally presents ICM's interpretations and analysis of current issues. It is made available internally at ICM's website

C. Contributions to Multilateral Forums

Intergovernmental groups

The Research Department regularly prepares "surveillance notes" for key multilateral forums to which the IMF is invited to attend, such as the G-7 and the G-20; other departments may

contribute additional pieces, when relevant. G-7 ministerial meetings take place four times a year on average, and G-20 ministerial meetings are held once a year. The Managing Director usually attends these ministerial meetings. G-7 and G-20 deputies' meetings are also held regularly, and the IMF is represented by the First Deputy Managing Director or other senior officials.

The surveillance note for a particular meeting is usually requested by its secretariat or the country holding the chairmanship. The notes are subject to an internal review process and must be cleared by management before transmitted, through the Executive Directors, to the relevant authorities. These intergovernmental group meetings come up at regular intervals. Given the proximity of many of these meetings, a note usually does not differ too much from the preceding one in terms of the description of global economic developments and prospects, and some officials may understandably find them rather repetitious. Staff does its best to respond to last-minute requests for additional material on a particular issue, but what it can do is limited by the lack of adequate infrastructure within the IMF.

Other international forums

Multilateral surveillance also takes pace at the OECD's Economic Policy Committee (EPC) and two of its working parties (WP1 and WP3). While IMF staff attends all of these meetings, it is only at WP3 that the IMF is represented at a very senior level, usually the Economic Counselor. WP3 meetings, which typically last a full day, consist of three sessions covering: (i) the short-term economic outlook; (ii) policy questions at the current juncture; and (iii) special themes (e.g., global imbalances). For each session, the lead discussant is designated ahead of the meeting. The IMF's role is to help inject a global perspective.

WP3 covers only the G-10 countries, and constitutes one of the few groups in the OECD where attendance is restricted to a subset of its members. As a consequence, WP3 has a higher profile than the EPC itself, with the participation of Vice Ministers or their equivalents. In addition, representatives from the IMF, the ECB, the European Commission, and the OECD also attend. The fact that no decisions are taken contributes to a lively and frank exchange of views at WP3. According to senior officials interviewed by the evaluation team, meetings of WP3 have evolved into a useful dialogue between Europe, the United States, and Japan on policy issues of mutual interest, and the discussion informs decisions taken at home.

The Financial Stability Forum brings together senior officials responsible for financial stability in major countries to identify emerging issues. It was established by the G-7, but also includes the central banks of the Netherlands, Hong Kong SAR, Singapore, and Australia, as well as some international organizations and committees. The FSF meets twice a year, typically in March and September. In addition, there are ad hoc "regional" meetings to which the authorities of a particular region are invited. The IMF has two seats and is usually represented by the Directors of ICM and MFD, who subsequently prepare a formal information note to the Executive Board. The IMF provides background documents to the forum, and IMF representatives are invited to make a presentation on global macroeconomic

developments. A Deputy Director of ICM attends a vulnerability discussion, which is held about a month before the full meeting.

Basel-based committees

The IMF is a member of several standard-setting committees, including the Basel Committee on Banking Supervision and its Core Principles Liaison Group, the International Association of Insurance Supervisors (IAIS), the Financial Action Task Force (FATF), the Committee on Payment and Settlement Systems, and a committee of the International Organization of Securities Commissions (IOSCO). Although standard setting may not be what is normally considered to be a multilateral surveillance activity, it nonetheless constitutes a vehicle through which the IMF contributes to creating a more stable international financial system. The IMF is uniquely qualified to provide inputs to this process because of its extensive bilateral surveillance and technical assistance work in the financial sectors of a large number of countries outside the G-10.⁵

The IMF contributes to global standard setting work in two ways. First, it brings global and emerging market perspectives to what is largely a G-10 process. In recent years, the IMF has also communicated its formal views to the standard setting bodies through the Executive Board at least once a year for each set of standards. On occasion, IMF representatives are included in these bodies' drafting committees. Second, the IMF helps to disseminate the work of the standard-setting bodies to countries that are not represented. To this end, MFD has sometimes collaborated with Basel-based bodies to arrange meetings between a core group of assessors and non-G-10 supervisors. Within the IMF, MFD provides training for area department staff on the practical application of the globally accepted standards.

D. Regional Work

Regional work by area departments takes several forms and works through various vehicles, including occasional cross-country analytical work and regional policy discussions with national authorities. Area departments have expanded their regional work in recent years and announced their intention to make further efforts in this area. Two types of regional work have become increasingly formalized: surveillance of currency unions and regional outlooks (Table 2.2). Of the two, the former has a strong bilateral orientation because it covers the monetary and exchange rate policies of member countries that have been delegated to regional institutions.

⁵ Such work includes the preparation of Reports on Standards and Codes (ROSCs) and FSAP exercises.

⁶ As noted in the respective FY2006 business plans for AFR (para 10), APD (paras 12 and 15), EUR (paras 4, 12 and 14), MCD (para 13), and WHD (introduction and para 7).

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Table 2.2. Key Regional Work Outputs

Surveillance activity	Frequency	Dissemination	Responsible department(s)
Euro Area Article IV	Annual, with 6-monthly update	Staff report public since 1998	EUR
WAEMU	Annual	Report public since 2001	AFR
CEMAC	Annual	Report public since 2003	AFR
ECCU	Annual, with 6-monthly update	Report public since 2004	WHD
Sub-Saharan Africa Regional Economic Outlook	Annual, with update	Public	AFR
Middle East and Central Asia Regional Economic Outlook	Annual since 2005, replacing earlier semiannual Middle East and North Africa report and part of CIS report.	Public	MCD
Asia-Pacific Regional Outlook	Semiannual since 2004, 3 times a year 2001–03	Public since 2005	APD
Latin American and Caribbean Regional Outlook	Annual public dissemination, with internal updates 2-3 times a year	Public since 2005	WHD

As to the surveillance of currency unions, drawing on the experience with euro area surveillance, a decision was recently adopted by the Executive Board to formalize discussions with the regional institutions of the Central African Economic and Monetary Union (CEMAC), the Eastern Caribbean Currency Union (ECCU), and the West African Economic and Monetary Union (WAEMU) in the context of the Article IV process. In all these cases, staff reports summarizing the discussions with the regional institutions are prepared. As to regional outlooks, four area departments are involved. AFR, APD, and MCD recently began to publish comprehensive outlooks for their respective regions (consisting of a review chapter and some analytical chapters), while WHD makes a more focused report electronically available to the public.

In addition, there are regional outreach efforts. In 2005, area departments took initiatives to promote the regional dissemination of the main messages of the WEO. In the weeks following the release of the WEO in September 2005, area departments held a number of seminars in different regions of the world, to which they invited officials, academics, market participants, and representatives of the press. These presentations were meant to reinforce the key messages of the WEO by drawing its regional implications. In some cases, regional outlooks (or updates of them) were distributed in connection with these meetings.

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⁷ See "Fund Surveillance Over Members of Currency Unions," SM/05/429, December 2005.

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E. Analytical Tools Used in Multilateral Surveillance

At least three sets of analytical tools support multilateral surveillance. First, the approach used in the vulnerability exercise is based on the analysis of 20 indicators of vulnerability in four sectors: external, public, financial and corporate. Using some thresholds, the methodology assigns the rating of high (H), medium (M) or low (L) to a country for each indicator; a weighting scheme is then used to come up with the final indicator-based rating for the country. While most of the indicators used for this exercise are widely accepted in the literature, use is also made of metrics contributed by the IMF staff's original analysis, including the CGER's assessment of the medium-term paths of major currency exchange rates (see below) and MFD's assessment of data quality and institutional weaknesses in the financial sector. The final rating is given by area departments based on their judgment of country-specific factors, including political risk. A major weakness of this methodology concerns the arbitrary choice of thresholds and weights. Further work is under way to strengthen the empirical basis of vulnerability rating.

Second, two approaches to specify equilibrium conditions are used in the CGER: purchasing power parity (PPP) and macroeconomic (saving/investment) balance. The PPP approach assumes that the real effective exchange rate will be stable over the medium term. The macroeconomic approach estimates the required real exchange rate adjustment by projecting a medium-term saving/investment balance that is consistent with economic fundamentals. This is a multilateral exercise in the sense that real exchange rates are assumed to adjust to clear, for each country simultaneously, the difference between the medium-term equilibrium saving/investment balance and the underlying current account position.⁸

A final major set of analytical tools is the use of global models. Two models have mainly been used in the IMF for policy simulations: MULTIMOD and, more recently, the Global Economy Model (GEM). MULTIMOD is a conventional reduced-form model consisting of several regions, in which global consistency is imposed on the determination of key endogenous variables. GEM is a stochastic dynamic general equilibrium model based on the microeconomic theory of optimizing economic agents (Box 2.2). In both models, the parameters are empirically calibrated to allow policy simulations to generate historically consistent numerical results. Each has its strengths and weaknesses, but the newer GEM has in recent years become the principal tool of policy simulation in the IMF because of its firmer theoretical basis.

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⁸ See Isard et al. (2001) for an exposition of this approach.

Box 2.2. Global Models at the IMF

The main role of global models at the IMF has been to generate alternative scenarios, and more recently to analyze the impacts of structural reforms. Their role in producing projections has been limited, as the baseline projections of the WEO remain by and large compilations of the judgments of country desks. A succession of global general equilibrium models have been developed at the IMF, from MERM and WTM in the 1970s to MINIMOD in the 1980s to successive versions of MULTIMOD through the 1980s and 1990s, to the Global Economy Model (GEM) today. 1/

Early global models had blocks for two regions, namely, the U.S. and the rest of the world. This framework was eventually expanded to include separate blocks for Japan, the euro area, the United Kingdom, Canada, small industrial countries, oil exporters, and less developed countries. Paradigm changes have shifted the focus recently from a long-run steady-state analysis (in MULTIMOD) to a dynamic general equilibrium perspective based on microeconomic theory (GEM).

Briefly, MULTIMOD consists of sets of steady-state equations, the parameters of which have been calibrated to match historically observed data outturns. A global consistency mechanism relates real exchange rates to current account flows, and interest rates to a global saving/investment balance. The gradual closing of identified gaps between the starting point and the (assumed) long-run steady state permits an internally consistent analysis of the global effects of policy changes, subject to the usual caveats of uncertainty surrounding the starting point, the model, and the data. 2/

Policy response scenarios specify both monetary and fiscal policy measures. MULTIMOD's treatment of monetary policy is rules-based and nonactivist, taking into account long lags between monetary policy measures and their impact on the real economy. Alternatives for monetary policy specifications include money targets, fixed exchange rates, and inflation forecast-based rules. Fiscal policy aspects are government absorption, distortionary and nondistortionary capital and labor taxes. The fiscal dimension has been considered a relative strength of MULTIMOD.

WEO analysis has made use of MULTIMOD to assess alternative scenarios and policy issues, such as the unwinding of global imbalances among large countries under different assumptions of policy measures taken. Other issues analyzed have included assessing the impact of oil price increases, interdependence among industrial countries, and productivity shocks related to IT developments. Model-based policy discussions in the WEO have occasionally been extended to bilateral surveillance, particularly for large industrial countries. MULTIMOD's weaker theoretical basis and its reliance on backward-looking expectations, however, imply greater susceptibility to drawing misleading policy inferences.

In contrast, GEM is a stochastic dynamic general equilibrium model that imbeds behavioral elements from microeconomic theory, designed to address the Lucas critique (i.e., reduced-form parameters are endogenous to the environment in which economic agents operate). At least in principle, GEM's framework makes it possible to draw more robust behavioral inferences in simulations of shocks that differ from what has ever been observed before, or more generally where time-series data are very limited. Estimation only enters the picture in calibration, and VAR analysis is used to construct confidence intervals for conclusions. A Bayesian approach is used for sensitivity analysis and to estimate parameter uncertainty. Unlike MULTIMOD that relies on reduced-form equations for trade links, GEM uses consumer preferences and adjustment costs underpinning demand and supply.

Yet, financial and fiscal aspects have been a weakness of GEM. Given the difficulty of incorporating multiple asset markets into general equilibrium models, GEM has no domestic financial sector, and monetary policy is specified as an interest rate feedback rule. To be able to analyze monetary policy better, RES is currently working with several area departments on a small monetary policy model. RES has also been cooperating with other departments on improving fiscal dimensions of GEM, which initially assumed full Ricardian equivalence with no impact on aggregate demand. A parallel Global Fiscal Model (GFM) has introduced liquidity constraints to the model; sticky wages and prices are being introduced to make GFM compatible with the current structure of GEM (for details, see Bayoumi et al., 2004; and Botman et al., 2006).

Use of GEM in multilateral surveillance began in 2003, with a quantitative assessment of labor and product market reforms in the euro area, but it has more recently become an important tool of alternative scenario analysis. In addition, GEM is becoming a popular tool for bilateral surveillance. GEM-based monetary policy analysis is also evolving.

^{1/} For a discussion of the early development of global models at the IMF, see Boughton (2001, pp. 254–261) and the references contained therein.

^{2/} Masson et al. (1990), Laxton et al. (1998), and Isard (2000) provide greater details on the model and its use in policy issues.

F. The IMF's Database for Multilateral Surveillance

The IMF has established in recent years three databases to support its work on multilateral surveillance, including the Global Data Source (GDS); the Bond, Equities and Loans (BEL) database; and corporate sector data. GDS, maintained by RES, provides high frequency data for advanced and systemically important countries; BEL, maintained by ICM, focuses on capital markets in a large number of developing countries, including emerging market economies. The data on the corporate sector are collected by both ICM and RES. These data sets are used in multilateral surveillance work, in conjunction with the IMF's standard economic and financial databases, particularly the *International Financial Statistics* and country desk data.

GDS supersedes earlier efforts to build a high frequency database in the IMF, which began in the mid-1980s. The initial focus was on collecting quarterly (then monthly) data for G-7 countries before the scope expanded to include major emerging markets in the second half of the 1990s. Currently, GDS covers about 50 major industrial and other systemically important countries, and includes macroeconomic, financial market, and commodity market variables. Weekly updates of data collected from internal and external sources enable an informed survey of developments, and allows IMF staff to make cross-country analysis on a consistent basis. A summary of a weekly update is circulated both within RES and to selected individuals outside the department, and is available to all IMF staff electronically.

On the financial market side, BEL provides up-to-date and high frequency information on the capital markets of 172 countries, obtained through a commercial source. The database includes public and private transactions in equity, fixed income and syndicated loan markets, covering maturities, spreads and other specifics. It is updated frequently (daily for bonds and equities and weekly for loans) and is available from the early 1980s, though in varying degrees of quality and completeness. In addition to ICM and RES staff, a large number of IMF economists make use of this dataset. Part of the data is also reproduced as a statistical appendix to the GFSR.

Finally, the multi-country data on the corporate sector consist of two datasets separately maintained by ICM and RES. While both aim to follow developments in the corporate sector in major countries, and both aim to assess corporate sector vulnerability by use of balance sheet information, the two initiatives remain separate efforts at the present. The ICM data primarily concerns the external vulnerability of the corporate sector in emerging markets and goes back to 1990. The RES data, known as Corporate Vulnerability Utility (CVU), provides selected indicators of the following four risks for the corporate sector in industrial countries and emerging markets: external financing, international business cycle, balance sheet, and default. The data on the balance sheets start in 1990 and are updated quarterly. Both ICM and RES efforts mainly feed into the vulnerability exercise (in which industrial countries are not included).

III. TOPICS IN THE WEO

This background document presents a list of topics selected by the WEO during 2000–05. Each topic appears under one single primary subject heading, and is identified as (i) linkage-related analysis (related to economic linkages, policy spillovers and global risks); (ii) cross-country analysis; or (iii) other.

Title	Date	Type of Topic	Coverage
Asset prices			
The global house price boom	9/2004	linkage	Chapter
What explains the recent run-up in house prices	9/2004	cross-country	Box
Housing markets in industrial countries	9/2004	cross-country	Box
How do balance sheet vulnerabilities affect investment	4/2003	cross-country	Box
When bubbles burst	4/2003	linkage	Chapter
How will recent falls in equity markets affect activity	9/2002	linkage	Box
A household perspective on the wealth effect	4/2002	other	Box
How important is the wealth effect on consumption	4/2002	cross-country	Box
Is wealth increasingly driving consumption	4/2002	cross-country	Chapter
Impact of the global technology correction on the real economy	5/2001	linkage	Chapter
Developments in global equity markets	10/2000	linkage	Chapter
Asset prices and the business cycle	5/2000	cross-country	Chapter
Global liquidity and asset prices	5/2000	linkage	Box
Productivity and stock prices in the United States	5/2000	other	Box
Commodities			
Pressures mount for African cotton producers	9/2005	cross-country	Box
Recent developments in commodity markets	9/2005	linkage	Appendix
Data quality in the oil market	4/2005	other	Box
Should countries worry about oil price fluctuations	4/2005	cross-country	Box
Will the oil market continue to be tight	4/2005	linkage	Chapter
Primary commodities and semiconductor markets	10/2001	linkage	Appendix
The global slowdown and commodity prices	5/2001	linkage	Appendix
Commodity prices and commodity exporting countries	10/2000	linkage	Chapter
Developments in the oil markets	10/2000	linkage	Box
Booms and slumps in the world oil market	5/2000	linkage	Box
Current Events			
The Kobe earthquake: an historical analogy to the terrorist attack on the U.S.	10/2001	other	Box
The terrorist attack: impact on the global outlook	10/2001	linkage	Box
Demographics			
Impact of demographic change on saving, investment and current account balances	9/2005	linkage	Box
How will demographic change affect the global economy	9/2004	linkage	Chapter
Implications of demographic change for health care systems	9/2004	linkage	Box
Economic Growth			
Examining the impact of unrequited transfers on institutions	9/2005	cross-country	Box
Is India becoming an engine for global growth	9/2005	other	Box
Return on investment in industrial and developing countries	9/2005	cross-country	Box
The use of specific levers to reduce corruption	9/2005	cross-country	Box
How does macro instability stifle Sub-Saharan African growth	4/2005	cross-country	Box

Title	Date	Type of Topic	Coverage
How should Middle Eastern and Central Asian oil exporters use oil revenues	4/2005	linkage	Box
Output volatility in emerging market and developing countries	4/2005	cross-country	Chapter
Why is volatility harmful	4/2005	linkage	Box
Workers' remittances and economic development	4/2005	cross-country	Chapter
What are the risks of slower growth in China	9/2004	other	Box
Can China sustain its rapid output growth	4/2004	other	Box
Fostering structural reforms in industrial countries	4/2004	cross-country	Chapter
Is emerging Asia becoming an engine of world growth	4/2004	linkage	Box
Accounting for growth in the Middle East and North Africa	9/2003	cross-country	Box
Recent changes in monetary and financial conditions in major currency areas	9/2003	linkage	Box
How would war in Iraq affect the global economy	4/2003	linkage	Appendix
Reversal of fortune: productivity growth in Europe and the U.S.	9/2002	cross-country	Box
Economic fluctuations in developing countries	4/2002	cross-country	Box
Measuring business cycles	4/2002	other	Box
Recessions and recoveries	4/2002	linkage	Chapter
How has September 11 influenced the global economy	12/2001	linkage	Chapter
The long-term impact of September 11	12/2001	linkage	Box
Business linkages among major advanced countries	10/2001	linkage	Chapter
Channels of business cycle transmission to developing countries	10/2001	linkage	Box
Confidence spillovers	10/2001	linkage	Box
How fluctuations in the G-7 countries affect developing countries	10/2001	linkage	Chapter
The growth-poverty connection in India	10/2001	other	Box
An alternative scenario (harder landing)	5/2000	linkage	Box
How can the poorest countries catch up	5/2000	cross-country	Chapter
Trends in human development index	5/2000	cross-country	Box
Exchange Rate Issues			
How did Chile, India and Brazil learn to float	9/2004	cross-country	Box
Learning to float: experience of emerging market countries since the early 1990s	9/2004	cross-country	Chapter
The effects of a falling dollar	4/2004	linkage	Box
How concerned should developing countries be about G-3 exchange rate volatility	9/2003	linkage	Chapter
How have external deficits adjusted in the past	9/2002	cross-country	Box
Weakness in Japan, global imbalances, and the outlook	4/2002	linkage	Appendix
How did September 11 affect exchange rate expectations	12/2001	linkage	Box
The weakness of the Australian and New Zealand currencies	5/2001	cross-country	Box
What is driving the weakness of the euro and the strength of the dollar	5/2001	linkage	Chapter
Convergence and real exchange rate appreciation in EU accession countries	10/2000	cross-country	Box
Why is the euro so undervalued	10/2000	linkage	Box
The pros and cons of dollarization	5/2000	cross-country	Box
Financial Markets	0.4000		_
Why is U.S. international income account still in the black, will this last	9/2005	other	Box
Financial globalization and conduct of macro policies	4/2005	linkage	Box
Regulating remittances	4/2005	linkage	Box
What are risks from low U.S. long term interest rates	4/2005	linkage	Box
Adjustable or fixed rate mortgages: what influences country choices	9/2004	cross-country	Box
Foreign exchange market development and intervention	9/2004	linkage	Box
How will population aging affect financial markets	9/2004	linkage	Box

Title	Date	Type of Topic	Coverage
Are credit booms in emerging markets a concern	4/2004	cross-country	Chapter
Does financial sector development help economic growth and welfare	4/2004	cross-country	Box
How do U.S. interest and exchange rates affect emerging markets' balance sheets	4/2004	linkage	Box
How will the U.S. budget deficit affect the rest of the world	4/2004	linkage	Chapter
Reserves and short-term debt	9/2003	cross-country	Box
The case for growth-indexed bonds	9/2003	other	Box
Corporate financial conditions related to recession severity in the U.S.	4/2003	cross-country	Box
How important are banking weaknesses in explaining Germany's stagnation	4/2003	other	Box
Brazil: the quest to restore market confidence	9/2002	other	Box
Capital structure and corporate performance across emerging markets	9/2002	cross-country	Chapter
Cross-country determinants of capital structure	9/2002	cross-country	Box
Market expectations of exchange rate movements	9/2002	linkage	Box
Capital account crises in emerging market countries	4/2002	cross-country	Box
Debt crises: what's different about Latin America	4/2002	cross-country	Chapter
Argentina: an uphill struggle to regain confidence	12/2001	linkage	Box
Contagion and its causes	12/2001	linkage	Appendix
Financial market dislocations and policy responses post-September 11	12/2001	linkage	Box
Investor risk appetite	12/2001	linkage	Box
Country experiences with sequencing capital account liberalization	10/2001	cross-country	Box
Impact of capital account liberalization on economic performance	10/2001	cross-country	Box
International financial integration and developing countries	10/2001	linkage	Chapter
Financial implications of the shrinking supply of U.S. Treasury securities	5/2001	linkage	Box
International capital flows to emerging markets	10/2000	linkage	Chapter
Fiscal Policy	10/2000	ппкаде	Chapter
Public debt in emerging markets: still too high?	9/2005	linkage	Box
Bringing small entrepreneurs into the formal economy	9/2004	cross-country	Box
Has fiscal behavior changed under EMU	9/2004	cross-country	Chapter
Impact of aging on public pension plans	9/2004	linkage	Box
Fiscal risk: contingent liabilities and demographics	9/2004	cross-country	Box
Public debt in emerging markets: too high?		•	
	9/2003 4/2002	cross-country	Chapter
China's medium-term fiscal challenges		other	Box
Fiscal stimulus and the outlook for the United States	12/2001	other	Box
Fiscal frameworks in advanced and emerging market economies	5/2001	cross-country	Box
Fiscal improvement in advanced economies: how long will it last	5/2001	cross-country	Chapter
Impact of fiscal consolidation on macroeconomic performance	5/2001	cross-country	Box
Japan: a fiscal outlier?	5/2001	other	Box
Fiscal decentralization in transition economies: China and Russia	10/2000	cross-country	Box
Social spending, poverty reduction, and debt relief in HIPCs	5/2000	cross-country	Box
Historical Surveys			
External imbalances then and now	4/2005	cross-country	Box
Historical perspective on booms, busts, recessions	4/2003	cross-country	Box
Historical evidence of financial crises	4/2002	cross-country	Box
The Great Depression	4/2002	linkage	Box
Monetary system and growth during commercial revolution	5/2000	linkage	Box
World economy in the twentieth century	5/2000	linkage	Chapter

Title	Date	Categorization	Type
HIV/AIDS			
HIV/AIDS: Demographic, economic and fiscal consequences	9/2004	linkage	Box
The economic impact of HIV/AIDS in Southern Africa	10/2000	cross-country	Box
Inflation or Deflation		, , , , , , , , , , , , , , , , , , , ,	
Long-term inflation expectations and credibility	9/2005	cross-country	Box
Is global inflation coming back	9/2003	linkage	Box
Could deflation become a global problem	4/2003	linkage	Box
Can inflation be too low	4/2003	other	Box
How concerning is higher headline inflation	10/2001	cross-country	Box
Relationship between fiscal deficits and inflation	5/2001	-	Box
-	5/2001	cross-country	
The decline of inflation in emerging markets: can it be maintained		cross-country	Chapter
Why emerging countries should strive to preserve lower inflation Cycles in nonfuel commodity prices	5/2001	cross-country	Box Box
	5/2000	linkage	DUX
Institutions	0/2005		Chart
Building institutions Developing institutions reflecting local conditions: ownership transformation in	9/2005	cross-country	Chapter
China vs. CEE	9/2005	cross-country	Box
Governance challenges and progress in sub-Saharan Africa	9/2004	cross-country	Box
Economic integration and structural reforms: the European experience	4/2004	cross-country	Box
Structural reforms and economic growth: New Zealand's experience	4/2004	other	Box
Structural reforms in the UK during the 1980s	4/2004	other	Box
Gulf Cooperation Council: challenges on the road to monetary union	9/2003	cross-country	Box
Managing increasing aid flows to developing countries	9/2003	cross-country	Box
Rebuilding post-conflict Iraq	9/2003	other	Box
Growth and institutions	4/2003	cross-country	Chapter
Have external anchors accelerated institutional reform	4/2003	linkage	Box
Institutional development: influence of history and geography	4/2003	cross-country	Box
Institutional development: the role of the IMF	4/2003	cross-country	Box
Promoting stronger institutions and growth: new partnership for Africa's development	4/2003	linkage	Box
Economic growth, civil conflict and poverty reduction in Sub-Saharan Africa	10/2001	cross-country	Box
Accession of transition economies to the EU: prospects and pressures	10/2000	linkage	Chapter
Accession of Turkey to the EU	10/2000	other	Box
Formalities and procedures of EU enlargement	10/2000	other	Box
Previous EU enlargements	10/2000	linkage	Box
Transition: experience and policy issues	10/2000	cross-country	Chapter
India: reinvigorating the reform process	5/2000	other	Box
Poverty reduction strategy papers	5/2000	other	Box
Information Technology (IT)			
Is the New Economy dead	4/2003	linkage	Box
Has IT revolution reduced output volatility	10/2001	cross-country	Box
Has U.S. TFP growth accelerated outside of the IT sector	10/2001	other	Box
IT and growth in emerging Asia	10/2001	cross-country	Box
The IT revolution	10/2001	linkage	Chapter
The IT slump and short-term growth prospects in East Asia	10/2001	linkage	Box
Productivity growth and IT in the advanced economies	10/2000	linkage	Chapter

Title	Date	Categorization	Туре
Labor markets			
Workers' remittances and emigration in the Caribbean	4/2005	cross-country	Box
How labor market reforms and tax cuts led to employment growth in the Netherlands	4/2004	cross-country	Box
Labor market reforms in the European Union	4/2003	cross-country	Box
Regional disparities in unemployment	4/2003	cross-country	Box
Unemployment and labor market institutions: why reforms pay off	4/2003	cross-country	Chapter
Methodology			
Demographic projections: methodologies and uncertainties	9/2004	other	Box
Estimating fiscal reaction functions	9/2004	cross-country	Appendix
Effects of tax cuts in GFM	4/2004	other	Box
Assessing fiscal sustainability under uncertainty	9/2003	cross-country	Box
Data on public debt in emerging market economies	9/2003	cross-country	Box
How to measure global growth	9/2003	other	Box
Measuring foreign reserves	9/2003	cross-country	Box
Global Economy Model	4/2003	other	Box
Identifying asset price booms and busts	4/2003	cross-country	Appendix
Global current account discrepancy	9/2002	other	Box
The gravity model of international trade	9/2002	other	Box
Accuracy of forecasts of recovery	4/2002	cross-country	Box
Was it a global recession	4/2002	other	Box
Accuracy of WEO growth forecasts	12/2001	other	Box
IT revolution, measurement issues	10/2001	cross-country	Box
Measuring capital account liberalization	10/2001	cross-country	Box
Forecasting turning points	5/2001	cross-country	Box
Output volatility and perils of forecasting in Japan	10/2000	other	Box
Policy assumptions underlying projections for some advanced countries	5/2000	cross-country	Box
Revisions in national accounts methodologies	5/2000	cross-country	Box
Monetary Policy		-	
Does inflation targeting work in emerging markets	9/2005	cross-country	Box
Inflation targeting alternatives: money and exchange rate targets	9/2005	cross-country	Box
Monetary policy in a globalized world	4/2005	linkage	Box
Monetary policy rules for the euro area	9/2004	cross-country	Appendix
Are foreign exchange reserves in Asia too high	9/2003	cross-country	Chapter
Introduction of euro notes and coins	4/2002	other	Box
Monetary policy in a low inflation era	4/2002	cross-country	Chapter
Inflation targeting in emerging market economies: implementation and challenges	5/2001	cross-country	Box
Japan's recent monetary and structural policy initiatives	5/2001	other	Box
U.S. monetary policy and sovereign spreads in emerging markets	10/2000	linkage	Box

Title	Date	Categorization	Туре
Regional			
Is investment in emerging Asia too low	9/2005	cross-country	Box
Saving and investment in China	9/2005	other	Box
The Indian Ocean Tsunami: impact on South Asian economies	4/2005	cross-country	Box
What works in Africa	4/2004	cross-country	Box
How can economic growth in the Middle East and North Africa region be accelerated	9/2003	cross-country	Chapter
Rebuilding Afghanistan	4/2002	linkage	Box
Russia's rebound	4/2002	other	Box
The effects of September 11 on the Caribbean region	12/2001	linkage	Box
Relative euro area growth performances: why Germany and Italy lag behind France	10/2001	cross-country	Box
The Japanese economic slowdown and East Asia	10/2001	linkage	Box
The enhanced HIPC initiative in Africa	5/2001	linkage	Box
Addressing barter trade and arrears in Russia	10/2000	other	Box
Privatization in transition economies	10/2000	cross-country	Box
The IMF and the transition economies	10/2000	cross-country	Box
Transition controversies	10/2000	cross-country	Box
Turkey's IMF-sponsored disinflation program	5/2000	other	Box
Trade, FDI, and External Balances			
Explaining divergent external sector performance in the euro area	9/2005	cross-country	Box
Global imbalances: a saving and investment perspective	9/2005	linkage	Chapter
How will global imbalances adjust	9/2005	linkage	Appendix
Globalization and external imbalances	4/2005	linkage	Chapter
Measuring a country's net external position	4/2005	cross-country	Box
Progress made in implementing policies to reduce global imbalances	4/2005	linkage	Box
The ending of global textile trade quotas	4/2005	linkage	Box
Is the Doha round back on track	9/2004	linkage	Box
Regional trade agreements and integration: NAFTA experience	9/2004	linkage	Box
Trade and financial integration in Europe: Five years after the euro's introduction	9/2004	linkage	Box
China's emergence and its impact on the global economy	4/2004	linkage	Chapter
Quantifying the international impact of China's WTO accession	4/2004	linkage	Box
Risks to the multilateral trading system	4/2004	linkage	Box
How do industrial country agricultural policies affect developing countries	9/2002	linkage	Chapter
How worrisome are external imbalances	9/2002	linkage	Chapter
FDI in Africa	9/2002	cross-country	Box
Trade and financial integration	9/2002	linkage	Chapter
Trade and growth	9/2002	cross-country	Box
Transport costs	9/2002	linkage	Box
Using prices to measure goods market integration	9/2002	cross-country	Box
Vertical specialization in the global economy	9/2002	cross-country	Box
Where is India in terms of trade liberalization	9/2002	other	Box
Critics of a new trade round	10/2001	other	Box
FDI and the poorer countries	10/2001	cross-country	Box
Potential welfare gains from a new trade round	10/2001	linkage	Box
The world trading system: from Seattle to Doha	10/2001	linkage	Chapter
Africa's trade and the gravity model	5/2001	linkage	Box
Large current account deficits in EU accession countries	5/2001	cross-country	Box

Title	Date	Categorization	Туре
Reducing external balances	5/2001	linkage	Appendix
Sustainability of the U.S. external current account	5/2001	linkage	Box
Trade integration and sub-Saharan Africa	5/2001	linkage	Chapter
China's prospective WTO accession	10/2000	other	Box
The global current account discrepancy	10/2000	linkage	Appendix

IV. TOPICS IN THE GFSR

This background document presents a list of topics selected by the GFSR during 2002–05. Each topic appears under one single primary subject heading, and is identified as primarily related to (i) advanced markets; (ii) emerging markets; (iii) crisis resolution; or (iv) others.

Title	Date	Type of Topic	Coverage
Risk			
Effectiveness of market for credit risk transfer vehicles	3/2002	Advanced markets	Chapter
Financial implications of Enron's bankruptcy	3/2002	Advanced markets	Box
Mature equity market valuations	6/2002	Advanced markets	Box
Equity market indicate deteriorating investor confidence, lower earnings	0/2002		ъ
expectations, and rising risk perception aversion	9/2002	Advanced markets	Box
Mortgage hedging mechanics	9/2003	Advanced markets	Box
Risk transfer and the insurance industry	4/2004	Advanced markets	Chapte
Credit derivatives	4/2004	Advanced markets	Box
The shift to tightening: parallels between 1994 and 2004	4/2004	Advanced markets	Box
Risk management and the pension fund industry	9/2004	Advanced markets	Chapte
Market repositioning and deleveraging	9/2004	Advanced markets	Box
Household balance sheets	4/2005	Advanced markets	Chapte
High-yield bonds	9/2005	Advanced markets	Box
U.S. auto companies and losses in credit derivatives market	9/2005	Advanced markets	Bo
Collective action clauses	12/2002	Crisis resolution	Во
Recovery rates from defaulted debt	12/2002	Crisis resolution	Во
Collective action clauses: latest developments	3/2003	Crisis resolution	Во
Collective action clauses: recent developments	9/2003	Crisis resolution	Во
Collective action clauses	9/2004	Crisis resolution	Во
Distressed debt markets: recent experiences in mature and emerging markets	9/2004	Crisis resolution	Во
Collective action clauses	4/2005	Crisis resolution	Во
Collective action clauses	9/2005	Crisis resolution	Во
Argentina and the asset class	3/2002	Emerging markets	Во
Balance of risks for emerging market equities	6/2002	Emerging markets	Во
External refinancing risk in Latin America	9/2002	Emerging markets	Во
Scope for emerging market contagion	9/2002	Emerging markets	Во
The role of financial derivatives in emerging markets	12/2002	Emerging markets	Chapte
An international solution for the original sin	3/2003	Emerging markets	Во
The risk of war and emerging market vulnerabilities	3/2003	Emerging markets	Во
Bond market convergence of EU accession countries: recent setbacks and prospects	4/2004	Emerging markets	Во
Emerging market borrowers improve debt structures: case studies	4/2004	Emerging markets	Во
Russia: recent turbulence in the banking sector	9/2004	Emerging markets	Во
Firm-level evidence on hedging activities in the nonfinancial sector in Latin America	4/2005	Emerging markets	Во
Issuing global bonds in local currencies: towards the absolution of original sin	4/2005	Emerging markets	Во
Local debt structure and vulnerability to volatile debt dynamics	12/2002	Other	Во
Risk retrenchment and risk indicators	12/2002	Other	Во
The benefits of portfolio diversification: do they really exist	4/2004	Other	Во
The impact of emerging market crises on insurance companies	4/2004	Other	Во
Distance to distress as a measure of balance sheet vulnerability	9/2004	Other	Во
Stocks, flows, and vulnerability assessments	9/2004	Other	Во

Title	Date	Type of Topic	Coverage
Volatility estimation	9/2004	Other	Box
Distance-to-default measure of bank soundness	4/2005	Other	Box
A sample calculation of potential gains from international diversification Impact of correlation assumptions on multiple default probabilities and CDO tranche-	9/2005	Other	Вох
specific default risk	9/2005	Other	Box
Capital Flows			
Insurance and reinsurance financial activities	6/2002	Advanced markets	Chapte
The shrinking U.S. commercial paper market	6/2002	Advanced markets	Box
The behavior of mutual funds during periods of emerging market volatility	4/2004	Advanced markets	Во
Gauging global liquidity conditions	4/2005	Advanced markets	Во
Pension fund update	4/2005	Advanced markets	Во
Alternative financial instruments and access to capital markets	3/2002	Emerging markets	Chapte
Recent bond warrants	3/2002	Emerging markets	Bo
Emerging market equities as an asset class	6/2002	Emerging markets	Chapte
Developments in Brazil and emerging debt markets since end-June	9/2002	Emerging markets	Box
Emerging market bond developments since end-September	12/2002	Emerging markets	Box
Emerging market contagion in 2002	3/2003	Emerging markets	Bo
"Feast or famine" dynamic prevails in emerging primary markets	3/2003	Emerging markets	Appendi
Volatility of private capital flows to emerging markets	9/2003	Emerging markets	Chapte
Yield compression in Central Europe: convergence expectations vs. macro			•
fundamentals	9/2003	Emerging markets	Во
Institutional investors in emerging markets	4/2004	Emerging markets	Chapte
Emerging markets as net capital exporters	9/2004	Emerging markets	Chapte
Capital flows to Africa and the Middle East	9/2004	Emerging markets	Во
Emerging market spread compression: real or liquidity	9/2004	Emerging markets	Во
German issue of Russian Federation credit-linked notes	9/2004	Emerging markets	Во
FDI to emerging market countries: an Asian perspective	9/2005	Emerging markets	Во
Foreign investment in local currency instruments: cyclical or fundamental	9/2005	Emerging markets	Во
Data sources and the trends in bank lending flows to emerging markets	9/2004	Other	Во
Financing flows and global imbalances	9/2004	Other	Во
Market-based insurance mechanisms	9/2004	Other	Во
Global asset allocation	9/2005	Other	Chapte
Home bias	9/2005	Other	Chapte
Institution Building	2/2002		
Structure of future-flow securitizations—modalities and case of PEMEX		Advanced markets	Во
Enron: lessons learned and the response	6/2002	Advanced markets	Во
Governance and accounting issues	9/2002	Advanced markets	Во
Financial asset price volatility: a source of instability	9/2003	Advanced markets	Chapte
Basel Core Principles compliance and banking system financial strength	9/2003	Advanced markets	Во
EU solvency II and the U.K.'s CP195 initiative	4/2004	Advanced markets	Во
Comparison of U.S. FAS 87, U.K. FRS 17, and proposed IAS standards	9/2004	Advanced markets	Во
Defined benefit pensions and corporate finance theory	9/2004	Advanced markets	Во
Economics and pension fund asset allocation	9/2004	Advanced markets	Во
European energy trading	9/2004	Advanced markets	Во
Proposed risk-based capital system for pension funds in the Netherlands	9/2004	Advanced markets	Во
Recent developments in securitization markets in Europe and Japan	9/2004	Advanced markets	Во
The revised Basel capital framework for banks (Basel II) The text treatment of remain plants a companion for selected industrial countries	9/2004	Advanced markets	Bo
The tax treatment of pension plans: a comparison for selected industrial countries	9/2004	Advanced markets	Вс

Title	Date	Type of Topic	Coverage
Credit derivatives market came of age in 2004	4/2005	Advanced markets	Box
Financial stability considerations related to trends in accounting standards	9/2005	Advanced markets	Chapter
Investment fund industry	9/2005	Advanced markets	Chapter
Collective action clauses: update on market practice	4/2004	Crisis resolution	Box
Emerging local bond markets	9/2002	Emerging markets	Chapter
Common practices in emerging local securities markets	3/2003	Emerging markets	Chapter
Local markets as self-insurance against volatile capital flows	3/2003	Emerging markets	Chapter
Pension fund regulations and local yield curves: the case of Mexico	4/2004	Emerging markets	Box
State bank recapitalization in China	4/2004	Emerging markets	Box
Hedge funds and recent emerging market currency crises	4/2004	Emerging markets	Appendix
Corporate finance in emerging markets	4/2005	Emerging markets	Chapter
Development of corporate bond markets in emerging market countries	9/2005	Emerging markets	Chapter
Corporate bond market in Russia	9/2005	Emerging markets	Box
Demand and supply factors driving corporate bond markets in China and India	9/2005	Emerging markets	Box
Emerging market borrowers intensify liability management operations	9/2005	Emerging markets	Box
Indexed bonds	9/2002	Other	Box
Extent of securities market development as an alternative source of funding	3/2003	Other	Chapter
Regulatory capital regimes	4/2004	Other	Appendix
Hedge fund strategy definitions	9/2004	Other	Box
Individuals' life-cycle savings and global capital markets	9/2004	Other	Box
Sample of popular energy contracts	9/2004	Other	Box
Finance and economic growth: review of the evidence	4/2005	Other	Box
Islamic bonds in Malaysia	9/2005	Other	Box
Others			
Record of stock market anticipating economic turnarounds	3/2002	Advanced markets	Box
Are forward short rates useful indicators of market expectations	6/2002	Advanced markets	Box
Hybrid pension plans	9/2004	Advanced markets	Box
Insurance industry update	9/2004	Advanced markets	Box
Insurance industry update	4/2005	Advanced markets	Box
Longevity bonds	4/2005	Advanced markets	Box
Early warning system models: the next steps forward	3/2002	Emerging markets	Chapter
Alternative measures of contagion	3/2002	Emerging markets	Box
The IMF's core early warning system models—a primer	3/2002	Emerging markets	Box
The demise of Brady bonds	9/2003	Emerging markets	Box
Definition of value at risk	9/2004	Other	Box

V. RELEVANCE AND TIMELINESS OF TOPICS ADDRESSED BY THE WEO AND THE GFSR

This background document presents a list of emerging policy issues discussed by the G-7 and G-20 Ministers and Deputies during 2000–05, as indicated by the relevant Communiqués, and indicates when these issues were taken up by the WEO or the GFSR, where applicable.

Forum	Topic	Date	When addressed in WEO	When addressed in GFSR
G-7	Impact of IT revolution on the Economy and Finance	7/2000	5/2000, 10/2000	
G-7	Launching a new trade round	7/2000		
G-7	Nuclear safety/Ukraine	7/2000		
G-7	Oil price	9/2000	5/2000, 10/2000	
G-20	FSAP and ROSCs (2 instances)	10/2000	(IMF initiative)	
G-7	Turkey	4/2001	5/2000, 10/2000	
G-7	New round of trade negotiations	10/2001	10/2001	
G-7	Argentina (5 meetings)	2/2002	12/2001, 4/2002	3/2002, 9/2002
G-7	IMF's proposal on sovereign debt restructuring Action Plan to improve stability, growth and living	2/2002	(IMF initiative)	
G-7	standards in emerging markets (2 meetings)	4/2002		
G-7	IMF and WB to begin FSAP	4/2002	(IMF initiative)	
G-7	Afghanistan	6/2002	4/2002	
G-7	DOT's plan of action for e-development	6/2002		
G-7	G8 Africa Action Plan	6/2002	9/2002, 4/2003	
G-7	HIV/AIDS	6/2002	10/2000 9/2002 (individual	
G-7	India and Pakistan	6/2002	countries)	
G-7	International exchange of tax information	6/2002		
G-7	Support for Doha round	6/2002	10/2001	
G-7	Support for peace in Middle East	6/2002		
G-7	WB's Education Action Plan	6/2002		
G-7	Brazil (2 meetings)	9/2002	9/2002	9/2002
G-7	Paris Club Debt Restructuring	5/2003		
G-7	Improving security	6/2003		
G-7	Regional issues: Iraq, Israel, North Korea and others	6/2003	4/2003	
G-7	Growth in Middle East (2 meetings)	2/2004	9/2003	
G-7	Remittance flows (2 meetings) Transparency and supervisory standards in offshore	2/2004	4/2005	
G-7	financial centers (2 meetings)	2/2004	4/2003	9/2004
G-7, G-20	Doha round (5 meetings)	5/2004	4/2003	
G-7	Reforms in Middle East and Africa (2 meetings)	5/2004	9/2003, 4/2003	9/2004
G-7	Oil data transparency (2 meetings)	10/2004	4/2005	
G-20	G-20 Reform Agenda Medium-term fiscal consolidation in US, structural reforms in Europe and Japan, and emerging markets,	11/2004	4/2003	
G-20	greater exchange rate flexibility WB and IMF's efforts in promoting institution-building	11/2004	4/2003	
G-20	and development of local capacity WB efforts to develop principles and guidelines for	11/2004	(IMF initiative)	
G-20	effective insolvency and creditor rights systems	11/2004	(WB initiative)	
G-20, G-7	Oil price impact (4 meetings)	2/2005	4/2005	
G-7	Brazil	4/2005	(individual country)	

VI. STATISTICAL TESTS OF WEO FORECASTS ON GROWTH AND INFLATION

This background document provides additional statistical tests of WEO forecasts. The results confirm the optimistic tendency of WEO forecasts for Africa and Latin America, but find a pessimistic tendency in forecasts for industrial countries and the Middle East. Forecasts for emerging Asia and transition economies are by and large unbiased, partly because of the averaging of positive and negative biases over the sample period. The magnitude and direction of the bias in WEO forecasts depends both on the time period and on the country coverage.

A number of previous studies have addressed the statistical properties of WEO forecasts (see Table 6.1 for an overview of these studies). Earlier studies tended to find that the WEO forecasts were optimistic for developing countries, particularly those in Africa, but failed to find such bias for industrial countries. These broad conclusions are supported by more recent works. For example, the latest work of Timmermann (2006), using data from the 1990s, noted that the WEO's growth forecasts appeared biased for individual industrial countries, but the forecast errors were not statistically significant. For the developing countries, however, the same study found optimism, particularly in the WEO's forecasts for Africa and, to a lesser extent, the Commonwealth of Independent States (CIS) and Latin America. Timmermann (2006) further noted that the optimistic bias was even stronger for countries under IMF-supported programs (see also GAO, 2003).

This document adds to these previous studies by using a more up-to-date set of data (1991–2003), employing panel data regression (as opposed to the pooled regressions of most previous studies and the bootstrapping technique of Timmermann 2006), and comparing the WEO forecasts to the Consensus forecasts as well as the forecasts produced by other international or regional public institutions, including the World Bank, the OECD, the Asian Development Bank (AsDB), the African Development Bank (AfDB), and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC).

Table 6.1 Main Findings of Previous Studies on WEO Forecasts

	Sample Period	Country Coverage	Methodology	Unbiasedness	Efficiency	Comparison with Consensus
Barrionuevo (1993)	1971–91	G-7	Individual and pooled regressions on bias and efficiency	Optimisms in the 1970s; pessimism in the 1980s	Growth forecasts inefficient; inflation forecasts efficient	N.A.
Artis (1997)	1971–94	G-7, five area departments, nonfuel exporters	Individual and pooled regressions on bias and efficiency	No bias for G-7 individually; optimism in Africa, Asia, and Western Hemisphere	Efficient for both G-7 and developing countries	WEO and Consensus mean are similar
Loungani (2000)	1989–98	Consensus countries	Pooled regression on bias and efficiency	N.A.	N.A.	WEO and Consensus mean are identical
Blix et al (2001)	1991–2000	France, Germany, Italy, Japan, Sweden, the United States.	Average Mean Forecast Error; comparison with other institutions' forecasts	N.A.	N.A.	70 percent of private forecasters better than WEO
GAO (2003)	1990–2001	G-7 and 87 emerging market economies	Individual regressions on bias and efficiency	Mostly unbiased; program targets biased but accurate	Efficient	N.A.
Timmermann (2006)	1990–2003	178 IMF member countries	Individual and bootstrapped regressions on bias and efficiency; Diebold and Mariano test	Unbiased for industrial countries; signs of optimism for developing countries	Serial correlation, especially for Central and Eastern Europe and CIS countries	WEO and Consensus mean are statistically similar

A. Data and Methodology

In this document, we restrict our attention to forecasts for real GDP growth and inflation in IMF member countries over 1991–2003. For the WEO, we use the April publications for current year projections and the September publications for year-ahead projections, with actual numbers taken from the April 2004 issue. Forecasts made by other institutions are selected from the closest relevant publication date so as to minimize any difference in timing. In practice, the current-year forecasts (corresponding to the April WEO) come from the March–June period, while the year-ahead forecasts (corresponding to the September WEO) span the August–November period. The regression results for year-ahead forecasts, however, are not formally reported here because they are nearly identical to those obtained for current-year forecasts.

Given our focus on the IMF's overall forecast performance, we are mainly concerned here with averages for country groupings or regions, although we also look at forecasts for individual countries when relevant. Regions are as defined by the WEO, except in the case of transition countries for which we combine Central and Eastern Europe (CEE) and CIS. When comparison is made with Consensus forecasts, we follow the definition of regions given by Consensus Economics, Inc.; when comparing WEO forecasts with those produced by other public institutions, we follow their definition of regions or groups (subject, in the cases of emerging Asia and industrial countries, to the availability of Consensus forecasts).

In view of the structural changes or hyperinflation experienced by some of these countries in the 1990s, we eliminated from the sample those years when extreme values were observed for some regions (e.g., the early 1990s for CIS countries). We also eliminated from the sample two countries experiencing conflict¹² as well as small economies (with an annual GDP of less than \$5 billion), in order to secure a balanced set of panel data.

⁹ Some previous studies have used the realized figures from the next available publication for each year. Our preliminary analysis shows that this particular choice of actuals does not materially change the results of our analysis.

¹⁰ For inflation forecasts by the World Bank and the OECD, we use their indices for private consumption prices. In order to make a meaningful comparison, we compute the respective forecast errors in these series by using their own realized numbers.

¹¹ The only difference is that the WEO's growth forecasts for industrial countries become unbiased when year-ahead forecasts are used.

¹² Angola and the Democratic Republic of Congo.

The regression analysis consists of estimating the following two models, one on bias and the other on efficiency:

Test of biasedness:
$$F_{it} - R_{it} = e_{it} = \beta_0 + 0$$
, with $H_0: \beta_0 = 0$ (6-1)

Test of efficiency:
$$R_{ii} = \beta_0 + \beta_1 F_{ii} + \beta_0$$
, with $H_0: \beta_0 = 0$ and $\beta_1 = 1$ (6-2)

These regressions are widely used in the literature (see Barrionuevo, 1993; Artis, 1997). Panel data regression is used to address the small sample problem. In particular, we use a panel-data GLS estimator, which yields a weighted average of within-group and betweengroup estimators, and divides forecast errors by standard deviations to take account of the volatility of the underlying series. We also control for serial correlation (panel-specific where possible) and allows for a heteroskedastic error structure for cross-country differences (but not cross-country correlation).

We report the following estimators of the relevant coefficients: (i) pooled OLS estimators; (ii) GLS panel-data estimators; and (iii) OLS Prais-Winsten (p-w) estimators. Given the fixed sample period and variable sample size (the number of countries could change between 12 and 27), individual effects may not be consistently estimated by the panel-data GLS estimator for some regions. It is for this reason that we supplement the GLS panel estimator with two additional estimators, as noted above. ¹³ In comparing two sets of forecasts, we use the mean error (ME), mean absolute error (MAE), and root mean squared error (RMSE) statistics. As the means for the respective regions, we report the means of the ME, MAE and RMSE statistics calculated from the individual countries.

B. The Statistical Properties of WEO Forecasts

Biasedness and efficiency of WEO forecasts

The biasedness and efficiency of WEO forecasts were tested by estimating equations (6-1) and (6-2), respectively. The results are reported in Table 6.2 for biasedness and Table 6.3 for efficiency. These results support the view that WEO forecasts were pessimistic for industrial and Middle Eastern countries (as indicated by positive forecast errors for growth and negative forecast errors for inflation) and were inefficient (as indicated by large p-values of the Wald statistic) during the 1990s. ¹⁴ For emerging Asia, however, WEO forecasts were unbiased and efficient for both growth and inflation. It is possible that the lack of bias in

¹³ We also used the Generalized Estimating Equations estimator and obtained substantially the same results.

¹⁴ A closer look at individual countries (not reported here) would show that growth was particularly underpredicted for the United States and the United Kingdom, while it was overpredicted for Germany, Italy and France.

growth forecasts was the result of missing downturns in the late 1990s and the early 2000s, which offset the negative errors committed in the other years (Figure 6.1). For transition economies, growth and inflation forecasts were unbiased, but the inflation forecasts were inefficient. The time-series profiles of forecast errors indicate that the absence of bias for both growth and inflation likely reflect the averaging of positive errors in the early 1990s with negative ones in a later period (Figures 6.1 and 6.2). The inefficiency of inflation forecasts could reflect serial correlation rather than bias, as noted by Timmermann (2006).

Table 6.2. Testing the Biasedness of WEO Current-Year Forecasts, 1994–2003 1/

	Ι	A. Growth		
		OLS 2/	GLS 3/	OLS P-W 3/
Industrial	Constant (β_0)	-0.41 (0.10)	-0.36 (0.07)	-0.45 (0.11)
Emerging Asia	Constant (β_0)	0.02 (0.23)	0.00 (0.17)	0.22 (0.27)
Latin America	Constant (β_0)	0.39 (0.19)	0.37 (0.13)	0.33 (0.21)
Transition	Constant (β_0)	0.05 (0.34)	-0.24 (0.26)	-0.03 (0.40)
Middle East	Constant (β_0)	-0.67 (0.30)	-0.75 (0.19)	-0.89 (0.31)
Africa	Constant (β_0)	0.66 (0.19)	0.65 (0.14)	0.82 (0.24)

B. Inflation					
		OLS 2/	GLS 3/	OLS P-W 3/	
Industrial	Constant (β_0)	0.17 (0.06)	0.13 (0.04)	0.17 (0.08)	
Emerging Asia	Constant (β_0)	-1.07 (0.59)	-0.74 (0.28)	-1.26 (0.55)	
Latin America	Constant (β_0)	0.54 (0.74)	-0.05 (0.20)	-3.23 (2.12)	
Transition	Constant (β_0)	-8.91 (6.60)	-3.18 (3.07)	-25.60 (20.01)	
Middle East	Constant (β_0)	0.80 (0.63)	0.59 (0.21)	0.96 (0.72)	
Africa	Constant (β_0)	-2.11 (0.71)	-0.59 (0.52)	-3.46 (1.14)	

^{1/} Standard deviations are in parentheses.

^{2/} OLS estimation with robust standard errors.

 $^{3/\} GLS$ and $OLS\ P-W$ (Prais-Winsten) estimations with heteroskedastic and panel-specific correlation.

¹⁵ A closer look at individual countries (not reported here) would show that the lack of bias in inflation forecasts likely resulted from overpredicting inflation in systemically important economies, which counterbalanced the underprediction in other countries in the region.

Table 6.3. Testing the Efficiency of WEO Current-Year Forecasts, 1994–2003 1/

		Α	. Growth			B. Infl	ation	
	•	OLS	GLS	OLS P-W		OLS	GLS	OLS P-W
Industrial	Constant (β ₀)	0.11	0.38	0.18	Constant (β ₀)	-0.01	0.04	0.05
	β_1	1.11	0.98	1.09	β_1	0.94	0.92	0.92
	Wald Test	8.38	23.81	17.38	Wald Test	5.39	13.99	4.41
Emerging Asia	Constant (β_0)	-0.61	-0.02	-0.70	Constant (β_0)	-0.55	-0.01	0.43
	β_1	1.11	1.01	1.10	β_1	1.22	1.07	1.10
	Wald Test	0.22	0.03	1.15	Wald Test	2.14	4.16	5.78
Latin America 2/	Constant (β_0)	0.16	0.28	0.17	Constant (β_0)	2.54	1.76	3.90
	β_1	0.82	0.80	0.81	β_1	0.71	0.87	0.66
	Wald Test	5.36	21.57	10.18	Wald Test	1.02	11.26	9.94
Transition 3/	Constant (β_0)	0.62	0.91	0.39	Constant (β_0)	-1.87	-2.44	2.72
	β_1	0.96	0.80	0.89	β_1	1.37	1.31	1.40
	Wald Test	0.10	8.66	1.42	Wald Test	19.74	82.16	26.30
Middle East	Constant (β_0)	2.37	2.35	2.41	Constant (β_0)	-0.50	0.35	0.54
	β_1	0.51	0.52	0.53	β_1	0.95	0.72	0.71
	Wald Test	20.92	59.65	30.63	Wald Test	1.66	14.24	5.18
Africa	Constant (β_0)	-0.76	0.41	-0.37	Constant (β_0)	2.00	0.50	3.15
	β_1	1.02	0.77	0.89	β_1	1.01	1.01	1.02
	Wald Test	5.85	35.05	13.45	Wald Test	5.72	1.44	9.66

and

^{1/} Wald statistics represents a test of joint hypothesis

^{2/1995–2003} for inflation in Latin America.

^{3/1996–2003} for inflation in transition countries.

Figure 6.1. Economic Growth and WEO Current-Year Forecast Errors in Selected Regions, 1991–2003 (In percent per year)

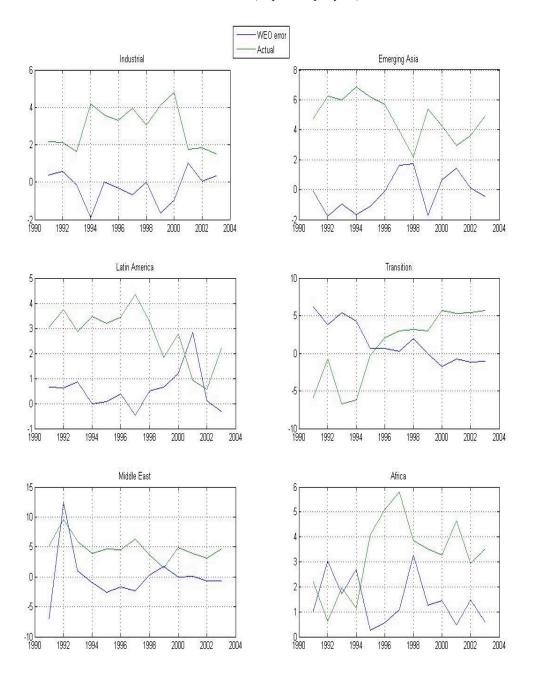
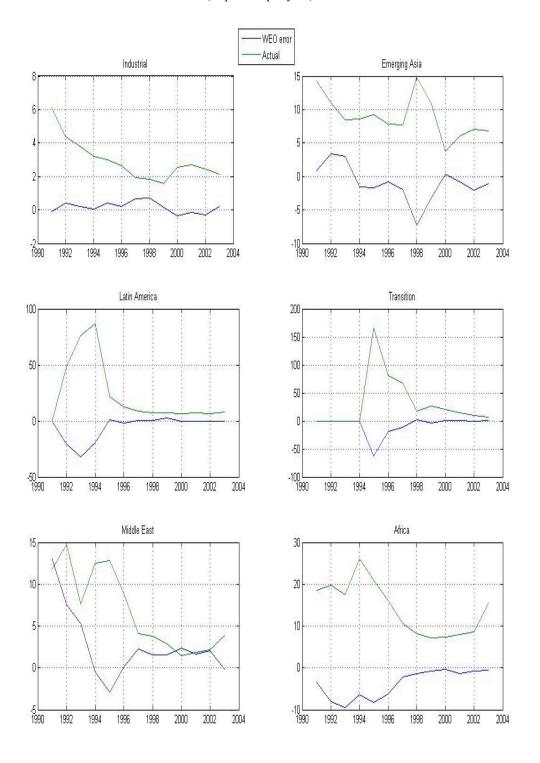


Figure 6.2. Inflation and WEO Forecast Errors in Selected Regions, 1991–2003 (In percent per year)



On the other hand, signs of optimism in WEO forecasts were evident in Latin America and Africa. For Latin America, the optimistic bias was statistically significant for growth but not significant for inflation. The forecasts were inefficient in both cases, likely reflecting the bias in the case of growth and serial correlation in the case of inflation. For Africa, growth optimism is even more evident in the sense that the bias was numerically larger and statistically more significant. A closer look at individual countries (not reported here), however, would show that growth forecasts were optimistic for about half of the countries during 1991–2003, while the forecasts were pessimistic for a handful of countries that were experiencing conflict. The forecasts for inflation were biased but the evidence for efficiency is mixed.

Relative accuracy of WEO forecasts

The relative accuracy of WEO forecasts can be assessed by comparing them to the forecasts produced by other private and public institutions. Table 6.4 reports the MAEs and RMSEs of WEO and Consensus forecast errors. A comparison of MAEs and RMSEs between WEO and Consensus forecasts indicate that the two sets of forecasts were very close, with Consensus performing slightly better for both current year and year-ahead forecasts. WEO forecasts performed better than the means of private forecasts, however, in the case of growth in Europe and inflation in Europe and emerging Asia. A closer examination of forecast errors over time (not reported here) shows that the largest discrepancy was around 0.4 percent for Europe, emerging Asia, and Latin America; a formal test (not reported here) would also indicate that WEO forecasts were not statistically different from Consensus mean forecasts for almost all countries in the sample.

WEO forecasts can also be compared with forecasts produced by other international and regional public institutions in terms of MEs and RMSEs (Table 6.5). For growth, the WEO forecast errors for Africa and Latin America were numerically smaller than those of World Bank, AfDB, and ECLAC forecasts; WEO forecasts for emerging Asia and industrial countries were very close to those produced by the AsDB and the OECD, respectively. For inflation, WEO forecast errors were numerically smaller than those of AsDB forecasts, while neither WEO nor OECD forecasts dominated the other for industrial countries. We may say that, if the IMF forecasts were optimistic for Africa and Latin America, the World Bank, AfDB and ECLAC forecasts were even more so

Table 6.4. WEO and Consensus Forecasts for Growth and Inflation in Selected Regions, $1991\hbox{--}2003\ 1/$

A. Growth

		MAE				RMSE			
	Cui	rent Year	Year Ahead		Cur	Current Year		Year Ahead	
	IMF	Consensus	IMF	Consensus	IMF	Consensus	IMF	Consensus	
G-7	0.97	0.95	1.28	1.24	1.39	1.36	1.54	1.49	
Europe	1.09	1.15	1.40	1.42	1.35	1.39	1.71	1.75	
Emerging Asia	1.60	1.47	2.17	1.98	2.14	1.97	3.09	2.87	
Eastern Europe	2.93	2.58	3.34	3.06	3.99	3.31	4.47	4.01	
Latin America	2.30	1.99	3.25	3.04	2.91	2.48	4.06	3.75	

B. Inflation

		MAE					RM	MSE	
	Cu	Current Year		Year Ahead		Current Year		Year Ahead	
	IMF	Consensus	IMF	Consensus	Ι	MF	Consensus	IMF	Consensus
G-7	0.43	0.40	0.63	0.66	0	.53	0.48	0.77	0.77
Europe	0.69	0.71	0.92	1.01	0	.94	0.94	1.21	1.29
Emerging Asia	1.63	1.80	2.46	3.03	2	.23	2.30	3.55	4.29
Eastern Europe	11.15	9.93	29.07	28.04	21	.36	17.55	61.63	60.42
Latin America	22.99	21.43	35.81	23.13	47	.34	43.01	84.26	56.53

^{1/} Means of MAEs and RMSEs for individual countries in the respective regions. Regions are defined by Consensus groupings.

Table 6.5. Current-Year Forecast Errors for Growth and Inflation Across Competing Forecasters, 1991–2003 1/

A. Growth

		ME	ı			RMSE			
	IMF	World Bank	Regional Institutions	Consensus	IMF	World Bank	Regional Institutions	Consensus	
Africa	0.51	1.01	0.97	-	1.89	2.85	2.91	-	
Emerging Asia	0.2	-	0.34	0.21	2.41	-	2.39	2.24	
Latin America Industrial	0.19 -0.12	1.96	0.5 -0.14	-0.19	2.18 1.62	3.16	2.35 1.41	1.55	

B. Inflation

	ME					RMSE			
	IMF	World Bank	Regional Institutions	Consensus	IMF	World Bank	Regional Institutions	Consensus	
Africa	-0.93	-6.01	-11.77		4.02	20.29	16.15	-	
Emerging Asia	0.35	-	0.44	1.03	2.48	-	3.33	2.63	
Industrial	0.06	-	0.17	0.08	1.27	-	1.1	1.15	

1/ Regional institutions are the AsDB (for Asia), the AfDB (for Africa), the ECLAC (for Latin America), and the OECD (for industrial countries). Because of data limitations, the sample is restricted to 2002–03 for Africa and Latin America and 1995–2003 for Asia.

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VII. USE OF GEM/MULTIMOD IN BILATERAL SURVEILLANCE, 2000–05

Country	Topic	Date	Model
United States	Impact of a 100 basis points increase in U.S. interest rates on developing countries.	June 2000	MULTIMOD
Ireland	Impact of a stronger world upturn in 2000 and slower growth in 2001 on Irish output growth, inflation, the real exchange rate and the current account.	July 2000	MULTIMOD
Japan	Simulations of the economic impact of population aging/a rising dependency ratio on GDP, interest rates, inflation, the real exchange rate and the current account balance. Repeated for alternative fiscal policy responses.	July 2000	MULTIMOD
Euro Area	Impact of a 1 percent increase in world demand and a 10 percent effective depreciation of the euro on GDP growth.	September 2000	MULTIMOD
Germany	(i) Impact of a 30 percent euro appreciation in 2001 on real GDP in Germany; (ii) Impact of an equity price correction-induced economic slowdown in the United States on German exports; (iii) Impact on output of persistently high oil prices at \$34 through 2001.	October 2000	MULTIMOD
Brazil	(i) Impact of higher public borrowing on the interest rate, investment, private savings, the exchange rate and the current account; (ii) Impact of a 150 basis point rise in U.S. interest rates on real GDP, the exchange rate and current account.	November 2000	MULTIMOD (modified version)
Greece	Impact of a 1 percent decline in the risk premium, phased in over three years, on saving, investment, trade and the exchange rate.	March 2001	MULTIMOD
United States	Effect of a temporary increase in total factor productivity (TFP) growth and a temporary increase in the market value of capital on GDP growth, investment, consumption, the U.S. dollar and the current account.	July 2001	MULTIMOD
Japan	Stochastic simulations using the Japan block of MULTIMOD to investigate implications of the zero bound on nominal interest rates for the design of monetary policy in Japan. Further simulation of an increase in government spending, a credible commitment to future inflation, and a permanent increase in the target rate of inflation after persistent negative shocks have driven interest rates down to the zero floor.	August 2001	MULTIMOD (1-country version)
United States	Simulation to show the strength of the U.S. dollar, the widening current account deficit, and the robust GDP growth is explained by an increase in total factor productivity growth, coupled with a smaller risk premium on U.S. assets. Alternative scenarios explore how current account adjustment may take place via a pickup in productivity growth in other industrial countries; a realization that expectations of future U.S. productivity growth were overly optimistic; and an increase in household savings.	July 2002	MULTIMOD
Euro area	Stochastic simulations run with the euro-area block of MULTIMOD assessed the likelihood of the zero interest rate constraint becoming binding, that is, the euro area economy falls into a deflationary trap.	October 2002	MULTIMOD (1-country version)
Australia	Simulations of impact of Intergenerational Report estimates of aging population-related fiscal pressures on debt, fiscal adjustment and GDP growth paths 2002–42.	February 2003	MULTIMOD
United States	Impact of a 50 percent increase in the price of oil and gas on U.S. GDP growth and inflation, the current account deficit, consumption and investment.	July 2003	GEM (2-country version)
Denmark	The long-run and medium-term impact of reducing goods and labor market markups in Denmark and the euro area on Danish real GDP, inflation, hours worked and the capital stock.	July 2004	GEM (3-country version)

VII. USE OF GEM/MULTIMOD IN BILATERAL SURVEILLANCE, 2000–05 (CONCLUDED)

Country	Topic	Date	Model
Euro Area	Effects of a 10 percent increase in U.S. multifactor productivity, a persistent 1 percentage point decline in the risk premium on dollar assets, and a 1 percentage point (of GDP) increase in U.S. fiscal spending on euro exchange rates and the euro area's GDP, interest rates and current account position.	July 2004	GEM (3-country version)
Estonia	(i) Impact of increase in Estonian labor and output price markups on GDP, consumption, investment, trade and prices.(ii) Impact of a 100 percent permanent increase in tradables productivity, 25 percent increase in nontradables productivity on inflation, real GDP, consumption and the current account deficit.	September 2004	GEM (3-country version)
Finland	The impact of labor and product market reforms on output, employment and the price level. A three-block version of GEM is used in this paper, the blocks being Finland, the euro area, and the rest of the world (ROW), comprising the United States, Russia, Sweden, and Norway.	January 2005	GEM (3-country version)
Canada	(i) The effects of a sustained 25 percent increase in oil prices on output, domestic spending, demand for exports and the exchange rate; (ii) The impact of delaying corporate income and wage tax reductions 10 years on domestic output, consumption and the capital stock, as well as the impact of fiscal reforms oversees on Canada.	February 2005	GFM 1/
United Kingdom	The impact of a 10-30 percent decline in house prices on real activity, via declines in residential investment, consumption and business investment. Simulation of associated decline in interest rates on output, inflation and the real exchange rate.	February 2005	MULTIMOD
Czech Republic	(i) The effects of population aging on GDP growth and the budget burden of old-age pensions and health care, taking into account the impact of labor market reforms and technological progress. (ii) Impact of a change in the volatility and mix of FDI and portfolio capital inflows on optimally calibrated monetary policy rules.	July 2005	MULTIMOD, GEM (2-region version)
Japan	Impact of fiscal adjustment and productivity-enhancing reforms on Japan's debt, external surplus and associated spillovers to the rest of the world.	July 2005	GEM (5-region version)
Latvia	The macroeconomic effects of increasing the number of households with access to bank credit on overall consumption and GDP growth, inflation, the real exchange rate, the current account and on net foreign liabilities.	July 2005	GFM 1/
United States	(i) Macroeconomic effects on GDP, national saving, federal deficits and debt of introducing Personal Retirement Accounts. (ii) Effects of near-term fiscal consolidation on short-run and long-run GDP growth. (iii) Effects on GDP, national saving and the interest rate of reducing personal income taxation of capital income.	July 2005	GFM 1/
Iceland	How current and planned future tax cuts in Iceland could be adding to overheating in the economy, inflation, required tightening in monetary policy, appreciation of the currency and the current account deficit.	August 2005	MULTIMOD (1-country version)
Thailand	The effect of an interest rate shock from the United States on output, consumption, and investment; associated monetary policy implications for greater exchange rate flexibility.	August 2005	GEM (3 countries, financial accelerator)
France	Simulations of the effects in France and the euro area of increasing competition in product and labor markets showing large gains in GDP, employment, and consumption. The dynamic adjustment paths following reforms in labor, services and goods markets illustrate the advantages of exploiting complementarities across markets.	November 2005	GEM (4-country version)

^{1/} Global Fiscal Model (GFM) is a parallel version of GEM that is capable of analyzing fiscal policy.

VIII. PARTICIPATION OF RES AND ICM STAFF IN ARTICLE IV CONSULTATION MISSIONS, FY 2000–05 1/

	Industrial	Countries	Emergin	Emerging Markets		ountries	Total
	ICM	RES	ICM	RES	ICM	RES	
2000		10		2	•••	1	13
2001		8		0	•••	3	11
2002	0	5	0	1	0	0	6
2003	1	3	10	0	0	1	15
2004	3	5	4	2	3	1	18
2005	1	6	12	3	2	1	25

^{1/}Number of RES and ICM staff members who participated in area department missions. Excludes Article IV consultations with the United States.

IX. PRIVATE SECTOR EXPERTS WHO PARTICIPATED IN THE SURVEY¹⁶

Jim Barrineau

Robin Bew*

Ji Chou*

Marek Dabrowski*

Sergio de Nardis*

Paul de Noon

Vihang Errunza

Robert Alan Feldman

Kristin Forbes

Chan-Guk Huh*

Yusuke Horiguchi*

Nobuo Iizuka*

Miles Kahler

Yuzuru Kato

Todd Keister

Peter B. Kenen

Hirokazu Kikuchi

Triphon Phumiwasana*

Ramkishen Rajan

Rafael Repullo*

Girts Rungainis

Jose Juan Ruiz

Abhirup Sarkar

Thomas Stolper

Xavier Timbeau*

_

¹⁶ The individuals indicated by an asterisk responded on behalf of their institutions, as follows (in order of appearance): Economist Intelligence Unit; Chung-Hua Institution for Economic Research; Center for Social and Economic Research; Istituto di Studi e Analisi Economica; Korea Economic Research Institute; Institute of International Finance; Japan Center for Economic Research; Milken Institute; Centro de Estudios Monetarios y Financieros; and Observatoire Français des Conjonctures Économiques.

X. LIST OF INTERVIEWEES¹⁷

The IEO team has spoken to more than 65 current and former members of IMF staff and all of the 24 Executive Directors (or their alternates). In addition, the following individuals have provided their views to the IEO. We express our gratitude for their generosity in making their time available to us, and apologize for any errors or omissions. They assume no responsibility for any errors of fact or judgment that may remain in the report.

International and regional organizations

African Development Bank

Philibert Afrika Henock Kifle Temitope Waheed Oshikoya

Douglas Barnett I. Koussoube A. Portela

Georges W. Bene-Hoane Charles L. Lufumpa Mohammed A. Salisu L. B. S. Chakroun Tijani Najeh Elfatih Shaaeldin A. Chouchane Felix O. Ndukwe E. G. Taylor-Lewis Bernhard G. Gunter Stephen A. Olanrewaju Ahmed Zejly

Asian Development Bank

Ifzal Ali Masahiro Kawai* Juzhong Zhuang

Frank Harrigan Pradumna B. Rana

Bank for International Settlements¹⁸

Benjamin H. Cohen Malcolm Knight Philip Wooldridge Roger W. Ferguson, Jr.* Frank Packer Yutaka Yamaguchi*

Allen Frankel

Eastern Caribbean Currency Union

Laurel Bain Garth Nicholls K. Dwight Venner

European Bank for Reconstruction and Development

Willem Buiter Jean Lemierre*

European Central Bank

Filippo di Mauro Julian Morgan Ludger Schuknecht Pavlos Karadeloglou Minna Nikitin Christian Thimann Neil Kennedy Georges Pineau Ad van Riet

•

¹⁷An asterisk indicates that the individual is listed under two separate headings.

¹⁸ Including Basel-based forums and committees.

European Union

Daniel Daco Gaetoun Nicodeme Klaus Regling* Servaas Deroose Lucio R. Pench Max Watson

Sixten Korkman

Inter-American Development Bank

Manuel R. Agosin Antoni Estevadeordal J. Alejandro Izquierdo

Organization for Economic Cooperation and Development

Andrew Dean Vincent Koen Paul van den Noord

Peter Hoeller Niels Thygesen

West African Economic and Monetary Union¹⁹

Abdoul Karim Allassan Pamphile Koudadjey Ousmane Ouedraogo Armand Badiel Francois Nare Solifou Ouedraogo

Adama Dieye* El-Hadji Abdoulaiji Ndiaye Bolo Sanou Modibo Kone Seyni Ndiaye Paul M. Sarr

Frederic Assomption Korsaga Joachim P. Ouedraogo El-Hadji Mamadou Seck

World Bank

Uri Dadush Enrique Rueda-Sabater Hans Timmer

Jeffrey Lewis

Private sector experts

Trevor Blake Drausio Giacomelli Steven W. Popper Gustavo Cañonero Steven A. Hess Alberto Ramos Jeanne del Casino Mauro Leos Shelly Shetty John Chambers Gustavo Lopez Thomas Stolper Vladimir Werning James A. Dewar David Lubin Robert Feldman Joydeep Mukherji Martin Wolf

Peter Garber Michael Mussa

¹⁹ Including the Central Bank of West African States.

Member Country Officials

Badreddine Barkia Pierre Beynet Michael Blome Paul Boothe Samir Brahimi Nicola Brandt Li Cao

Michel Cardona
Mark Carney
Gilbert Cette
Mingqing Chen
Gordon de Brouwer

Sogue Diarisso Berend Diekmann

Adama Dieye*
Cheikh Tidiane Diop
Maguette Diop
John Drage
Marc Farnoux

Roger W. Ferguson, Jr.*

Deike Fuchs Tim Geithner Herbert Gratz Russell Green Ulrich Grosch Brahim Hajji

Erich Harbrecht

Marc Hausmann Regis Pelissier Toni Honkaniemi Adrian Penalver Hannu Jokinen Jean Pesme Mikio Kajikawa Stephen Pickford Masahiro Kawai* Imene Rahmouni Satoshi Kawazoe Klaus Regling* Andrew Kilpatrick Chris Salman Caio Koch-Weser Ibrahima Sarr

Jens Larsen Claus-Peter Schollmeier
Michael Leahy Habib El Montacer Sfar
Jean Lemierre* Naoyuki Shinohara
Qian Li Masaaki Shirakawa

Ran Lin Mark Sobel

Rachel Lomax Cheikh Hadjibou Soumare

Yang Luo Antti Suvanto Andreas Lux Dong Tao Shuanyou Ma Jukka Vesala Rudiger von Kleist **David Mayes** Joshua McCallum Horoshi Watanabe Pierre Mongrue John Weeks William Murden Torsten Wezel Malindi Myers Sir Nigel Wicks Hiroshi Nakaso Beth Anne Wilson

Franz Neueder Caixia Xu Nicolas Namias Yuji Yamashita Takashi Oyama Yutaka Yamaguchi*

XI. RESULTS OF THE IEO SURVEY OF IMF STAFF

This background document presents the results of an IEO survey of IMF staff with regard to the WEO and the GFSR. The survey was sent to all staff in the economist stream (of A12 or above) in all five area departments—about 600 staff. Responses were received from 81 staff members. Unless noted otherwise, the response rates to the questions below are in percentages of respondents, with a statistical margin of error (at 95 percent) of approximately 10 percentage points.

Information about yourself

Q1. How long have you worked in the Fund?

1.	Less than 2 years	3 respondents
2.	2–4 years	13 respondents
3.	5–9 years	24 respondents
4.	More than 10 years	41 respondents

Q2. Have you ever worked in RES, ICM or PDR?

Yes
 Yes 39 respondents
 No 42 respondents

Q3. Which of the following best describes the type of country (countries) you are primarily responsible for?

1.	8.6	G7
2.	7.4	Smaller industrial
3.	29.6	Systemically important emerging market
4.	27.2	Other emerging market
5.	24.7	Low income developing
6.	2.5	None of the above. Please explain

Q4. What is your grade?

Percent of total area department staff in grade

1.	A12-13	24 respondents	14.0
2.	A14-15	27 respondents	9.3
3.	B1-2	18 respondents	22.5
4.	B3-5	12 respondents	18.2

The World Economic Outlook (WEO)

Q5. How often do you use the WEO in your country work?

- 6.2 Seldom
 39.5 Occasionally
 44.4 Regularly
 9.9 Frequently
- Q6. Which major components of the WEO do you find most useful? (You may select more than one)
- 1. 77.8 Macroeconomic projections
- 2. 33.3 Review of recent developments
- 3. 61.7 Analysis of current policy issues
- 4. 38.3 Discussion of prospective policy issues
- 5. 4.9 Other. Please specify
- 6. 1.2 Don't know
- Q7. On a five-point scale where "5" means you strongly agree and "1" means you strongly disagree, how do you rate your level of agreement with each of the following statements related to the WEO?
- 1. I consult with the WEO in preparing for a country visit.
- 2. Topics raised in the latest WEO are discussed with country authorities in Article IV consultations or program negotiations.
- 3. The WEO database corresponds to the database I maintain for my country work.
- 4. I incorporate the WEO assumptions (provided through RES) in making my own forecasts in country work.
- 5. The WEO forecasts are not much different from the forecasts agreed with country authorities in program documents.
- 6. The WEO provides effective support for the messages the Fund is trying to convey through Article IV consultations.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
1.	16.3	32.5	12.5	13.8	20.0	5.0
2.	3.8	22.5	28.8	28.8	13.8	2.5
3.	18.5	35.8	24.7	9.9	3.7	7.4
4.	49.4	40.7	3.7	1.2	1.2	3.7
5.	14.8	29.6	17.3	6.2	1.2	30.9
6.	14.8	32.1	28.4	13.6	3.7	7.4

Q8. How can the WEO be improved to have greater usefulness to your country work? (Select three most important)

1.	5.1	More frequent publication
2.	20.3	Focus on fewer issues
3.	32.9	More concrete policy recommendations
4.	58.2	More cross country perspectives
5.	43.0	More compact and reader-friendly presentation
6.	24.1	Greater use of scenario analysis
7.	7.6	More iterative process to generate globally consistent forecasts
8.	8.9	Other. Please specify
9.	13.9	Don't know

The Global Financial Stability Report (GFSR)

Q9. How often do you use the GFSR in your country work?

1.	75.5	Seldom
2.	19.8	Occasionally
3.	3.7	Regularly
4.	0.0	Frequently

Q10. Which major components of the GFSR do you find most useful? (You may select more than one)

1.	38.9	Review of recent market developments
2.	34.7	Analysis of current policy issues
3.	16.7	Discussion of prospective policy issues
4.	5.6	Other. Please specify
5.	31.9	Don't know

Q11. On a five-point scale where "5" means you strongly agree and "1" means you strongly disagree, how do you rate your level of agreement with each of the following statements related to the GFSR?

- 1. I consult with the GFSR in preparing for a country visit.
- 2. Chapter II gives me a useful summary of recent global market developments.
- 3. Topics raised in the latest GFSR are discussed with country authorities in Article IV consultations or program negotiations.
- 4. Messages conveyed in the GFSR complement the messages the Fund is trying to convey through Article IV consultations.
- 5. The analyses of the GFSR and the WEO are well integrated with each other.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
1.	1.3	2.5	15.0	21.3	55.9	5.0
2.	2.5	29.1	26.6	5.1	21.5	15.2
3.	0.0	1.3	16.3	32.5	43.8	6.3
4.	1.3	6.3	32.5	11.3	27.5	21.3
5.	0.0	5.1	37.2	12.8	21.8	23.1

Q12. How can the GFSR be improved to have greater usefulness to your country work? (Select two most important)

1.	3.9	More frequent publication
2.	33.8	Focus on fewer issues
3.	36.4	More concrete policy recommendations
4.	22.1	More weight on banking sector (as opposed to capital market)
		issues
5.	39.0	More compact and reader-friendly presentation
6.	9.1	Other. Please specify
7.	23.4	Don't know

Other Outputs

Q13. On a five-point scale where "5" means you are very familiar and "1" means you are very unfamiliar, how do you rate your level of familiarity with each of the following outputs?

- Vulnerability Exercise 1.
- Coordinating Group on Exchange Rate Issues 2.
- Financial Systems Trends 3.
- World Economic and Market Developments 4.
- Commodity Market Updates 5.
- Global Markets Monitor 6.

	Very Familiar	Unfamiliar	Very Unfamiliar	Familiar	Neutral	N/A
1.	54.3	34.6	7.4	2.5	1.2	0.0
2.	15.0	27.5	20.0	11.3	23.8	2.5
3.	7.4	12.3	18.5	22.2	37.0	2.5
4.	23.5	28.4	18.5	12.3	14.8	2.5
5.	35.8	39.5	14.8	6.2	3.7	0.0
6.	53.1	19.8	13.6	6.2	6.2	1.2

Q14. Which of the above outputs do you use most frequently? (You may select more than one)

- 1. 29.5 Vulnerability Exercise
- 2. 10.3 Coordinating Group on Exchange Rate Issues
- 3. 2.6 Financial Systems Trends
- 4. 23.1 World Economic and Market Developments
- 5. 65.4 Commodity Market Updates
- 6. 55.1 Global Markets Monitor

Q15. On a five-point scale where "5" means you strongly agree and "1" means you strongly disagree, how do you rate your level of agreement with each of the following statements?

- 1. Multilateral surveillance effectively draws on the outcome of bilateral surveillance.
- 2. Multilateral surveillance is effectively fed into the Article IV process.
- 3. Macroeconomic analysis is well integrated with financial market perspectives.
- 4. Article IV consultations would benefit from incorporating more financial market perspectives.
- 5. Article IV consultations would benefit from incorporating more cross country perspectives.
- 6. The IMF's database and analytical tools are adequate to conduct multilateral surveillance effectively.
- 7. Multilateral surveillance adequately highlights the impact of economic policies in large countries on the rest of the world.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
1.	11.1	32.1	34.6	9.9	8.6	3.7
2.	8.6	33.3	35.8	13.6	7.4	1.2
3.	2.5	33.3	33.3	18.5	8.6	3.7
4.	13.9	44.3	30.4	8.9	1.3	1.3
5.	26.3	48.8	16.3	6.3	1.3	1.3
6.	2.5	29.6	30.9	23.5	9.9	3.7
7.	9.9	35.8	29.6	14.8	6.2	3.7

Q16. Several area departments have begun to produce regional outlook publications (excluding surveillance reports for the Euro Area, ECCU, WAEMU, and CEMAC). How do you assess the contribution of this "regional surveillance" activity to the overall effectiveness of the Fund's surveillance responsibility?

- 1. 38.3 Very useful, and more should be done
- 2. 24.7 Useful, but more resources are not needed
- 3. 21.0 Marginally useful
- 4. 13.6 Very little value-added is provided
- 5. 2.5 Don't know

Q17. How often do you read the regional outlooks produced by other departments for other regions?

42.5	Seldom
42.5	Occasionally
8.8	Regularly
6.3	Frequently
	42.5 8.8

XII. RESULTS OF THE IEO SURVEY OF NATIONAL AUTHORITIES

This background document presents the results of an IEO survey of national authorities with regard to the WEO and the GFSR. The survey was sent to all 184 member countries through the IMF Executive Directors. Responses were received from 105 countries, including all of the G-7 and large emerging markets. The response rates to the questions below are in percentages of respondents, with a statistical margin of error (at 95 percent) of approximately 6.3 percentage points.

The World Economic Outlook (WEO)

Q1. Which major components of the WEO do you find most useful? (You may select more than one)

1	89.4	Macroeconomic projections
2	51.9	Review of recent developments
3	77.9	Analysis of current policy issues
4	53.9	Discussion of prospective policy issues
5	8.6	Other. Please specify
6	1.0	Don't know

Q2. How do you rate the WEO in each of the following areas?

- 1. Analytical rigor
- 2. Timeliness of issues
- 3. Effectiveness in identifying vulnerabilities
- 4. Reliability of projections
- 5. Readability
- 6. Analysis of regional issues

	Completely Adequate	Adequate	Neutral	Inadequate	Completely Inadequate	Don't Know
1.	30.9	62.9	3.1	0.0	0.0	4.1
2.	25.8	51.5	17.5	2.1	0.0	4.1
3.	20.6	59.8	17.5	2.1	0.0	1.0
4.	9.3	48.5	29.9	4.1	0.0	9.3
5.	39.2	41.2	13.4	2.1	0.0	5.2
6.	10.3	45.4	23.7	16.5	0.0	5.2

- Q3. How do you rate your level of agreement with each of the following statements related to the WEO?
- 1. I consider the WEO's projections to be the benchmark for assessing economic prospects.
- 2. The WEO projections tend to be optimistic for most countries.
- 3. The trends and issues identified in the WEO are regularly discussed during the IMF's Article IV consultation with my country.
- 4. The WEO covers well the effect of policies of large countries on the rest of the world.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
1.	38.8	49.0	9.2	1.0	1.0	2.0
2.	9.2	29.6	26.5	15.3	5.1	14.3
3.	10.2	41.8	14.3	17.3	5.1	12.2
4.	20.4	48.0	12.2	11.2	4.1	4.1

Q4. Who is the primary audience of the WEO in your country? (You may select more than one)

- 1. 98.0 Policymakers/public sector economists
- 2. 58.2 Academics/research institutes
- 3. 21.4 The media
- 4. 12.3 The private sector/market participants
- 5. 1.0 Other. Please specify
- 6. 1.0 Don't know

Q5. How is the WEO used by senior policymakers in your country?

- 1. 34.3 Issues raised are discussed
- 2. 24.2 Much of the report is read
- 3. 32.3 A summary of the report is read
- 4. 7.1 Hardly used
- 5. 3.0 Don't know

Q6. What is the WEO's main channel of influence on the country's policymaking process? (You may select more than one)

- 1. 82.8 Economic forecasts
- 2. 70.7 By identifying emerging policy issues
- 3. 9.1 Increased media attention
- 4. 3.0 Other. Please specify
- 5. 3.0 Don't know

Q7. How can the WEO be improved to have greater usefulness? (You may select more than one)

- 1. 25.5 More frequent publication 2. 19.4 Greater focus on fewer issues 3. 54.1 Greater use of alternative scenarios More compact and reader-friendly presentation 4. 37.8 Greater attention to the policies of systemically important countries 5. 41.8 6. 60.2 More treatment of regional issues 9.2 Other. Please specify 7. Don't know 8. 1.0
- Q8. How would you consider the usefulness of separate economic outlook publications for different regions to supplement the WEO?
- 1. 61.6 Highly helpful 2 28.3 Useful but value
- 2. 28.3 Useful, but value-added is small
- 3. 9.1 Not necessary
- 4. 1.0 Don't know

The Global Financial Stability Report (GFSR)

- Q1. Which major components of the GFSR do you find most useful? (You may select more than one)
- 1. 77.1 Review of recent market developments
- 2. 74.0 Analysis of current policy issues
- 3. 52.1 Discussion of prospective policy issues
- 4. 4.2 Other. Please specify
- 5. 1.0 Don't know
- Q2. How do you rate the GFSR in each of the following areas?
- 1. Analytical rigor
- 2. Timeliness of issues
- 3. Effectiveness in identifying vulnerabilities
- 4. Readability

	Completely Adequate	Adequate	Neutral	Inadequate	Completely Inadequate	Don't Know
1.	21.3	63.8	12.8	0.0	0.0	3.2
2.	12.8	60.6	19.1	2.1	0.0	6.4
3.	19.1	54.3	21.3	2.1	0.0	3.2
4.	17.0	53.2	20.2	5.3	1.1	4.3

Q3. How do you rate your level of agreement with each of the following statements related to the GFSR?

- 1. The GFSR adds value over and above similar periodic publications.
- 2. The trends and issues identified in the GFSR are regularly discussed during the IMF's Article IV consultation with my country.
- 3. The balance between capital market and banking sector issues is about right.
- 4. The analyses of the GFSR and the WEO are well integrated with each other.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
1.	29.8	53.2	11.7	2.1	0.0	4.3
2.	6.4	36.2	19.1	19.1	6.4	13.8
3.	13.8	38.3	21.3	11.7	3.2	11.7
4.	18.1	40.4	14.9	11.7	2.1	13.8

Q4. Who is the primary audience of the GFSR in your country? (You may select more than one)

- 1. 92.6 Policymakers/public sector economists
- 2. 43.2 Academics/research institutes
- 3. 5.3 The media
- 4. 15.8 The private sector/market participants
- 5. 2.1 Other. Please specify
- 6. 7.4 Don't know

Q5. How is the GFSR used by senior policymakers in your country?

- 1. 17.2 The issues raised by the GFSR are routinely discussed
- 2. 25.8 Much of the report is read
- 3. 37.6 A summary of the report is read
- 4. 15.1 Hardly used
- 5. 5.4 Don't know

Q6. What is the GFSR's main channel of influence on the country's policymaking process? (You may select more than one)

- 1. 76.8 By highlighting risks to the financial system
- 2. 35.8 By suggesting policy responses to those risks
- 3. 71.6 By identifying emerging policy issues
- 4. 4.2 Increased media attention
- 5. 3.2 Other. Please specify
- 6. 5.3 Don't know

Q7. How can the GFSR be improved to have greater usefulness? (You may select more than one)

1.	19.2	More frequent publication
2.	41.5	Greater focus on fewer issues
3	47.9	More concrete policy recommendations
4.	31.0	More weight on banking sector (as opposed to capital market) issues
5.	41.5	More compact and reader-friendly presentation
6.	11.7	Other. Please specify
7.	5.3	Don't know

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