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**An Evaluation of the Research Chapters of
the IMF's *World Economic Outlook* and
*Global Financial Stability Report***

Miguel A. Kiguel

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Prepared by Miguel A. Kiguel

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Abstract

This study examines the technical quality of the analytical chapters of the two IMF flagship reports, the *WEO* and the *GFSR*. It found that most of these chapters provided good quality analysis of relevant macroeconomic and financial topics. It found that *WEO* chapters were stronger when they dealt with areas within the core mandate of the Fund, and that the *GFSR* chapters had greatly improved since 2007. The weaker chapters in both reports tended to lack clear analytical frameworks. The policy advice in both reports tended to be predictable and did not always follow from the analysis. Neither the *WEO* nor the *GFSR* chapters achieved an integrated view of macroeconomic and financial developments and neither foresaw the severity of the 2007–08 crisis.

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Author's E-Mail Address: mkiguel@econviews.com

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ABBREVIATIONS

BRIC	Brazil, Russia, India, and China
<i>GFSR</i>	<i>Global Financial Stability Report</i>
IMF	International Monetary Fund
NGOs	nongovernmental organizations
OECD	Organization for Economic Cooperation and Development
<i>WEO</i>	<i>World Economic Outlook</i>

I. INTRODUCTION AND MAIN FINDINGS¹

1. This evaluation covers the research or analytical chapters of the IMF's *World Economic Outlook (WEO)* and *Global Financial Stability Report (GFSR)* issued during the evaluation period, 2004–08. It covers 30 chapters of the *WEO* and 20 chapters of the *GFSR* and is based on a variety of criteria, including the quality of the analysis and the balance between theory and evidence, the relevance of the topics for policymakers, their timeliness, the soundness of the policy recommendations, and whether the presentation is clear, with well-focused questions posed at the outset, with understandable language and with a good use of tables and graphs.
2. The overview chapters of the *WEO* and the *GFSR* provide an evaluation of current developments and of the main risks in the world economy and in the international financial markets. The analytical chapters of the two reports address specific topics that are relevant for current policy discussions in more depth, treating them in a way that is accessible to a broad audience.
3. The two reports are flagship IMF publications that are broadly distributed and intended to have an important influence on policymakers and the media, and in some academic and think tank circles, in order to foster the debate on current policy issues. Most of the media coverage focuses on the initial chapters, while the analytical chapters receive less attention, at least at the time the publications are released.
4. The *WEO* has a broader scope than the *GFSR*, mainly because it addresses a large number of macroeconomic issues that represent the core work at the IMF, while the *GFSR* deals mainly with financial issues, which have only recently received much attention from policymakers. In addition, the *WEO* has a longer trajectory and over the years it has built a clear reputation as one of the leading reports on current economic developments and prospects. The *GFSR* is a more recent publication whose importance is rising along with the recognition that financial and macroeconomic issues are closely interconnected. The analytical chapters of the *WEO* in the evaluation period seem to be more developed products, while those of the *GFSR* are more uneven. Only in more recent years has the *GFSR* developed a structure that seems suitable for the product.
5. This evaluation is organized as follows. The remainder of this section provides a summary overview and evaluation ratings, with scores for different aspects of the two reports. Section II looks in more depth at the *WEO*, analyzing aspects such as structure, choice of topics, and policy conclusions, and Section III presents a similar analysis for the *GFSR*. Section IV presents conclusions and some reflections for the future.

¹ I am grateful to the participants at the evaluation workshop that took place in Washington, in April 2010, to Hali Edison for her patience in providing me tips about how to approach the report, to Marcelo Selowsky for his useful comments, and to Federico Bragagnolo for research assistance.

A. *The World Economic Outlook*

6. On the whole, the research chapters of the *WEO* achieve the objective of providing a good analytical framework combined with evidence to discuss current economic policy issues. Nevertheless, there are exceptions. The chapters are generally stronger when they address traditional macroeconomic issues (such as global macro imbalances,² exchange rate issues,³ or inflation⁴) than when they address issues (e.g., labor markets,⁵ workers' remittances,⁶ institutions,⁷ or climate change⁸) that fall outside the Fund's core areas of research. This is not surprising, as the stronger chapters correspond to those areas in which the IMF has a "comparative advantage" and where it spends more research effort.

7. There are exceptions, though, as some chapters, especially those that do not address core IMF issues, have weak analytical frameworks, while others get lost in technicalities—especially some that include large econometric models to simulate macroeconomic outcomes.

8. The conclusions and discussions of policy implications tend to be quite predictable and somewhat vague, especially when they argue in broad terms in favor of a prudent fiscal stance, a credible and sound monetary policy, a more open economy, or more market-oriented policies. It would certainly be useful to present more specific policy recommendations, targeted to the issues being discussed, perhaps including some examples of specific countries or type of countries.

9. The evaluation uses ten criteria that fall into four groupings:

- **Structure and presentation**, which looks at whether the chapter is well organized, whether the questions are clearly posed, and whether there is a good balance and coherence between empirical questions, analytical issues, and policy discussions;

² See for instance, Chapter 3 and Box 1.4, April 2005; Chapter 2 and Appendix 1.2, September 2005; Chapter 2 and Box 1.4, April 2006; Box 2.1, September 2006; Chapter 3, April 2007; Box 1.3, October 2007; Box 1.3, April 2008.

³ See for instance, Chapter 2, September 2004; Chapter 3, April 2007.

⁴ See for instance, Box 1.1, September 2004; Chapter 4, September 2005; Chapter 3, April 2006; Chapter 3, October 2008.

⁵ See for instance, Chapter 5, April 2007.

⁶ See for instance, Chapter 2, April 2005.

⁷ See for instance, Chapter 3, September 2005.

⁸ See for instance, Chapter 4, April 2008.

- **Choice of topics**, assessing especially whether the topics are related to the Fund’s work and whether they address policy issues that were relevant at the time the report was issued;
- **Quality of analysis**, looking especially at whether the chapter has a strong (though not necessarily complicated) analytical framework, whether the data presented are relevant for the issues being discussed, and whether the conclusions follow from the analytical framework and the evidence presented; and
- **Policy conclusions**, mainly assessing their relevance and their relation to the analysis presented in the chapter.

10. For each criteria, judgments were made that take into account relevant factors, example given, did the chapter address issues of high policy relevance. We use a rating system that ranges from 1 to 5 (where 5 is the best “grade”). Table 1 summarizes the results of the evaluation of the *WEO* research chapters overall.

Table 1. *World Economic Outlook* Summary Evaluation

Report Chapter	Overall Average		
	Core (24)	Noncore (6)	All (30)
Structure and presentation			
1. The questions are well posed and clearly focused	4.2	3.2	4.0
2. There is a sound and clear discussion of the analytical framework	3.7	2.8	3.5
3. There is a good balance between analytical discussions, empirical evidence, and policy implications	3.7	3.2	3.6
4. Writing is clear and well organized	4.2	3.5	4.1
5. Is the empirical evidence presented in an intuitive and convincing way?	3.5	2.8	3.4
Choice of topics			
6. The issue is timely and relevant	3.8	2.5	3.5
7. The issues are important for policy discussions at the time	3.5	2.0	3.2
Quality and analysis			
8. Does it use appropriate analytical tools and relevant data?	3.8	2.8	3.6
Policy advice			
9. Would it be useful for policymakers?	3.4	2.7	3.3
10. Are the policy conclusions convincing?	3.4	2.7	3.2
Overall rating report	3.7	2.8	3.5

Note: The number of chapters analyzed is given in parentheses. The rating system ranges from 1 to 5 where 5 is the best rating.

11. The evaluation shows that overall the *WEO* is a high-quality product—a finding that is not surprising given the reputation of this report and the influence that it has when it is

released. There is a question, though, regarding whether some of the more technical portions of the analysis, as well the use in some cases of rather complex econometric techniques, are really within the grasp of policymakers, especially the top policymakers who constitute an important part of the intended audience for the report.

12. We divided the sample of 30 *WEO* analytical chapters into two groups: 24 chapters that address traditional macroeconomic issues (“core issues”) such as inflation, exchange rate policy, or global imbalances; and 6 chapters on issues that fall outside the Fund’s core research (e.g., labor markets, institutions, or climate change) (Table 2).⁹ With the world economy performing as well as it did during most of the evaluation period, it might have been difficult for the Fund staff to identify timely research topics, and there might have been an understandable tendency to write about issues outside the core of the Fund’s work. Nevertheless, we found an important difference in the quality of the chapters depending on whether they address “core” IMF issues or others, in which the Fund does not have the same level of expertise. This is reflected in the differences in the average score, 2.8 for the noncore chapters versus 3.7 for the core chapters.

13. The problems generated by the U.S. current account deficit and global imbalances were at the center of the policy discussion on macroeconomic issues during the evaluation period and hence it is not surprising that they received significant attention in the *WEOs* during those years.¹⁰ Other issues that received attention were related to inflation and inflation targeting, exchange rate policy, and housing prices. The major themes that dominated the macroeconomic debates during these years were the end of inflation, the increasing importance of the BRICs (Brazil, Russia, India, and China) in general and of China in particular, global imbalances, asset price booms (especially in housing) and the rise in commodity prices.

14. The subprime crisis began in July/August 2007. Though the last three *WEOs* included in the sample were produced too early to consider the impact of the global crisis, the *WEOs* issued since 2007 do consider the potential impacts of a crisis and instruments of political economy with which to address them. For instance, the April 2007 report includes a chapter on the potential impact on the global economy of a recession in the United States. Chapter 3 of the April 2005 report addresses the implications of the housing price decline for monetary policy, and the latest report in the sample (October 2008) includes a chapter addressing the relation between financial stress and economic downturns and another one discussing the possible utilization of fiscal policy as a countercyclical tool. The most recent reports in the sample also contain boxes on issues related to the crisis, such as the macroeconomic

⁹ There is some arbitrariness in this distinction. For instance, one could argue whether the functioning of labor markets fall within the main mandate of the IMF. Our view is that it broadly belongs to the category of structural issues that are not necessarily a central part of IMF-supported programs.

¹⁰ See for example, Chapter 2, April 2004; Chapter 3, April 2005; Chapter 2, September 2005.

implications of the financial market turmoil and the risks that housing markets posed for global growth.

Table 2. *World Economic Outlook* Chapters Evaluated

Year		Chapters
2004	April	(ii) The Global Implications of the U.S. Fiscal Deficit and of China's Growth
		(iii) Fostering Structural Reforms in Industrial Countries
		(iv) Are Credit Booms in Emerging Markets a Concern?
2004	September	(ii) Three Current Policy Issues: The Global House Price Boom; Learning to Float: The Experience of Emerging Market Countries Since the Early 1990s; Has Fiscal Behavior Changed Under the European Economic and Monetary Union?
		(iii) How Will Demographic Change Affect the Global Economy?
2005	April	(ii) Two Current Issues Facing Developing Countries: Workers' Remittances and Economic Development; Output Volatility in Emerging Markets and Developing Countries
		(iii) Globalization and External Imbalances
		(iv) Will the Oil Market Continue To Be Tight?
2005	September	(ii) Global Imbalances: A Saving and Investment Perspective
		(iii) Building Institutions
		(iv) Does Inflation Targeting Work in Emerging Markets?
2006	April	(ii) Oil Prices and Global Imbalances
		(iii) How Has Globalization Affected Inflation?
		(iv) Awash with Cash: Why Are Corporate Savings So High?
2006	September	(iii) Asia Rising: Patterns of Economic Development and Growth
		(iv) How Do Financial Systems Affect Economic Cycles?
		(v) The Boom in Nonfuel Commodity Prices: Can It Last?
2007	April	(iii) Exchange Rates and the Adjustment of External Imbalances
		(iv) Decoupling the Train? Spillovers and Cycles in the Global Economy
		(v) The Globalization of Labor
2007	October	(iii) Managing Large Capital Inflows
		(iv) Globalization and Inequality
		(v) The Changing Dynamics of the Global Business Cycle
2008	April	(iii) The Changing Housing Cycle and the Implications for Monetary Policy
		(iv) Climate Change and the Global Economy
		(v) Globalization, Commodity Prices, and Developing Countries
2008	October	(iii) Is Inflation Back? Commodity Prices and Inflation
		(iv) Financial Stress and Economic Downturns
		(v) Fiscal Policy as a Countercyclical Tool
		(vi) Divergence of Current Account Balances Across Emerging Economies

Note: Highlighted chapters are considered "noncore" issues.

15. An issue that has been missing but would have been useful to address is the link between credit markets and the business cycle. While there are some discussions of the booms in asset prices, including the housing bubble, the chapters fail to describe a link from the fall in asset prices to the impact on credit and on the business cycle. While this weakness is easy to detect today, given the crisis that eventually took place, it would have been a natural extension of many of the issues that were raised in different chapters.

B. The *Global Financial Stability Report*

16. The importance of the *GFSR* as a flagship IMF publication has been growing, though the *GFSR* is less well known and has a shorter track record than the *WEO*. The first chapter of the *GFSR* quickly began to be recognized among policymakers and practitioners for its useful and comprehensive reviews of the main developments in world financial markets and overall assessments of financial risks. This overview chapter typically presents some technical issues, such as topics related to credit default swaps or related to the markets of different derivatives. It is written relatively simply, and is accessible to a broad audience.

17. The *GFSR* typically devotes two chapters to research topics. Compared with the opening chapter, these analytical chapters have not achieved the same level of maturity, though since 2007 they have been improving. By and large, those produced until 2007 do not show a good balance between strong analytical work and well-structured evidence. They provide a good description of the stylized facts and raise relevant policy issues, but they certainly do not have the same analytical depth as their corresponding overview chapters.

18. Relative to the *WEO*, the research chapters of the *GFSR* on the whole are more descriptive and much less technical. They primarily provide stylized facts and trends about the evolution of the world financial markets, including the role of different players or products. They typically lack a well-defined analytical framework and a clear focus, and in general they do not pose a set of questions that they attempt to answer using theory and/or evidence. Their conclusions are unnecessarily lengthy and do not give the reader a clear sense of priorities; their long lists of “to do’s” tend to overwhelm the reader.

19. However, starting in 2007, and coinciding with the first signs of softness in the world financial markets, improvements can be seen in the content, the analytical frameworks, and the presentation of the *GFSR* research chapters. Questions are posed more clearly at the outset, the analysis presented is better integrated with that presented in the first chapter of the reports, and a better balance is achieved between the topics discussed in the first chapter and the evidence and theoretical analysis in the research chapters.

20. Our review is based on 20 analytical chapters of the *GFSR* that were written between 2004 and 2008 (Table 3).

Table 3. *Global Financial Stability Report* Chapters Evaluated

Year		Chapters
2004	April	(iii) Risk Transfer and the Insurance Industry
		(iv) Institutional Investors in Emerging Markets
2004	September	(iii) Risk Management and the Pension Fund Industry
		(iv) Emerging Markets as Net Capital Exporters
2005	April	(iii) Household Balance Sheets
		(iv) Corporate Finance in Emerging Markets
2005	September	(iii) Aspects of Global Asset Allocation
		(iv) Development of Corporate Bond Markets in Emerging Market Countries
2006	April	(ii) The Influence of Credit Derivative and Structured Credit Markets on Financial Stability
		(iii) Structural Changes in Emerging Sovereign Debt and Implications for Financial Stability
2006	September	(ii) Household Credit Growth in Emerging Market Countries
2007	April	(ii) Changes in the International Investor Base and Implications for Financial Stability
		(iii) The Globalization of Financial Institutions and Its Implication for Financial Stability
2007	September	(ii) Do Market Risk Management Techniques Amplify Systemic Risks?
		(iii) The Quality of Domestic Financial Markets and Capital Inflows
2008	April	(ii) Structured Finance: Issues of Valuation and Disclosure
		(iii) Market and Funding Illiquidity: When Private Risk Becomes Public
2008	October	(ii) Stress in Bank Funding Markets and Implications for Monetary Policy
		(iii) Fair Value Accounting and Procyclicality
		(iv) Spillovers to Emerging Equity Markets

21. The evaluation uses the same methodology and set of criteria as for the *WEO* and the same rating scale, ranging from 1 to 5 (where 5 is the best “grade”). Table 4 summarizes the evaluation of the *GFSR* analytical chapters.

22. For the *GFSR* we divided the sample into two subperiods, the first ranging from 2004 to 2006 and the second from 2007 to 2008. Of the 20 chapters in the sample, 11 correspond to the earlier period. We calculated the overall average scores of the chapters for each subperiod. Dividing the sample in this way reveals important changes in both the substance and the presentation of the chapters.

23. The overall results indicate that in general the *GFSR* chapters perform as well as the *WEO*. However, the difference is startling when we consider the subperiod 2004–06, when the *GFSR* research chapters were particularly weak, their scores are significantly below the *WEO*. But the quality of *GFSR* chapters improved sharply in the later period and became in some cases better than that of the *WEO* chapters.

Table 4. *Global Financial Stability Report* Summary Evaluation

Report Chapter	Overall Average		
	2004–06 (11)	2007–08 (9)	2004–08 (20)
Structure and presentation			
1. The questions are well posed and clearly focused	2.9	3.9	3.4
2. There is a sound and clear discussion of the analytical framework	2.6	4.1	3.3
3. There is a good balance between analytical discussions, empirical evidence, and policy implications	3.1	4.0	3.5
4. Writing is clear and well organized	2.9	3.9	3.4
5. Is the empirical evidence presented in an intuitive and convincing way?	3.0	4.0	3.5
Choice of topics			
6. The issue is timely and relevant	2.9	4.3	3.6
7. The issues are important for policy discussions at the time	2.5	4.0	3.2
Quality and analysis			
8. Does it use appropriate analytical tools and relevant data?	3.1	4.2	3.6
Policy advice			
9. Would it be useful for policymakers?	2.7	4.0	3.3
10. Are the policy conclusions convincing?	2.9	3.8	3.3
Overall rating report	2.9	4.0	3.4

Note: The number of chapters being analyzed is given in parentheses.

II. THE *WORLD ECONOMIC OUTLOOK*

A. The World Economy and Financial Markets During the Evaluation Period

24. During most of the evaluation period the world economy enjoyed high and synchronized growth, low rates of inflation, and financial stability, in a period that has sometimes been called “the Great Moderation.” In fact, 2003–07 was probably the best economic period of the last four decades. Low rates of inflation generated unique financial conditions. Credit spreads were low and there were no apparent problems in financial institutions.

25. These favorable economic conditions, which are discussed at some length in the first chapters of the various issues of the *WEO*, probably affected the Fund’s selection of research topics for this report. As there were no “hot issues” that needed to be discussed, chapters focused on some idiosyncratic choices such as workers’ remittances, institution building, or demographic changes, which do not appear to be core topics for an IMF flagship publication.

26. The main themes that dominated the macroeconomic debates during these years were the end of inflation, the increasing importance of the BRICs in general and of China in particular, global imbalances, asset price booms (especially in housing), and the rise in commodity prices. The subprime crisis started to surface in July/August 2007, initially without large effects on the global economy. The financial crisis became apparent only in the first quarter of 2008, with the collapse of Bear Sterns, coinciding with the publication of the April 2008 *WEO*, and hence there was not much time to include any discussion of the issues till the October 2008 reports.

27. The topics that dominated the policy discussions during those years were covered in the research chapters of the *WEO*. As discussed below, the treatment was sometimes uneven; macroeconomic and financial issues were not well integrated; and though the policy recommendations were generally in the right direction they mostly failed to give the reader a clear message about priorities or about whether the issues were really urgent.

B. Evaluation Findings

Structure and presentation

28. The *WEO* chapters are generally well structured. They show discipline in clearly and concisely stating their main questions at the outset, and this definitely helps the reader to understand their purpose. Typically, a well-defined part of the chapter presents the main stylized facts and the analytical framework and is followed by a section that tends to be more technical, many times including references to econometric models or to quantitative evidence. The chapter concludes by summarizing the main findings and presenting the policy implications. There has been some improvement in the organization and clarity of the chapters over time.

29. Some individual *WEO* chapters cover two or three different topics, which many times are unrelated to each other and as a result are difficult to tie together to find a common theme.¹¹ A case in point is Chapter 2 of the April 2004 *WEO*. This analyzes three topics—the housing boom, exchange rate flexibility in emerging markets, and fiscal policy in the euro area—that have no obvious common theme; by and large they relate to problems observed in different regions and their economic and policy links are far apart. From a reader's perspective it would have been better to treat each in a stand-alone chapter, even if a short one.

30. The *WEOs* are prepared for the Spring and Fall meetings of the Board of Governors of the IMF and, as stated in some documents that we had access to, their main audience is policymakers attending those meetings. The nature of the material and the technical

¹¹ See for instance, Chapter 2, April 2004; Chapter 2, September 2004; and Chapter 2, April 2005.

presentations of some issues in the various chapters suggest that they cater to a broader audience than just the high public officials—namely mid-career staff at ministries and central banks, and probably equally importantly to researchers and to think tanks, nongovernmental organizations (NGOs), universities (including students), and people generally interested in macroeconomic issues. The material presented in the chapters is generally useful for policy discussions and for use in courses in colleges and universities (mainly for undergraduate economics and in some schools that deal with public policy issues).

31. The research chapters balance a relatively nontechnical introduction and conclusions with a more technical main body that uses somewhat more technical language. Given the multiple objectives of these chapters and the variety of audiences that tend to make use of them, the current approach seems reasonable.

32. The chapters generally present an analytical framework that helps the reader to understand the issue under discussion. Presentation of the framework is a useful and necessary component and it works best when it is done in a relatively simple and readily understood way, linking the analysis to the existing literature. The chapters generally succeed in this respect, though in a few cases the analytical frameworks are not made clear. An example of a good analytical framework is “Exchange Rates and the Adjustment of External Imbalances” (Chapter 3, April 2007), which poses a clear set of questions and describes the approach to addressing them, along with links to relevant work presented in previous *WEOs*.

33. There are several examples of chapters with a weaker framework. For example, in “Fostering Structural Reforms in Industrial Countries” (Chapter 3, April 2004) the question is presented at the outset but analytical and methodological problems weaken the results and conclusions. The indices of structural reforms used in the chapter are based on very few variables, and could be misleading; for instance, in the case of trade reform the chapter looks only at the average tariff (and does not consider nontariff barriers), while in the case of financial reform it looks only at variables like controls on credit or on interest rates, which have become less pertinent over the years as indicators of the quality of the financial markets. The interesting and somewhat worrisome result is that these two areas are precisely those in which the authors find that there has been more progress. Something similar occurs in “Building Institutions” (Chapter 3, September 2005), which offers abundant interesting evidence about changes in institutions and the historical background, but no clear guide to policymakers regarding what specific policies can be adopted to improve institutions. The long “shopping list” that is offered does not help the policymaker know where to start.

34. Another example is the section on workers’ remittances in Chapter 2, April 2005, in which the analysis does not pose clear questions at the outset and provides policy conclusions that are too vague and seem to overestimate the virtues of remittances. The lack of a clear analytical framework weakens the analysis and the conclusions. The discussion presents a large number of alleged benefits of remittances (e.g., that they help to increase human and physical capital or that they reduce the risks of financial crisis), which in our view tend to

overstate the importance of remittances, and the discussion lacks a clear focus. In addition, there is almost no discussion of their volatility caused by problems in the host country—an issue that became apparent following the 2008 recession. The international financial positive effects of remittances appear to be overstated. For example, “in extreme cases, remittances might reduce the probability of financial crisis” (p. 73) seems farfetched, as financial crises are typically related to problems with the allocation of stocks of assets, while remittances represent a flow. Besides, it is not clear whether the authors have in mind problems related to the stability of the banking system or to potential problems that could arise in the balance of payments (i.e., a run on the currency).

35. The more technical sections of the chapters sometimes take for granted that the reader has some knowledge of econometrics. One example is Chapter 4, April 2007, where p. 137 mentions the “cross-country and cross-region set of vector autoregressive analysis (VAR).” We believe that for many readers of the *WEO* there should be at least a footnote explaining what a VAR is, and what is the purpose of using this VAR analysis relative to other techniques.

36. Two useful aspects of the current format should be maintained. First, the boxes, which are used quite extensively, are a helpful instrument to illustrate specific points or to address some technical issues that are targeted to specific audiences. The advice here would be to try to prevent them becoming a distraction to the main argument, and to try to keep them short. Second, the chapters are presented in a helpful format, accompanying the column of text with a column of supporting graphs and tables.

37. Regarding the presentation of evidence, most of the time it is better to show graphs presenting the partial correlation between two variables than to provide tables with multiple regressions that could be difficult to interpret.

38. In our view, the Fund staff should make a big effort to present in a simpler, nontechnical way the important findings from its research. Event analysis and case studies are very useful means to illustrate the points made. Chapter 4 of the April 2007 *WEO* (on decoupling) offers a good balance between “event studies” and econometrics as well as the presentation of data. Econometrics is a useful tool, though it is probably a “black box” for many readers, who will simply need to have faith in the results presented. A number of *WEO* chapters rely on econometrics and get lost in technicalities about the econometric or simulation techniques and do not pay enough attention to the interpretation or implications of the results. One of these is Chapter 3 of the April 2005 *WEO*, which uses the Global Economic Model (GEM) “to investigate the implications of globalization for the adjustment of external imbalances” (p. 133). This chapter simulates several scenarios (instead of one base case and alternatives to the base cases) and does not present them clearly enough to convey a good sense of their likelihood of occurring, or of the major risks that the world economy faces. The discussion in the chapter on climate change and the global economy

(Chapter 4, April 2008), using the Global Integrated Monetary and Fiscal Model, also becomes unnecessarily technical.

39. In our view the *WEO* should aim to reach a broad audience, most of whom are expected to be familiar with economic terms and concepts but not necessarily knowledgeable in econometrics or on more technical quantitative issues. As a result it would be useful to always provide an intuitive interpretation of the econometric results and their implications. Econometrics and other quantitative methods should be only used when they can help to quantify the effects of certain policies on outcomes (say, the effect of a 10 percent real depreciation on the trade balance on the adjustment of the current account), and the results should be presented in a simple and readily understandable way.

40. The audience expects the IMF to quantify some of the effects discussed in the analytical chapters. Nevertheless, these chapters should make clear that their quantitative estimates are mainly scenarios, rather than forecasts, and should explain the underlying assumptions and the limitations of the empirical results.

Choice of topics

41. The analytical chapters of the *WEOs* typically address macroeconomic issues and policies that are relevant at the international level and that are part of the policy debate in the months prior to the publication of the reports. It is difficult for them to be fully up to date with macroeconomic policy issues, because often the choice of research topics is based on research commissioned months earlier or in other cases ongoing research conducted at the Fund.

42. The issues covered by the *WEO* in the evaluation period are by and large those that dominated the policy debates and the concerns of policymakers during those years. They include global imbalances, including issues related to current account balances and fiscal deficits; inflation; exchange rate and monetary policies; capital flows; and commodity prices and their impact on the world economy. In addition, there is some discussion of the links between the financial sector and the real economy as well as of some specific issues that could affect macroeconomic performance, such as housing prices or credit booms.

43. A number of chapters address the importance of globalization. In itself, globalization is important for the IMF, but some of the chapters discuss aspects of globalization that are not central to the Fund's work; an example is the discussion on globalization and inequality (Chapter 4, October 2007). The analysis of how globalization has affected inflation (Chapter 3, April 2006) is clearly a mainstream issue for the IMF, while the one on globalization and labor markets (Chapter 5, April 2007) falls somewhere in between.

44. Other topics fall less clearly within the expected range; they include "Building Institutions" (Chapter 3, September 2005), "Fostering Structural Reforms in Industrial

Countries” (Chapter 3, April 2004), and “Climate Change and the Global Economy” (Chapter 4, April 2008), which are not part of the core work of the Fund.

45. A number of issues covered in the *WEO* have an overlap with the *GFSR*. Examples are the analysis of housing booms, though in general the *WEO* chapters on this topic address the macroeconomic effects and monetary policy, which means that they fit naturally within the *WEO* mandate. Another example, with a less convincing fit, is the chapter on “Awash with Cash: Why Are Corporate Savings So High?” (Chapter 4, April 2006). Here the analysis is mainly on corporate financial decisions, and although it has some implications for overall saving and investment, it would have been more appropriately included in a report on corporate finance.

46. One of the central themes of the *WEOs* is the issue of global imbalances. The treatment of these imbalances focuses mainly on the U.S. economy, dealing both with the current account deficit and possible mechanisms for adjustment and with the budget deficits and their possible reduction. Most of the discussion could not have anticipated that in the end the effects of the 2008 crisis would eventually lead to a reduction in these imbalances.

47. Other recurrent themes are the fall of inflation rates and the experience with exchange rate flexibility in emerging countries. In these two topics the Fund clearly has significant expertise, and by and large they are well analyzed in the sample chapters. The chapter that asks whether inflation targeting works in emerging markets (Chapter 4, September 2005) is well structured and contains good analysis. Another chapter (Chapter 3, April 2006) analyzes whether globalization of the real and financial sectors has affected inflation. This topic has received a good deal of attention, especially as many developed economies have started to rely on outsourcing. The analysis here is well done, and the policy conclusions argue in favor of the importance of monetary policy. Perhaps the authors should have been more emphatic about the fact that globalization affects price levels but not necessarily the rate of inflation. Chapter 3 of the October 2008 *WEO* discusses the effects of the rise in commodity prices on inflation. While this was a “hot topic” at the time, the report’s publication coincided with the crisis and the topic became quickly outdated.

48. Issues related to exchange rate policies are not discussed as extensively for developed economies as for emerging countries in the sample chapters, though the April 2007 report contains a chapter on exchange rates and adjustment of external imbalances. That analysis is quite useful as it discusses several episodes in which it relates devaluations to improvements in the current account.

49. Another chapter that presents timely issues and contributed to the policy discussions of the time is that on decoupling (Chapter 4, April 2007)—an issue that will probably be further analyzed in the future. The chapter provides a good framework for future discussions.

What was missing?

50. Though the *WEOs* offer a fair amount of discussion about the risks posed by increases in housing prices and about the possibility of some speculation in the market, as well as in the commodity markets, they did not foresee the size of the problem and the potential interconnections it had with credit markets and the stability of the financial sector.

51. With hindsight, it seems clear that more research was needed on the links between developments in the financial markets and credit on the one hand, and economic activity on the other. The most recent chapters that try to put together financial and macroeconomic issues (such as “The Changing Dynamics of the Global Business Cycle” (Chapter 5, October 2007)) acknowledge that the increases in housing and commodity prices pose some macroeconomic risks but do not explore deeply enough the connections between the financial markets and macroeconomic variables.

52. The chapters on credit booms (Chapter 4, April 2004 and Chapter 2, September 2004) emphasize the risks that a reversal of the booms could pose for consumption and aggregate demand, and the possible impact on growth and the business cycle. However, they fail to address the possible connections between potential problems in consumer credit, the banking sector, and overall financial stability. Neither do they explore the financial channel in depth. Chapter 4, April 2004 focuses on credit booms in emerging markets, and a similar analysis is not offered for the developed countries, nor did the *WEO* apparently consider that the growth in nonbank credit was a concern.

53. Similarly, the chapter that discusses the possible existence of a bubble in the housing market (Chapter 2, September 2004) presents compelling evidence of the existence of overvalued housing prices in many countries, and of the risks of a large fall in real estate prices, but its discussion of the implications of the price correction concentrates on the macroeconomic effects, such as a possible reduction in consumption and aggregate demand, or GDP growth. There is no discussion of the implications for the quality of bank assets or the possible risks to the portfolios of securitized mortgages.¹²

¹² Discussing the effects of financial stress on the economy, the same chapter argues, using historical evidence, that episodes in which there is bank distress are more likely to be associated with severe and protracted recessions than are episodes in which the problems center in the securities or foreign exchange markets. This statement appears to be only half right, however, as the recent crisis initially centered on the investment banks and moved only later to the commercial banks—in effect, it was a credit crisis that affected liquidity levels in the commercial paper and repo markets, which resemble much more the credit or securities markets than the traditional banks.

Timeliness

54. Most of the topics covered in the *WEOs* are those that were being discussed at the time in think tanks, in academia, and among policymakers: global imbalances, inflation, exchange rate management, the sustainability of growth, and housing prices among others.

55. A number of the topics featured do not appear to be central in the policy discussions; they include workers' remittances, corporate savings, and the analysis of demographic change. As argued above, the inclusion of such topics probably reflects the unusually low inflation and high growth that prevailed in most of the evaluation period.

56. Since research projects take time and are typically started well in advance of publication, often it is difficult to adjust quickly the content of a report such as the *WEO* to accommodate the most recent developments. This was probably the case in the April 2007 issue, and to some extent in both 2008 issues (especially the chapters on climate change, the changing dynamics of the business cycle, and commodity prices and inflation). These chapters were published in the midst of the financial crisis when the dominant concerns were about the severity of the recession and the policy responses needed to avoid a new Great Depression.

57. The lesson from this period is that the research section of the *WEOs* should probably address timely and relevant macroeconomic policy issues, but cannot by its very nature be expected to address the most recent macroeconomic developments with the same degree of timeliness as Chapter 1.

Final reflections on the choice of topics

58. On the whole, the *WEO* research chapters focus on relevant topics and themes, reflecting the concerns of the international policy discussions of the time. There is a good balance between the coverage of developed and emerging markets, with perhaps a little more attention to the problems of developed countries. Among the latter group, it seems that the United States receives more attention than Europe or Japan while other Asian member countries of the Organization for Economic Cooperation and Development (OECD) in general are left behind. Asia receives more attention than Latin America or Eastern Europe, and Africa receives very little.

59. A disproportionate emphasis on issues related to the United States is clearly visible in the discussion of fiscal deficits, global imbalances, and decoupling. It is not obvious whether this is because the United States has a bigger role regarding these issues or is simply because the IMF is located in Washington.

60. A few issues appear to have been chosen "out of the blue." The discussions of climate change or income do not fit within the core mandate of the IMF, which is to discuss

macroeconomic issues. Some of them could be better addressed by other international development institutions.

61. The impression given is that the chosen themes are driven by the research that is being conducted by the IMF Research Department and are not necessarily oriented to the issues that are discussed in Chapter 1 of the *WEO*. As a result, some of the chapters are more in line with the themes presented in Chapter 1, while others appear to come out of the blue.

62. Finally, the use of chapters that group together two or three unrelated issues does not appear to be a good option. This practice seems to have been discontinued since 2006.

Quality of analysis

63. The quality of the analytical work is solid in the *WEO* research chapters reviewed and in most cases it fulfills the objectives of the *WEO*. The score that we estimate for the sample as a whole is 3.5 out of five, which is a good figure. The score is stronger for the chapters that concentrate on the core issues of the Fund's work (3.7) and weaker for those that deal with noncore issues (2.8).

64. In general the research chapters of the *WEO* have good analytical frameworks, as they convey to the reader the issue that they plan to discuss, they link it to the theoretical and empirical literature, and they motivate the discussion giving examples that are related to current economic events. This presentation is then used to stimulate the discussion of policy issues or important macroeconomic topics, and to motivate the discussions with evidence and results of statistical and econometric analysis.

65. Examples of good chapters include the discussion of inflation targeting in emerging market economies (Chapter 4, September 2005), which is backed by a good analytical framework and useful evidence and is relevant for policymakers; the discussion of decoupling (Chapter 4, April 2007), whose main contribution is the presentation of evidence and the spillovers from developed to emerging markets; and the chapter on savings and investment and the global imbalance (Chapter 2, September 2005), which enhances understanding of the issue at hand.

66. There are also some weak chapters, having either a flimsy analytical framework, or unsatisfactory use of the data or the evidence. One example is the chapter on structural reforms in industrial countries (Chapter 3, April 2004), whose conclusions rely on a very fragile and questionable data set about the evaluation of actual policies. For instance, in assessing the need of financial reform the chapter looks at whether there are controls on interest rates and credit allocations on international financial transactions, instead of assessing the quality of banks and of other financial intermediaries and the quality of the financial regulation and supervision. This view of financial reform seems outdated. Similarly, in the case of trade reform the chapter only looks at the effective tariff rate and not at nontariff barriers.

67. Another disappointing chapter is “How Do Financial Systems Affect Economic Cycles?” (Chapter 4, September 2006) which, instead of discussing the pro-cyclical behavior of credit or the transmission mechanisms of liquidity and monetary policy through the financial sector, addresses a relatively specific microeconomic issue: what difference does it make whether financing is channeled through the banks or through the capital markets? Finally, the chapter on remittances (Chapter 2, April 2005) suggests that remittances are much more important than they seem to be in practice, and probably exaggerates the positive and negative effects.

68. Chapters that address the core IMF topics tend, on average, to be analytically stronger but dealing with a core IMF issue does not always ensure good quality. Global or external imbalances, for example, are treated better in some chapters than in others. “The Global Implications of the U.S. Fiscal Deficit and of China’s Growth” (Chapter 2, April 2004) is well organized, its questions are clearly posed and addressed, its discussion of the issues makes use of a solid analytical framework, and its answers and their policy implications are supported by relevant and easy-to-understand evidence. Besides, many of the outcomes predicted in this chapter have since materialized. By contrast, “Globalization and External Imbalances” (Chapter 3, April 2005) promises to provide an interesting discussion of globalization: but most of its analysis actually focuses on whether more integrated world capital markets are a plus or minus to correct external imbalances. While this might be an interesting topic in itself, the chapter does not convince one that it is important for understanding external imbalances. Besides, the chapter offers no discussion of important factors such as sudden stops of capital flows (which have been widely discussed in the case of emerging market countries), or the larger role that sovereign wealth funds and central banks play in the allocation of capital flows—two issues that would have helped to gauge the overall risks.

Policy advice

69. Each of the sample chapters ends by presenting the policy implications of the analysis. This is a key part of the discussion, although often very brief. The Fund’s view on policies is taken seriously and is an important basis for policy discussions among policymakers, analysts, and academics.

70. Ideally, the advice presented should help policymakers by clarifying the options for dealing with the issues under discussion. The recommendations should be as specific as possible in order to help governments design appropriately targeted measures. When the policy recommendations are vague or presented in general terms, such as “governments should follow prudent macroeconomic policies” or “market liberalization is useful to foster competitiveness and growth” they are not very useful. The policy advice needs to be specific and tailored to policymakers’ needs: it should help them identify priorities and detect the most critical issues that need to be addressed, and should propose specific measures that could be implemented to provide an adequate response to the issue at hand.

71. The *WEO* in general fails to achieve this important objective because although its advice is generally in the right direction it is not specific enough to make an important difference in the design of policies. True, many of the issues that are discussed involve problems that are general in nature (for instance, inflation targeting in emerging markets or decoupling in the global economy) and hence one could not expect the *WEO* to provide very specific recommendations.

72. One example of the lack of specificity of advice follows the discussion of Dutch disease in “Managing Large Capital Inflows” (Chapter 3, October 2007). The chapter’s policy conclusions are: “In addition to the macroeconomic policy instruments discussed in Chapter 2 [which refer to the primary fiscal balance or primary expenditures], the authorities have other tools at their disposal, which have not been analyzed systematically—notably, financial supervision and regulation, but also a wider range of policies such as labor and product market reforms. The role of such policies in responding to capital inflows would be an important topic for future research.” These recommendations in our view are very vague, as labor reform is a very general issue and product market reform is even vaguer. In addition, it is not clear how financial supervision could affect the Dutch disease problem. Besides, in this particular case, the authors dismiss too quickly the possibility of using sterilization or some form of capital controls. Although these policies are unlikely to be effective in the medium or long term, they could be used temporarily as a way to smooth the transition. Besides, some recent work at the IMF suggests this option.

73. Another example of policy advice that is reasonable but vague comes from the April 2004 report (p. 96), which argues that emerging market economies need to increase the flexibility of their economies through structural reforms. The chapter does not specify which are the important policy reforms or which are the priorities, or which concrete policy measures the Fund would recommend to these economies.

74. Most of the policy advice offered by the sample chapters, at least until 2007, also appears to be very predictable, typically arguing in favor of fiscal adjustment, proposing policies that reduce government regulation and intervention, and more market-oriented measures, freer capital flows, and stable and predictable monetary policies that favor low rates of inflation. While it is difficult to argue with the tone of the policy recommendations, this type of general policy advice is sometimes counterproductive, especially in emerging markets, as it helps to create a view that the Fund is mechanical and that its policy recommendations do not take into account the specific features of individual countries.

III. THE *GLOBAL FINANCIAL STABILITY REPORT*

75. The objective of the *GFSR*, as stated in the preface to the April 2005 edition, is to “assess global financial market developments with the view to identifying potential systemic weaknesses. By calling attention to potential fault lines in the global financial system, the

report seeks to play a role in preventing crises, thereby contributing to global financial stability and to sustained economic growth of the IMF's member countries.”

76. Most of the analysis along these lines is carried out in the first chapter, which is the core of the report and makes a clear effort to map the financial risks across financial markets and regions.

77. Each report also typically contains two or three research chapters, which treat specific issues in more depth. Some of these chapters are mainly descriptive, such as those that present the characteristics and roles of key long-term financial players such as pension funds, insurance companies, and investment, mutual, or hedge funds. Others deal with more specific issues that typically address the functioning of financial markets or assess the risks, such as the chapters that address household credit growth in emerging market economies (Chapter 2, September 2006) or the one that analyzes whether market risk management techniques amplify systemic risk (Chapter 2, September 2007).

A. Evolution of Financial Markets During the Evaluation Period

78. The evaluation period can be clearly divided into two subperiods, the first starting in 2004 and ending in the first half of 2007, and the second starting in July 2007, at the beginning of the financial crisis, and ending in 2008. The analysis undertaken in the *GFSR* chapters to a large extent reflects the different realities in these two periods.

79. In the first period, the markets enjoyed unusual financial stability, as credit spreads tightened to very low levels; there was ample funding liquidity in the markets and growing levels of financial intermediation. There were some concerns about the rise in asset and commodity prices, and continued warnings about a possible bubble in housing prices and in credit spreads. Many analysts also raised concerns about the potential financial risks generated by the growth of derivatives markets. But during those years the markets overlooked these risks and policymakers did not perceive them as a major threat. At least on the surface, the markets were working well.

80. The second period corresponds to the preface and the outbreak of the financial crisis, which peaked with the collapse of Lehman Brothers in September 2008. The first problems were observed in the U.S. subprime mortgage market in July 2007, when some funds that had invested in subprime mortgages started to face liquidity and solvency problems and the investment bank Bear Sterns (the underwriter of those funds) had to come to their rescue. These problems were followed by a number of events that clearly signaled risks in the financial markets, including the failure of Country Wide, the largest mortgage broker, in the second half of 2007, and the collapse of Bear Sterns, which was subsequently rescued by the U.S. Federal Reserve and bought by J.P. Morgan in March 2008.

81. The crisis began to escalate with the failure of Freddie Mac and Fannie Mae, though it peaked in September and October of 2008, when the financial markets were in panic and

there was a risk of a new great economic depression. The crisis was the most serious threat to international financial stability since the Great Depression. The survival of many financial institutions, including the largest investment banks, some commercial banks, and the largest insurance company (AIG) was at stake. Investment banks faced a run on their liabilities and were forced to sell many assets at fire-sale prices. In the end, the investment banks were either absorbed by other institutions or transformed into commercial banks, while the commercial banks had to be recapitalized and governments were forced to come to the rescue of many financial institutions. The crisis led to a sharp drop in asset prices, and bank credit and the commercial paper market virtually disappeared.

B. Evaluation Findings

Structure and presentation

82. The audience for the *GFSR*, as for the *WEO*, consists of policymakers, analysts at think tanks, and academics. Compared with those of the *WEO*, the analytical chapters of the *GFSR* are generally longer, more descriptive, less analytical and “model driven,” and make less use of statistics. Though they do not set out to test specific hypotheses, they provide a thorough analysis of the sector or issue that they discuss, often describing the key features of a particular industry or sector and covering many of the institutional and regulatory elements that are relevant for the discussion, including cross-country comparisons. They conclude with policy recommendations.

83. The structure of the *GFSR*’s research chapters has improved over time, and definite positive changes were made in 2007. The later chapters in the sample make an effort to pose at the outset the main issues and questions to be addressed, thus allowing the analysis and the messages of the reports to be sharpened.

84. The research chapters are generally written simply; they do not make much use of quantitative analysis, and hence they could be read by a broad audience that does not necessarily have a background in these issues. The chapters contain useful tables, many of which are mainly descriptive of the evolution of the financial sector or of the relative size of different financial intermediaries. At the same time they tend to be tedious to read, giving many details that are of interest mainly to people who work in the industry.

85. On the other hand, the typical overview chapter of *GFSR* makes an important contribution that is not easy to find in other places. It describes the evolution of the world financial markets, covering recent financial developments regarding capital flows, interest rates, exchange rates, and asset prices. It is useful because it describes a number of financial issues in a thorough way that are not covered in other publications. Last, but not least, it also provides a discussion of the main financial risks. At least until 2007, there was a big difference between the *GFSR*’s Chapter 1 and the research chapters. In general, Chapter 1 is more interesting to read and does a much better job at combining data and analytical issues than the research chapters.

Choice of topics

86. The themes that are covered typically include a description of the main actors in the financial markets (insurance companies, mutual funds, pension funds, etc.), and of some general developments in the financial markets, such as the development of government debt or of credit derivatives. These themes are useful, but their treatment during the evaluation period did not help significantly to identify the global financial risks.

87. The sequence of themes from one report to the next during the first years of our review appears to have followed a clear pattern—which was to cover sequentially the different financial actors—and from that point of view it made sense. This decision had a drawback, namely that a number of issues, especially those related to the systemic effects of financial risks as well as other timely issues such as the housing booms and the emergence of bubbles in asset prices were left out.

88. A large part of the *GFSRs*, especially between 2004 and 2006, is devoted to discussing in great detail the implications of the process of risk transfer that resulted from the securitization of assets such as mortgages, credit card receivables, consumer loans, and other financial assets. With the benefit of hindsight it is clear that the reports overestimated the advantages of these new instruments and did not take into account the funding liquidity and credit risks associated with them.

89. Coinciding with the beginning of the financial crisis, the reports shifted towards the analysis of risks from a systemic point of view that runs across sectors. The October 2008 report contains discussions about the valuation and disclosure of structured financial products, funding liquidity, private and public sector risks, and stress scenarios in the banking system.

What is missing?

90. In our view, a number of themes are missing from the analysis. It is surprising that the research chapters of the *GFSR* did not pay enough attention to key financial issues that could potentially have large effects on the real side of the economies and on the evolution of the financial sector itself.

91. For emerging countries, it would have been useful to try to tie together the financial and macroeconomic issues. One example is the discussion about the diversification of the investor base for emerging markets (April 2004), in which the larger reliance on foreign funding is perceived as unambiguously favorable. This view ignores the risks associated with sudden stops, or those related to the vulnerabilities that external finance can introduce into these countries. This gap is especially surprising because the *WEOs* look at these risks and vulnerabilities and consider them as potential threats to financial stability.

92. For more developed markets, the *GFSR* chapters did not offer an in-depth analysis of the derivatives markets or of the risks that those could entail, or of the growth of securitization, or of the interconnections among different types of credit institutions. It is surprising that during this period no chapter analyzed the risks associated with the fall in risk premiums or the rise in asset prices (mainly for housing, or for the stock markets), especially given the possible existence of bubbles in some of these markets and the effects that a burst bubble could have on overall financial stability. Paradoxically, many of these issues were discussed in the *WEOs*, as discussed in Section II above, though the *WEOs* looked at them from a macroeconomic perspective and did not link them to the risks for financial stability.

93. The *GFSR* research chapters evaluated made a clear effort to maintain a good balance in the coverage of emerging and developed economies, and also maintained a reasonable balance in the discussion of the problems of different regions.

94. Another issue that would have been useful and timely to cover is the critical role that the credit rating agencies played in the crisis. These agencies have attracted many criticisms in the past. True, this is a difficult issue to tackle, but it is in areas such as this where the *GFSR* could make a difference. Two other missing issues that the recent crisis has brought to the fore are (1) the role of the mono-line insurance companies—companies that had an important effect on credit ratings but whose risk might not be as diversified as is generally thought (raising questions about the usefulness of this industry), and (2) the interconnections among financial intermediaries.

Timeliness

95. The evolution of the financial markets during the two subperiods and themes covered in the reports were very different. Until 2007 the themes of the *GFSR* chapters were very diverse, and it is difficult to argue that there were more pressing issues that the reports should have dealt with. Even so, it is noticeable that during the calm years, the *GFSRs* did not address potential problems such as the development of asset bubbles and their implications for financial stability, or the rapid growth of credit and the implications it could have for the financial system or, even more important, for the economy as a whole.

96. With the outbreak of the crisis it became clearer which themes should be addressed in the analytical chapters. In the April 2007 report, the themes still do not capture the importance of the crisis; the two research chapters cover issues such as the changes in the international investor base and the advantages of the globalization of financial institutions for financial stability (an issue that has become controversial in light of the crisis). The September 2007 report still did not catch up with events, as one of the chapters analyzes capital inflows to emerging market countries. The catch-up took place only in 2008: the April 2008 report deals with issues of valuation of structured finance and analyzes funding liquidity and its implications, while the October issue addresses stress in the banking system

and fair value accounting and pro-cyclicality and the spillover effects on emerging markets—three issues that were timely and important.

Quality of analysis

97. The quality of the research in the *GFSRs* is very uneven. There is an important gap between the first chapters of the *GFSRs*—which achieve a good balance between the concepts that are being presented and the evidence—and the research chapters—where the analytical issues are often vaguely presented and generally too little evidence is provided to substantiate the arguments.

98. In general, the *GFSR* research chapters are largely descriptive. The lack of a clear analytical framework that states at the outset the issues that the chapter intends to answer, the methodology that will be used, the main findings, and the policy implications that follow from these steps is a notable weakness of these chapters.

99. In our view, it would be useful to sharpen the questions that the *GFSR* research chapters are trying to analyze (as has been done to some extent since 2007), and to present more evidence to support the results. For instance, if the objective is to explain the fall in credit risk (as measured by the spreads on high yield bonds or on emerging market yields), it would be useful to show the evolution of the spreads at different times, and the determinants of the spreads (use correlations, tables, or graphs), and to give a sense of whether they are sustainable. Or, if the aim is to discuss accounting methods in the insurance industry, it would be useful to quantify the effects of different methods and to have a sense of whether there is, for example, a trade-off between accuracy (mark to market) and solvency (fair or accounting value), or some other quantification that could help the reader gauge the importance of the issue at hand.

Policy advice

100. The *GFSR* chapters, like those of the *WEO*, always end with a list of policy recommendations. Their policy recommendations tend to be more specific than those of the *WEO*, partly because the *GFSRs* look at narrower issues, such as the insurance companies or the pension fund industry, and hence they can give more concrete advice regarding the rules or regulations that are most appropriate to help financial stability.

101. Despite the greater specificity of their policy advice, however, the *GFSRs* tend to provide a “laundry list” of things that countries need to do, without giving a clear sense of priorities. Neither do they draw clear distinctions between emerging and developed financial markets.

102. As in the case of the *WEO*, the advice is almost always predictable, and the educated reader can anticipate the main recommendations. The typical policy advice is to improve supervision processes, adopt tighter regulations, or change the institutional framework.

Unfortunately, in cases in which the policy advice is more complicated, such as regarding the valuation of structured financial products (Chapter 2, April 2008), the conclusions are not clear-cut. They favor more transparency (which is difficult to argue with); urge that “rating agencies should provide investors with more analytical information;” and favor “[f]urther refinement and careful implementation of Basel II.” None of these pieces of advice is likely to change a country’s policy framework. Finally, about the valuation of structured financial products, the chapter says: “Greater attention to applying fair value results needs to be addressed. As experience is gained from the crisis, some weaknesses in the implementation of fair value as a valuation mechanism could usefully be addressed.” This statement does not give the reader a sense of whether countries should move towards applying fair value accounting or not. This type of problem arises repeatedly in the chapters, showing that the Fund is not ready to take a strong stand on these issues.

103. A final problem, which goes beyond the research chapters of the *GFSR*, is that the policy advice does not successfully integrate the interconnections between financial markets and macroeconomic events and policies, nor does it take into account the interconnections among different financial intermediaries. This issue is addressed to some extent in Chapter 3 of the April 2008 report, but without precise recommendations. Regarding the problems with funding liquidity, this states: “Careful consideration will need to be given to these incentives in order to improve policies to reduce systemic risks in the years to come.” How would a policymaker interpret this statement?

IV. OVERALL EVALUATION OF THE REPORTS AND REFLECTIONS FOR THE FUTURE

104. The analytical chapters of the *WEO* and of the *GFSR*, the two IMF flagship reports, are on the whole good quality chapters that address relevant macroeconomic and financial topics. The *WEO* chapters have been more mature pieces of research, to a large extent because that report has been developed over many years and because they mostly address issues that are part of the core work that the IMF has been conducting since its creation. The *GFSR* is a more recent report, whose analytical chapters have not yet reached the same level of maturity. Nevertheless, the quality of these chapters has been improving, in part because financial issues are now recognized as highly interconnected to the macroeconomic work at the IMF and in part because of a natural process of maturation.

105. The *WEO* and the *GFSR* each start with a chapter that provides an overview of recent economic and financial developments, generally presenting base-case economic and financial scenarios and identifying the main risks that could affect the outcomes. Ideally, the research chapters should provide the analytical underpinning for some of that discussion, or alternatively discuss an issue that is particularly relevant for macroeconomic or financial policies from a long-term perspective. In our view there is still a need to better integrate the two sections of the reports, including by more coordination in the selection of the topics that are covered.

106. The evaluation of the analytical chapters of both reports prompts a number of recommendations:

107. Regarding **structure and presentation**, both reports have now achieved a good level of quality. The recommendation is to insist on starting with clear questions that are linked to important policy issues and that are motivated with examples that policymakers can easily grasp. Given that the reports are intended for policymakers and analysts (including those in academia and think tanks) and the short amount of time that the researchers have to draft the chapters, the idea is that they should serve as a bridge between academics and policymakers. The chapters need to bring together the most recent analytical work and evidence and “translate” them into a language accessible to policymakers. The major value added should lie in the application of the analysis to policy issues. For this, the reports need to present clearly the policy implications of the empirical findings. This last recommendation is more relevant in the case of the *WEO*, which is the more technical publication.

108. The **choice of topics** is a critical decision, especially because the issues being addressed need to be timely and relevant for a large number of countries. In the case of the *WEO*, the most successful chapters are those that address the topics in which the Fund has clear expertise such as inflation, exchange rates, monetary and fiscal policies, or external imbalances. The treatment of structural or long-term issues is an option, but in those cases the authors need to make sure that these are related to the Fund’s mandate. In the case of the *GFSR*, the selection of topics appears to be in line with the mandate of the report, though many times the analytical chapters have missed central issues that were important to understand financial risks (and that were sometimes mentioned in the overview chapter).

109. The **quality of the analysis** is on average good, but there is high variance. In the case of the *WEO*, it is better in those areas where the Fund has greater expertise and less successful in those where it has less. In the *GFSR*, it has improved over the years, though a large number of the chapters evaluated are more descriptive than analytical. The expectation is that the *GFSR* will continue to move along more analytical lines, though without becoming over-technical, choosing topics that are relevant for financial stability and macroeconomic performance.

110. An important issue is the **use of evidence** to illustrate specific points. In our view the use of boxes is very useful for the reader, and we would recommend a more intense use of partial correlations and graphs. We would also recommend relying less on econometrics, using these techniques mainly to quantify certain effects and to help the reader to understand the quantitative impact of the adoption of certain policies (e.g., fiscal multipliers) or of changes in key variables (e.g., the price of oil). The results should be presented clearly as scenarios, not forecasts.

111. The **policy advice** presented in the reports does not always follow from the analysis and is often too vague to help policymakers. In general, the advice is what one expects: in the

WEO, prudent monetary policy, avoidance of overvalued currencies, tightening in fiscal policy, better institutions, more flexible labor markets, and so forth; and in the *GFSR*, adoption of better regulatory frameworks and improvements in supervision, more transparency in financial institutions' accounting, provision of more information, and so forth. To be useful, the policy conclusions need to be more tightly related to the analytical framework and the evidence presented, and they should be more specific.

112. One possibility would be to try to distinguish different economic situations or country taxonomies and recommend different policies depending on where each country stands. For instance, the soundness of adopting an expansionary fiscal policy depends among other things on whether the economy has excess capacity or not, as well as on the size of the stock of debt and on the existing tax pressure. The policy conclusions could then differ depending on the situation of a specific country.

113. **Moving forward, one of the main challenges is to find ways to integrate and coordinate the work on the two reports**, especially regarding a better understanding of the various ways in which financial issues can affect macroeconomic outcomes and of the mechanisms through which macroeconomic developments can have an impact on financial stability. In today's world, as the recent international financial crisis has made clear, there are strong two-way connections between the financial markets and macroeconomic outcomes. A sharp deterioration in the financial markets affects the availability of credit to the private sector and thus affects economic activity. Conversely, a severe drop in economic activity can affect asset prices and the level of nonperforming loans in the banking sector and generate problems in that sector. In some extreme cases, such as in a financial crisis, governments might be forced to bail banks out through issuing debt and by providing guarantees on some of their liabilities, undertaking emergency policy measures to avoid a collapse of credit and of the payment system.

114. It seems that during the evaluation period there was essentially no coordination between the two reports regarding the topics covered and the interactions between financial and macroeconomic issues. In this regard the two reports have been working in parallel in their analysis of current economic developments, their analytical chapters, and their policy recommendations.

115. Achieving better coordination and integration will not be easy, not only because it requires a good understanding of the interaction between macroeconomic and financial issues (which is not discussed in traditional macroeconomic courses), but also because the work at the Fund and the responsibility for the preparation of the reports is in different departments.¹³ While there is a review process for both reports, the bottom line is that there are not enough

¹³ The *WEO* is prepared under the direction of the Research Department, while the *GFSR* is directed by the Monetary and Capital Markets Department.

interactions between the two products and each of the departments perceives the report as its own output.

116. In 2010, in an effort to integrate the analysis and policy recommendations the two reports shared a joint introduction. This is a move in the right direction but not enough to close the gap. Management could consider implementing measures to achieve more interaction between the two departments—which is particularly important at the early stages of the preparation of the reports. This process could involve some joint brainstorming meetings at the time when the topics are selected for the analytical chapters of the two reports; some joint working seminars to present the initial drafts of the chapters; and members of the two departments working together throughout the review process of both reports. In addition, the Fund could consider implementing a mobility policy between the two departments for the staff who conduct research and participation in drafting the chapters.