

Regulatory and Supervisory Challenges in a New Era of Global Finance

Edited by
Jan Joost Teunissen

FONDAD
The Hague

*From: Regulatory and Supervisory Challenges in a New Era of Global Finance
FONDAD, The Hague, 1998, www.fondad.org*

Forum on Debt and Development (FONDAD)

FONDAD is an independent policy research centre and forum for international discussion established in the Netherlands. Supported by a worldwide network of experts, it provides policy-oriented research on a range of North-South problems, with particular emphasis on international financial issues. Through research, seminars and publications, FONDAD aims to provide factual background information and practical strategies for policymakers and other interested groups in industrial, developing and transition countries.

Director: Jan Joost Teunissen

Regulatory and Supervisory Challenges in a New Era of Global Finance

Proceedings of a Conference on “Coping with Financial Crises in Developing and Transition Countries: Regulatory and Supervisory Challenges in a New Era of Global Finance”, held at De Nederlandsche Bank on 16-17 March 1998 and organised by the Forum on Debt and Development, with the co-sponsorship of the Dutch Ministry of Foreign Affairs, De Nederlandsche Bank, the International Monetary Fund, the Canadian International Development Agency, the North-South Institute, and the G-24 Project on International Monetary and Financial Affairs.

Editor: Jan Joost Teunissen

The views expressed in this book do not necessarily represent those of the Forum on Debt and Development or any of the co-sponsors. The summaries of the floor discussions, following the papers, attempt to convey the sense and substance of what was discussed. They have not been reviewed by all of the participants.

ISBN: 90-74208-14-2

Copyright: Forum on Debt and Development (FONDAD), 1998

Permission must be obtained from FONDAD prior to any further reprints, republication, photocopying, or other use of this work.

This publication was made possible thanks to the support of De Nederlandsche Bank and the Department for Development Cooperation of the Dutch Ministry of Foreign Affairs.

Additional copies may be ordered from FONDAD at
Noordeinde 107 A, 2514 GE The Hague, the Netherlands
Tel: 31-70-3653820 Fax: 31-70-3463939 E-Mail: Forum_FONDAD@wxs.nl

*From: Regulatory and Supervisory Challenges in a New Era of Global Finance
FONDAD, The Hague, 1998, www.fondad.org*

Contents

Acknowledgements	7
Notes on the Contributors	8
Abbreviations	12
Preface by H. Johannes Witteveen	13
Introduction by Jan Joost Teunissen	16
I The Global Implications of Financial Crises in Emerging Market Economies (From Mexico to Korea)	23
“The Financial Crisis in Korea and Its Lessons for Reform of the International Financial System”	25
<i>Yung Chul Park</i>	65
Comment by Kunio Saito	
“Globalised Financial Markets and Financial Crises”	70
<i>Charles Wyplosz</i>	
Comment by Mukhtar Nabi Qureshi	88
Floor Discussion	90
II The International Institutions’ Current Approaches and the Prospects of Their Future Activities	105
“Reflections on the Asian Crisis: Causes, Culprits and Consequences”	107
<i>Jack Boorman</i>	
Comment by Stephany Griffith-Jones	133
“Financial Crises: Towards an Alternative Approach”	140
<i>Ariel Buira</i>	
Comment by Pradumna B. Rana	
Floor Discussion	157

III	Specific Issues Confronting Regulators and Supervisors at the International Level	167
	“Four Themes of Sound International Supervision”	169
	<i>Susan M. Phillips</i>	177
	Comment by Paul Cantor	
	“Promoting International Financial Stability: The Role of the BIS”	180
	<i>William R. White</i>	
	Comment by Armand Pujal	205
	Floor Discussion	209
IV	Specific Issues Confronting Regulators and Supervisors at the National Level	221
	“Thailand: Path of Financial Restructuring”	223
	<i>Amaret Sila-On</i>	
	“Some Financial Issues in Transition Economies: The Case of Hungary”	229
	<i>György Szapáry</i>	
	“Banking Supervision in Developing Economies”	235
	<i>Christian Larraín</i>	
V	Epilogue	267
	“The Challenges for the International Financial System at the Eve of the 21st Century”	269
	<i>Age Bakker</i>	
	Appendix: List of Participants	274

Acknowledgements

This book was made possible through the ideas, support and contributions of many people and organisations. A particular thanks goes to Roy Culpeper (The North-South Institute), Gerry Helleiner (Head of the G-24 Project on International Monetary and Financial Affairs), and Coen Voormeulen (De Nederlandsche Bank) for their assistance with the development of the contents of the March 1998 conference, held in Amsterdam, from which this book emerges. I also want to especially thank Age Bakker for his able chairing of the conference and for his intellectual input. Henk Brouwer, Tom de Swaan, and others at De Nederlandsche Bank have been very helpful with the conference preparations whom I therefore also thank.

Fondad very much appreciates the continuing support of the Dutch Ministry of Foreign Affairs and the co-sponsoring of this conference by De Nederlandsche Bank, the International Monetary Fund, the Canadian International Development Agency, and the G-24 Project on International Monetary and Financial Affairs.

Fondad is grateful to UNCTAD for allowing us to publish Christian Larraín's paper on "Banking Supervision in Developing Economies" which is also to appear in the forthcoming UNCTAD publication *International Monetary and Financial Issues for the 1990s, Vol. X* (New York and Geneva, United Nations Publications).

A special thanks goes to Adriana Bulnes, Julie Raadschelders and Miriam Anne Frank who assisted me in the publishing of this book.

Jan Joost Teunissen

Notes on the Contributors

Age Bakker is Deputy Executive Director of the Nederlandsche Bank and Professor of Monetary and Banking Issues at the Vrije Universiteit of Amsterdam. He is a member of a number of policy committees within the framework of the European Monetary Institute, the Group of Ten and the OECD. He is presently engaged in preparing the introduction of the euro into the Dutch financial system. Previously, he has held various other positions in the Nederlandsche Bank. He has published on European monetary cooperation, the international monetary system and the functioning of financial markets.

Jack Boorman is the Director of the Policy Development and Review Department of the IMF, which organisation he first joined in 1976. Formerly he was Senior Advisor, Deputy Director, and finally Director of the Exchange and Trade Relations Department of the IMF. Previously he was also Division Chief of the Asian and then the European Department of the IMF. Prior to the IMF, he worked as a Financial Economist for the Federal Deposit Insurance Corporation. He has taught at both the Universities of Southern California and Maryland. He has published on the topics of banking, macroeconomics, and on monetary theory and policy.

Ariel Buira is an economic adviser and former Deputy Governor of Banco de México. He has been Mexico's representative in numerous missions and negotiations in the international arena including the IMF, the World Bank, BIS, OECD, UNCTAD, as well as the Economic Commission for Latin America and the Caribbean. In the past he has been Executive Director of the IMF. He has a wide range of publications focusing on international financial issues.

Paul Cantor is Executive Director of the Toronto International Leadership Centre for Financial Sector Supervision (The Toronto Centre) and Chairman & Chief Executive Officer of National Trust. He is also Director of The Dominion of Canada General Insurance, The Empire Life Insurance Company and Torstar Limited. Previously he has been President & Chief Executive Officer of Confederation Life Insurance Company, President of the Investment Bank with the Canadian Imperial Bank of Commerce and Director of National Trustco Inc.

Stephany Griffith-Jones is a Senior Fellow at the Institute of Development Studies, Sussex University. Previously she worked at Barclays Bank International in London and at the Central Bank of Chile. She has served as a senior consultant to many international agencies including the World Bank, the Inter-American Development Bank, the EU and UNCTAD. She is the author of many books and articles including *Managing World Debt* (1988), *Coping with Capital Surges: The Return of Finance to Latin America* (1995, with Ricardo Ffrench-Davis), and *Global Capital Flows* (1998).

Christian Larraín is Associate Economist at GERENS Consult and Director of SACOR Enterprise (CORFO) in Chile. He was previously General Director of International Finance and Banking at the Ministry of Finance, served as a Senior Advisor to the Minister of Finance and the Superintendent of Banks, and as an Advisor at the Office of the Government of Chile. He has done extensive consultancy work and has published on banking regulation and supervision.

Yung Chul Park is a Professor of Economics at Korea University, Seoul. In addition, he is Chairman of the Deliberation Committee for Financial Development at the Ministry of Finance and Economy, Korea. He previously served as the Chief Economic Adviser to Korean President Doo Hwan Chun, as President of the Korea Development Institute, as an academic member of the Bank of Korea's Monetary Board and as Director of the Institute of Economic Research at Korea University. He is the former President of the Korea Institute of Finance. He has also worked for the International Monetary Fund. As a Visiting Professor he taught at the Universities of Harvard and Boston.

Susan M. Phillips is member of the Board of Governors of the US Federal Reserve System. She has been Assistant Professor at Louisiana State University and the University of Iowa, where she later became Associate Professor. Here in 1979 she was appointed as Acting Assistant Vice President for Finance and University Services and later Associate Vice President. She has been a Brookings Economic Policy Fellow and a SEC Economic Fellow with the Securities and Exchange Commission. First a member on the Commodity Futures Trading Commission, she later became its Chairman. She is the author of many scholarly publications.

Armand Pujal is Deputy Secretary General of the Banking Commission in Paris, which he first joined in 1997. He has previously held several different positions at the Banque de France, initially working in the Inspection

Department and then becoming Head of Balance of Payments Division, Head of International Relations and, finally, Deputy General Manager of the Foreign Department. In 1988, he was seconded to the Federal Reserve Bank of New York.

Mukhtar Nabi Qureshi is Deputy Governor at the State Bank of Pakistan. He is a Member of the Board of the following institutions: the Small Business Finance Corporation, the National Development Finance Corporation, and the Saudi Pak Industrial & Agricultural Investment Company. He is also a Member of the Institute of Bankers in Pakistan. During his career at the Bank of Pakistan he has held senior-level positions in almost all departments of the Central Bank.

Pradumna Rana is Senior Economist at the Economics and Development Resource Center of the Asian Development Bank and has been with the ADB since 1988. Previously he has worked at the Institute of Southeast Asian Studies in Singapore and lectured at the National University of Singapore, the Tribhuvan University of Nepal and Vanderbilt University, Tennessee. He is a member of the core group of the Bank's annual *Asian Development Outlook* which in 1998 included his chapter on "The Financial Crisis in Asia." In 1998 he was the coordinator of a joint World Bank/ADB Study on "Managing Capital Flows: National and International Dimensions," which will soon be published.

Kunio Saito is Director of the Regional Office for Asia and the Pacific of the International Monetary Fund in Tokyo since 1997. Previously he was the Director of the IMF's Southeast Asia and Pacific Department. He has worked with the IMF since 1969, primarily in its Asian Department. He has also worked in the Japanese Ministry of Finance and for the Asian Development Bank.

Amaret Sila-On is Chairman of both the Stock Exchange of Thailand and the Financial Sector Restructuring Authority (FRA). He is also Chairman of various government committees on organisational and financial matters. Previously he was Minister of Commerce in the Royal Thai Government and has worked for the Minister of Finance in Thailand. He has been Governor of the American Chamber of Commerce in Thailand and Vice-President of the ASEAN Chamber of Commerce and Industry. In the private sector he has worked for companies such as Shell and The Siam Cement Co. and continues to act as an adviser to private sector institutions.

György Szapáry is Deputy President of the National Bank of Hungary, President of the Board of Directors at the International Centre for Bankers in Budapest, and President of the Foundation for Enterprise Promotion of the Province of Jász-Nagykun-Szolnok, Hungary. He is also a Member of the Board of the Budapest Commodity Exchange. Previously he was with the Economic Commission in Brussels. He then joined the IMF, where his positions included Division Chief of both the Asian and European Departments, Assistant Director of the Asian Department and finally Senior Resident Representative of Hungary.

William R. White is the Economic Adviser and Head of the Monetary and Economic Department of the Bank for International Settlements. He has previously worked for the Bank of Canada, as Deputy Chief of the Department of Banking and Financial Analysis; as Deputy Chief and then Chief of the Research Department; as appointed Adviser to the Governor and finally as its Deputy Governor. He has also worked as an economist for the Bank of England.

H. Johannes Witteveen is an economic adviser and was the former Managing Director of the IMF from 1973 until 1978. Previously he was Minister of Finance of the Netherlands (1963-1965, 1967-1971) and a Member of Parliament (1965-1967). He has served as a director and advisor on international economic and monetary affairs for various Dutch and international companies. From 1948-1963, he was a Professor of Economics teaching business cycle theory and economic policy at the Netherlands School of Economics in Rotterdam.

Charles Wyplosz is Professor of Economics at the Graduate Institute of International Studies in Geneva and a Fellow of the Centre for Economic Policy Research in London. Previously he was at the European Institute for Business Administration (INSEAD) and the Ecole des Hautes Etudes en Sciences Sociales in Paris. In 1981 he founded the Paris Seminar in International Monetary Economics. He has held various other positions including at the European Economic Association, and the Fonds National de la Recherche Scientifique in Brussels. He has served as a consultant to the European Commission, the French and Russian governments, the IMF, the World Bank, and the Harvard Institute for International Development. He is on the editorial boards of various economic journals.

Abbreviations

ADB	Asian Development Bank
AMC	Asset Management Corporation (of Thailand)
ASEAN	Association of Southeast Asian Nations
BIBF	Bangkok International Banking Facility
BIS	Bank for International Settlements
CEPS	Centre for European Policy Studies
CPI	consumer price index
DSBB	Dissemination Standard Bulletin Board (of the IMF)
EMS	European Monetary System
EMU	Economic and Monetary Union (of the EU)
EU	European Union
FDI	foreign direct investment
FRA	Financial Sector Restructuring Authority (of Thailand)
G-7	Group of Seven
G-10	Group of Ten
G-24	Group of Twenty-Four
GDP	gross domestic product
GNP	gross national product
IAIS	International Association of Insurance Supervisors
IDB	Inter-American Development Bank
IIF	Institute of International Finance
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
KOSPI	stock price index in Korea
LDC	less developed country
NBH	National Bank of Hungary
OECD	Organisation for Economic Cooperation and Development
PINs	Press Information Notices (of the IMF)
RAB	Radhanasian Bank
RTGS	Real-Time Gross Settlement
SDDS	Special Data Dissemination Standard (of the IMF)
SDR	special drawing right
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
US	United States
WTO	World Trade Organization

Preface

The depth and the contagious effect of the Asian crisis have taken the world by surprise. Countries that were widely seen as on the path of rapid and sustainable growth were plunged into a deep depression with devastating social consequences. The ripple-effect of it has hit and threatened other emerging countries and they will not leave the industrial world unaffected.

This development has of course created an intensive and far-reaching debate among economists and politicians about causes, cures and preventive measures for the future.

The old debate about business cycle policy seems to be returning in a new guise. The subject had faded away from the attention of policymakers in the industrial countries who seemed to have learned the art of maintaining a more stable growth. But now the Asian crisis has set in motion many of the forces and cumulative effects that were well known in business cycle theories. Our instruments to maintain reasonable stability in the globalising world economy seem to be inadequate.

This book brings together the papers and discussions from a Fondad Conference on this subject held in March 1998 in which I was a participant as well.

The contributions made by the various experts range from detailed matters confronting international and national supervisors (in the second half of the book) to the global implications of the crisis and the approach of the international institutions (found in the first part). All this is very useful and enlightening in my view. And some more fundamental issues emerge.

Ariel Buira, for example, argues forcefully that the IMF should make available more liquidity to defend exchange rates against excessive depreciation. This has indeed been a serious problem in the current Asian crisis. Of course, the initial overvaluation first had to be corrected; but the correction was far too deep and destructive. I think, therefore, that there is strength in Mr. Buira's argument. After all, firm surveillance of exchange rate policies is an essential task of the Fund! The aim of this surveillance should be a reasonable exchange rate *stability* – which is not the same as *rigidity*.

But, on the other hand, there is the feeling that the IMF is already fueling excessive amounts of public finance into these countries. Here another important idea should be considered. Is the IMF already bailing out imprudent private creditors too easily and would more financial support

only feed into this? Would it not be better to create an international mechanism for an IMF-sponsored debt moratorium instead? It is beyond a doubt that if, in future cases, such a moratorium could be introduced at an initial stage of a crisis, less IMF money would be needed for repayment of short-term debts, and more would be available to stabilise exchange rates. In my view, a combination of these two seemingly opposing ideas would be an important improvement of our “financial architecture”.

But I believe that more is needed. There is one essential element in the Asian crisis that has not yet been recognised sufficiently. That is that the excessive flows of bank credit into these countries – which came in addition to large inflows of portfolio investments – were possible and to some extent stimulated by credit and liquidity *creation* in offshore financial markets. International bank credit is generally seen as a capital movement from one country to another. However, these capital flows to Asian countries did not in any way diminish bank credits in the industrial countries. They could be financed by attracting deposits in the international inter-bank market. The practice of re-depositing the proceeds of loans in this market leads to the creation of international liquidity in the same way as lending by money-creating banks does within a country.

This uncontrolled source of international liquidity is a fundamental weakness in the present world financial system. Bank credit, which central banks in industrial countries have learned to control within their own borders, has become internationalised and has escaped from normal central bank influence by shifting to Euromarkets and other offshore markets. In my view, this fundamental flaw in our financial system must now be urgently addressed. Central banks should not continue to focus almost exclusively on their own money supply. As I suggested earlier, central banks should cooperate to set up a systematic surveillance system for international liquidity together with the IMF and the BIS. For this purpose they should create a new instrument for international monetary policy, by imposing reserve requirements on international bank lending, for example. This could either be done on the total increase in international lending or on lending increases to specific regions or countries.

A difficulty in such a policy could be that the adequacy or excessiveness of international liquidity cannot be determined by a simple statistical measure. Within countries, the *velocity* of the circulation of money has to be taken into account, besides the *supply* of money. Something similar applies to the international financial scene. A deeper analysis of the world’s financial situation is needed. Does a large increase in private international liquidity find its counterpart in the hoarding of official reserves? And is a contraction of bank lending and private international liquidity perhaps compensated by the deficit spending by governments and the reduction of

official reserves? Or does it threaten to become a recessionary spiral? Such questions have to be addressed in designing an adequate international monetary policy – in the same way that central banks have to learn to do this in their national monetary policies.

Much further thought will have to be given to the different ideas that are discussed in this book. The conference from which it emerges was a well-organised and thought-provoking meeting. We must be grateful to De Nederlandsche Bank and to Fondad for organising it and presenting the results in this book.

H. Johannes Witteveen

Introduction

When Mexico was hit by a dramatic currency crisis in December 1994, the immediate international policy response was to try and halt the possible spreading of Mexico's crisis to other emerging market economies. Looking to the future, policymakers and academics also engaged in designing strategies that would help prevent similar crises from occurring in other developing and transition countries – at least, to the extent that these other countries had sound economic policies.

With regard to the first effort, making sure that the Mexican crisis would not infect other emerging economies, the remedy applied was highly successful – though with heavy social costs for the Mexican people. The second effort, however, has proven to be much less successful. The remedies *adopted* to prevent future crises – which, obviously, is not the same as the remedies *suggested* – have simply not worked. Indeed, within two years after the Mexican crisis, Thailand was struck by a serious currency crisis. And this time it turned out to be much harder to prevent the crisis from spreading to other emerging economies. Not only did it infect many East Asian countries that were originally considered good credit risks, but it also affected major emerging economies elsewhere such as Russia and Brazil. Moreover, the crisis that had started in East Asia turned out to be much more persistent and profound than originally expected or hoped, with recessionary and speculative features becoming present in almost every country of the world – including the richer nations.

So the need for an in-depth diagnosis of (a) why things went wrong, (b) whether the current management of the crisis is adequate, and (c) how future currency crises can be prevented more effectively, has become a very pressing one. In particular, the regulators and supervisors of private capital flows are now being challenged to assess whether they are doing a proper job and how they might improve it. This challenge is posed to national as well as international regulators and supervisors because in this new era of global finance, no country can insulate itself from world markets. Indeed, both national and international policymakers are puzzling over how they can best deal with the problems and uncertainties they are now facing.

This book addresses, above all, these regulatory and supervisory challenges. It includes the analyses of and the views on the current crisis (and its remedies) by a number of highly experienced experts in the field of global finance – academics as well as policymakers, working in national as well as international institutions, in emerging as well as advanced economies.

I Diagnosis and Cure

At the time of this writing (October 1998), it has become commonplace to describe the current crisis as a global financial storm raging in various regions and sectors – primarily financial but also industrial – of the world economy. Even though this storm is more or less under control, it still threatens to erupt in ‘unstable’ and economically important parts of the world such as Brazil. A financial crisis in Brazil would certainly cause further havoc in Latin America and elsewhere, including the United States. So rather than leaning back quietly and taking a dispassionate look at the problem, analysts and policymakers are faced with a crisis which continues to linger on. Moreover, because of its *global* character, it cannot simply be relegated to those who are trying to resolve it in the affected emerging economies. Coming to grips with the crisis requires, first of all, a proper diagnosis.

This is more easily said than done, as this book – once again – illustrates. There are so many possible explanations for the current financial turmoil that the experts, as usual, do not agree on one indisputable diagnosis. Instead, they suggest a variety of explanations *and* remedies. These run from blaming the Asian countries for “crony” capitalism to arguing that the international lenders were at fault with their irresponsible over-lending and subsequent panicky, herd-like withdrawal when investors’ sentiment changed. Other explanations, which can also be found in this book, include the well-known argument that guarantees by domestic as well as international institutions have created moral hazard for the lenders, or that the Asian crisis has once more demonstrated the inappropriateness of fixed (pegged) exchange rate regimes.

Depending on the type of diagnosis made, a similar range of remedies is suggested. In the order of the above mentioned explanations for the emergence of the crisis, these include that: (i) the Asian countries and other emerging economies should establish the same standards of liberalisation, transparency and regulation as the rich nations have; (ii) international capital flows ought to be controlled better, and, in addition, an international lender of last resort is needed; (iii) lenders should no longer be given guarantees that they will be bailed out when crisis strikes; and (iv) all emerging countries should adopt a freely floating exchange rate regime.

Evidently, more explanations and remedies are being suggested, both in this book and in other fora. For example, many argue that the Asian saga proves that liberalisation of inadequately regulated domestic financial systems is a recipe for disaster. In a similar vein, it is also said that liberalisation policies were a mixed blessing for emerging economies. They improved the investment climate in these economies but, at the same time, also made them extremely vulnerable to external shocks. Looking at the foreign debt

problem confronting these economies right now, it is also stressed by many that a swift elimination of the debt overhang is urgently needed.

In this book, the *diagnosis* of the crisis mainly comes out in its first two sections, which deal with the global implications of currency crises in emerging market economies and the policies pursued thus far by the international financial institutions. In these two sections, the focus is on the macroeconomic aspects of the current crisis, whereas in the latter two sections the focus is on regulatory and supervisory issues.

In the first section of this book, Yung Chul Park meticulously analyses both the internal and external factors behind Korea's financial turmoil and concludes that both domestic borrowers – with their disregard for prudence and risk management – and foreign lenders – with their short-term profit and herd mentality – are to blame for bringing about this crisis. In the next paper, Charles Wyplosz observes that a few well-known causes lie at the root of the currency and financial market crises of the last two decades, and that these causes have been at work in the Asian crisis as well. He mentions six of such “old lessons” not yet learned, and presents three “new lessons”.

In the second section of the book, Jack Boorman (from the IMF) gives his view on what went wrong in Asia. Echoing Park's observation that, in part, the borrowers are to blame, Boorman stresses that the primary reason lies in the weaknesses in the financial and corporate sectors of the Asian countries, and in the inadequate regulation of capital movements. At the same time, Boorman notes that most of the Asian countries now in trouble *were* pursuing sound macroeconomic policies – so they were not completely at fault. In the next paper, Ariel Buirra (former Deputy Governor of Mexico's Central Bank) deals with the other part of the blame – the lenders' irresponsible behaviour. He observes that the current IMF approach is ill-suited for handling crises of confidence. In his view, such crises are due as much to market misperceptions and overreactions to the news of the day, as to policy shortcomings.

Regarding the *remedies*, Park reviews a number of policy measures that have been suggested to help prevent a crisis and, if a crisis is inevitable, to contribute to its more effective management. Being aware that most of these measures are not likely to be realised anytime soon, he seriously questions the advanced countries' advocacy of a “pell-mell” opening of the financial markets of emerging economies. Until these countries are more protected from the recurrence of financial crises, they should be allowed to “throw some sand in the wheels of international finance,” Park states.

Wyplosz says that the traditional IMF recipe should only be applied to countries with wrong fundamentals. Otherwise, restrictive macroeconomic policies complicate matters rather than resolve them. He suggests methods to reduce the incidence of crises and ways to alleviate their effects, including

an IMF-sanctioned moratorium. In Wyplosz' view, a moratorium would work as an incentive against irresponsible (over)lending and give a country in crisis the much needed temporary relief from the weight of its external debt.

In Boorman's view, crisis prevention should include the now standard trio of (i) better information to market participants, (ii) more transparency in economic policies, and (iii) the strengthening of domestic financial systems. He adds 'orderly' capital account liberalisation as a fourth item to the list, recognising that full-fledged liberalisation is no longer a dogma. With regard to crisis management, Boorman shares the view that the private sector should be more involved in resolving the crisis by, among other things, taking losses. He also believes that IMF-sanctioned debt standstills could contribute to a more effective crisis resolution.

According to Buira, an alternative approach to dealing with financial turmoil in developing countries is needed. Other than current IMF practice, it should aim at preventing a speculative attack from developing into a full-fledged crisis. This could be achieved by the timely provision of sufficient financial support to sustain confidence coupled, if appropriate, with a policy reform package. He suggests that the IMF is in a good position to play this role. It should be enabled to provide member countries – at least if they show to have sound economic fundamentals – with a readily available stand-by credit to be drawn on in the event of a significant speculative attack on the currency. As others, Buira also stresses the need for measures that would force creditors to take certain losses (e.g. through a bankruptcy-type procedure or the imposition of certain limitations on capital transfers).

The analyses and views of Park, Wyplosz, Boorman and Buira are enriched and evaluated in the comments and reports of floor discussions that are included in the first two sections of the book. They reflect the thinking and the insider's knowledge of a group of high-level experts who participated in a two-day conference held at the Dutch Central Bank. One observation which comes out clearly from these discussions is that the many different perspectives add up to a highly useful set of policy recommendations. In some cases these are mutually exclusive, but more often they seem to be complementary.

The reflections by H. Johannes Witteveen in the Preface to this book points to another observation worth emphasising. Most of the discussions on the diagnosis of and the prescription for financial crisis (particularly those discussions that influence policy) are taking place within rather narrowly defined terms of the debate. Witteveen, who was the IMF's Managing Director from 1973 to 1978, is one of the few high-level experts who is publicly presenting a broader view. In his Preface – and in his interventions in the floor discussions included in this book – he stresses, for instance, the need for studying ways to control the *creation* of international liquidity as

well as the *movement* of enormous capital flows around the world. In his contribution to another Fondad publication (see *The Policy Challenges of Global Financial Integration*, Fondad, 1998), Witteveen also includes ecological and ethical concerns in his analysis of economic globalisation. A broader view on both the origins of and the remedies for the crisis is unfortunately missing in most of the mainstream debate.

II Regulatory and Supervisory Challenges

In the aftermath of the Mexican crisis, various institutions and groups have begun working on the regulatory and supervisory challenges posed by financial turbulence in emerging markets. The Basle Committee on Banking Supervision, in particular, made substantial progress in establishing “Core Principles of Effective Banking Supervision” (BIS, April 1997). The G-10 report on “Financial Stability in Emerging Market Economies”, also released in April 1997, is another example of this continuous effort. However, as the ongoing crises in Southeast Asia and elsewhere demonstrate, more research and policy debate is needed.

The papers included in the third and fourth sections of this book respond to that need. In the third section, Susan Phillips, of the US Federal Reserve System, focuses on four themes of sound international supervision: (i) the specific risk profile of individual institutions; (ii) sound accounting and disclosure systems; (iii) adequate capital standards; and (iv) international coordination. William White, in turn, discusses in his paper how international financial stability can be promoted and what role the Bank for International Settlements (BIS) is playing in this respect. Reviewing the work of the various committees meeting at the BIS in Basle, he focuses on specific measures already agreed upon and, given the extraordinary pace of change in modern financial markets, new measures that need to be developed. The papers by Phillips and White are complemented by commentaries and floor discussions.

In the fourth section, experts from Asia, Eastern Europe and Latin America assess a number of specific issues that confront regulators and supervisors in these respective regions. Amaret Sila-On, from Thailand, reports on the financial reform in his country and concludes with a note on the future prospects for financial restructuring and development in Thailand. György Szapáry, from Hungary, discusses a number of bank regulation and supervision issues faced by his country and other transition economies. He also touches upon some crucial issues concerning exchange rate and monetary policy in transition economies. Christian Larraín, from Chile, deals extensively with the challenges of banking supervision in developing

economies. He first describes, from an insider's perspective, a large number of supervisory weaknesses in developing economies, then makes policy recommendations for strengthening supervision in these economies, and finally suggests what positions developing countries should take in international forums with respect to issues such as capital adequacy, operation of financial conglomerates, and consolidated supervision. Larraín distinguishes between first and second-generation reforms. The former are primarily applied in recently privatised financial systems that are unsophisticated and where supervision is extremely precarious. The latter are to be implemented in more developed and consolidated banking systems.

III A New Architecture for the International Monetary System?

The current global financial turmoil has spurred a rethinking of the functioning of the international monetary and financial system. Not only has the crisis turned out to be much more profound and long-lasting, but also more contagious and systemic (affecting the functioning of the system as a whole) than originally foreseen. Therefore, in the course of 1998, a growing number of proposals for remedying the flaws in the world financial system have appeared. They range from a mere refinement and enhancement in efficiency of current practices to encompassing proposals of how the world's financial architecture should be renewed.

As said, the steps already taken by policymakers to improve both the prevention and management of currency crises have yet had little effect. This is a major reason why the call for reform of the system has now, as in previous post-war periods of financial crisis, become popular again.

Calls for reform of the so-called Bretton Woods system (agreed upon at the end of the Second World War) have gained momentum in two particular periods. The first one was at the end of the 1960s and early 1970s, when there was a serious crisis of confidence of the key currency of the system, the US dollar. Even though in 1974, after many years of painful negotiations between experts of rich and poor nations, a sensible plan for reform was adopted, the plan was nonetheless shelved. The main reason for this was that, with the oil crisis of 1973, the US dollar had regained strength as the world's currency.

The second period was the early 1980s, when the foreign debt problem of Latin America and other parts of the world evolved into an international debt crisis which threatened the survival of the Western banking system. The plea for reform was then voiced almost exclusively by experts from the developing world. They felt that the international monetary "non-system" and the sudden steep rise of interest rates in the United States (as a result of

a change in monetary policy) were as much at fault for the emergence of the debt crisis, as was the “mis-management” by the developing countries concerned. Obviously, this time, there was no reform plan, let alone negotiations.

Now, the situation looks, again, more like the period in the beginning of the 1970s. Now, as then, academics and policymakers (or former policymakers) in the major nations are elaborating proposals as to how the system should be changed. Now, as then, these proposals are beginning to be taken seriously by the people who are in “command” of the system. And now, as then, deep doubts remain with most of those who are managing the system as to whether such a reform is really needed.

Age Bakker, in his epilogue to this book, seems to fall in the latter category. Although he recognises that more needs to be done to address today’s financial turmoil, he believes that a stronger emphasis should be placed on putting present ideas and policy recommendations into practice, rather than on a complete overhaul of the current architecture of the global financial system.

In a couple of years it will become clear as to whether Bakker’s view and that of his colleagues have prevailed and if all the nice plans for reform are shelved – as was the case before. So far, the post-war monetary system has demonstrated an amazing resistance to attempts at reform. With the current belief among policymakers that more should be left to the free play of markets, this resistance seems only to have grown stronger. Moreover, the ongoing trend of economic (and cultural) globalisation does not seem to go along well with the old idea of steering the economy. Who would be at the helm? The IMF? The World Bank? These two “Bretton Woods sisters” together? A new multilateral institution for global economic governance?

Reflecting back on the conference from which this book results and previous Fondad conferences (see, for example, *Can Currency Crises Be Prevented or Better Managed? Lessons from Mexico*, Fondad, 1996), I think that both the efforts at reform *and* the efforts at better management of the current system are valid. In fact, these efforts are not mutually exclusive. The one can be done while the other, in the meantime, should by all means be continued. In this book, the analyses and policy proposals are inspired both by attempts at reform as well as better management – though with a bias towards the latter.

I hope that the wealth of facts and ideas presented in the following pages will stimulate and enrich the thinking of the reformers as well as the crisis-managers. The creative thinking of both groups is needed in order to improve the functioning of the global financial system.

Jan Joost Teunissen
Director
October 1998

Part I

The Global Implications of Financial Crises in Emerging Market Economies (From Mexico to Korea)

The Financial Crisis in Korea and Its Lessons for Reform of the International Financial System

*Yung Chul Park*¹

I Introduction

Korea's financial crisis has been as dramatic as it has been unexpected. In fact, over a two-month period, from October to December 1997, Korea was reduced from being the world's 11th largest economy to an economy surviving on overnight loans from the international money markets. What was so surprising about this crisis was that as late as October 1997, no one, including the international credit rating agencies, could have predicted that only two months later the foreign exchange market would collapse. Nor that the Korean won would fall by more than 50% against the US dollar between November 19, 1997, when Korea decided to approach the IMF for a rescue plan, and December 24, 1997. During the same period, the stock price index (KOSPI) tumbled to almost 350 from 498, and the short-term market rate of interest shot up to 40% per annum.

Despite the IMF's rescue package and Korea's commitment to the clearing of non-performing loans and the restructuring of troubled financial institutions together with other badly needed economic reforms, Korean banks suddenly found themselves cut off from the international financial markets. During the last week of December, Korea was on the verge of defaulting on its foreign debts. It narrowly avoided that fate by working out a last minute emergency loan package put together by the IMF and several of the G-7 countries.

Although Korean banks have been able to roll over some of their short-term debts and market sentiments have seemingly once again begun to turn in Korea's favour, much work remains for Korea in terms of normalising its ties to the international financial markets. At the time of my writing, the IMF programme has not been as successful as originally expected in terms of improving the markets' confidence in the Korean economy.

1 Earlier versions of this paper were presented to the conference on the International Financial System under Stress on January 26-27 in New York and to the G-24 Ministerial Meeting on February 7-8 in Caracas, Venezuela. Rudi Dornbusch and Jack Boorman of the IMF gave valuable comments on an earlier draft.

The purpose of this paper is to analyse both the internal and external factors responsible for, and the consequences and policy responses to, the financial turmoil plaguing Korea today. Section II describes the buildup to the crisis, focusing on the process of financial liberalisation and its effects on domestic investment. Section III discusses a series of developments which culminated in the foreign exchange crisis in November and December of 1997. Lessons and implications of the crisis for reform of the international financial system are analysed in Section IV. Concluding remarks can be found in the last section.

II Buildup to the Crisis

Korea rebounded strongly from its slowdown in growth in 1992 and 1993. It did not experience the kind of double-digit growth that it had during the period of 1986-89, but the economic growth from 1994 to the beginning of 1997 was almost 8% on average per annum. It peaked in 1996 at nearly 9% (see Tables 1 and 2).

Table 1 Major Indicators of Korean Economy¹
(in percentages)

	1991	1992	1993	1994	1995	1996	1997 ¹	1998 ²
GDP	9.1	5.1	5.8	8.6	8.9	7.1	6.1	0.7
Consumption	9.3	6.8	5.3	7.0	7.2	6.9	5.0	-1.8
Fixed Investment	12.6	-0.8	5.2	11.8	11.7	7.1	-2.1	-12.1
Construction	13.0	-0.6	8.9	4.5	8.7	6.3	0.9	-6.1
Equipment	12.1	-1.1	-0.1	23.6	15.8	8.2	-5.9	-20.8
Commodity Exports	12.2	10.9	9.7	14.6	25.3	14.5	24.2	14.5
Commodity Imports	19.4	4.0	5.6	21.8	21.3	13.9	6.5	2.0
Gross Savings/GDP	35.9	34.7	35.1	35.2	35.9	34.3	34.2	34.8
Gross Investment/GDP	38.9	36.6	35.1	36.1	37.0	38.2	36.1	34.1
Increase of Stocks/GDP	0.5	0.0	-0.9	0.3	0.5	1.4	-	-
Current Account/GDP	-2.8	-1.3	0.3	-1.0	-1.8	-4.8	-1.9	0.7
Terms of Trade	0.6	0.0	4.4	1.2	-3.6	-12.3	-10.3	-
Consumer Price Index	9.3	6.2	4.8	6.3	4.5	4.9	4.4	10.1
Producer Price Index	4.7	2.2	1.5	2.8	4.7	2.7	3.8	21.1

Notes:

¹ Averages from the first quarter to the third quarter.

² Korea Institute of Finance forecasts.

Source:

The Bank of Korea, *National Income*, various issues.

The Bank of Korea, *Balance of Payments*, various issues.

The National Statistics Office, *Consumer Price Index*, various issues.

Table 2 Balance of Payments
(in billions of dollars and percentages)

	1996	1997							1998 ¹	
		I	II	III	IV					
					Oct.	Nov.	Dec.			
Current Account	-23.7	-7.4	-2.8	-2.1	-0.7	0.5	3.6	3.4	-8.9	3.0
Trade	-15.3	-5.4	-0.7	-0.0	-0.0	0.7	2.7	3.4	-2.8	10.9
Exports	128.3	30.6	35.6	34.6	12.1	12.1	12.6	36.8	137.5	147.8
(%)	(4.1)	(-2.9)	(9.3)	(16.3)	(7.7)	(4.8)	(7.5)	(6.7)	(7.2)	(7.4)
Imports	143.6	36.0	36.3	34.6	12.1	11.4	9.9	33.4	140.4	136.7
(%)	(12.2)	(5.7)	(1.7)	(-2.0)	(-7.0)	(-11.0)	(-21.8)	(-13.3)	(-2.3)	(-2.6)
Invisible Trade	-7.6	-1.8	-2.0	-1.9	-0.7	-0.2	0.2	-0.7	-6.3	-8.6
Transfers	-0.8	-0.2	-0.1	-0.2	-0.0	0.0	0.8	0.8	0.3	0.8
Capital Account	17.0	4.8	5.8	1.5	0.0	-2.0	-	-	-	-

Note:

¹ Korea Institute of Finance forecasts.

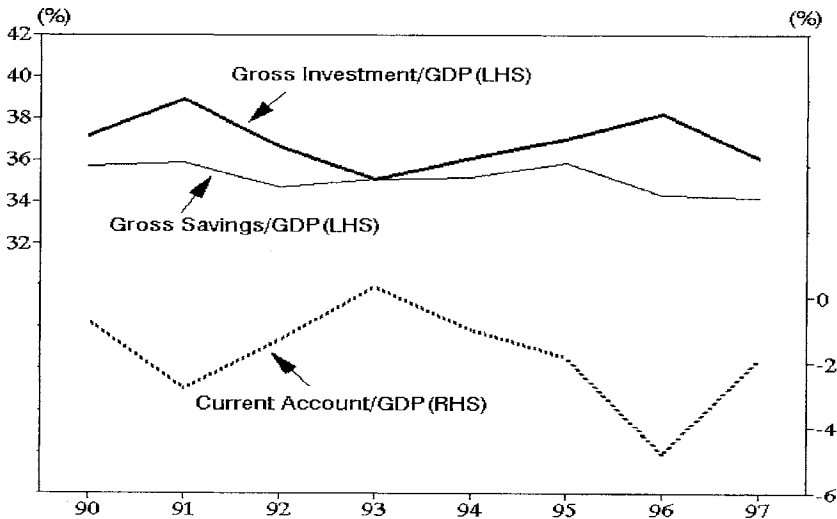
Source: The Bank of Korea, *Balance of Payments*, various issues.

Like the earlier periods of high economic growth, the economy was once again being fueled by exports. What was different during the 1994-96 period was that the high growth was also spurred by high investment. In many respects, this high investment was a positive development as the economy was coming out of a mild contraction during the 1992-93 period. However, it was also responsible for a sharp increase in the current account deficit and the financial and foreign exchange crisis in which Korea finds itself today. Why exactly did Korean firms embark upon such an investment spree? Two major developments were responsible: (i) the strengthening of the yen; and (ii) the financial liberalisation and market opening, which increased the availability of low-cost foreign credit.

High Yen, Financial Opening and Investment Boom

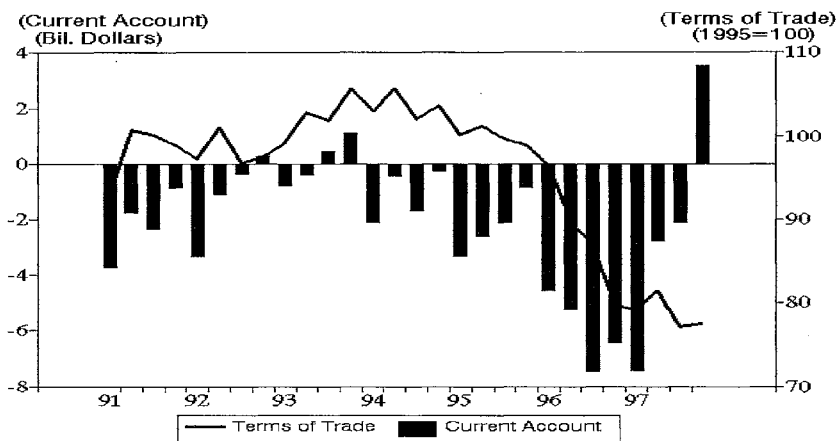
The appreciation of the yen brought about a sharp increase in the export earnings of East Asian countries, as they were becoming more competitive vis-à-vis Japan in exports of manufactures. This, in turn, encouraged a great deal of investment throughout East Asia. Korea benefited most out of all the East Asian countries from the high yen because it competes directly with Japan in many industries where Japan has been a predominant exporter.

Figure 1-A Savings/GDP, Investment/GDP and Current Account/GDP



Source: The Bank of Korea, *National Income*, various issues.
The Bank of Korea, *Balance of Payments*, various issues.

Figure 1-B Terms of Trade and Current Account



Source: The Bank of Korea, *Balance of Payments*, various issues.

During the third quarter of 1995, however, the Japanese yen reversed itself and began to decline. Since then, the yen/dollar exchange rate has continued to depreciate. At about the same time, the terms of trade moved against Korea's favour and continued to deteriorate for the next two years. The terms of trade shock, which in part reflected the stagnation in demand for Korea's major export products, worsened the current account deficit and triggered a deceleration of the economy (see Figures 1-A and B).

Despite these adverse developments, the Korean policymakers were not prepared to make any substantial adjustment in the won/dollar exchange rate. As a result, the real, effective (trade adjusted) exchange rate appreciated for more than a year from the third quarter of 1995 and thereafter remained relatively stable until November of 1997, when the current financial crisis broke out. The reason for the Korean policymakers' reluctance to devalue the won during this period was not altogether clear. It is speculated, however, that the policymakers, who were then preoccupied with industrial restructuring, believed that a strong won would help facilitate the shifting of resources away from those industries such as light manufacturing, where Korea was losing its competitiveness.

If this was indeed their policy objective, much of the effect of a strong won was more than offset by a large increase in foreign capital inflows facilitated by the deregulation of capital account transactions. This increase in foreign capital inflows helped maintain a relatively strong won,

but because the domestic interest rate was more than twice the level of interest rates in international financial markets, the strong currency could hardly deter Korean firms from expanding their investments.²

Between 1994 and 1996, net foreign capital inflows amounted to \$52.3 billion, more than three times the total net inflows for the 1990-93 period (see Table 3).³ Much of the inflows, which consisted of short-term liabilities of domestic financial institutions and firms, were then channelled to finance investment in Korea's major export-oriented industries: electronics, automobiles, iron and steel, shipbuilding, and petrochemicals. As a result, investment jumped to 38.2% of GDP in 1996, from about 35% three years earlier, which caused a large increase in the current account deficit, reaching almost 5% of GDP (see Table 1).

Although the economy began to decelerate during the second half of 1996, largely due to the sharp decline in the prices of Korea's major export products, including semiconductors, the large industrial groups, or *chaebols*, which dominate Korea's manufacturing sector, were unable or unwilling to adjust their production and investment. Their inventories were piling up, but commercial banks were becoming less willing and more selective in extending credit to these groups, as they were increasingly concerned regarding these groups' growing losses and accumulating debts. Denied sufficient credit from commercial banks, the industrial groups had to secure high-cost, short-term loans from merchant banks. They also turned to foreign financial institutions and markets for their financing of fixed investment and inventories.

Industrial groups not only expanded their investment in domestic industries, but also in foreign countries. In 1994, Korea's total foreign investment rose to \$2.3 billion from less than \$1.3 billion a year earlier. Over the next two years, it grew 33 and 36%, and much of this investment went to Southeast Asia and Europe, no doubt financed by foreign credits.

While the available data are rather sketchy, foreign debts of domestic firms amounted to \$35.6 billion at the end of 1996. This figure jumped to \$43.2 billion a year later. Private foreign debts, as defined by the Korean government, do not include the liabilities of the foreign subsidiaries and branches of Korean firms, unless the payments of these debts are guaranteed by their parent firms. The exact amount of these liabilities was not

2 During the 1995-96 period, the short-term money market rates in Korea fluctuated between 13 and 14%, while the Libor on 90-day US dollar deposits remained below 6% per annum.

3 During the 1986-89 period, the capital and financial accounts generated a surplus on the order of \$16 billion.

Table 3 Long-Term and Short-Term Capital and Financial Accounts Transaction (in billions of dollars and percentages)

	1986-89	1990-93	1994-96	1994	1995	1996	Jan-Oct 97
Total Capital Account Balance (A)	-5.4	5.2	17.4	11.6	17.4	23.2	14.3
Long-Term Capital Balance (B=C-D)	-4.4	3.4	7.2	4.1	6.9	10.7	11.5
(B/A, %)	(82.0)	(65.2)	(41.6)	(35.7)	(39.4)	(46.2)	(81.0)
Inflow (C)	-3.5	3.9	11.8	6.4	12.3	16.9	16.6
(Foreign Direct Investments)	(0.7)	0.7	1.3	0.8	1.2	2.0	1.9
(Foreign Securities Issued by Firms)	n.a.	1.7	3.4	3.3	3.4	3.7	4.9
(Foreign Securities Issued by Fin. Institutions) ¹	-0.6	1.1	5.3	2.0	5.5	8.5	7.3
Outflow (D)	0.9	0.5	4.6	2.2	5.4	7.1	5.0
(Overseas Direct Investments)	0.2	1.1	3.0	2.1	3.1	3.9	3.0
Short-Term Capital Balance (E=F-G)	-1.0	1.8	10.1	0.7	10.6	12.5	2.7
(E/A, %)	(18.0)	(34.8)	(58.4)	(6.4)	(6.1)	(5.4)	(1.9)
Inflow (F)	-0.4	4.4	18.1	13.8	18.7	21.8	6.9
(Portfolio Investments) ²	n.a.	2.2	3.5	2.5	2.9	5.1	2.8
(Short-Term Trade Credit)	0.0	0.5	3.8	2.7	4.0	4.8	3.5
(Short-Term Borrowings of Financial Institutions) ³	0.5	0.5	6.0	4.1	7.6	6.3	-1.1
(Inter-Office Accounts) ⁴	0.4	0.4	2.5	2.5	2.1	2.9	3.0
Outflow (G)	0.6	2.6	7.9	6.4	8.1	9.3	3.2
(Portfolio Investments) ⁵	0.0	0.1	0.6	0.5	0.4	0.9	1.2
(Assets of Deposit Money Banks) ⁶	0.2	1.8	4.8	4.1	5.4	5.0	1.4
(Assets of Merchant Banks and Develop. Inst.) ⁷	0.1	0.0	0.9	0.2	0.5	2.0	0.4

n.a. = not available

Notes

- ¹ Domestic financial institutions include deposit money banks, foreign bank branches in Korea, development institutions, and merchant banks.
- ² Portfolio investments in domestic securities by foreign investors.
- ³ Include short-term liabilities of merchant banks and development institutions and commercial paper and other short-term securities issued by deposit money banks.
- ⁴ Borrowings of foreign bank branches in Korea from their home offices.
- ⁵ Portfolio investments in foreign securities by domestic investors.
- ⁶ Changes in foreign currency assets of oversea branches of domestic deposit money banks.
- ⁷ Changes in foreign currency assets of oversea branches of domestic merchant banks and development institutes.
- ⁸ Annual average of the period.

Source: "Capital Account Liberalization and the Structural Change of the Capital Account in Korea", In: *Monthly Bulletin*, Bank of Korea, December, 1997.

*From: Regulatory and Supervisory Challenges in a New Era of Global Finance
FONDAD, The Hague, 1998, www.fondad.org*

known, but it was estimated to be over \$51 billion at the end of June 1997.⁴

Why were Korea's industrial groups so inflexible and slow in adjusting their investment and output in response to the changes in the internal and external environment? The answer lies in some of the salient characteristics of the Korean *chaebols*. One such characteristic has been their tendency to compete more for market share than for profits. This feature is often attributed in part to the Japanese model of government-led economic development, but it was largely the consequence of an industrial policy geared towards obtaining scale economies in major export industries at the early stage of their development. Every major *chaebol* was pursuing business in only the tried and proven industries. Therefore, profits were driven down, forcing them to carve out the largest market shares that they possibly could and to also diversify at the first opportunity into new industries which promised high profits.

As a result, all of the largest *chaebols* went on to expand their investment in Korea's major industries so as not to lose their relative positions in the economy. Furthermore, the rigid and bureaucratic management system, where the decisionmaking was concentrated at the top, made it difficult for the *chaebols* to adjust their investment and production to changes in market conditions as rapidly as they should. Because practically all of the *chaebols* are family owned, they were reluctant to issue equities, as doing so could dilute their management control. These characteristics, together with the underdevelopment of the domestic capital markets, have caused the *chaebols* to become highly leveraged. A recent survey shows that the average debt-equity ratio of the 30 largest *chaebols* was more than 380% in 1996, four times as high as that of Taiwan.⁵ As it turned out, the high leverage of the corporate sector proved to be the Korean economy's greatest structural weakness. Much of the expansion in investment could only be possible by taking on enormous amounts of debt, and the rapid debt accumulation by the *chaebols* meant that the economy as a whole became more susceptible to a slowdown in growth and a financial crisis.

The new government that came to power early in 1993 mounted a campaign of market deregulation and opening, as it was determined to rely more on the market for the management of the economy. The WTO agreement did not leave much room for industrial policy, and market liberalisation took away what was left of the government's control of the pro-

4 Since a large amount of private foreign debts will come due in the spring of 1998, it is feared that the inability of private firms to service their foreign debts could destabilise the financial markets once again.

5 Economic Review No. 29, Korea Institute of Economic and Technology, December 29, 1979.

duction and investment activities of the large conglomerates and enterprises. The deregulation efforts succeeded in freeing the *chaebols* from the government, but without instituting either internal or external mechanisms of monitoring and controlling their management to replace the government's former role. Small stockholders have never had much voice in the management of the *chaebols*. The government, unlike during previous decades, was suddenly unable to control or coordinate the investment activities of the *chaebols*. The *chaebols* were free to do whatever they believed was in their best interests.

Financial Deregulation with Inadequate Supervision

From the 1960s and through the 1980s, capital account transactions had been tightly regulated. Many restrictions on capital movements in and out of the country were put in place to facilitate the government's industrial policy and to minimise the destabilising effects of short-term capital flows on the economy. All of this began to change in the early 1990s. By this time, the effectiveness and viability of Korea's interventionist regime had come into question due to the increasing complexity of the economy. Korea had also come under increasing pressure from developed countries, led by the US, to liberalise its financial sector, so Korea found itself beset by necessity to pursue liberalisation from both within and without. Financial market deregulation and market opening began in earnest in 1993, immediately after the inauguration of the current administration, and it was accelerated by Korea's accession to the OECD as its 29th member. Less than five years have elapsed since then, but the Korean experience demonstrates, as have many other cases of financial market opening, that unless financial market opening in emerging market economies is properly managed, with adequate supervision, it could easily lead to a boom and bust cycle during the transition period.

Although the market deregulation and opening in Korea had been carried out in a gradual and piecemeal manner, it led to a surge in foreign capital inflows during the 1994-97 period, much of which were short-term and speculative. With the acceleration in financial liberalisation, domestic financial institutions were allowed greater freedom in managing their assets and liabilities, in particular in borrowing from international financial markets. This greater freedom, together with the moral hazard inherent in the Korean financial system, also weakened their discipline in lending, in particular to large industrial groups, and in managing market risk. In fact, Korean financial institutions took much greater risks in their investment in foreign securities with borrowed short-term funds than prudent management would have permitted, thereby exposing themselves to the problem

of balance sheet-mismatch. These developments made the Korean economy highly vulnerable to the speculative currency attack and liquidity crisis.

In retrospect, Korean financial institutions were not adequately prepared for the financial market opening because they had not yet developed expertise in credit analysis, risk management, and due diligence. They had little experience in foreign exchange and securities trading and with international banking in general. The supervisory authorities were not monitoring and regulating their international financial activities as much as they should have, because they were pressured to overhaul the regulatory system to make it more compatible with a liberalised system. They eliminated and relaxed many restrictions and control measures, but failed to install in their place a new system of prudential regulation needed to safeguard the stability and soundness of financial institutions.

During the three-year period from 1994-96, total capital flows (inflow plus outflows) rose to 47% of GDP from less than 30% during the preceding three-year period (see Table 4). Net inflows during the same period amounted to \$52.2 billion, and unlike in the 1980s, the bulk of these inflows consisted of short-term borrowings with maturities less than one year, accounting for 62% of total net inflows, compared to 37% during the 1990-93 period (see Table 3).

Short-term capital inflows included foreigners' portfolio investment (mostly equity investment), trade credit, short-term borrowings by banks and other financial institutions, as well as borrowings by Korean branches of foreign banks from their headquarters. The aggregate as well as individual ceiling on foreigners' investment in equities have gradually been raised since 1992. This relaxation, together with the favourable prospects of the Korean economy, induced a surge in foreigners' equity investment during the 1994-96 period. However, compared to other forms of short-term capital inflows, the amount of portfolio investment was modest. The inflow in the form of trade credit jumped more than seven-fold, bank borrowings eleven-fold, and borrowing of Korean branches of foreign banks from their home offices more than seven-fold between the two sub-periods.

There were several reasons for the large increase in short-term capital inflows. One reason was the rapid growth in trade volume which required an equal increase in import and export-related credits. However, the growth in short-term capital inflows outpaced the expansion in trade. This discrepancy can be explained by the use of trade credit facilities as the routes of capital inflow which, in turn, were induced by the high interest rate differentials between the domestic and foreign financial markets in the context of stable foreign exchange rates. Deregulation of trade credits led to a lengthening of the periods of deferred and installment payments for imports ranging from six months to three years. Exporters were also

Table 4 Capital and Financial Accounts of Korea
(in billions of dollars and percentages)

	1986-89	1990-93	1994-96	1994	1995	1996	Jan-Oct 97
Total Capital Inflow (A)	87.1	188.6	342.3	82.8	117.4	142.1	119.2
(average annual growth rate)	(3.8)	(2.5)	(33.4)	(37.4)	(41.8)	(21.0)	(4.2)
Total Capital Outflow(B)	108.4	169.0	290.1	71.1	100.1	118.9	104.9
(average annual growth rate)	(9.1)	(19.9)	(28.1)	(24.9)	(40.7)	(18.8)	(10.0)
Total Capital Transactions (A+B)	195.5	357.7	632.5	153.9	217.5	261.0	22.45
(average annual growth rate)	(6.0)	(22.0)	(30.9)	(31.4)	(41.3)	(30.0)	(6.8)
((A+B)/GDP)	(31.8)	(29.8)	(47.3)	(40.4)	(47.6)	(53.9)	-
Capital Account Balance ¹	-21.5	20.9	52.2	11.6	17.4	23.2	14.3
Current Account Balance	33.7	-15.0	-37.2	-4.5	-8.9	-23.7	-23.2

Notes:

¹ Capital account balance is different from total capital inflow (A) minus total capital outflow (B) because of the statistical errors resulting from reclassifying the capital account balance.

Source:

“Capital Account Liberalization and the Structural Change of the Capital Account in Korea”, In: *Monthly Bulletin*, Bank of Korea, December, 1997.

allowed to offer suppliers' credits to foreign importers with longer maturities ranging from one to two years. The ceilings on export advances and export downpayments were also raised. These changes contributed to a large increase in trade credit. Commercial banks, for their part, had to increase their foreign currency borrowings to accommodate the growing demand for export and import financing; that is, to purchase the growing volume of export bills and to finance imports on credit.

There was another reason for the surge in short-term bank borrowing. Beginning in 1994, the ceiling on foreign currency loans by commercial banks was lifted, but the ceiling on commercial banks' medium and long-term borrowings from international financial markets was not. As a result, commercial banks were forced to raise short-term credits to finance long-term loans at home. Commercial banks were also attracted to short-term financing because the costs of short-term borrowing were lower than for issuing medium and long-term securities, largely because they had not established sufficiently high credit ratings to borrow from the long-term capital markets.

The external liabilities of commercial banks consist mostly of trade related refinance, bank loans, and securities issued, including commercial paper. Although commercial banks traditionally borrow at the short end of the financial market and extend short-term loans, the rise in their short-term indebtedness was alarming; the share of the short-term in total external liabilities jumped to 79% in 1994 from less than 65% a year earlier (see Table 5-A).⁶ Much of the increase came from the issuance of commercial paper. Over the next two years, the share of short-term liabilities remained well over 70%, but instead of issuing commercial paper, commercial banks were relying on credit lines and loans for subloans, and other short-term loans as the major sources of short-term foreign credit. Although precise data and reliable information are not available, they were likely making long-term foreign currency loans to their customers with lending resources secured from the short-term money market, thereby creating a mismatch problem. In retrospect, the mismatch problem made the management of the financial crisis much more difficult than necessary.

Why did the Korean policymakers let banks and other financial institutions borrow so much from the short-term money markets? Why did they not open the domestic bond market and liberalise long-term external financing? Perhaps they may have ignored the management of short-term liabilities, because these liabilities do not add to the stock of foreign debts

⁶ The share of short-term in total external liabilities at merchant banks is relatively lower, though the accuracy of their balance sheet figures have been questionable (see Table 5-B).

Table 5-A External Liabilities of Domestic Deposit Money Banks in Korea¹
(end of period, millions of dollars and percentages)

	1992		1993		1994		1995		1996	
External Liabilities	7,220	(100)	6,554	(100)	10,941	(100)	18,942	(100)	26,708	(100)
Short-Term Liabilities	4,813	(66.7)	4,222	(64.4)	8,077	(78.9)	14,642	(77.3)	19,582	(73.3)
Deposits	68	(1.0)	92	(1.4)	80	(0.7)	127	(0.7)	177	(0.7)
Call Money	399	(5.5)	467	(7.1)	1,062	(9.7)	1,581	(0.8)	2,026	(7.6)
Borrowings from Banks	4,346	(60.2)	3,663	(55.9)	7,493	(68.5)	12,934	(68.3)	17,379	(65.1)
(Due to Banks) ²	3,818	(52.9)	3,210	(49.0)	6,935	(63.4)	10,177	(53.7)	11,295	(42.3)
(Other Borrowings) ³	528	(7.3)	453	(6.9)	558	(5.1)	2,757	(14.6)	6,084	(22.8)
Long-Term Liabilities	2,407	(33.3)	2,332	(35.6)	2,306	(21.1)	4,300	(22.7)	7,126	(26.7)
Borrowings from Banks	1,470	(20.4)	1,503	(23.0)	1,159	(10.6)	1,129	(6.0)	758	(2.8)
Foreign Securities Issued	666	(9.2)	572	(8.7)	778	(7.1)	2,872	(15.2)	6,141	(23.0)
Inter-Office Accounts	138	(1.9)	119	(1.8)	220	(2.0)	115	(0.6)	57	(0.2)
Others	133	(1.8)	138	(2.1)	149	(1.4)	184	(1.0)	170	(0.6)

Notes:

- ¹ The figures in parentheses are percentages of total external liabilities.
- ² The external liabilities due to banks include credit lines from the foreign banks and borrowings for sub-loans.
- ³ Other borrowings include commercial paper, CDs, and other short-term securities issued by the deposit money banks.

Source:

The Bank of Korea, *Foreign Exchange Statistics*, various issues.

Table 5-B External Liabilities of Merchant Banks in Korea
(end of period, millions of dollars and percentages)

	1992		1993		1994		1995		1996	
External Liabilities	1,774	(100)	1,450	(100)	1,820	(100)	3,872	(100)	5,942	(100)
Short-Term Liabilities	606	(34.2)	303	(20.9)	654	(35.9)	1,966	(50.7)	3,190	(53.7)
Deposits	28	(1.6)	19	(1.4)	0	(0.0)	0	(0.0)	0	(0.0)
Call Money	5	(1.6)	1	(7.1)	46	(2.5)	56	(1.5)	58	(1.0)
Borrowings from Banks	573	(32.3)	283	(55.9)	608	(33.4)	1,910	(49.3)	3,132	(52.7)
Long-term Liabilities	1,168	(65.8)	1,147	(79.1)	1,166	(64.1)	1,906	(49.2)	2,752	(46.3)
Borrowings from Banks	730	(41.2)	727	(50.1)	491	(27.0)	435	(11.2)	327	(5.5)
Foreign Securities Issued	437	(24.6)	419	(28.9)	674	(37.0)	1,470	(38.0)	2,388	(40.2)
Others	1	(0.1)	1,000	(0.1)	1	(0.1)	1	(0.0)	37	(0.6)

Note:

The figures in parentheses are percentages of total external liabilities.

Source:

The Bank of Korea, *Foreign Exchange Statistics*, various issues.

as they mature and are paid off within a year, whereas long-term liabilities do. The Korean authorities have not regulated short-term external credit transactions of banks and the financial institutions because these transactions are tied to the international financial services they provide. They may have overlooked the possibilities that short-term loans could be rolled over continuously and that short-term credit facilities could be abused as means of financing long-term investment.

Although the deterioration in the quality of assets and prevalence of short-term external financing were clearly visible, the supervisory authorities did not order the financial institutions to take corrective measures. They did not do so, because nurtured in the old tradition of direct control and bank examination, they had neither the resources nor experience in monitoring and exercising regulatory power to maintain overall soundness and profitability of financial institutions. Long relegated to the role of supporting manufacturing industries under the control of government, banks and other financial institutions had become accustomed to accommodating much of the credit needs of the industrial conglomerates without necessarily checking their creditworthiness. In fact, many commercial banks were competing among themselves to win over these *chaebols*, as they were regarded as prime customers with little credit risk.

As in Japan, Korean banks also consider it important to establish long-term relationships with their customers by serving as their main banks. This device is often alleged to be an efficient means of collecting information and dealing with the information asymmetry problem. However, the long-term relationship could be counterproductive in that banks often find it difficult to keep their long-term customers at arm's length, in particular if their customers are powerful *chaebols*. During the 1994-96 period, it appears that banks failed to deal prudently with these conglomerates as if they were in an implicit partnership and so were not able to curb their excessive investment. This partnership also explains why the banks were taken by surprise when their foreign customers and creditors severed ties with them as the financial crisis unfolded. The banks never had expected the foreigners to cut them off.

A search for the clues to the ongoing financial crisis in recent periods has led to the auditing and examination of the asset and liability management of financial institutions, including commercial banks. A preliminary report of the examination is alarming, revealing how reckless these institutions were in investing in foreign securities, engaging in the operation of offshore funds, and in dealing in financial derivative products. According to a recent report by the Securities Supervisory Board, Korean securities firms and investment trust companies incurred heavy losses in their operations of offshore funds established in Malaysia, Ireland, and France. At the

end of 1997, the total losses amounted to about \$1.1 billion. Twenty-eight Korean securities firms established 89 offshore funds and leveraged them two to five times the capital base. Of the total investment of \$2.6 billion, \$1.1 billion was their own capital and the remainder consisted of borrowings from foreign sources. Disguised as foreign institutional investors, they invested heavily in Korean stocks and high-risk securities issued by firms and financial institutions in Southeast Asia. Other revelations show how inept and inexperienced Korean financial institutions were in investing in financial derivatives. Their investments became total losses.

According to a recent newspaper report, Korean merchant banking corporations, which have been permitted to engage in international finance in recent years, had borrowed \$20 billion from the short end of the international financial market by the end of October 1997. Not surprisingly, they had invested their funds in highly risky securities issued by firms in Southeast Asian countries. About 5% of their investments in October were classified as non-performing assets.

III The Crisis in Full Force

Financial Market Developments in 1997

The investment boom supported by foreign credit could not last very long, but locked in market share competition. Unable to lay off workers, the *chaebols* were unwilling to adjust their production and hoped that the government would come in at a certain stage to rescue them, but it could not. The number of corporate bankruptcies began to soar and so did the volume of non-performing loans at financial institutions. Over a six-month period from December 1996 to June 1997, non-performing credits as a proportion of total credits almost doubled (see Table 6). The first major casualty of the slowdown in export growth and the terms of trade shock in the second half of 1996 was the Hanbo group. Specialised in iron and steel, it was the nation's 14th largest *chaebol*. As Hanbo was unable to meet the payments of the principle and interest on its loans, the decision was made to restructure it through a workout programme organised by its creditor banks rather than to liquidate it. A few months later, it was placed under court receivership because the workout programme did not succeed.

The investigation into the Hanbo collapse revealed that many loans to this group had been made under political pressure, loans which Korean financial institutions would not have granted on their own. The revelations of the extent of the unholy ties between politicians and industry and the scale of corruption shocked both the Korean people and the foreign in-

Table 6 Non-Performing Credits of Financial Institutions
(in trillions of won)

	December 1996	June 1997	December 1997
Commercial Banks			
Total credits (A)	311.7	360.8	375.4
Non-performing credits (B=C+D) ¹	12.2	21.9	22.6
Substandard credits (C) ²	9.7	16.0	12.6
Bad credits (D=E+F) ³	2.5	5.9	10.1
Doubtful credits (E) ⁴	2.0	4.9	9.6
Estimated loss (F) ⁵	0.5	1.0	0.5
Non-performing credit ratio (B/A, %)	3.9	6.1	6.0
Bad credit ratio (D/A, %)	0.8	1.6	2.7
	December 1996	October 1997	November 28, 1997
Merchant Banks			
Total credits (G) ⁶	79.9	85.7	84.5
Non-performing credits (H) ⁷	1.3	3.9	5.1
Non-performing credit ratio (H/G, %)	1.6	4.5	6.0

Notes:

- ¹ Non-performing credits include bad credits (which include the credits classified as doubtful or estimated loss) and the credits classified as substandard.
- ² Substandard credits are the credits out of total credits expected to be collected by selling collateral extended to customers who have been in arrears for no less than six months or to the issuer of dishonoured bills and checks, or to the firms which are under court receivership.
- ³ Bad credits include the credits classified as doubtful or estimated loss.
- ⁴ Doubtful credits are the portions of credits out of total credits to customers in excess of the amount expected to be collected classified as substandard that are expected to be a loss, but have not yet been realised as such.
- ⁵ Estimated loss is the portion of credits out of total credits to customers in excess of the amount expected to be collected classified as substandard that must be accounted as a loss, because collection is not possible in a foreseeable period.
- ⁶ Credits at merchant banks include the CP discounting and factoring.
- ⁷ Non-performing credits at merchant banks include notes discounted and dishonoured; notes discounted and dishonoured by firms under legal management; dishonoured notes paid by the firms instead; and loans overdue by more than six months.

Source:

The Bank of Korea and the Association of Merchant Banks.

vestors. The pervasiveness of corruption discovered in Korea this past year has been one of the major factors in foreign institutional investors' loss of confidence in the government and in the economy in general, which no doubt helped to bring about the crisis.⁷

⁷ For brevity, foreign institutional investors will be referred to as foreign investors.

More high-profile bankruptcies followed, but the one debacle which no doubt caused the government to lose a great deal of its credibility more than any other was the near-bankruptcy of the Kia Group in July. At first, it was decided that the Kia Group, which is the nation's 8th largest *chaebol*, would also be covered by a workout programme, but this soon proved impossible. Debate then raged as to whether or not the Kia Group should be placed under court receivership, a prospect which the management of Kia strongly opposed. Weeks passed by without any decisive action by the government towards resolving this problem. Unable to find new investors or to merge it with either of the other automakers, Kia was finally put into liquidation proceedings in October.

By the first week of September, six *chaebols* including Kia had been placed under a workout plan or had become insolvent. They accounted for about 10.4% of the total assets of the 30 largest *chaebols*, not a large enough amount to threaten the stability of the economy, but their demise made the economic outlook more pessimistic than before. By this time, the Korean public had become by and large disillusioned with the ineptness of the current administration, which became a lame duck government. There seemed to be no end to the bankruptcies and the economic slowdown had already dragged on for nearly two years. Therefore, whatever economic control the government had still held after liberalisation was now even further compromised. With the next presidential election to be held in December, there was no way the current administration was going to be able to take any serious action to restore stability to the Korean financial markets. The foreign investors knew this all too well, prompting some of them to begin withdrawing their funds from the Korean stock market and out of Korea in early September.

The behaviour of the government in its management of exchange rate policy in the last three months leading up to the crisis did not help and, in fact, exacerbated the financial problems. Exchange rate policy was rather inconsistent and unpredictable, suggesting to foreign and domestic investors alike that the government was at a serious loss as to how to deal with the deteriorating financial situation. The won had been under strong depreciatory pressure since the early months of 1997. Time after time throughout the year, the government would publicly state that it would defend the won at a certain level, only to be forced to retreat and attempt defending the won at a new level. When the won/dollar exchange rate approached the psychologically important level of 1000 won per dollar, the government made a goal line stand, intervening heavily in the market, but then gave up suddenly several days later.

Between June and November, the central bank's reserve holdings fell by \$10 billion, as shown in Table 7. During the same period the central bank

Table 7 Foreign Reserves of the Bank of Korea
(end of period, billions of dollars)

	1996	1997						1998
		March	June	Sep.	Oct.	Nov.	Dec.	Jan.
Official Foreign Reserve (A)	33.2	29.2	33.3	30.4	30.5	24.4	20.4	23.5
Deposits at Overseas Branches (B)	3.8	8.0	8.0	8.0	8.0	16.9	11.3	11.0
Other (C)	—	—	—	—	0.2	0.2	0.2	0.2
Usable Reserves (A-B-C)	29.4	21.1	25.3	22.4	22.3	7.3	8.9	12.4

Note:

Official foreign reserve holdings are based on the IMF definition. Deposits at overseas branches are those deposits made by the Bank of Korea at overseas branches of domestic commercial banks. In November, when the domestic commercial banks were unable to repay their loans from the foreign banks, the Bank of Korea supported them by making foreign currency deposits at their overseas branches.

Source:

The Bank of Korea.

sold \$12 billion in the spot market and made forward sales amounting to \$7 billion in order to defend the won. The government further strained investors' credulity during this time by failing to divulge the Bank of Korea's actual level of foreign reserves or its forward market commitments. It asserted that the Bank of Korea held about \$30 billion dollars in reserves, a figure which investors found implausible. The actual level of usable reserves had already dropped below \$22 billion in March. By the end of November, it fell to \$7 billion dollars.

Toward the end of October, it became clear to policymakers as well as to market participants that the financial situation was getting out of control. Foreign investors moved out of the stock market in droves and Korean banks were increasingly unable to roll over their short-term foreign loans. In order to avoid default, they were forced to turn to the Bank of Korea for liquidity or to resort to the foreign overnight loan markets. Yet, the authorities still failed to take any action, ignoring the growing clamour for much-needed financial reform, as well as for the restructuring of industry and the *chaebols*. On November 19, the government announced a reform package which included measures for disposal of non-performing loans and widening of the exchange rate fluctuation band. Under normal circumstances, the package would have been seen as taking a serious step toward restructuring the economy, but with the sense of panic rising by the day, the market hardly noticed it.

Three days later, unable to control the situation, the government made public its decision to approach the IMF to ask for assistance. The negotiations between the Korean government and the IMF were completed in a record time of only 10 days, ending on December 3. The IMF agreed to provide a total of \$21 billion to be disbursed in 11 installments over a three-year period from its emergency financing and other facilities. It also secured financial commitments totalling \$36 billion from the World Bank, the Asian Development Bank, the United States, Japan, Germany, Canada, the United Kingdom, Australia, and other countries, as well as from international organisations, which would serve as a second line of defense. The IMF's conditions required a tight monetary policy, a fiscal surplus, sweeping financial reform, further liberalisation of the financial markets, and also two conditions which were unusual to an IMF programme: greater flexibility in the labour market and restructuring of the *chaebols*.

Contrary to expectations, the swift and successful conclusion of the negotiations did little to allay fears and stabilise the financial markets including the foreign exchange market. The won/dollar exchange rate continued to depreciate. On many trading days, it actually hit the daily fluctuation band, which had been widened to plus/minus 10% on November 20. Interest rates began to soar while the stock price index went into a nose-

div. On December 16, the 10% band was lifted, and a free floating exchange rate system was introduced. A few days later, the 25% interest rate ceiling was also abolished, as it had become clear that interest rates had to rise well above that level. Most of the capital controls were also abolished. The limit on aggregate stock ownership by foreigners was raised to 55%, the market for corporate bonds with maturities longer than three years was opened up, and the short-term money market would also be deregulated for foreigners' investment. The IMF financing package, together with the conditions it set, did not help change the markets' sentiment. Many thought that Korea might not be able to comply with the structural reforms mandated by the IMF and that the extremely tight monetary and fiscal policies required of Korea under the IMF programme would depress economic activity so much that, in fact, they would in the long run undermine Korea's ability to service its foreign debt. This would clearly defeat the purpose of the IMF programme. The rollover rate at commercial banks fell to about 10%, market interest rates shot up to the dizzying height of 40%, and the won/dollar exchange rate continued to depreciate, reaching 1,995 won per dollar on December 23.

The financial situation was clearly unsustainable and rumours began to circulate among the foreign investors that Korea might have to declare a debt moratorium. The IMF and US Treasury clearly had to take stronger measures to stop further haemorrhaging of the Korean economy. On Christmas eve, the IMF and the G-7 countries came up with a \$10 billion emergency financing programme, drawing \$8 billion from their second line of defense.

The new package succeeded in turning market sentiment around as it demonstrated the resolve of the IMF and G-7 to rescue Korea from financial collapse. It would actually seem that a new watershed has been reached, as the IMF has clearly served as a lender of last resort in the East Asian financial crisis.

In retrospect, sovereign credit ratings by credit rating agencies have also complicated the management of the Korean crisis (see Table 8). In January

Table 8 Korea's Sovereign Credit Ratings

	Moody's		S&P
Jan. 97	A1	Jan. 97	AA-
Nov. 28, 97	A 3	Oct. 24, 97	A+
Dec. 11, 97	Baa2	Nov. 25, 97	A-
Dec. 22, 97	Ba1	Dec. 11, 97	BBB-
		Dec. 22, 97	B+

Source: Internet Websites of Moody's and Standard and Poors.

1997, Moody's gave Korea a sovereign credit rating of A1 and Standard and Poors (S&P) gave it AA-. On November 28, Moody's lowered its rating to A3, and on October 24, S&P downgraded Korea to A+. Thus, Moody's readjusted its rating downward twice and S&P three times before the end of 1997. Whenever the sovereign rating was downgraded, the premium on Korean securities in the international financial markets rose. Foreign banks then refused to roll over their short-term loans to Korean financial institutions. As a result, the foreign exchange rate depreciated further and the markets' sentiment worsened. Reflecting the deterioration of the markets' confidence in the Korean economy, the rating agencies adjusted their sovereign ratings downward again, thereby deepening the crisis even further. The rating agencies were in fact generating a vicious cycle of declining ratings and market sentiment.

The immediate effects of the IMF programme were a sharp increase in the domestic interest rates and a substantial depreciation of the won/dollar exchange rate. The squeeze in the supply of money together with the requirement to meet the 8% BIS capital adequacy ratio before April dried up the availability of bank credit, especially to small and medium-sized firms. In December 1997, the rate of loan defaults jumped to 1.49% from 0.14% a year earlier, and the number of business failures was almost five times as high as the figure for December 1996.

In 1998, the level of fixed investment is expected to decline by more than 30% and consumption by almost 10%. Due to the domestic slump, aggregated demand is expected to fall by more than 5%, despite an expected 7% rise in exports. The currency depreciation, together with the decline in domestic demand generated a current account surplus of \$3.6 billion in December 1997 and another surplus to the order of \$3 billion in January 1998. A surplus of over \$15 billion is forecast for all of 1998. Annual inflation, in terms of the CPI, will soar to about 10%, while the unemployment rate is expected to exceed the 5% level. Recent forecasts suggest that at least two years will pass before Korea manages to recover from the current crisis.

Contagion and Warning Signs

Warning Signs

While there is ample evidence that the Korean economy has been adversely affected by the Southeast Asian crisis, this does not mean that the Korean government and Korean borrowers were not at fault. As discussed in Section II, they mistakenly believed until the very end that Korea's strong economic fundamentals would safeguard the economy from a crisis.

In many respects, Korea looked quite different compared to the Southeast Asian economies, particularly with regard to its economic fundamentals. For example, during the 1991-96 period, Korea ran a budget surplus, monetary expansion was moderate, the savings rate was one of the highest in the world, and capital inflows – which totalled no more than 2.7% of GDP – were primarily channelled to the non-manufacturing sector for its fixed investment. A recovery in the export-oriented industries, such as the semiconductor and automobile industries, could easily sustain the entire economy and thereby lessen the strains which the excess of non-performing loans and the current account deficit were exacting on Korea. Moreover, the real exchange rate remained relatively stable during this time, indicating no sign of currency overvaluation. Neither the government nor Korean financial institutions and corporations ever took any serious action which could have prevented this crisis.

Table 9 Korea's Total External Liabilities
(end of period, billions of dollars)

	1995 ¹	1996	1997			
			June	Sep.	Nov.	Dec.
Long-Term Liabilities (A)²	33.1	57.5	60.7	66.6	72.9	86.0
(A/C, %)	(42.2)	(36.5)	(37.1)	(39.0)	(45.0)	(55.7)
I. Financial Institutions	–	41.5	43.4	47.6	53.2	50.3
1. Domestic Financial Institutions	–	38.3	39.7	43.8	49.4	46.3
Domestic	–	24.5	27.9	31.3	31.0	29.9
Offshore	–	8.5	9.6	9.6	9.6	9.2
Foreign Branches	–	5.3	2.2	2.9	8.8	7.3
2. Foreign Financial Institutions	–	3.2	3.7	3.8	3.8	4.0
II. Domestic Firms	–	13.6	15.1	16.9	17.6	17.6
III. Public	–	2.4	2.2	2.1	2.0	18.0
Short-term Liabilities (B)	45.3	100.0	102.8	104.0	88.9	68.4
(B/C, %)	(57.8)	(63.5)	(62.9)	(61.0)	(55.0)	(44.3)
I. Financial Institutions	–	78.0	77.7	78.3	63.1	43.8
1. Domestic Financial Institutions	–	65.2	63.5	62.0	45.9	28.9
Domestic	–	26.2	28.5	23.6	18.7	11.7
Offshore	–	12.7	13.0	13.1	11.3	8.7
Foreign Branches	–	26.4	22.0	25.3	16.0	8.5
2. Foreign Financial Institutions	–	12.8	14.2	16.3	17.2	14.9
II. Domestic Firms	–	22.0	25.1	25.8	25.8	24.7
Total Liabilities (C)	78.4	157.5	163.5	170.6	161.8	154.4
(%)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Notes:

¹ The figures for 1995 represent external debts as defined by the World Bank definition.

² Long-term liabilities are those with maturities longer than one year, while short-term liabilities are less than one year.

Source:

Ministry of Finance and Economy

However, there had been warning signs of an impending financial crisis in Korea and Southeast Asia as early as August 1996. The deterioration of the current accounts of Indonesia, Malaysia, Thailand, and Korea in 1996 raised the question of whether these countries could sustain their current account deficits and whether they were immune to financial crises like those that have plagued Latin American economies. In the case of Korea, the sharp deterioration in a number of liquidity indicators was an especially clear danger signal, but this was overlooked.

By the end of 1996, the share of short-term debt as a percentage of Korea's total foreign liabilities rose to 60.7%, suggesting that Korean financial institutions and firms were increasingly borrowing at the short end of the market (see Tables 5A, 5B and 9). Other liquidity indicators also deteriorated. The ratios of external liabilities to exports and GDP almost doubled between 1995 and 1996, and the ratio of short-term foreign liabilities to GDP more than doubled during the same period. The short-term foreign liabilities of financial institutions, during that time, were three times as large as the foreign reserve holdings of the Bank of Korea. Foreign liabilities as a percentage of total liabilities at financial institutions rose to 11.9% in 1996 from less than 8.9% a year earlier. By then, Korean commercial banks were already paying 50 basis points above the Eurodollar rate for their short-term borrowings. It is not a surprise then that a few foreign investors began to nervously ask themselves if further financial meltdowns, such as those in Mexico, could be in the making.

Early in 1997, the Korean policymakers were indeed concerned about the sharp increase in the current account deficit that had occurred in the preceding year. But at the same time, they were also very optimistic that the terms of trade, the deterioration of which had primarily been responsible for the growing imbalance, would turn around in favour of Korea and ease the current account burden. However, the terms of trade did not improve and neither did the current account. The volume of non-performing loans at banking institutions rose to 6.1% of total loans by June 1997, up from 4.2% six months earlier, with the increasing frequency of business failures. This, together with the capital losses on their holdings of equities, cut into their earnings. By international standards, many of Korea's financial institutions were not sound and therefore became vulnerable to financial crisis.

Contagion Effects

Despite all of Korea's policy and other mistakes, the Korean experience raises the question of whether the foreign investors should be held in part responsible for creating the crisis. There is the suspicion that too many

foreign banks and institutional investors may not have upheld due diligence in their lending to East Asian economies during the 1990s. Returns were low all over the world, except East Asia. Portfolio investment in the region had become fashionable, so foreign investors jumped on the bandwagon and threw vast sums of money at the highest returns in Asia, all too often without really knowing what they were investing in.

What developments have made foreign investors so drastically change their expectations as to the future prospects of the Korean economy? Journalistic accounts, for example, suggest that foreign investors were increasingly dismayed by and concerned with the structural weaknesses of the Korean economy. This made Korea a highly risky place for portfolio investment and bank lending. At a certain point investors were simply fed up and left. It is true that they have long known and complained about the lack of transparency in corporate management in Korea. They always questioned the reliability of balance sheets and income statements of large corporations and banks, and warned about the risks involved in the cross-ownership and cross-debt guarantees between the affiliates of Korea's major conglomerates.⁸

These problems, however, were not serious enough for them to contemplate a sudden withdrawal from Korea before the Southeast Asian currency crisis erupted. In fact, even well into the month of November 1997, according to a survey by the Korea Development Institute,⁹ many foreign investors were "optimistic" about the future of the Korean economy. Only two weeks later would they become so negative and then leave all at once, thus causing a bank-run problem where everyone divests from a country or a region at the same time, taking their money out of their investments, almost regardless of whether those investments were good or bad.

The chain of events leading up to the crisis in November therefore shows that Korea has been adversely affected by the contagion of the Southeast Asian crisis and, in particular, that the Hong Kong stock market crash sparked off the exodus by foreign banks and institutional investors out of Korea. Given the relatively strong economic fundamentals, would Korea not have come under speculative attack had proper measures been taken to contain the Southeast Asian crisis?

To answer this question, one must identify the various channels of contagion and their relative significance in the East Asian context. In many

⁸ Banks and other financial institutions lent large sums of money to the conglomerates. When these are netted out, the cross-guarantees mean that in many cases the loans to the *chaebols* are not backed by any collateral or payment guarantees, giving rise to greater risks than otherwise. Foreign investors had long been aware of this but thought nothing of it until the last minute.

⁹ See the November 18, 1997, Korea Herald.

historical instances, the effects of a currency crisis in one country are transmitted to other countries through a variety of channels such as trade, capital markets, and flows of speculative money (Kindleberger, 1966, Chapter 8). A recent study by Park and Song (1997) suggests that the institutional investors' channel may have been the main route through which the Thai crisis has been spread to other Southeast Asian economies.

It was suggested in Section II that foreign equity investors may have precipitated the financial crisis in November as they began withdrawing their funds as early as the first week of September. A simple Granger causality test was run to examine whether their behaviour leads to changes in the prices of Korean stocks or is passive in that they respond to price changes with a lag. Our results are inconclusive; depending on the sample periods chosen, the test results vary substantially. This means that as far as the pattern of investment is concerned, domestic investors are not likely to behave differently from foreign investors. Unlike domestic stockholders, however, foreign investors could set a foreign exchange crisis in motion when their fund withdrawal puts depreciatory pressure on the foreign exchange market, causing reserve losses, as has happened in Korea.

IV Lessons and Reform of the International Financial System

The financial crisis in Korea has demonstrated that both domestic borrowers and foreign lenders are clearly to blame for bringing on the crisis, and that the IMF has not been as effective as hoped in restoring stability. Borrowers – usually taking the lion's share of the blame for crises – with their disregard for prudence and ignorance of risk management, especially with regard to exchange rate risk, need to be controlled in some way. Lenders need to be curbed as well. With little else driving them but short-term profit considerations and the herd mentality, they are capable of disturbing an economy in a catastrophic way as they withdraw their investments and exit at the first sign of serious danger. These investor characteristics may call for international regulatory mechanisms to be put into place. In an increasingly integrated world economy, better means for managing crises once they erupt need to be worked out, although any reform of the international financial system at this stage would be difficult indeed.

1. Overshooting and Moral Hazard

Why has the Korean crisis been so severe in the absence of a large economic shock and any measurable deterioration in economic fundamentals?

What developments triggered the crisis? According to Eichengreen and Wyplosz (1996), there are three types of distortions that could give rise to a financial crisis. One type of distortion is asymmetric information and the herd behaviour on the part of foreign investors and financial institutions. Another is moral hazard in both the domestic and international financial systems. The third is any distortion, including a political one, that could lead to multiple equilibria in the foreign exchange market. All of these distortions were present in Korea. Not well-informed investors display, successively, excessive optimism and then excessive pessimism. Investors follow the lead of other investors, committing funds to markets with good prospects like the East Asian markets. Bad news or simply a change of sentiment often provokes a violent reaction. As was discussed in Section III, there is evidence that the financial crisis in Korea was triggered by the contagion of the Southeast Asian crisis and, in particular, the speculative attack on the Hong Kong dollar. After what took place in Hong Kong, the Korean economy suddenly looked vulnerable in the eyes of many foreign investors. A stampede of frightened investors then followed. The moral hazard problem and the close presidential race, which cast doubt as to the prospects for economic reform, accelerated the panic flight of foreign investors. In the end, the change caused by the expected contagion of the Southeast Asian crisis shifted Korea from a relatively stable into a bank-run equilibrium.

As shown in Tables 3 and 5-A, securitised capital has accounted for more than 70% of the capital inflows into Korea since the early 1990s.¹⁰ The predominance of portfolio investment has made global institutional investors much more important in international finance. Since they are driven largely by liquidity and short-term performance considerations, portfolio capital inflows are obviously far more volatile than bank loans as portfolio capital can leave a country in only a few hours, whereas medium-term bank loans cannot. The growing importance of portfolio capital has made the contagion of a financial crisis more likely, as has been the case in East Asia. It has also deepened and complicated the management of the ongoing crisis in Korea.

As noted earlier, foreign equity investors began to withdraw their investments from the Korean stock market as early as the first week of September 1997. In retrospect, they may not have precipitated the financial crisis, but they certainly aggravated it. Taking their cue from these portfolio investors, foreign banks soon started to refuse to roll over their

¹⁰ Securitised capital inflows in Table 5-A include all of the long-term capital inflows, plus foreigners' portfolio investment and banks' commercial paper financing.

short-term loans to Korean financial institutions. In other words, financial market opening together with the predominance of portfolio capital inflows has permitted, and actually given rise to sudden capital outflows, resulting in inordinate increases in interest rates and excessive depreciation of the foreign exchange rate.

The Korean crisis has been exacerbated further by the moral hazard problem in the Korean banking system and in the IMF programme. As is widely known, commercial banks and merchant banking corporations have long operated with implicit government guarantees in Korea. Although a deposit insurance system is in place, few believe that the government could allow these institutions to go bankrupt. This guarantee, together with inadequate regulation, provides incentive to banks to borrow larger amounts of funds abroad for domestic lending, than they would otherwise do, and to invest in riskier projects with the expectation that the government will bail them out in the event they incur serious losses.

This moral hazard appears to have affected the behaviour of foreign financial institutions lending to Korean banks and other financial institutions as well. Since they expect to receive national treatment, they also believe that, like domestic depositors, the payment of principles and interest on their loans is guaranteed by the government, although there is no formal arrangement of guarantee to that effect. They also know that as a group they could put pressure on the Korean government to guarantee repayment. Indeed, when signs of a financial crisis began to appear, this is precisely what they did, and very successfully. Due to this implicit guarantee, foreign banks did not feel the need to conduct careful credit analysis of the Korean financial institutions to which they were lending vast sums of money. When some of the symptoms of the crisis began to surface, few foreign banks were trying to reschedule their loans to troubled Korean banks, in sharp contrast to what they normally would do if dealing with delinquent borrowers at their home bases. Even though information on Korea's corporate sector and financial institutions, including the knowledge that most of the published corporate and banking data are unreliable, was available, foreign investors did not even try to gather and analyse this information.

Another type of moral hazard was also found during the Korean financial crisis. Once it became clear that Korea could not overcome its impending financial crisis, which was in part precipitated by their fund withdrawal, international banks and institutional investors began putting pressure on the Korean government to seek IMF financing. They have done this because a debt moratorium would not be an efficient or realistic mechanism of debt resolution, for the simple reason that there were too many investors and too many types of investors. Therefore, negotiations

would not have been feasible. More importantly, the IMF programme favours creditors more than debtors (Soros, 1998). The fact that the IMF has come to Korea's aid means that the foreign banks will be able to recover their investments with relative ease and perhaps even profit, as the austere monetary and fiscal policies that the IMF is requiring of Korea mean extraordinarily high interest rates.

However, the agreement between the Korean government and the IMF on the structural reform and rescue package was not sufficient to satisfy the banks and, as a result, did little to change the markets' sentiment, at least during December. This is because foreign banks, in view of what was happening in Indonesia and Thailand, were not sure whether the IMF could enforce the implementation of financial and real sector reforms during a political transition period, marked by an inept lame duck government which would remain in power until the end of February 1998, as well as great uncertainties surrounding the upcoming presidential election (held on December 18, 1997). In addition to the Korean government's compliance to the IMF programme, foreign lenders wanted to be assured of the payments of the principles and interest on their loans; otherwise, they would not return to the Korean market.¹¹ They have asked for and received the provision of a government guarantee on private debt, based on the grounds that it would facilitate and simplify the negotiations with Korean financial institutions on the debt restructuring and the supply of new credit.

Now that the moral hazard and overshooting problem appears to be rather serious, we have to ask if global institutional investors and international commercial banks, whose activities cross national borders, should be monitored and subject to some types of regulations. At present, capital flows originating from global institutional investors are completely unregulated in their source country and even less so internationally. They certainly have not been regulated in Korea. Griffith-Jones (1996) advocates the creation of an international supervisory mechanism to which the task of regulating short-term capital flows could be assigned. There is controversy as to whether such a global governance mechanism would be effective in stabilising short-term capital movements. Assuming it would be, which countries or institutions should be responsible for the task? How should the different financial rules and enforcement mechanisms of different countries be coordinated and made uniform? Should the system be made uniform at a global or at a regional level?

11 To be fair, it is true that Korean officials alluded to the possibility of guaranteeing the repayment with interest of Korean banks' foreign debts on several occasions, even before the crisis broke out.

A global system would of course face opposition and it would be difficult to negotiate it in the near future. However, since the EU members have agreed to common rules and supervision, it seems reasonable to ask whether other countries in different regions should attempt to establish regional frameworks for financial regulation and supervision. This issue merits further discussion, because smaller groups of countries, where institutions are similar, would naturally face far fewer hurdles on the way to establishing viable international arrangements. Certain public goods are better provided through such arrangements, and financial supervision and regulation would certainly seem to be one of them (Lawrence, 1996).

2. Prevention and Better Management of Financial Crises

Another important question to be raised at this point in the ongoing East Asian currency turmoil is whether the crisis could have been prevented and could have been better managed once it broke out. It is somewhat discouraging that even despite the best efforts of the participants of the G-7 Halifax summit of 1995 to work out effective means of prevention and management of currency crises, financial turmoil began to rock Southeast Asia in the summer of 1997, spreading then to other countries. Korea has been claimed as the latest casualty, with speculation that there could even be others later on.

Griffith Jones (1996) makes a number of suggestions for crisis prevention, which include: (i) better management of macroeconomic policies; (ii) fuller disclosure of information to market participants; (iii) establishment of an early warning system with improved monitoring of national economic policies; and (iv) regulatory restrictions on capital flows to emerging markets, both by creditors and debtor countries. Following these suggestions, there was little Korea could do by itself to protect itself from a crisis except for making more as well as reliable information available.

Kindleberger's study on the causes, characteristics, and propagation of financial panics and crashes in a historical perspective leaves us little doubt that financial crises will continue to recur, so long as banks and investors with propensities for speculative excess cause domestic bank runs. Likewise, there will always be national economies which mismanage their financial industries and macroeconomic policies, thereby inviting banking and foreign exchange crises. Since financial crises can occur for a number of reasons, it is not clear whether the symptoms of crises could be detected and identified beforehand. When the causes of financial crises in individual countries are domestic in origin, individual governments should be held responsible for resolving the crises. However, in an increasingly globalised world economy, the effects of a financial crisis are easily and rapidly trans-

mitted to other countries, and this contagion, which often draws even healthy economies into financial turmoil, must be prevented. That is, the efforts of the international community should focus in particular on the prevention of financial contagion, not financial crises in individual countries.

Could the Korean crisis have been prevented? In hindsight, the answer to this question is an unequivocal yes because Korea would not have been thrown into turmoil had the Southeast Asian crisis been contained where it emerged. *Could the Korean crisis have been better managed?* The management of the Korean crisis as organised and supervised by the IMF reveals a classic dilemma of an international lender of last resort. If the IMF had had the power of global lender of last resort, and let it be known that it was prepared to supply an unlimited amount of credit until all capital outflows stopped, as central banks do when they encounter domestic bank runs, it would be reasonable to argue that the Korean crisis would have been short-lived. However, the IMF does not have either the mandate of an international lender of last resort, nor the resources to serve such a role.

The Korean experience also suggests that the presence of a powerful international lender of last resort would give rise to the moral hazard problem. Knowing that the rescue is forthcoming, the markets will lose incentive to resolve the crises by themselves. Neither the initial rescue package agreed upon between the IMF and the Korean government, nor the rescue funding was able to reverse the markets' excessive pessimism. What was so surprising and unexpected about the Korean crisis was the markets' lack of confidence in the IMF rescue efforts. The IMF funding package, though it was the largest in its history, did not impress the markets as much as it could have under different circumstances. Only when the G-7 countries produced additional financing of \$8 billion and pleaded with the market participants to return to the Korean market, even threatening not to disburse the additional commitments, did the withdrawal from Korea stop. It was as if the international financial community wanted to test whether the G-7 countries would honour their Halifax commitment.

If this was what the markets are after, it is also not surprising that, as was the case in the Mexican crisis, a large share of the costs and strains are likely to be borne by the Korean economy and by the official international support. As evidenced by the debt negotiations between the creditor banks and the Korean government, foreign banks are not going to share the costs of crises as much as they should. Quite to the contrary, it appears they are determined to reap a profit from the crisis, knowing that their market power will in the end force the public sector to accept their terms for the resumption of lending. The market power that international banks and global institutional investors hold is understandably difficult to confront.

When it is combined with moral hazard, and when the IMF and G-7 will in the end serve, as they have, as lenders of last resort, the management of crises such as that in Korea becomes extremely difficult.

Should there be a lender of last resort in international finance? And how should this lender, if it is established, mobilise its resources for intervention? In view of the systemic risk posed by the contagion of the East Asian crisis, could one make a strong case for creating a lender of last resort, although disagreement would persist over its precise role? To answer this question, it would be instructive to examine the effectiveness of the IMF's intervention in the Asian crisis so far.

Although the IMF was not created to deal with systemic risk or to act as a lender of last resort, it has played such a role during the East Asian crisis, simply because no other institutional arrangement capable of containing crises has ever been established and because it offers a framework for collective support in times of individual countries' crises (Kenen, 1996). How effective has the IMF's intervention been so far? It is too early to judge since the crisis is still unfolding before us, but the Korean experience suggests that it has not worked as well as was perhaps expected. One can point to a number of reasons for the ineffectiveness of the IMF's signaling role.

One is that the IMF does not come in to rescue a country until after the collapse of the foreign exchange market, not before. By the time that the IMF and the Korean government had agreed to a rescue plan, the crisis had gathered force and was already at its peak. The IMF intervention was too late and its financing package was not large enough to turn the tide. If indeed the IMF is going to serve as lender of last resort, the Korean experience shows that it would have to intervene at an early stage of a speculative attack. The problem here, however, is that governments in distress are extremely reluctant to ask for IMF assistance. Such a request is tantamount to admitting policy failure and is therefore a major political risk and embarrassment.

In most cases, when governments do finally decide to accept an IMF programme, the succeeding negotiations usually drag on, wasting precious time while the markets are looking for decisive action. Had new IMF credit been injected earlier, when clear warning signs of crisis were visible in Korea, the IMF programme could have worked better. To play the role of lender of last resort, there should be a mechanism or institutional arrangement by which the IMF could intervene automatically to nip speculative attacks in the bud. Waiting for governments to ask for help on their own accord will almost always mean waiting too long.

In this regard, a proposal has been made to create a new short-term financing facility at the IMF, from which the member countries could borrow before a crisis happens, with the condition that they accept an IMF

shadow programme for approval (Griffith-Jones, 1996). The idea of attaching policy conditionality before the crisis breaks out is meant to avoid moral hazard – countries mismanaging their economy with the expectation that they would be rescued in case the markets panic. However, one must ask how many, and what types of countries, would mismanage because the IMF stands ready to bail them out in case they fall into a financial crisis? The more serious problem lies with international banks and global institutional investors who would lend more money to these countries than otherwise, knowing that they could be bailed out. The IMF has little power to regulate their lending, and this lack of supervisory authority will likely weaken considerably the effectiveness of the short-term financing facility, as it leaves the IMF powerless to deal with moral hazard.

The new automatic financing facility, to be effective and avoid moral hazard, should include measures for regulating and supervising foreign investors, as much as the member countries requesting the right for an automatic withdrawal. If controlling capital inflows at their source is not realistic, then the new facility should allow the member countries willing to accept the shadow programme to institute a system of prudential regulations on capital account transactions.

Another reason why there were serious questions as to the efficacy of the IMF programme in Korea, was that it was not flexible enough to account for the unique characteristics of specific countries. The IMF is often criticised for applying the same programme to all countries, as it has in the East Asian crises. Requiring tight fiscal and monetary prescriptions, for example, to a country with neither a fiscal deficit nor an inflation problem has been controversial. The controversy may also have dampened the IMF's efforts to shift the markets' sentiments. Admittedly, many of these industrial and financial reforms are long overdue in Korea, but it is not at all clear that they could not have been carried out without the IMF's intervention.

Indeed, it is difficult to judge whether the harsh monetary and fiscal tightening, which the IMF is requiring of Korea, is necessary or even in the interests of either Korea or the foreign investors. There is obviously a trade-off between (i) a relatively low domestic market interest rate, with a larger currency depreciation and with greater exchange rate volatility, and (ii) a high interest rate with a smaller depreciation and a relatively stable exchange rate. However, in an economy where firms are highly leveraged, as they are in Korea, a high-interest rate policy could result in a high frequency of business failures. In fact, these failures could become so high that they would dislocate the industrial base itself, thereby undermining the economy's debt servicing capacity. The won/dollar exchange rate

changes have also been too volatile even during a panic period, often moving by more than 5% daily in either direction. This naturally raises the question of whether or not a lowering of the domestic interest rate would increase the exchange rate volatility, because the monetary easing may help change the markets' sentiment, as it could improve Korea's debt servicing capacity in the medium term. This question is essentially an empirical one.

A third reason why the IMF's intervention may have been weakened is that the standard IMF programme, which puts more emphasis on the formulation of economic policy reforms than on financing, may be less effective in cases where the creditors involved comprise such a huge and faceless mass of parties, each of whom has a different interest and outlook. It is indeed high time to ask whether these international banks and global institutional investors moving vast sums of money across national borders do actually understand the policy package and take it into consideration in their investment decisions. The difficulty with the IMF approach is that foreign investors in most cases may not have the capacity to determine whether the policy package will work. Even if they do, they may not have the patience to examine the thrust, objectives, and the effects of the policy package. Since policy changes and structural reforms are subject to many uncertainties, international banks and global institutional investors cannot afford to rely on a policy package which is claimed to cure the economic ills of a country as far away from their bases as Thailand, particularly when they are preoccupied with the short-term performances of their portfolios.

The East Asian currency crisis, in particular that of Korea, leaves little doubt that the prevention of contagion of financial crises would be greatly facilitated if there existed an effective international lender of last resort, although the presence of such an institution in the future is highly unlikely. Kindleberger (1966) argues that, while the moral hazard problem could be severe, there should be an international agency which has *de jure* responsibility for providing the public good of financial stability (p. 9). To minimise the consequences of moral hazard, he argues that the presence of such an institution should be doubted, so that such an agency could "leave it uncertain whether rescue will arrive in time or at all, so as to instill caution in other speculators, banks, cities, or countries" (pp. 9-10). Despite these problems, many small, open economies like Korea may have no alternative but to return to more restrictive capital account regimes in order to safeguard themselves against the contagion of financial crises. This in the absence of mechanisms of multilateral cooperation, including a facility which serves as a lender of last resort, and regardless of whether or not such regimes would be effective and efficient.

In the case of Korea, practically all of its foreign debt consists of private foreign liabilities of financial institutions and corporations. Except for the

consideration of systemic risk, neither the domestic authorities nor the international lender of last resort should socialise these liabilities. One possible means of solving the moral hazard problem, which has been discussed extensively in the domestic context, would be a private insurance scheme for financial institutions. For a commitment fee, domestic financial institutions in emerging markets could receive standby credit from major international money centre banks or other willing institutions, to be drawn on in the event of such emergencies as a bank run. Foreign investors and depositors might be much less inclined to withdraw their funds from specific financial institutions or from entire countries if this kind of insurance were a standard feature of international finance.

Perhaps of equal importance, this system also has the merit of shifting the cost of financial bailouts from the public sector to where it belongs, the private sector, thereby further reinforcing the incentive for financial institutions to borrow and lend more wisely. This ultimately means that there would be more accountability at financial institutions and that there would be less possibility of taxpayers having to mop up financial messes.

3. Financial Liberalisation in Emerging Market Economies

Three of the conditionalities required of Korea by the IMF is to all at once completely open the domestic financial services market, scrap the present foreign exchange control system – something that would partly entail deregulation of capital movements – and adopt a free floating exchange rate system. These are regulatory changes that ordinarily occur over an entire generation in most countries. An important question is whether these reforms would be consistent with each other if carried out simultaneously, and if they will contribute to the stability and efficiency of the domestic financial system. The Korean experience casts doubt on both the rationale and effectiveness of these changes.

How should developing countries manage their integration into the global system? In view of the recent financial crises in East Asia, it would seem that they should be very cautious in opening their money and capital markets. Market opening greatly increases their exposures to speculative capital movements, which have been found to give rise to speculative bubbles and to dramatically destabilise local economies. Should developing countries delay integration until they can institute regulatory and supervisory systems which are comparable to those of advanced countries, in terms of standardisation and effectiveness? Or should they liberalise their financial systems in a big bang style in the expectation that market forces will in the end stabilise capital movements?

In recent years, western governments have devoted increasing attention

to securing the rights of access for their financial firms to the markets of developing economies. However, although these governments know that the accounting practices and disclosure requirements in developing countries do not conform to their standards, and that the supervisory financial authorities do not enforce rules and regulation as tightly as they should, few western governments have demanded the necessary financial reforms and changes. Yet, they have been persistent in their demands for equal access and an outright opening of domestic capital markets (Herring and Litan, 1995).

Advanced countries have also not made clear their position as to whose rules should apply to firms and financial institutions in developing countries, or which nations or regulatory bodies should enforce these rules. As a result, the financial activities of international financial institutions, especially global institutional investors who regularly move vast amounts of capital across national borders, are not subject to prudential regulations, and understandably are not scrutinised by regulatory bodies of either home or recipient countries.

In the process of financial liberalisation in many developing countries, the domestic regulatory and supervisory authorities are required to abolish those regulations which hinder the free functioning of the markets. In many cases, this is necessary as government intervention proves to be more of a hindrance than a help after an economy matures. However, all too often, the useful prudential regulations are swept away as well; a classic case of throwing out the baby with the bath water.

This has serious ramifications. Many institutions and firms in developing countries are inadequately supervised before deregulation occurs, so they are suddenly permitted to engage in all kinds of financial activities in which they have neither experience nor competitive advantage. As they will nevertheless make forays into international lending and borrowing and other such businesses, excessive deregulation more often than not sets up an economy for a major crisis.

Needless to say, the Korean supervisory institutions had no authority to monitor the activities of those foreign financial institutions which had been lending all this money to Korean firms and financial institutions, let alone regulate them.

Every country regulates and supervises its own domestic financial institutions and markets for a number of reasons, the most important being the lessening of systemic risk. In the transition from a controlled to a liberalised financial system, the regulatory and supervisory system is often weakened and not yet harmonised with the respective systems of other countries. Furthermore, except for the IMF, there is no lender of last resort which could support central banks in case foreign financial institutions call

in or refuse to roll over their short-term loans to domestic financial institutions, thereby precipitating a crisis. This puts developing countries at a serious disadvantage and in very real danger. It does not serve the interests of the international financial community to force developing countries to open up their financial markets without providing public goods that will safeguard these countries from currency crises and other systemic risk.

In a small economy, like Korea, which is also now open financially (since December 1997), internal and external shocks to the domestic markets are instantaneously transmitted to the foreign exchange market. Especially when the foreign exchange market is thin and forward arrangements are not readily available, the spot exchange rate reacts sharply to domestic and foreign shocks, leading to substantial changes in the real exchange rate by the day, and sometimes by the hour. This kind of exchange rate instability can be disruptive to production and investment in an economy open to international trade. A fundamental question is whether such an economy fully integrated with the global financial system can maintain a flexible exchange rate system.

Korea has experimented with both a managed floating and a completely free floating system. As it was designed, the managed floating system could not function in the face of a destabilising speculative attack. The band was widened, as part of the IMF conditionality, but this did nothing to stem the tide of capital outflows and did not stop the depletion of reserves. Since then, the nominal exchange rate vis-à-vis the US dollar has depreciated by more than 50%, and its movements have been volatile, making the real exchange rate equally unstable.

So far, it appears that the depreciation and flexibility of the foreign exchange rate has done very little in the way of restoring foreign investors' confidence. The difficult question is whether the foreign exchange rate should be allowed to depreciate continually until the markets' sentiment turns around. The recent Korean experience is rather negative in this regard. As Eichengreen and Wyplosz (1996) suggest, emerging market economies, like Korea, with a large external sector are better advised to pursue a pragmatic policy that involves limited exchange rate management and the imposition of limited restrictions on capital movements. In the long run, they suggest that these countries should contemplate monetary unification with a larger neighbour. In the case of Korea, Japan is such a neighbour, but it accounts for less than 20% of Korea's total trade, making it an impractical neighbour with whom to unify.

The process of worldwide financial integration will lead to creation of a single global market. To be tenable, such a market system must be supported by a global financial governance system that includes global rules and supervision of financial activities. In a domestic economy, the central

bank stands ready to rescue a healthy bank suffering from a public panic by extending an unlimited amount of credit, if necessary. In an open economy, the central bank could not play a similar role as lender of last resort if a bank run ensues as a result of foreign investors' panic. A free floating system may not prevent a foreign exchange crisis caused by the financial crisis. As long as these institutional deficiencies of the international financial system remain, there may be a limit as to which emerging market economies could deregulate capital account transactions.

V Concluding Remarks: Reflections on the Crisis

The financial crisis in Korea has been much more severe than expected and has inflicted serious damage on the economy. Korea will not be able to completely recover from the economic dislocation brought on by the crisis for a number of years. The Korean experience naturally raises the questions of whether the crisis, in hindsight, could have been prevented in the first place and whether it could have been better managed once it broke out. What general lessons can we derive from the experience, and what are the implications of the crisis for the reform of the international financial system?

There is no question that the Korean policymakers are largely responsible for the crisis. They have tinkered with much needed economic reforms for the real as well as the financial sector of the economy for far too long, thereby deepening foreign investors' distrust in the government. Furthermore, in 1997, the Korean policymakers did not pay enough attention to the sharp deterioration in various liquidity indicators, and to the complaints of foreign investors about either the non-transparency in the management of corporations and financial institutions or the reliability of the published statistics on banking and foreign reserve holdings. They have tried to defend the won for too long by maintaining a managed floating system, thereby causing the Bank of Korea to lose a substantial amount of reserves.

At the same time, the deficiencies of the international financial markets have become more pronounced and have exacerbated the crisis, giving rise to far more extensive damage. The herd behaviour and information problems on the part of investors were apparent during the Korean crisis. The herd behaviour was compounded by moral hazard stemming from the implicit or expected loan guarantees by the Korean government and the recourse to IMF rescue financing.

The East Asian crisis in general has shown that in an integrated financial world, financial crises can be contagious and pose systemic risk. In order to

prevent financial crises in the future, what reforms or institutional changes should be contemplated? Creating a new lender of last resort or strengthening the role of the IMF as such a lender is controversial, because few countries would be inclined to assume the cost of operating such an institution.

Regulating and monitoring institutional investors at their source countries is claimed to be impractical and unnecessary. Regulating and monitoring foreign lenders by borrowing countries would be regarded as capital control and completely against the spirit of liberalisation. Even despite the fact that the IMF has acted as a *de facto* lender of last resort, many would object to the idea of giving the organisation regulatory authorities.

In the meantime, Korea has been under pressure, much more so now after requesting IMF assistance, to completely open up its financial markets, thereby integrating its domestic market with the world financial system, which does not provide any public goods for global financial stability, while adopting a free floating exchange rate system. This is an unsustainable situation, to say the least. When a domestic financial institution experiences a run on its deposits, the central bank stands ready to contain the bank run by making, if necessary, unlimited amounts of credit available. If the run becomes contagious and affects other domestic banks, the central bank will have to lend from its holdings of foreign reserves. If it depletes its holdings of foreign reserves, the country will then be forced to default on its debt repayments.

Exchange rate depreciation and high interest rates could stop the run on the banking system, but the Korean experience demonstrates that they offer no guarantee. The ultimate outcome of the situation depends entirely on the markets' perception. The system of floating exchange rates does not appear to be the most efficient arrangement for a small, open economy as it may cause large fluctuations in the real exchange rate. In a fully integrated financial world, should the central bank in question be solely responsible for containment of the crisis? Other than the central bank of the country where the bank run is on, should there be a multilateral organisation serving as lender of last resort?

Most of the measures proposed so far for the prevention and better management of financial crises, such as creation of an international lender of last resort and restructuring the IMF for regulating global institutional investors, as well as harmonising rules and enforcement efforts at a regional or global level, are not likely to be realised anytime soon. Given this reality, and in view of the ongoing financial crisis in East Asia, the international financial community should have second thoughts about whether it would serve the interests of the advanced countries to demand a haphazard opening of the financial markets of emerging market economies. Until the

provision of public goods which will safeguard these countries from the recurrence of financial crises, they should be allowed to throw some sand in the wheels of international finance, at least at the national level.

References

- Eichengreen, Barry and Charles Wyplosz (1996), "What Do Currency Crises Tell Us About the Future of the International Monetary System?," In: Teunissen, J. J. (ed.), *Can Currency Crises Be Prevented or Better Managed?: Lessons from Mexico*, FONDAD, The Hague, pp. 90-103.
- (1996), "Taxing International Financial Transactions to Enhance the Operation of the International Monetary System," In: Mahbub ul Haq, Inge Kaul, and Isabelle Grunberg (eds.), *The Tobin Tax, Coping with Financial Volatility*, Oxford University Press, pp. 15-40.
- Griffith-Jones, S. 1996, "How Can Future Currency Crises Be Prevented or Better Managed?," In: Teunissen, J. J. (ed.), *Can Currency Crises Be Prevented or Better Managed?: Lessons from Mexico*, FONDAD, The Hague, pp. 64-77.
- Herring, Richard J. and Robert E. Litan (1995), *Financial Regulation in the Global Economy*, The Brooking Institute, Washington, D.C.
- Kenen, Peter B. (1996), "How Can Future Currency Crises à la Mexico Be Prevented?," In: Teunissen, J. J. (ed.), *Can Currency Crises Be Prevented or Better Managed?: Lessons from Mexico*, FONDAD, The Hague, pp. 39-47.
- Kindleberger, C. P. (1966), *Manias, Panics, and Crashes: A History of Financial Crises*, 3rd edition, John Wiley and Sons, Inc., New York.
- Lawrence, Robert Z. (1996), *Regionalism, Multilateralism, and Deeper Integration*, The Brooking Institute, Washington, D.C.
- Park, Yung Chul (1996), "The Republic of Korea's Experience with Managing Foreign Capital Flows," In: Mahbub ul Haq, Inge Kaul and Isabelle Grunberg (eds.), *The Tobin Tax, Coping with Financial Volatility*, Oxford University Press, pp. 193-220.
- (1996), *East Asian Liberalization, Bubbles, and the Challenge from China*, Brooking Paper on Economic Activity, 2, Washington, D.C., pp. 357-371.
- and Song, C.Y. (1997), "The Southeast Asian Currency Crisis and the Channels of Contagion," Paper presented at a Conference at the Mitsui Life Financial Research Centre, University of Michigan Business School, November 6, Ann Arbor, Michigan.

Comment on “The Financial Crisis in Korea and Its Lessons for Reform of the International Financial System,” by Yung Chul Park

Kunio Saito

Yung Chul Park’s paper, like all his previous papers, is interesting, insightful, and thought-provoking. He addresses many difficult questions like “Why did the Asian financial crisis spread so widely and so fast?” and “Why was it so severe?”, the questions which many of us here have been struggling to answer. He makes frequent references to the IMF-supported programme in Korea and raises some interesting and useful thoughts on a number of issues facing the international financial community, including the possibility of regulating international capital flows.

On my part, I would like to contribute to this discussion by addressing three questions: “Could the crisis have been prevented?”; “Could it have been better managed?”; and “What needs to be done to prevent another crisis?” I will offer my comments on some of the points Mr. Park makes and, in the process, touch on what the IMF has been trying to do in Korea. My main message here, not surprisingly, is a bit kinder to the IMF than Mr. Park is – the IMF programme in Korea had a rocky start and the initial stabilisation process took more time than had been expected but, after that initial phase, the programme has been doing well and the prospects for recovery in Korea are not bad, despite numerous difficulties the economy still faces.

So, let me start with the first question, “Could the crisis have been prevented?” My answer is “yes”, on two conditions – namely (i) if a country had strong macroeconomic and structural fundamentals, and (ii) if it maintained flexible exchange rate and interest rate policies. I share Mr. Park’s view that Korea could have avoided the crisis, if the authorities had dealt with all the structural weaknesses before they were uncovered by a cyclical slowdown of the economy. Market participants, then, could have differentiated Korea from countries like Indonesia and Thailand. Unfortunately, this was not the case in Korea in late 1997, and even if strong macro and structural fundamentals had been in place, that would not have been sufficient to prevent a crisis. In my view, strong fundamentals have to be

accompanied by flexible policies on the exchange rate and, especially, interest rates. To keep markets functioning and to clear supply-demand imbalances, market prices – the exchange rate and interest rates – must be allowed to move freely and at times substantially. One mistake Korea – and Thailand and Indonesia – made at the initial stage of the present crisis was that they tried to deal with the imbalance through direct market intervention. Since no central bank could match the liquidity the market can mobilise, this strategy only aggravated the problem. The movements of the exchange rate and interest rates at this initial stage were too small, making the subsequent depreciation and interest rate increases much larger than otherwise required.

This was in sharp contrast to the experience of Hong Kong and the Philippines, both of which were perceived to have relatively strong fundamentals, but which nevertheless were subjected to a speculative attack at least once during last fall. At that time, market participants were so pessimistic about Asia and, as Mr. Park puts it, were behaving like a scared herd, that they were ready to move liquidity out of even those markets that were seen as having relatively strong fundamentals. Against this pressure, Hong Kong raised the overnight call money rate to 300% and the Philippines raised the rate to 200% for a few days in late October. Consequently, Hong Kong and the Philippines managed to prevent the initial exchange market turmoil from developing into a full-fledged crisis.

Let me now move to the second question: “Could the crisis have been better managed?” Here, I join Mr. Park in saying that the crisis could, and should, have been managed better, at least in the Korean context, but perhaps for different reasons. Instead of identifying these possible differences, however, I would like to present my own account of what happened in Korea. I will do so by dividing the Korean crisis into three periods – (i) the pre-IMF period between mid-November and December 4th (when the IMF Board approved the programme); (ii) the “initial” post-IMF period around Christmas; and (iii) the period since then.

Although the Korean economy had faced an increasing number of problems from the beginning of 1997, the crisis reached Korea only in mid-November. The subsequent three-week period – my pre-IMF period – was crucial in containing the crisis. In a way, the Korean authorities moved fast to address the situation. Following a change of Finance Minister, the IMF was contacted at the end of the first week, the programme was negotiated in the next two weeks and received approval on December 4th. To complete programme negotiations within such a short period required tremendous efforts, especially for the Korean authorities, who had to negotiate not only with the IMF mission, but among themselves to build consensus. However, in the meantime, policies were kept unchanged and no new

measures were introduced to deal with the evolving situation. Most significantly, during the first week, the Bank of Korea tried to defend the rate through direct intervention, losing a large amount of reserves, then discontinuing the intervention without raising interest rates substantially, causing a sharp fall in the won exchange rate. Consequently, Korea lost the opportunity to contain the crisis at its very early stage.

The second period began with the approval of the Korean Programme on December 4th. The initial priority of this programme was to stabilise the exchange market through the restoration of market confidence. To that end, the programme entailed a number of specific measures: (i) demonstration of the authorities' strong will and commitment to structural reform and sound economic management, including defending the Korean currency through higher interest rates; (ii) demonstration of the central bank's ability to meet any contingency with its reserves. For this purpose, Korea received a large amount of resources from the Fund, as well as credit commitments for the second line defense from a number of industrial countries; and (iii) expectations of a rollover of short-term credits by foreign commercial banks.

In any event, things did not go as well as expected. Almost immediately after the programme was put in place, a public debate began as to whether the programme should be renegotiated in the heated political climate prior to the presidential election. Interest rates were raised, but only modestly compared to the prevailing market pressure. New short-term debts were "found" and market estimates of Korea's debt were revised upward almost every day, raising questions regarding the central bank's ability to meet payment obligations, even after its reserves had been enhanced with resources from the IMF. These developments did not help strengthen confidence, especially among foreign banks, who withdrew rather than rolled over credit during the first twenty days of December. Although a number of important actions such as capital account liberalisation and banking sector reform were introduced, the programme was not really in place. Consequently, Korea lost another crucial opportunity.

The third phase of Korea's adjustment began in the final weeks of December, when the situation started to improve. By that time, the then president-elect, Kim De Jung, had convinced the market that he was firmly behind the programme, and at the same time, policies were strengthened in many respects – including interest rates, which were raised to the highest level in many years in Korea. Debt data were finally revised and published, clarifying the uncertainties that had caused unnecessary confusion and fear. Discussion of a formal rollover of short-term debts began between the Korean authorities and foreign banks. The IMF had advanced its disbursement and made \$2 billion available in late December, in addi-

tion to the \$9 billion it had already disbursed. The G-7 countries confirmed their commitments to provide resources for the second line of defense, if and when it was needed.

Based on these measures in late December, the won strengthened substantially from its trough on December 23rd and a measure of stability has now been established in the exchange market. The Korea authorities have since been working toward the second key objective of the programme, that is to establish a base for resuming strong growth. This is a difficult task but, as Mr. Park describes in his paper, the Korean authorities are forcefully implementing the needed measures and, like many others, I have every confidence that they will succeed.

Let me now turn to the last question: "What should be done to prevent another crisis?" In his conclusion, Mr. Park mentions the possibility of creating an international lender of last resort as well as a mechanism to regulate international investors and their activities. Mr. Park seems to favour creating such an institution and mechanism, but he recognises that this is not likely to be realised anytime soon. He argues that in the meantime, emerging market countries "should be allowed to throw some sand in the wheels of international finance," to safeguard themselves from the recurrence of financial crises.

In my view, the main problem with the argument for an international lender of last resort is that it comes too close to an argument for "an IMF with generous credit but with no conditionality". This is an argument put forward from time to time in Asia and elsewhere in the world. The presumption is that there is nothing wrong with the countries' policies and that all crises are externally induced. Hence, such a crisis should be dealt with without changing policies, or with minimal changes to the exchange rate and interest rate. However, this presumption does not usually hold. Policies, including the exchange rate, are often wrong and need to be adjusted. An international lender of last resort would create a moral hazard by prolonging wrong policies. Also, addressing a crisis by intervention only, or even mainly by intervention, is no longer technically feasible, given the recent expansion of cross-border capital flows.

This brings me to the subject of regulating certain types of capital flows. I believe that there is a growing consensus that the international financial community should monitor and collect information on large transactions and positions in exchange markets. I hope that the international community will be able to come up with and agree upon a mechanism to utilise this information in order to regulate excessive and abrupt movements of liquidity across borders. Here I share Mr. Park's wish, although, like him, I am not hopeful that we will get what we want anytime soon.

With regard to Mr. Park's suggestion of throwing some sand in the

wheels of international finance, I would note that some emerging market countries have done this as a temporary measure, including requiring central bank deposits with no remuneration for all external short-term borrowing. At the same time, I would ask whether a country can effectively control these “speculative” capital flows while maintaining other flows intact. The question is at what cost? In my view, these considerations on balance, would not support Mr. Park’s suggestion, especially in the Korean context.

Let me now conclude with my own suggestions, which I am afraid, are not exciting but which are, I believe, pragmatic. To avoid another crisis, it is important for countries to maintain strong macro and structural fundamentals, as well as efficient exchange and money markets, where both exchange rate and interest rates are allowed to move flexibly to address any supply-demand imbalances. At the regional and international level, this should be supported by a mechanism for effective mutual surveillance and a strong IMF, both in terms of policy advice and financial support.

Globalised Financial Markets and Financial Crises

Charles Wyplosz

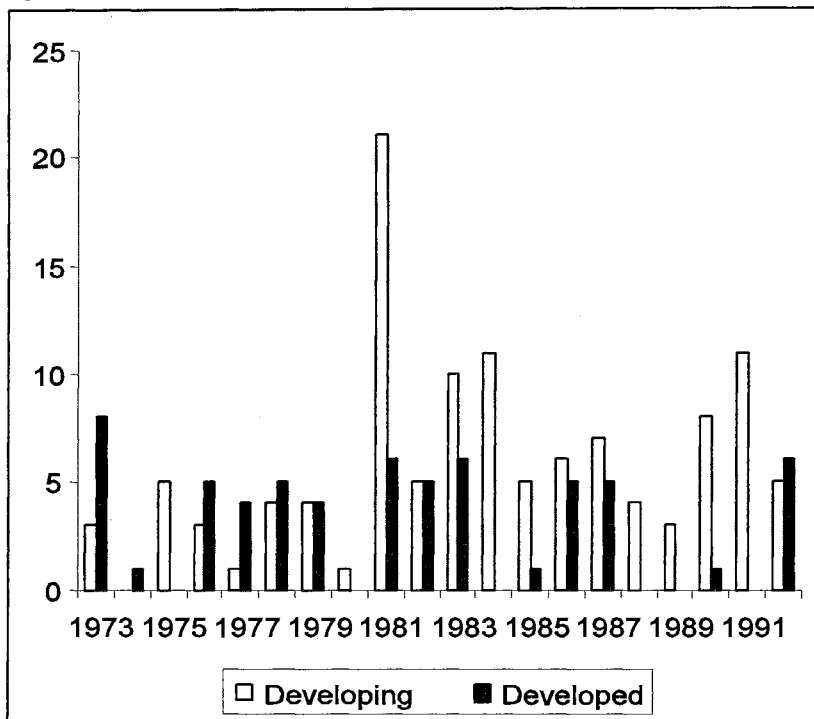
I Introduction

Over the last two decades financial crises have tended to occur increasingly frequent. The modern era of big crises started with the Mexican default in 1982. Immediately thereafter, most of the developing countries faced a withdrawal of funds which led to numerous crises. It took a decade of painful adjustment before the developing countries could regain access to international borrowing. The next wave started with the mini-krach on Wall Street in 1987. Contagion immediately affected European markets (King and Wadhvani, 1990) but the crisis was promptly dealt with through a large-scale injection of cash by the Federal Reserve and other OECD central banks. A few years later, in 1992-93, the European Monetary System remained under siege for nearly a year. The crisis in fact had started in Europe outside the EMS area, in Sweden and Finland. In the end the system had been defanged as it shifted to fluctuation bands so large that they were unlikely to be binding. Next, in 1994-95 the Mexican crisis was followed throughout Latin America by the 'tequila' effect. Mexico itself faced two years of high inflation and recession. Finally, the Thai crisis spread in 1997 throughout Southeast Asia, also affecting the Czech Republic, Brazil, Poland and Russia among others. Figure 1 displays the number of crises in developing countries as determined by Frankel and Rose (1996), i.e. before the latest wave. From this accumulated experience a number of lessons emerge. Some of these lessons are pretty uncontroversial but others remain hotly debated and often fail to find their way into policymakers' reasonings.

Empirical work on the characteristics of crises has quickly developed over the last few years. A number of conclusions emerge from the studies of Eichengreen, Rose and Wyplosz (1995, 1996); Kaminsky, Lizondo and Reinhart (1997); Frankel and Rose (1996); and the IMF (1997). First, currency crises are typically preceded by overvalued exchange rates, as well as fast growth in domestic credit and current account deficits. Second, there is no clear link between fiscal policy and crises. Third, crises are followed by exchange rate undervaluation, inflation, high interest rates and an improvement in the current account. Fourth, domestic asset prices do not

fall ahead of the crisis; they are often high before and quickly decline at the time of the crisis. Fifth, in the case of developing countries, crises tend to occur when interest rates in developed countries bottom up. Although not yet backed by hard evidence, these stylised facts lend themselves to a number of tentative albeit important implications.

Figure 1 Number of Financial Crises in Developing and Developed Countries



Source: Frankel and Rose (1996); Eichengreen, Rose and Wyplosz (1995).

First, financial market liberalisation is the best predictor of currency crises. This has been true for Latin America in the 1980s, for Europe in the early 1990s and for Asia in 1997. The channels are capital inflows which pose delicate policy problems, exposure to currency risk, and heightened volatility.¹

1 For a survey on the literature on capital inflows see Calvo *et al.* (1996), for the role of exposure see Mishkin (1996), for volatility see Calvo and Mendoza (1998).

Second, crises seem to spread contagiously. Once one country comes under attack, “similar” countries follow.² What “similarity” exactly means remains an open research question. There are clear geographical effects (Latin America, Europe, Southeast Asia), but structural aspects, such as banking structure or external debt levels, also seem to matter.

Third, crises often occur without warning signals and come as big surprises. While there is a tendency to blame myopic markets and official watchdogs, another interpretation relies on rationality. Under the alternative view, markets operate with limited information and tend to come around to holding average views which can shift in a radical and unexpected manner.

The combination of financial deregulation, contagion and erratic market behaviour suggests that financial markets are not the epitome of perfection that they are often made out to be. Financial markets occasionally malfunction and, when they do, the effects can be dramatic as illustrated by the experience of Mexico, Argentina and Asia. Measured in terms of bank and firm defaults, the costs are enormous. Measured in terms of lost output and unemployment, the costs are even more frightening.

Should something be done about it? Yes of course, but a seriously complicating factor is that crises are often not predicted, because they are unpredictable. Better information and early warning signals may help but will not prevent crises, nor will they provide guidelines when crises hit. This paper suggests methods to reduce the incidence of crises and to alleviate their effects. These methods are sometimes seen as controversial because they rely on the view that financial markets are prone to failures. The next section argues that lessons from past crises have still not been taken on by mainstream policymaking circles, although there are indications that ideas evolve towards the recognition that some form of public intervention is in order. Section III draws new lessons from the most recent crises. These lessons were likely to further disquiet policymakers attached to a heavy dose of *laissez-faire* in financial matters. Section IV presents policy proposals while Section V provides a summary of conclusions.

II Old Lessons Not Learned

A few well-known causes lie at the root of currency and financial market crises. These causes have been seen at work in the previous episodes³ and

² Evidence of contagion has been provided by Eichengreen, Rose and Wyplosz (1996) for the OECD countries, and Calvo and Reinhart (1995) for Latin America.

³ See e.g. Eichengreen and Wyplosz (1996).

here they are again, hitting the Asian economies. This section reviews an all too familiar territory.

1. *The Inconsistent Trinity*

A basic principle of open macroeconomics is that we can only have two of the three following features: a fixed exchange rate, full capital mobility and monetary policy independence. Any pair is possible but any attempt at achieving all three inevitably results in a currency crisis. The reason for this inconsistency is well-known. Full capital mobility implies that the interest rate is determined by financial conditions out of reach for domestic monetary authorities: interest rates abroad, market expectations of the future path of the exchange rate and risk premiums. A fixed exchange rate implies that the central bank must stand ready to buy or sell its own currency in unlimited quantities. Money supply is fully determined by demand and monetary independence is lost. To recover independence, a country can either give up the fixed exchange rate target or recover control of its interest rate and demand for money by preventing capital movements. By liberalising capital movements Asian countries – as did the UK and Italy in 1992, and Mexico in 1994 – violated this iron law of macroeconomics.

2. *Financial Markets Are Subject to Serious Information Asymmetries*

A standard characteristic of financial markets is the extensive presence of information asymmetries. By definition, lenders know less than borrowers about the latter. As is well known, this leads to both moral hazard and adverse selection. The standard analysis explores the implications for the lender/borrower relationship. Moral hazard leads to a variety of market failures – essentially inefficient *ex post* enforcement of sanctions and excessive *ex ante* risk-taking – as well as inappropriate macroeconomic policies. Adverse selection implies a drying out of the market when risk is perceived to rise, which in turn may elicit dangerous behaviour by lenders. The case of Mexico in 1994 well illustrates the latter point: by replacing its peso-denominated debt with dollar-denominated debt, the Mexican authorities were signaling their unwillingness to inflate away their debt. However, in so doing they exacerbated their difficulties. Markets were prompt to conclude that Mexico's situation was unsustainable.

The ubiquitous prevalence of information asymmetries carries potent implications for international finance.⁴ Many practical implications will be

4 This view is elaborated at length by Mishkin (1996).

brought up below. At this stage, it is important to note that the popular view, that financial markets efficiently match worldwide savings and borrowing needs, is unlikely to be correct. That financial markets channel billions of dollars everyday from one point of the planet to another at minimum cost and with maximum safety, and that they treat an amazing volume of information on a minute-by-minute basis does not in any way mean that the markets are efficient in the economic sense (full information Arrow-Debreu). Information asymmetry is massively present and there exist non-atomistic agents with non-economic aims.⁵ Instead, the presumption should be that financial markets may occasionally disrupt economic activity. What is required is a sober assessment of the market failures, their nature and quantitative importance.

3. Good Behaviour as a Source of Severe Difficulties

Since the seminal work of Stiglitz and Weiss (1981) it is well understood that lenders may prefer not to extend any credit at all rather than take unknown risks when they are uncertain about the borrower's exact situation. Charging a market premium is a way to face borrowing risks. However, charging high premiums is not desirable when the risk is poorly understood. The reason is adverse selection, or the familiar 'lemon market' effect. Lenders know that potential borrowers have an incentive to misrepresent the truth. If they ask large premiums as a measure of protection, the borrowing costs may exceed what is really justified. Borrowers cannot truthfully communicate their own riskiness to lenders because their word is not credible. Lenders fully realise that risk premiums may in some cases be excessive, but they are unable to tell the good from the bad cases. Worse, lenders are rationally led to suspect that those borrowers still willing to accept excessive premiums are those whose riskiness is even larger than justified by the premiums. Borrowers with more limited risk should not be willing to pay such large premiums. The market separates into two groups of borrowers: good borrowers that do not want to borrow, and bad risks willing to borrow. The rational response of lenders is not to lend, or to lend limited amounts. This gives rise to the phenomenon of credit rationing where there is no interest rate at which lenders and good borrowers can do business.

This information asymmetry can be very large in international lending, for obvious reasons. It affects private and public borrowing. Starting with

5 This point is not new, of course. Keynes is often quoted as a critic of the financial market mystique. It has been recently re-stated *inter alia* in Eichengreen, Tobin and Wyplosz (1995). For an antidote, see Dooley (1996).

private borrowing, even the largest companies in developing countries are not sized-up sufficiently by investors from developed countries. In addition, many developing countries restrict access to their domestic markets so that the strength of domestic companies can be less than what it looks. Limited democracy is often associated with nepotism and corruption, a source of both fragility and opaqueness that further aggravates the situation. Fast economic growth in a particular country can act as a mitigating factor. In Asia, however, it has been noted that fast growth is the result of heavy investment, not unusual productivity gains (Young, 1992). As a consequence, growth does not always outpace indebtedness.

The outcome is heavy credit rationing as, typically, only “blue chip” companies have access to foreign borrowing. Even then, lenders are circumspect and stand ready to withdraw at the first sign of danger. Less reputed corporations can only access foreign financing through bank intermediation. Banks then undertake both maturity and currency transformation, opening up additional sources of weakness.

Turning to sovereign borrowing, it is difficult to separate out *ability* from *willingness* to pay (Bulow and Rogoff, 1988). Ability to pay depends on a host of factors difficult to assess by lenders: neither macroeconomic (e.g. the effect of recessions on tax revenues) nor political (e.g. the possibility to raise additional taxes) factors can be treated as a regular business risk. Because legal recourse against sovereign borrowers is limited, states may simply be unwilling to pay. It is possible then to imagine two situations. In a good state of the world, when risk is low, lenders do not ask for large premiums. Then good and bad borrowers alike are in the market. If the situation suddenly worsens, or is perceived to have become riskier, risk premiums immediately increase and credit rationing becomes more severe. Sovereign borrowers either do not want to borrow, or are unable to find willing lenders. The result is a market breakdown in the form of a worldwide credit crunch affecting a wide range of “suspect” countries.

The result is that corporations and governments face varying degrees of credit rationing. A paradoxical implication is that good economic “news” becomes a threat. Improved macroeconomic conditions (e.g. the end of a period of high inflation) visibly reduce a country’s riskiness. Domestic financial deregulation improves the degree of transparency. In such cases, the extent of credit rationing declines. Corporations and authorities alike then face higher borrowing ceilings. As they move from one level of external borrowing to a higher level, the resulting once-off stock effect translates into a sudden increase in capital flows. The surge is transitory in nature, which presents the recipient country with a severe trade-off.⁶ The

6 The situation is well analysed in Calvo *et al.* (1996).

authorities can allow the inflows to reduce domestic interest rates while the exchange rate appreciates, leading to a spending (consumption and investment) boom as residents take advantage of temporarily improved conditions. The boom and exchange rate overvaluation is often accompanied by a financial bubble. Alternatively, the authorities may resist the boom by intervening in the foreign exchange market, accumulating reserves and then sterilising them. In that case domestic interest rates remain high which fuels further inflows. In addition, the authorities face quasi-fiscal costs because the interest that they receive on their forex reserves is lower than what they pay as the result of sterilisation operations. Eventually, the perception of endless flows and the weight of the quasi-fiscal costs force the authorities to give in and to let the boom occur.

The puzzling element is that this trouble is the normal outcome of an initial improvement in economic conditions. The capital inflows are transitory, but is not a soft landing possible? Experience shows that this is almost never the case. As markets expect an exchange rate and asset price correction, both foreign and domestic operators stand ready to leave the country at the first sign that the inflow period is over. The hard-lending takes the form of a sudden shift from boom to bust.

One reason for this apparent fatality lies with faulty interpretations. The mirror image of capital inflows is a current account deficit, as shown in Table 1. These deficits are unsustainable, but so is the source of the phenomenon, the stock-flow adjustment described above. In principle *laissez-faire* should take care of the situation. As inflows naturally dry out the exchange rate should gently depreciate, inflated asset prices should decline and domestic spending should return to sustainable levels. This is not the way financial markets operate. They typically shut the borrowing window abruptly and without advance notice, mostly because they are scared that the soft-lending scenario may be derailed by other investors' panic reaction. In doing so they create the hard-lending scenario that they so fear.

Table 1 Pre-Crisis Current Account Deficits and Real Appreciation: Some Examples

	Mexico (1988-94)	Indonesia (1990-97)	Korea (1990-97)	Malaysia (1990-97)	Philippines (1990-97)	Thailand (1990-97)
Real exchange rate appreciation (%)	38	25	12	28	47	25
Current account (% of GDP)	-	-6.4	-2.6	-13.5	-5.8	-14.3

Note: The current account is the annual average over the period 1990-97.

Source: IMF.

4. *The Phenomenon of Multiple Equilibria: Self-Fulfilling Crises and Unpredictability*

Exchange markets, and financial markets in general, are subject to the phenomenon of multiple equilibria.⁷ The generic cause of the phenomenon is that when markets act on the basis of expectations of a particular outcome, they are strong enough to actually deliver this outcome. Put differently, what makes a crisis occur is the belief that it *can* occur. This is an inherent feature of the human nature of economic actions, in contrast with physics: a bridge cannot collapse simply because it is believed that it *can* collapse. What makes this phenomenon particularly perplexing is that expectations that are *ex ante* unjustified are validated *ex post* by the outcome that they have provoked. They can be self-fulfilling.

For a while, self-fulfilling crises have been considered as a theoretical curiosity without practical relevance. The EMS crisis of 1992-93, however, is an example of a self-fulfilling crisis which required a policy response (Eichengreen and Wyplosz, 1993). Similarly, once Mexico had devalued its currency in December 1994, the markets figured out that the new administration was not as much committed as the previous one to the exchange rate system (see Sachs *et al.*, 1995). Similarly, while Thailand is a case where fundamentals were wrong, and had been so for a while, the other Southeast Asian countries were not obvious candidates for a run on their currencies. When the attacks occurred, though, otherwise innocuous-looking foreign currency borrowings became a source of acute financial distress, given the unrealistically low levels of the exchange rates.

There is thus a possibility that a country may find itself in different potential equilibria. One of these equilibria is the initially prevailing good one: the traditional economic fundamentals are compatible with the existing exchange rate and asset prices. Other, bad equilibria are possible, with lower exchange rate and asset prices. There may exist many, indeed an infinity of alternative “bad” equilibria. What is needed is that all such equilibria be internally consistent: the market’s expectation of what the authorities will do in the event of a crisis must actually match the authorities’ best course of action under the circumstances.

To be sure, not all countries are subject to multiple equilibria. There must pre-exist some weakness which is not lethal in and by itself, but which can become lethal once the situation deteriorates. Most countries

7 The theoretical reference is Azariadis and Guesnerie (1986). For an application to exchange markets, see Obstfeld (1996). The bridge example that follows is borrowed from Lucas.

probably exhibit one form of weakness or another. Under normal conditions, such weaknesses are not expected to bring hardship. If all goes well, the weaknesses eventually disappear without further ado. Self-fulfilling crises are built on such weaknesses – they may occur but they do not have to. A weakness is a necessary condition for a speculative attack, but not a sufficient condition.

At this stage, we do not have any understanding of what triggers self-fulfilling attacks. Some countries face a crisis while others, equally open to risk, remain untouched. Countries without any weakness are on the safe side, but most countries may be attacked. Fortunately, only few crises occur at any given point in time. Self-fulfilling attacks are fundamentally unpredictable.

5. Sequencing and the Choice of an Exchange Rate Regime

The combination of the impossible trinity principle and of possible self-fulfilling attacks carries an essential policy implication: financial liberalisation makes self-fulfilling attacks possible. A country with existing weaknesses should therefore move cautiously in the direction of liberalisation. Financial liberalisation is a desirable step, but it can be a source of speculative attacks as well. In the long-run, the benefits from openness are unlikely to make up for the extreme costs of successful, speculative attacks.

The lesson is that financial liberalisation should be contemplated only when the situation is ripe. That means that significant weaknesses ought to be eliminated first. The impossible trinity principle also implies that countries which accept full capital mobility must choose between monetary policy independence and an exchange rate target. Monetary policy independence requires that the exchange rate be reasonably flexible, either floating or bound by sufficiently wide bands of fluctuations. The adoption of a tight exchange rate target (narrow bands, either fixed or crawling) requires abandoning monetary policy independence, possibly opting for a currency board or joining a monetary union.

In conclusion, full capital liberalisation ought to be the last step of a process that includes establishing a strong banking system and eliminating other sources of weaknesses such as a large external debt, high unemployment, unsettled macroeconomic conditions, as well as opting for either exchange rate flexibility or a currency board or monetary union. Financial liberalisation must come last, in contrast with attempts at using capital mobility to force unpalatable solutions (e.g. a clean-up of the banking system). This is a lesson taught by the European crisis, by the Mexican crisis, and one which has been rediscovered in Asia.

6. Moral Hazard and Adverse Selection

The asymmetry of information also leads to both moral hazard and adverse selection concerning IMF programmes or bilateral aid. Moral hazard arises when borrowing countries expect support in case of a crisis. The result may take two forms. First, there is the possibility of excessive *ex ante* risk-taking by the borrowers. This may include unhedged borrowing as well as inappropriate macroeconomic policies. Second, the policy response to rescue packages may also be lenient in the expectation that further bailouts can be obtained. This problem is well known and often brought up. Yet the severity of IMF programmes seems to be such that this form of moral hazard is unlikely to play an important role.

Moral hazard also alters the behaviour of lenders. Banks and other financial institutions tend to rely on the assumption that excessive lending cannot be sanctioned by systemic default. There is excessive lending at rates too low. When the crisis erupts, lenders may prefer to lobby for international official bailouts rather than costly and uncertain litigation. *Ex ante* they do not allow for contracts which include contingent clauses which cover the grey area between faithful debt service and outright default. *Ex post* they do not only shut off a country – both the sovereign and private borrowers – from the loan market altogether, but they even shift towards speculative behaviour. Speculation should normally further endanger their own assets but lenders act on the premise that these assets are protected. This moral hazard problem is more serious than the previous one. So far lenders to Mexico and the Asian countries seem to have escaped with little damage.

Another implication of asymmetric information, adverse selection, has not been widely discussed. Adverse selection occurs in two forms. The first form of adverse selection is credit rationing by lenders. The symptom then is the sudden limitation of market access when the risk is perceived to rise, which in turn may elicit dangerous behaviour by lenders. The drying-up of funds has been seen in the case of the Asian crises. The case of Mexico in 1994 clearly illustrates the dangerous response of borrowers: by replacing its peso-denominated debt with dollar-denominated debt, the Mexican authorities were signaling their unwillingness to inflate away the debt problem, but they instead created the moral hazard problem that their debt had become too big to be allowed to fail. The second form of adverse selection is the side-effect of tough conditionality designed to minimise moral hazard. By setting very rigorous conditions, the IMF may actually discourage countries facing mild difficulties, or in an early phase of crisis, from applying for support. As a consequence some countries may attempt to avoid opening up negotiations with the IMF and other donors until the

situation has so deteriorated that there is no other choice. The delay in seeking support may make all the difference between a soft and a hard lending scenario.

II New Lessons

Fundamentally, the Asian crisis does not represent a new phenomenon. Still, some aspects previously known have been illustrated with more clarity than before. They are discussed in this section.

1. *A Widening List of Weaknesses*

Once it is understood that self-fulfilling crises are possible in countries which present some form of weakness, it becomes important to know precisely what weaknesses are the most dangerous ones. The European crisis of 1992-93 has shown that poor macroeconomic conditions put a country at risk. The Mexican crisis of 1994-95 has highlighted the crucial issue of foreign currency sovereign indebtedness.

With the exception of Thailand, Asian countries were not vulnerable to previously identified weaknesses. With hindsight it is now recognised that private borrowing, if unhedged, is a weakness. To be sure, it has been long understood that borrowers need to exercise prudence. The Basle prudential ratios have been designed to force banks to adopt proper behaviour in this respect. It is true that these ratios were not observed in Asia. Yet, the story is more complicated.

The unhedged external borrowings of Asian firms and corporations were indeed a source of danger if the exchange rates were to decline by a significant amount. Given the remarkable growth performance of these countries, there was little reason to anticipate the huge devaluations which have occurred in the wake of the crisis. Rating agencies never said that there was no risk. The ratings did not rule out trouble. After all, none of the Asian countries was AAA. The rating might be interpreted as signaling a very small probability of a big disaster. Lenders and borrowers alike may well have been rational in acting on the premise that a dramatic turnaround was highly unlikely. But “unlikely” does not mean “impossible”. It turns out that the worst scenario has occurred. Now wisdom-after-the-fact reigns and it is “obvious” that more caution was needed, much as after the eruption of the international debt crisis in 1982 the debt problem was seen as an example of reckless recycling of petro-dollars. What the rating agencies did not detect was the imminence of risk, but in a self-fulfilling world that is probably impossible.

Without denying that moral hazard has played a role in these episodes, a more sober assessment seems warranted. Each crisis tends to bring to the forefront a source of weakness that was known *ex ante*, but was then considered benign. This process of an ever-widening list of weaknesses is likely to continue. There will be more crises and they will add to the danger list. Unfortunately we do not know what to expect next.

2. Policy Intervention When the Fundamentals Are Good

A characteristic of self-fulfilling crises is that they affect countries which are not undergoing clear macroeconomic difficulties. While *ex post* many now find that the current accounts were not healthy and the exchange rates were overvalued, these signals were not flashing ahead of time, because most Asian countries were in fact on a sustainable path.⁸

It is important therefore to recognise that crises can occur even when the fundamentals are good, and to design appropriate interventions rather than looking for hopeless early-warning systems. The first post-crisis IMF programmes have tended to rely on a set of measures appropriate for crises created by bad fundamentals. They emphasised the need for tight monetary and fiscal policies even though inflation rates were low and declining, and many budgets were close to balance or even in surplus. There is strong evidence that these measures have made matters worse, not better.

Indeed, most Asian crises have seen a financial bubble burst when a weak financial system, freshly deregulated, collapsed. This resembles the US Savings and Loans crisis, the Wall Street crashes of 1929 and 1987, the near-collapse of banks in the UK, Sweden and Norway in the early 1990s. The lesson from those episodes is clear: in contrast to the misguided attempts at restoring confidence through restrictive monetary and fiscal policies, the proper policy response is a rapid reliquification of the banking system and emergency intervention – via the budget – to recapitalise banks and corporations in order to avoid a generalised credit crunch and the associated collapse in production. Curiously Fischer (1997) justifies the IMF approach using the same terminology – the need to restore confidence – as in 1929. The fact that the Asian countries have not been allowed to resort to the same policies as those successfully implemented in developed countries is worrisome.

⁸ Astute observers like Young (1992) had noted that the Asian miracle was not a miracle, but the outcome of large savings turned into massive investments. However, they did not predict a crisis, just an eventual slowdown.

3. *The Crucial Role of Moratoria*

In fact there is a good explanation for the IMF approach, one that needs to be explicitly spelled out. The reasoning seems to have been as follows. Tight policies were called for to prevent the exchange rate from further depreciating. This was seen as essential because each drop in the exchange rate made the foreign currency debt larger. Stabilising the exchange rate, possibly reversing the depreciation, was urgently needed to prevent even more bankruptcies. Hence the insistence was that the interest rate be kept high, even though it meant adding to the powerful deflationary forces at work. This reasoning rests on two assumptions which are highly questionable.

The first assumption is that the exchange rate is positively related to the interest rate. This textbook relationship is unlikely to apply at a time of crisis. Textbook theories cannot explain the depreciations observed in Asia. If we accept instead the multiple equilibria assumption, explained in Section II, a very different interpretation emerges. This interpretation emphasises self-fulfilling expectations as the explanation for depreciations which cannot be associated with traditional fundamentals. In such a situation the link between the interest rate and the exchange rate is, at best, tenuous, and most likely non-existent. However, it is more likely that expectations are driven by the perception of the adequacy of policies pursued.⁹ Indeed exchange rates throughout the regions have continued to decline even after the IMF agreements were signed.

The second assumption is that servicing the external debt should be the overriding concern of crisis-stricken countries. The rationale is that suspension of debt servicing would cut access to foreign financial markets for a long period of time.¹⁰ There is little evidence that debt defaults actually have long-lasting effects on market access.¹¹ A very different view holds that the priority is to deal with the domestic implications of the crisis. A quick pump-priming of the economy may bring an early return of the fast growth performance enjoyed by the Asian countries. Along with a return of exchange rates to their “normal” fundamentals, fast growth makes it easy to resume external and internal debt servicing.

9 Drazen and Masson (1994) distinguish between the credibility of policymakers (in this case a tough-minded IMF) and the credibility of policies, i.e. policies that succeed in dealing with the problem at hand. They show that policies which are ultimately going to fail are not credible, no matter what is the inherent quality and reputation of those who sponsor them.

10 An additional concern is that debt default might spread beyond the region, e.g. affecting Brazil or Russia. This may be a concern for the IMF but its relevance to individual countries is less clear.

11 See Eichengreen and Portes (1989).

There is room, therefore for a very different strategy. It starts with an IMF-sanctioned moratorium. It therefore permits to disregard temporarily the exchange rate level. It is built around policies that foster an early return to normal financial and production conditions, minimising the adverse domestic effects of the crisis. This strategy may be seen as creating a moral hazard problem, but it is unlikely that the possibility of a moratorium will encourage countries to court the kind of disaster that has befallen on Asia. Furthermore, a moratorium would reduce the other moral hazard which encourages unlimited lending by banks and other financial institutions that expect to be bailed out by international rescue operations, as they have been, following the Mexican and Asian crises.

IV Summary Conclusions: Coping with Future Crises

1. Why There Will Be More Crises

The official reaction to the Asian crises (e.g. the G-7 meeting of Finance Ministers) has been to call for more transparency and the setting-up of early warning systems. Given the importance of the information asymmetry problem, any effort at providing timely and accurate information to the markets and their regulators is a step in the right direction. With considerable optimism, if we assume that all crises are due to bad fundamentals, we could hope to one day substitute hard with soft landings. The existence of self-fulfilling crises means that there will always be crises and that they will remain unpredictable.

This is why, maybe, the IMF has asked for more capital. Given the amounts disbursed in Asia, its lending capacity is reduced. The size of rescue packages have considerably increased starting with \$40 billion for Mexico and up to \$57 billion for Korea. There seems to be a belief that pouring sufficient large amounts into foreign exchange markets will quiet down markets when they start panicking. This would be a serious mistake. When speculative attacks occur, no finite amount of money can stop liberalised financial markets. By encouraging liberalisation the IMF has weakened itself, and its difficulties in replenishing its coffers are not only self-inflicted wounds, but also unnecessary. The IMF's stamp of approval remains as valuable as it has ever been, and is independent of the amounts committed. It relies entirely on the quality of its analyses. The IMF used to be very efficient when its programmes offered much lower loans. Reliable conditionality would then trigger larger amounts of private lending. This was leverage, IMF style. Now that operators leverage in a grand way, IMF cannot play tit for tat.

2. Financial Deregulation

The evidence so far is that domestic financial market deregulation leads to boom-and-bust cycles. The main reason is the stock-flow problem described in Section II. While this is no reason to abandon deregulation altogether, the lesson is that deregulation must follow, not precede, the strengthening of the banking and financial sectors.

Similarly the liberalisation of capital movements is a desirable aim. Yet it has the effect of being followed by speculative attacks of such magnitude that the authorities are helpless, even when supported by massive rescue packages. The implication is that external liberalisation should come last and should not be complete as long as countries believe that they need to limit the fluctuations of their exchange rates. I have previously argued (e.g. in Eichengreen and Wyplosz, 1996) that compulsory deposits on exchange transactions, or on inflows as is done in Chile, have a crucial role to play. These are essentially prudential measures which discourage short-term flows while leaving long-term flows mostly unaffected. Such measures cannot prevent crises when the fundamentals are wrong, nor can they even stop self-fulfilling crises once they have picked up speed. What they can do is to slow down a crisis, giving time to the monetary authorities to work out credible policy responses. During the Asian crises we have witnessed how programmes hurriedly put together were immediately over-run by the markets. Panic programmes – designed by IMF staffers – were too flawed to stick, no matter how much money was promised. Because emergency policies are often misguided, a liberalised worldwide capital market needs emergency brakes.

3. Exchange Rate Regimes

When, finally, capital flows are fully liberalised, the robust choice is between free-floating and formally giving up monetary independence. Free floating has the advantage of shielding the monetary authorities from occasional vagaries in the exchange market. The downside is that crises are replaced by exchange rate volatility. When the country's openness is limited, or when its exports are dominated by staple goods, the price of which are determined on world commodity markets, this is an acceptable choice. As is the case in the US, Japan and the European Monetary Union, the costs from exchange rate volatility can be reduced when well-developed financial markets provide a large menu of cheap instruments which reduce risk-taking by non-financial entities.

Other countries will find exchange rate volatility costly as relative prices – between traded and non-traded goods, between exports and imports –

become too unstable. The solution then is to choose between either lightly managed exchange rates or giving up of monetary independence. Lightly managed exchange rates are attractive in theory as they represent a middle ground. The risk is that they deliver both volatility and crises. Giving up monetary policy can take the form of either single-sided currency boards or collective monetary unions bringing together countries with strong trade links, as Europe is about to undertake.

4. *Orderly Workouts*

When crises hit countries with wrong fundamentals, traditional IMF programmes are the right medicine. When crises are of the self-fulfilling varieties, of course there is a weakness that needs to be attended to. Since most such weaknesses are structural (unemployment, high debt, weak financial and banking systems), the problem cannot be corrected in the short run, during the crisis. In addition, structural changes are easier and less costly when the economy is growing. It is essential, therefore, that the priority be given to preventing the economy from being severely hit by the crisis. In particular, when the fundamentals were right to start with, restrictive macroeconomic policies are likely to complicate matters and cause unnecessary hardship, rather than rebuilding confidence. Crisis-time policies are credible when they aim at breaking the crisis dynamics, not because they are tough.

To focus on domestic objectives, however, a country in crisis must be temporarily relieved from the weight of its external debt, especially if it is incurred in foreign currency. Currently, international lending contracts to both private and official borrowers do not incorporate clauses that take into account the possibility of speculative crises. There is room for covenants that would allow the clock of repayments to stop, while still maintaining market access. This is a complicated issue with legal complexities and the need for establishing a sort of court or referee to decide when the covenant can be invoked. Yet the costs of forcing countries to choose between debt suspension and market access are so massive that there is no reason not to undertake such an important change in international lending practices.

References

- Azariadis, Costas and Roger Guesnerie (1986), "Sunspots and Cycles," In: *Review of Economic Studies* 53(5), October, pp. 725-37.
Bulow, Jeremy and Kenneth Rogoff (1988), "The Buyback Boondoggle,"

- In: *Brookings Papers on Economic Activity* 2, Washington, D.C., pp. 645-98.
- Calvo, Guillermo, Graciela Kaminsky and Leonardo Leiderman (1996), "Inflows of Capital to Developing Countries in the 1990s," In: *Journal of Economic Perspectives* 10 (2), Spring, pp. 123-39.
- Calvo, Guillermo and Enrique Mendoza (1998), "Contagion, Globalization and the Volatility of Capital Flows," unpublished paper, University of Maryland.
- Calvo, Sara and Carmen Reinhart (1995), "Capital Flows to Latin America: Is There Evidence of Contagion Effects?," unpublished paper, The World Bank, Washington, D.C.
- Drazen, Alan and Paul Masson (1994), "Credibility of Policies versus Credibility of Policymakers," In: *Quarterly Journal of Economics* 109(3), August, pp.735-54.
- Dooley, Michael P. (1996), "The Tobin Tax: Good Theory, Weak Evidence, Questionable Policy," In: M. ul Haq, I. Kaul and I. Grunberg (eds.), *The Tobin Tax, Coping With Financial Volatility*, Oxford University Press, New York.
- Eichengreen, Barry and Richard Portes (1989), "Dealing with Debt: The 1930s and the 1980s," In: I. Husain and I. Diwan (eds.), *Dealing with the Debt Crisis. A World Bank Symposium*, World Bank, Washington, D.C., pp. 69-86.
- Eichengreen, Barry and Charles Wyplosz (1993), "The Unstable EMS," In: *Brookings Papers on Economic Activity* 1, Washington, D.C., pp. 51-124.
- Eichengreen, Barry and Charles Wyplosz (1996), "What Do Currency Crises Tell Us About the Future of the International Monetary System?," In: J. J. Teunissen (ed.), *Can Currency Crises Be Prevented or Better Managed?*, FONDAD, The Hague.
- Eichengreen, Barry, James Tobin and Charles Wyplosz (1995), "Two Cases for Sand in the Wheels of International Finance," In: *Economic Journal* 105, January, pp.162-72.
- Eichengreen, Barry, Andrew Rose and Charles Wyplosz (1995), "Exchange Market Mayhem: The Antecedents and Aftermath of Speculative Attacks," In: *Economic Policy*, 21, October, pp. 249-312.
- Eichengreen, Barry, Andrew Rose and Charles Wyplosz (1996), "Contagious Currency Crises," In: *Scandinavian Economic Review* 98 (4), pp.463-84. Also reprinted in: T. M. Andersen and K. O. Moene (eds.) (1997), *Financial Liberalization and Macroeconomic Stability*, Blackwell.
- Fischer, Stanley (1997), "IMF – The Right Stuff," In: *Financial Times*, 17 December.
- Frankel, Jeffrey and Andrew Rose (1996), "Currency Crashes in Emerging

- Markets: An Empirical Treatment,” In: *Journal of International Economics* 41, pp. 351-66.
- Jeanne, Olivier (1997), “Are Currency Crises Self-Fulfilling: A Test,” In: *Journal of International Economics* 43, November, pp. 263-86.
- Kaminsky, Graciela, Saul Lizondo and Carmen Reinhart (1997), *Leading Indicators of Currency Crises*, IMF Working Paper WP/97/79, July.
- King, Mervyn and Sushil Wadhvani (1990), “Transmission of Volatility between Stock Markets,” In: *Review of Financial Studies* 3(1), pp. 5-33.
- Mishkin, Frederic (1996), *Understanding Financial Crises: A Developing Country Perspective*, NBER Working Paper No. 5600.
- Obstfeld, Maurice (1996), “Models of Currency Crises with Self-Fulfilling Features,” In: *European Economic Review*, April, pp. 1037-47.
- Sachs, Jeffrey, Aaron Tornell and Andrés Velasco (1996), “The Collapse of the Mexican Peso: What Have We Learned,” In: *Economic Policy* 22, pp.13-64.
- Stiglitz, Joseph E. and Andrew Weiss (1981), “Credit Rationing in Markets with Imperfect Information,” In: G. Mankiw and D. Romer (eds.), *New Keynesian Economics, Volume 2: Coordination Failures and Real Rigidities*, MIT Press, Cambridge, Mass.
- Young, Alwyn (1992), “A Tale of Two Cities: Factor Accumulation and Technical Change in Hong Kong and Singapore,” In: *NBER Macroeconomics Annual*, MIT Press, pp. 13-54.

Comment on “Globalised Financial Markets and Financial Crises,” by Charles Wyplosz

Mukhtar Nabi Qureshi

Listening to the masterly presentation of Charles Wyplosz on globalisation of financial markets and financial crises has been very educative and indeed enlightening. He gives an analytical insight into the dimension of problems that have arisen as a result of a violation of what he calls an iron law of open macroeconomics, namely the inconsistency of a fixed exchange rate, full capital mobility and monetary policy independence. While any pair of the three is possible, an attempt at achieving all three would inevitably result in a currency crisis which, in his view, lesson-wise is not a new phenomenon but a rediscovery of what has already happened in Europe or Mexico. Seen in the suggested healthy order of sequencing, the lesson is that full capital liberalisation should be undertaken after consolidation of the banking system on a sound footing, the removal of other weaknesses in the external and domestic side of the macroeconomic framework, and the selection of an appropriate exchange rate mechanism.

I have a few comments to make in this regard. From the point of view of developing countries, it is sometimes argued that while capital liberalisation is a desirable objective, it would not be proper to base it on the strength of efficiency of resource allocation alone. Other factors of production including labour are equally essential for resource allocation and global welfare. However, in a situation where first-best conditions in the use of all factors of production are not available, other combination of policies may be considered. Thus, balance of payment needs of developing countries would justify capital account convertibility which, in turn, helps financing their needs of current account deficits for achieving a desirable level of investment and growth. Developing countries need private capital inflows because of low national savings, large investment requirements, increasing debt servicing, and a declining trend in net official capital inflows. Grants and long-term concessionary loans from multilateral agencies and bilateral sources are no more available to finance current account deficits. While developing countries have benefited from private capital inflows, they have also faced crises as funds were withdrawn, even when they already had strong fundamentals like high growth and saving rates,

low budget deficits, low inflation, diversified exports and high levels of reserves. It is, therefore, appropriate for other developing countries with weaker economic fundamentals to pause for a while along with these emerging economies to take a fresh look at the costs and benefits of capital account convertibility.

In developing countries the current account deficit is mostly generated by ambitious growth targets and speedy liberalisation of the current account itself. Paradoxically trade liberalisation and market-based economic management make it necessary for them to carry forward the process of reform and opening up of their capital account transactions as well.

The difficult issue to decide is whether capital account liberalisation should be extended to short-term funds and if so whether it be optional or compulsory. One may argue that certain preconditions should be put so as to hedge against disruptive or destabilising effects of cross-border movement of short-term funds. Several countries including Pakistan have moved toward a *de facto* liberalisation of short-term capital and the question is whether to make them adopt it *de jure* forcefully or voluntarily. It seems a consensus is developing in favour of a mandatory approach and extension of the IMF jurisdiction to the capital account to promote an orderly liberalisation through proper watch, advices and assistance. It could provide rather more resources to sterilise speculation efforts and to meet systemic problems. To make the process of capital account convertibility less painful, a reform of the banking system is a *sine qua non*. Regulators should provide for acceptable international standards of capital adequacy, lending, early warning and preventive mechanisms, transparency and disclosure, as well as a proper reporting system to the central bank. This should include information on capital flows in and out of the country. Good governance, containing favouritism and corruption is necessary. Again, a strong and autonomous central bank capable of enforcing desirable monetary policy is also necessary. Fiscal prudence and avoidance of quasi-fiscal deficits coupled with proper coordination with monetary policy objectives would add to the strength of the economy and would facilitate meeting preconditions for moving toward capital account convertibility.

It might be appropriate to say that the financial mess of Asian countries was of its own making. For years, banks were treated as tools of state industrial policy, ordering them to make loans to uncreditworthy companies and industries. Central banks were subservient to the wishes of extraneous elements and did not enjoy proper autonomy. New lessons learned through the Asian crisis, incisively articulated by Professor Wyplosz, will go a long way in generating new research besides forcing the monetary authorities to reduce their objectives and follow a cautious blend of interventionist and market-based approach.

Floor Discussion of “The Global Implications of Financial Crises in Emerging Market Economies”

Information and the Spread of Crises

Alexandre Lamfalussy began the discussion by commenting on the availability of information. “It is at the heart of the matter. Mr. Park is entirely right in saying that there was a lot of factual information available and that it was not used. I am primarily referring to the maturity profile of bank borrowing and bank lending. It was known by the end of 1995, and widely publicised by early 1996, that the very substantial increase in bank borrowing by most of the Southeast Asian countries was at the short end. I wrote a letter to the *Financial Times* about this and the BIS report in June 1996 spelled it out in great detail and in very strong words. The same situation had occurred in the early 1980s. By 1979, it was quite clear that almost 50% of sovereign bank borrowing was at the short end. This did not come as a surprise to the bankers in 1982. So it would be unwise to think that by improving this kind of information, you would necessarily improve the whole financial scene.

There is, however, one very difficult area concerning information where a kind of asymmetrical information problem exists which has no easy remedy. This is the uncertainty about how the affected countries will, in fact, react. How will the political reaction develop? This is not a very helpful remark, and the information is not entirely asymmetrical because I doubt that the countries themselves know how they will react. There is a sort of global uncertainty about how the policy reactions will develop inside the countries, how the international community will react, and so forth. And this is the more fundamental information problem; the information problem is not just a problem of basic statistics.”

Lamfalussy continued by relating the issue of information to the spread of crises throughout a region. While he thought it unlikely that regional contagion could be avoided, he suggested that efforts still needed to be made in this regard. “During the crisis in the 1980s, I was at the BIS. When it began in Mexico the BIS package and the US package were put together in 24 hours and they were not conditional. The response was extremely quick, yet three months later the crisis spread to Brazil. I think that what happens in many instances is that financial market participants have a very bizarre way of looking at these things. They do not ask wheth-

er the same conditions are emerging in country Y as in country X which experienced a crisis. Instead, they ask whether there are not *other* conditions that would justify a fear. In other words, if you have macroeconomic mismanagement, for instance, they don't necessarily look at another country and ask, 'is it also mismanaged from a macroeconomic point of view?' They ask instead whether it is mismanaged from *another* point of view – structural problems, lack of transparency in corporate balance sheets, etc. If they are satisfied that this is not the case, then they ask whether political problems are emerging, and if there are no political problems, then they wonder whether the weather might be responsible. Corporations and lenders seek to cover their responsibility.”

Jack Boorman suggested that we would never be able to answer whether the Korean crisis could have been avoided if Thailand had been dealt with successfully. “The issue of why Thailand was not quickly and successfully dealt with goes back to Mr. Lamfalussy's point. A lot of what went wrong in Thailand between July and November was political. The government did not come to grips with the situation, so whether a large financing would have made a difference is certainly a question, but it also raises a deeper question. Would even more financing for Thailand and other similar cases have been appropriate, and if so, how do you square this with calls that the private sector be called into these operations at an earlier stage? I happen to agree with Mr. Lamfalussy about the fact that once the investors' fascination with Asia had ended, they began looking around, but they were not looking at exactly the same kinds of problems that fostered the crises in Thailand, among others the current account deficit. Instead, they were looking at structural issues and so forth.”

Barbara Stallings made the point that the containment of regional contamination is crucial. “It has been mentioned a couple of times that it is impossible to contain regional contagion once it starts. But there are a number of examples in Latin America, back in the middle of the decade and more recently, that show that if you act quickly and in a draconian manner if necessary, then you can stop the contagion. In the mid-1990s, it hit Mexico and Argentina and despite initial fears, the rest of the region had no serious contagion effects. Recently, Brazil and Chile raised interest rates very rapidly and at least up until now, this seems to have worked in stopping the contagion this time as well.”

Rating Agencies

The issues of information and contagion led the participants to examine the role of the rating agencies. Paul Cantor elaborated on their specific activities. “With the evolution of the flows of capital in the markets today,

I want to make two general points about how lenders grapple with the credit risk issue. The first is that disintermediated assets tend to be more dependent on the rating agencies' interpretation of creditworthiness than intermediated assets. The second point is that the shorter the term, the more likely it is that the rating agencies will be the crucible on which the investment is made. So in an environment where there is a large flow of short-term lending and that lending is disintermediated, there is a much greater likelihood of the kind of volatility that we have seen in recent years. The growth of the financial institutions, which now span the investment as well as the commercial banking format, also creates additional volatility in these circumstances. One tends to find that the short-term disintermediated assets are run by the institution's trading room, and that the credit departments, which have a greater ability to do their own assessments, have had less of a role to play. Or to put it another way, while investment bankers are good at doing deals, they do not have a high level of credit skills. In this environment, the rating agencies have played a fairly significant role, as we have seen, and are open to some doubt as a result of their failure to effectively foresee and predict the circumstances that have now arisen."

György Szapáry suggested that rating agencies are basically market-driven institutions trying to anticipate market sentiment. "They try to second-guess what the markets think and want. For instance, if markets think that a country is not doing well, rating agencies will find various indicators which will prove that the country is not doing well. On the other hand, if capital is flowing to a country, in spite of that country's weak macroeconomic fundamentals, rating agencies will find other reasons to give it a positive rating. Korea is an example. Within a few weeks, they downgraded Korea by several notches after the markets had precipitated the crisis. But what was there about Korea which the agencies did not know before? In my view, a credit rating agency which reacts like the market is not a good guide for markets to follow. We need independent objective agencies which are not paid by the market and which are not trying to second-guess the markets."

Yung Chul Park agreed with the notion that the rating agencies do not always base their ratings on a country's macroeconomic fundamentals. He elaborated on Korea's rating in 1997. "In January 1997, Moody gave us a rating of A-1. On November 28, 1997, it dropped to A-3; ten days later it was BAA-2 and after another ten days, it was BA-1. Did they discover some new fundamentals in the span of one week? On what were they basing their ratings? Standard and Poors gave us a AA- in January 1997. On October 24, 1997 it was A+. On November 25, 1997, it was A-; ten days later it was BBB-; and ten days later B+. For heaven's sake, what were they doing?"

Charles Wyplosz responded to Park. “I have been very critical of rating agencies in the past, so I find myself in a strange position. However, when we have self-fulfilling attacks, we cannot ask credit rating agencies to come up with an accurate assessment because *nobody* has this assessment. The problem lies in awareness of this fact and the recognition that they are unable to predict a crisis.”

The IMF Response to the Crisis

Jack Boorman explained how the IMF responded to the situation in Korea “The Korean authorities chose an initial policy defense mechanism which was fundamentally flawed. Not only did it delay their willingness to involve the Fund, but by the time we did get involved, the situation was dire.

In early November, the Korean authorities were still refusing to accept assistance from the Fund. A mission was invited to Korea only on Monday, November 24th. On Thursday, the 27th, I received a call that they were effectively out of reserves. We had not known that. In fact, we thought that they had 50 billion dollars in reserves at the end of September. But this was misleading because 20 billion turned out to be claims on Korean banks, which were not usable. So they had 30 billion in usable reserves. During the course of November, because of a flawed policy of the Bank of Korea, they wasted, I would say, another 20 billion. So by the time we started discussions, they had 7 billion left.

I use the term wasted because the Bank of Korea opened its window to its own banks and made foreign exchange available to them at 100 points above Libor. As soon as the banks came under pressure from their own short-term claimants, mostly overseas banks, they adopted the totally passive posture of going to the Bank of Korea and taking down loans of 100 basis points above Libor – which was more attractive – and paying off their creditors. They never engaged their creditors to keep them in, they didn’t have to, they had a cheap, alternative source of funds.

So the Bank of Korea violated one of the key principles of the lender of last resort, i.e. lending to institutions at anything other than a penalty rate. This was an absolutely key issue, and it unfortunately went on for several days and weeks – even after the approval of our programme. The government finally changed this policy and increased its rate first to 400 basis points, then 600 basis points, and finally 1000 basis points. Then the Korean banks finally started dealing with their creditors and indeed some of the creditors, at that high of a spread, showed a willingness to stay in.

I remain concerned about this critical issue of willingness on the part of country authorities to ask for assistance in a timely manner. You cannot deal with a situation like this when there are effectively no reserves left and

you are staring default in the face. It forces you to take decisions, it limits your ability to analyse and it limits negotiating capacity. There has to be an earlier approach.

I also remain concerned because of the arguments that are being made by Martin Feldstein in his article in *Foreign Affairs* (March/April 1998). He argues that we have probably worsened the situation of the willingness of countries to come to the Fund early, because of the way in which these cases in Asia have been dealt with. In other words, having finally come to the Fund for assistance, the Fund then crafted programmes which go to the heart of some of the structural, political, some would say cultural, ways of doing business in these countries. To be crude, a 'kick them while they're down' syndrome on the part of the international community. If this indeed has the effect of making middle-income countries and emerging market countries reluctant to come to the Fund, I think that we have a real problem on our hands that we have to confront quite seriously."

H. Johannes Witteveen compared the current crisis to 19th century crises experienced in Europe. "While I think it is quite right that there is nothing new in history, there are always variations. We have a long history of business cycles, the whole 19th century had many crises. These crises were often characterised by overinvestment and this is also the character of the current Asian crisis. It is not a case of government overspending and government deficits, as was often the case after the war when the IMF applied its remedies. And while the current Asian crisis is a case of overinvestment, it is much more dangerous than generally was the case in 19th century Europe, because it is financed by foreign bank credit in foreign currency. Previously in Europe, these overinvestment situations were mostly financed internally by the domestic banking system, and this left a certain amount of room for bank credit to expand, but there were also limits and it could not be withdrawn so easily. The great danger of the current Asian crisis was not only that the flow of credit could not be stopped, but that it went back the other way, it had to be repaid. This determined the character and the difficulty of this crisis. It also holds some lessons for how it could have been prevented. I think we should look at how the international community might restrain this type of international credit in certain cases or in general.

What I would like to ask is: Why didn't the IMF try to bring in an element of rescheduling from the beginning? I think that the 1982 crisis in Latin America was handled well because IMF funding went hand in hand with rescheduling. The IMF could influence the banks by saying, 'We will provide this kind of credit if you agree to this kind of rescheduling.' I understand that in the case of Asia, it was much more difficult because it was not credit to the government but to many different private business.

Nevertheless, I wonder whether rescheduling shouldn't have had more priority from the beginning with IMF support and the support of the main central banks. This ultimately happened when the crisis had become much more serious. The difficulty, as we have seen, is that once these bank loans have to be repaid and not enough reserves are available, then exchange rates are put under tremendous pressure and the whole repayment problem becomes considerably more difficult. This is also a feature which was not present in most of these earlier 19th century crises. To some extent perhaps it was present in the 1873 crisis in the US where a substantial amount of European capital was withdrawn. Probably, for that reason, that crisis was then the beginning of a rather serious depression in the American economy.

So my question is: Couldn't more have been done to coordinate some rescheduling by the banks and the financial support? The next question, which was also raised by Dr. Park is: Couldn't the financial support by the Fund be adjusted to the remaining repayment needs? Of course the IMF has the purpose of disbursing the money over time based on performance criteria, but in this case, does that not mean that not enough money was available to prevent this disastrous foreign exchange crisis?"

Park agreed with Witteveen. "The IMF was concerned about building up reserves. A larger amount of reserves would convince international creditors. I thought at that time that the IMF or the G-7 countries should get into the rescheduling right away instead of doing it 2 months later. We finished the rescheduling only on March 15th. Of course, in hindsight, we should have done it but everyone was so preoccupied with building up reserves."

Jack Boorman responded by reviewing each of the cases and their negotiations with the IMF. "We approached each of the cases differently because they were different. Thailand was the first. In July, in Thailand we were dealing with heavy short-term bank exposure and some corporate exposure. The approach taken there was an informal "moral persuasion" and, partly because of Japanese subsidiaries of corporations operating in Thailand, there was the opportunity to use the authority of the Japanese and the others to talk to the banks, to explain the situation, and to maintain exposure as one means of working through it. So there were these informal approaches, and even though the situation emerged rather problematically, partly because of the political uncertainties with the Thai government until the new government came in November, a case can be made that that approach has pretty much worked. The roll-over rate and the maintenance of exposure in Thailand has been pretty good.

We were dealing with a completely different situation in Indonesia. It was something with which we had little experience, i.e. massive exposure,

including short term, in the corporate sector. It was not a bank problem in the first instance. Dealing with corporate sector debt, particularly in Indonesia, is extremely difficult partly because the domestic institutions which are necessary to induce debtors to behave themselves do not exist. There is a bankruptcy law, but it is the 1904 Dutch law, and while it is not a bad law, there was no effective judicial system in Indonesia to enforce it. So there is a problem with debtor discipline. What we have done is to set up a body which is attempting to bring a voluntary case-by-case solution to this issue. It is working dreadfully slowly, so I think there is no doubt that we have to consider alternatives.

In Korea, the situation was basically short-term bank exposure. We debated this matter when we were coming to a conclusion regarding the arrangement at the end of November with Korean authorities as to what ought to be done. We shied away from what would have been a default or moratorium at that stage. This leads to my point that we must keep in mind what the situation was at that moment in the individual country and in the world. We should not forget this when we try to look back at these 'post mortems'.

Latin America and Brazil, in particular, were under tremendous pressure. Thailand had spread to Malaysia, Indonesia, the Philippines and then Korea. Then it seemed to be jumping the Pacific and pressures were developing in Latin America. I can only speak for myself in those deliberations, but I was greatly influenced in that discussion by the risk to the markets of calling a halt to payments in Korea, with the fear that everybody would pick up their phone with instructions to their traders and dealers about what to do in Latin America. Maybe it was right, maybe it was wrong, but it was part of what was in the back of my mind.

The other aspect of it, which I think has turned out to be correct, was that you have to deal in an environment where there is some receptivity on the part of the private creditors. I remain sceptical as to whether we would have had that receptivity at the end of November, given the host of second-tier institutions that were involved in lending to the banks in Korea and given the exposure levels of even the big institutions. This is not to say that this is the best that could have been done, but the fact that some of those second-tier institutions got out and that some of the big institutions had the opportunity to work down their exposure led to a situation whereby, when we finally did approach the banks on December 21st or 22nd, we were playing into a slightly more receptive environment."

Alexandre Lamfalussy expressed concern about the issue of lender behaviour and moral hazard. "There is a serious moral hazard problem on the lending side which needs to be put on the record. It is difficult to draw conclusions, but my instinctive feeling is that the way in which the 1994-

1995 Mexican crisis was handled – which didn't seem to have caused any loss to any lender – may have had an impact on current lending behaviour. While I think that what was done in the 1980s was a rather long, drawn-out process and while banks may not have lost very much in the end, they were kept very uncertain about the losses for a very long time indeed.”

Ariel Buira suggested that the process in Latin America was drawn out because the authorities in the industrial countries did not want their banks to take such losses since they had not yet made the necessary loan-loss provisions and were unable to immediately absorb such losses. “So they drew out the process and Latin America lost a decade. I think we need some other arrangement, in fact, if we had had a Chapter 11 option, the banks would have taken the losses, some banks would have gone bankrupt, somebody else would have bought the banks and the thing would have gone on as happened in any country that has had a banking crisis. This is the normal procedure and if it had been followed, Latin America would not have lost 10 years and endured all sorts of problems.”

Charles Wyplosz suggested that the notion of moral hazard for lenders was an argument in favour of a moratorium which would not be as lender friendly as practice had been so far. Age Bakker wondered “whether the way we are dealing with this crisis is not giving the wrong signals to the lenders, because what we are doing is in fact bailing out those who have given dollar-denominated loans, while those who took a real interest in these countries by investing in companies in domestic currency are being substantially penalised. One could argue that the way we are dealing with this crisis is giving the wrong incentives to lenders and perhaps encouraging moral hazard.”

Liberalisation, Sequencing and Exchange Rates

As the participants continued to examine the causes of the crisis, the discussion turned to the issues of liberalisation and sequencing. György Szapáry responded to the suggestion that some countries liberalised too early. “Some of the benefits we in Hungary are enjoying are directly related to liberalisation. Some Central and Eastern European countries have attracted a fairly important amount of FDI as a result of liberal rules which have allowed the multinationals to manage their financial transactions efficiently. In Hungary, for instance, we have been quite successful in attracting foreign banks to set up business, which has been facilitated by the liberalisation of the capital markets. However, we have been very conscious in the area of short-term capital flows, we have kept restrictions and we would like to liberalise them last.

I have been involved in the market reforms in Hungary from the very

beginning and one of the things that I have learned is that the simultaneity of reforms is in fact a necessity. For instance, if one wants to privatise the banking system, one has to strengthen supervision at the same time. If it is not possible to strengthen the supervision of the banking system because of a lack of adequate expertise or because there is political quibbling about whether supervision should be done by the Central Bank or by a separate institution, then it is better to postpone liberalisation. But keep in mind that it would be ideal to do this all at the same time. As for liberalisation and crises, it is clear that you will not have a crisis if you have not liberalised, but neither will you have efficiency and potential for rapid economic growth. Postponing liberalisation makes sense only if there is a lack of human and institutional back-up to implement and live with liberalisation. In other words, sequencing is the second-best solution, which one has to accept sometimes.”

Roy Culppeper took issue with the notion that without liberalisation, one suffers on the growth side. “The whole Asian miracle took place among countries that were highly non-liberal over three decades. If you look within Asia, I find it interesting that the two countries that have not been affected by contagion, China and Taiwan, are relatively closed economies. Finally, the limits on short-term flows that Chile and other countries have imposed have not only protected them from the ‘tequila’ effect, but have not resulted in a penalty on their growth performance either. Deferring, especially short-term, liberalisation does not seem to have a growth penalty.”

Szapáry emphasised the importance of differentiating between countries and regions when one is talking about liberalisation. “The Asian countries range in population and markets from 35 million to over 100 million, let alone China which is over 1 billion. They are rich in natural resources and they can afford a cautious approach to liberalisation, since they can live on their own markets if they need to. They have more room for manoeuvre and more time to implement some of the liberalisation. But in Eastern Europe, countries like the Czech Republic, Slovakia and Hungary are small countries, 10 million people or so, with no vast natural resources and substantial integration into the neighbouring European markets. We face different problems and some of the things that are being said about postponing liberalisation and sequencing do not apply to us or would be much more difficult to implement.”

Louis Kasekende commented on the issue of sequencing as one of the lessons from the crisis. “We have been liberalising the current account, have moved forward towards liberalising the financial sector and, at the moment, we are enjoying some benefits. Still, I do not want to underrate the risks. For some African countries, we have to think about measures for assisting them because when we maintained the controls, it did not stop

capital flight during the 1970s. When we came to the 1980s and the 1990s, we had all of these big problems of monitoring and identifying what was coming back in the various countries. There is a study financed by UNCTAD which revealed numerous problems of recording. We found no use in maintaining controls and we moved very fast in liberalising. We need to develop some measures for highly liberalised countries that remain in this category of developing countries with all of its attendant problems with regulation and the effectiveness of that regulation.”

Stephany Griffith-Jones supported Kasekende’s point with a reference to Chile. “Chile liberalised very quickly and is very committed to a market economy, but it has imposed reserve requirements for short-term inflows, which seem to work because they have helped to discourage short-term flows.”

Mike Kennedy suggested that we may never get the sequencing right. “It is always easier politically to start with financial liberalisation. However, then the real issue is, how do you create some sort of forcing mechanism to undertake structural reform as well? Most models emphasise macroeconomic fundamentals of ‘getting it right’ and helping prevent speculative attacks. I think we are going to see a third generation of speculative attacks’ literature coming from Paul Krugman on the role of structural features. The point is, we know that there are always going to be attacks, but would flexible exchange rates have been better for these countries? Would that have made creditors and debtors look more carefully? As Mr. Lamfalussy pointed out, information was available about these things. Did the existence of the peg or the crawling peg lend them some sort of complacency so that they kept on lending since they presumed that there would be some sort of bailout?”

At the OECD, we pointed out in our Korean survey that there were structural problems, but it is difficult to do more than that. You are dealing with sovereign governments and you can only use peer pressure to try to create some sort of forcing mechanism.”

Yung Chul Park explained the exchange rate policy of Korea. “We had a long discussion about exchange rate policy before the crisis and whether we should expand the adjustment band from 2.5% to 10% or 15%. The IMF could not give us an answer. I suggested 10%, but that might be a sign of weakness. What about 5%? And in fact, I was very surprised when after we agreed to the IMF programme sometime between December 3rd and Christmas, the IMF suddenly came to us and said we had to go to the floating exchange rate system, 100% flexible system. When we asked why they didn’t suggest that before, they said that the situation had changed.”

Macroeconomic Fundamentals and Coping with Crises

The issue of macroeconomic fundamentals remained an important topic for the participants as illustrated by Charles Wyplosz. “Restrictions to capital movement are only useful in crisis time when things move so rapidly that the authorities don’t have time to think through their options or they cannot negotiate with the IMF because things are moving so fast. But I don’t know of anything that can prevent a crisis if the fundamentals are wrong, and I think it would be a mistake to rely on restrictions to capital movement to deal with wrong fundamentals. Even if the fundamentals are right but the market, for some reason, is going into crisis, restrictions would not work.”

Szapáry also stressed the importance of good macroeconomic fundamentals. “Clearly there are some countries which suffer attacks without apparent reason since their macroeconomic fundamentals are good. Good fundamentals help to discourage attacks. If attack, nevertheless, takes place, a country with strong macroeconomic fundamentals is in a better position to withstand it.”

Miroslav Hrnčíř added the institutional dimension to the macroeconomic fundamentals argument. “I can perhaps make this point by looking at Czech development. While our macroeconomic figures were considered the success story of transition economies for a long time, it is also true that there was some loss of momentum in developing an institutional framework. As you perhaps know, we were subject to quite heavy speculative attacks in 1997. We became vulnerable from two points of view. Certainly our macroeconomic figures deteriorated at that time, but it was a result of microeconomic and institutional weakness in the allocation of resources. And at the same time, we liberalised considerably more than our neighbouring countries, so Czech currency became more exposed to currency trading than any other currency in Central and Eastern Europe. So we were also vulnerable because of our success.

In any case we have been fairly successful in coping with the currency crisis we faced and one of the reasons for our success was that we didn’t hesitate to act quickly. We raised the interest rates immediately, which was a clear signal. So we were able to cope with the crisis without any external help, with very modest depreciation of the currency and with a soft landing of interest rates. What is even more important for our case, the other side of the coin of the currency crisis was that there was a reconsideration of government policy. We determined that it was necessary to go ahead with the privatisation of the banking sector, with the legal framework and the institutional framework, with cultivation of the market institutions and I

think this is the crucial point for further conditions of how to cope with the next crisis.”

Moratoria, Chapter 11 and Bailouts

Yilmaz Akyüz presented the UNCTAD view on moratoria. “In the 1980s it was discussed in the context of sovereign debt and in the mid-1990s also in the case of the Mexico crisis. In Asia, as we know, the issue is largely a private debt crisis. Usually, private creditors are protected by insolvency court according to the provisions of their contracts regarding choice of law, choice of forum. But in a case like Korea, it is very difficult to expect every individual creditor to try to benefit from the two principles that Chapter 11 of the US Bankruptcy Code formulates, i.e. the automatic standstill principle and ‘debtor in possession’ financing.

It is difficult to deal at the private individual debtor level for another reason, as we have seen in Korea, because the individuals may be solvent, but the country doesn’t have the reserves to make the payments. In that case, the individual debtors may be unwilling to file a petition for their protection. So the country must be allowed to unilaterally declare a debt standstill. As you may know from the 1980s, the US courts turned this down in the case of Costa Rica when the Costa Rican government introduced such a debt standstill. Initially the US District Court and the Court of Appeals accepted the case in favour of Costa Rica. However, after the hearing, the US Department of Justice intervened in the Court of Appeals and said that while it was consistent with US law, it was against the US policy of dealing with such situations through the IMF. There is an Article 6, Section 2b of the IMF which one can interpret as saying that debt payments cannot be stopped. What we need is either an amendment of that IMF article or some other mechanisms which allow countries to unilaterally declare a standstill along the lines of Chapter 11, much like the safeguard action countries can take in the WTO, subject to further negotiations and consultations with the parties concerned in order to stop the damage that external factors may be causing.

The problem here is that being itself a creditor and its main shareholders being creditors, the IMF has a conflict of interest not only vis-à-vis debtors on which the IMF placed policy conditionality, but also with other creditors because the IMF itself is a creditor with seniority. So a more independent panel could be established along the WTO lines in order to allow countries, once they unilaterally declare that kind of a standstill, to approve it and also allow ‘debtor in possession’ financing, that is financing that has seniority over the previous debt, while at the same time asking the country to present a restructuring plan with the debt.

The advantage of such a procedure would be that there is no need for large sums of money for bailouts. What I want to put on the table is a proposal which follows Mr. Wyplosz' suggestion to think about an international mechanism that would allow automatic standstill and 'debtor in procession' financing which will eliminate any need for large-scale bailouts."

Witteveen suggested that the IMF would be in a very special position to give some guidance to a moratorium and rescheduling process, because it could then be coordinated as in the 1982 Latin American crisis with financial support that it is itself providing. "In those negotiations, the IMF was able to put strong pressure on the banks because it could say, if you go along with this kind of rescheduling, we will provide these financial resources, and then the loans can be serviced. It was a very logical connection.

At the same time, we need to consider how we can create some restraint on international credit. We have learned to control domestic business cycles in the advanced economies because we control bank credit. But in the international scene, international bank credit is not controlled. It can expand enormously to certain countries and regions beyond anything that is reasonable. What I think would be very important in preventing such crises is if there could be international consultation in the BIS, for example together with the IMF, to get the main central banks to restrain this kind of international credit by their banks – even if it goes through Euromarkets and not through their own economy. They control bank credit in their own economy, they control the money supply very well now, but this has no parallel in the international scene and that is what we are going to need in the future."

Griffith-Jones agreed that moratoria and standstills are very attractive conceptually "but they are very tricky because capital is more mobile and you cannot freeze all the flows. Therefore, the risks of restraining capital outflows during crisis are very high. It is much more difficult than in the 1980s when it was just medium-term debt. The emphasis should be placed on the kinds of issues that Mr. Witteveen was pointing out, what can be done both nationally and internationally to slow down the flows before the crisis? Precisely because everyone knows that these moratoria are very difficult to implement, it may not be a first-best solution, but a second-best *realistic* solution of trying to regulate excessive surges, both internationally and nationally."

Wyplosz suggested that it would be difficult to determine who should be the referee or the equivalent of Chapter 11 courts. "There have been views that the IMF is suffering a conflict of interest, there are other views that the IMF is good to internalise the externality. Jack Boorman said we could

not call a moratorium because of concern about the externality with Latin America. That is a valid point and I understand that there is a conflict of interest between protecting one country and protecting the systemic access to markets. This is an argument that makes it even more difficult to think about how we should deal with these moratoria. It is an extremely complicated and at the same time extremely important issue.”

Part II

The International Institutions' Current Approaches and the Prospects of Their Future Activities

Reflections on the Asian Crisis: Causes, Culprits, and Consequences

Jack Boorman

“Let us live in as small a circle as we will, we are either debtors or creditors before we have had time to look round”.

Goethe

“An ounce of prevention is worth a pound of cure”
Benjamin Franklin, Franklin’s Gazette, 1734

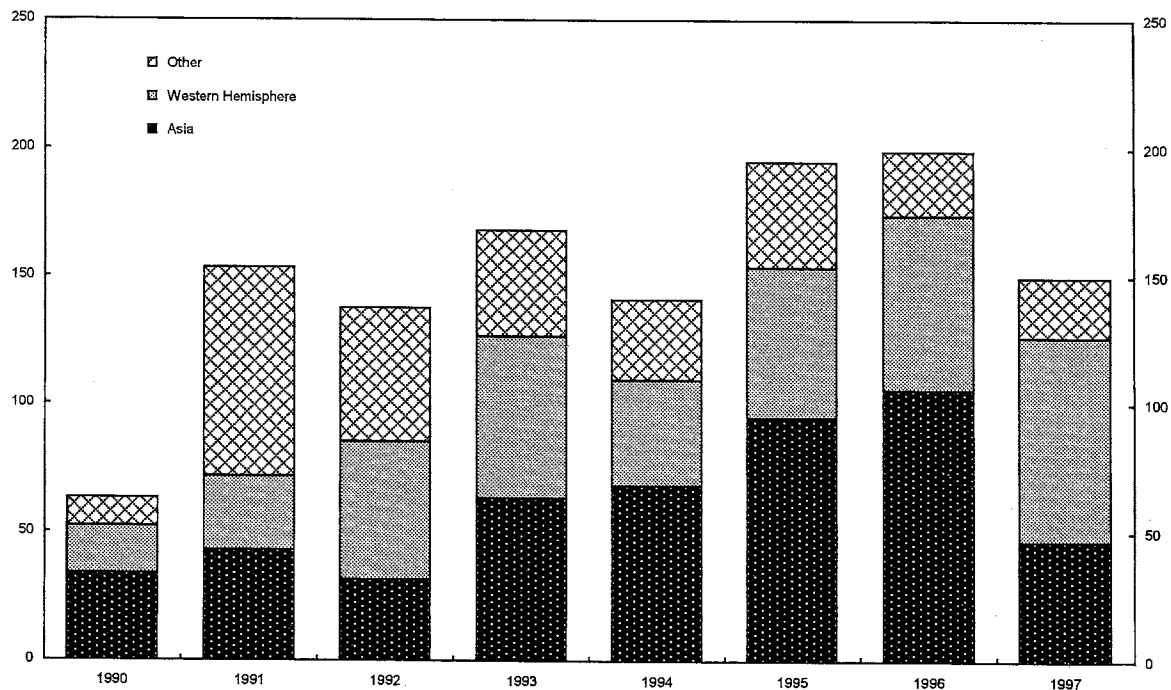
In recent weeks, many individuals and groups have started reflecting on the Asian crisis and the lessons that could be drawn from it in order to strengthen the international monetary system. The Fund has taken an active part in these discussions. This conference provides a perfect opportunity to pursue this work. This paper first considers recent developments in emerging capital markets. In light of these, it then attempts to review what went wrong in Asia. It concludes with reflections on what to do primarily to help prevent another crisis but also to improve the management of the next one – which will eventually come.

I Recent Developments in Emerging Capital Markets

Introduction

During the 1990s emerging markets’ access to international capital markets improved dramatically. As demonstrated by Chart 1, private capital inflows to these countries quadrupled from around \$50 billion in 1990 to almost \$200 billion in 1996 before declining somewhat last year to around \$150 billion. The Mexican crisis of 1994-95 had only a temporary and limited effect on the scale and geographic distribution of capital flows and the cost of external borrowing.

Chart 1 Net Private Capital Flows to Emerging Markets



Source:
World Economic Outlook Database.

*From: Regulatory and Supervisory Challenges in a New Era of Global Finance
FONDAD, The Hague, 1998, www.fondad.org*

Regional Composition

A larger number of countries have been able to attract these private capital flows. As an indication, the number of countries rated by international credit-rating agencies, often viewed as a prerequisite for the issuance of Eurobonds, has risen from 11 in 1989 to 49 in 1996. The regional composition of these flows continued to favour Asia and Latin America through most of this decade. Asia's share of these flows rose steadily until 1996 reaching around one half (about \$100 billion). Last year this share fell to one third (just under \$50 billion).

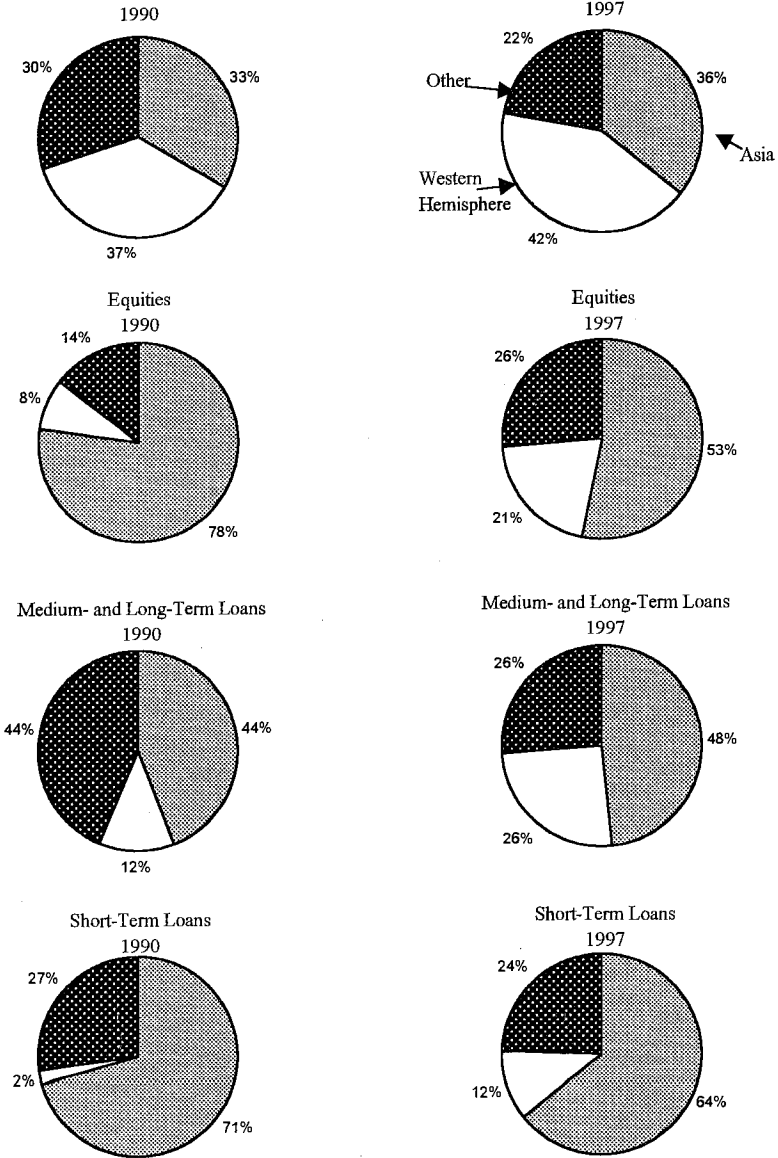
The regional distribution of private capital flows has been closely linked to the macroeconomic performance of countries in the various areas, reflecting an improved ability of investors to discriminate among countries according to the quality of policy and economic performance. Three factors were behind the general improvement in access to international markets: (i) search for higher yields by investors in mature markets caused them to move down the credit spectrum and increased demand for high-yield sovereign and corporate bonds issued by emerging market countries; (ii) institutional investors' seeking to diversify their portfolios took a sanguine view of the economic fundamentals in most emerging markets which had improved through macroeconomic stabilisation; and (iii) extensive structural reforms including the opening up of international trade and capital flows.

Type of Instruments

The composition of external financing by emerging markets in the 1990s was characterised by the increased reliance on bond issuance as opposed to bank loans although these remained important. However, there were some differences between Asia and Latin America. While in Latin America bonds have been the dominant instrument, in Asia bank loans continued to be the main source with a marked increase in the share of short-term loans. Inflows into equity have been relatively small with the larger share going to Asia (Chart 2).

The rise in borrowing by emerging markets reflected a general improvement in the terms and conditions under which borrowers in emerging markets could access global markets. As Chart 3 shows, yield spreads on sovereign bonds declined sharply on Latin American and European sovereign bonds from peaks reached during the Mexican crisis but rose sharply in recent months following the Asian crisis. Spreads on Asian sovereign bonds rose sharply in recent months but were hardly affected by the Mexican crisis. Moreover, the average maturity for sovereign bonds, which

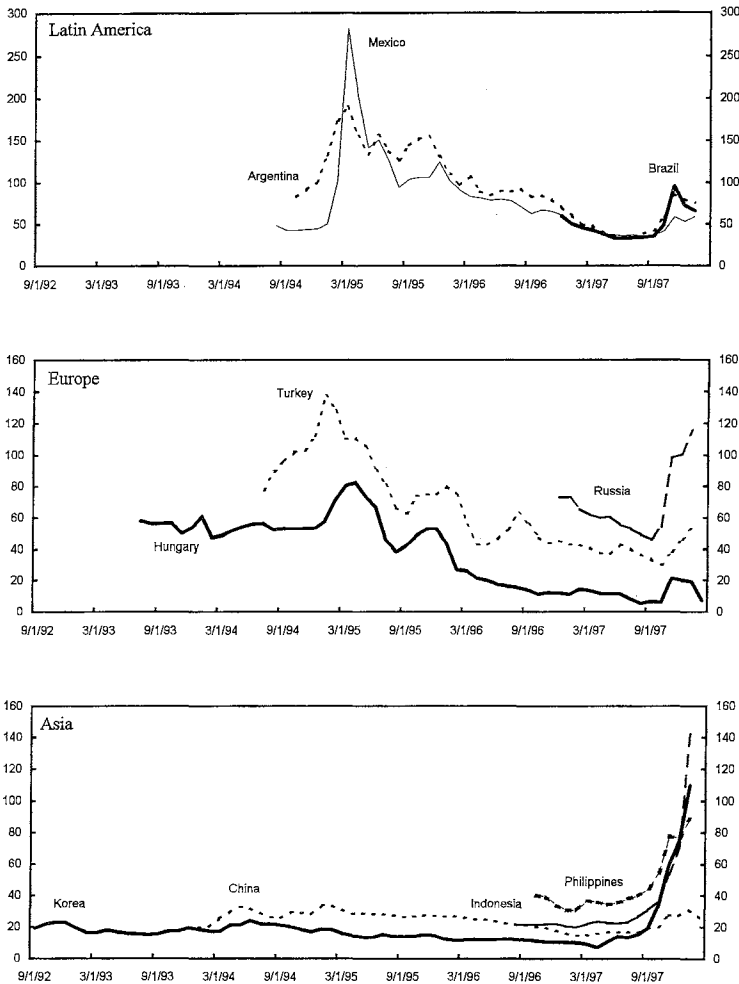
Chart 2 Private Capital Flows to Emerging Markets: Regional Shares by Type of Flows¹ (in percentages)



Source: DCBEL Database.

¹ Gross primary market financing

Chart 3 Secondary Market Yield Spreads on US Dollar-Denominated Eurobonds by Selected Emerging Markets¹ (in basis points)



¹ Latin America: Republic of Argentina bond due 12/03, United Mexican States bond due 9/02, and Republic of Brazil bond due 11/01.

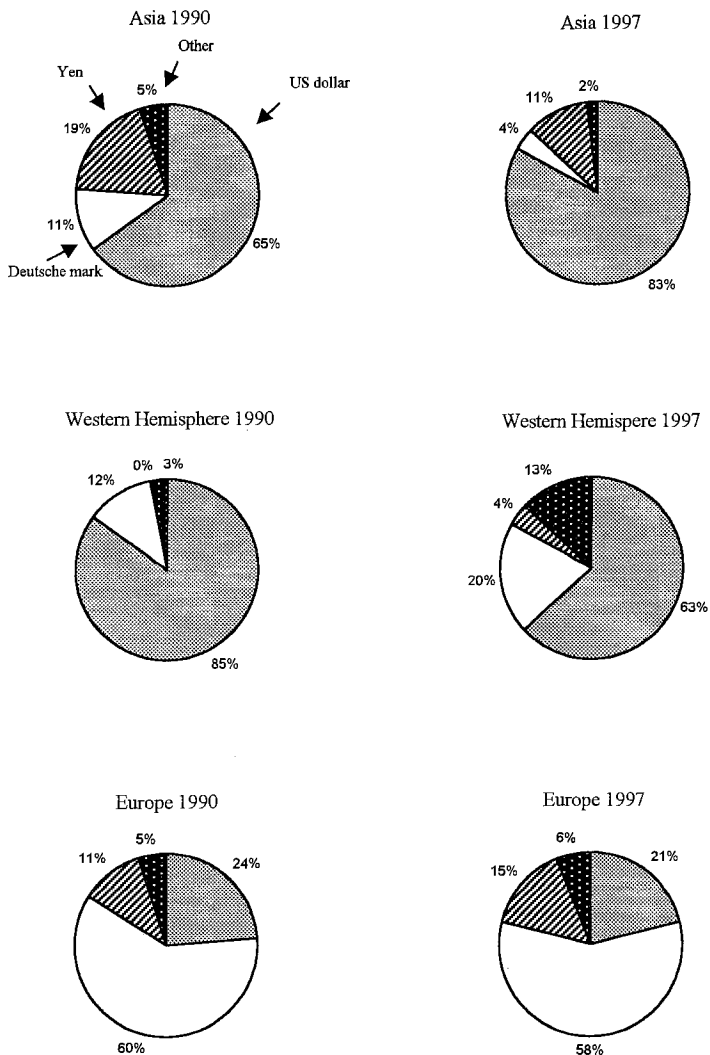
Europe: National Bank of Hungary bond due 6/98, Republic of Turkey bond due 6/99, and Ministry of Finance Russia bond due 11/01/

Asia: People's Republic of China bond due 11/03, Republic of Indonesia bond due 5/96, Republic of Philippines bond due 10/16, and Korea Development Bank bond due 2/02.

Sources:

Bloomberg; and Reuters.

Chart 4 Emerging Market International Bond Issues by Currency of Denomination: Selected Regions¹



Note:

¹ 1997 figures are based on data for the first quarter

Sources:

Capital Data Bondware; and IMF estimates.

had fallen sharply in the wake of the Mexican crisis to 3.9 years, rose dramatically in 1996 to 9.8 years. At the same time, the currency composition of bond issues has changed in Asia and Latin America between 1990 and 1997 (Chart 4). In Asia the share of US dollar-denominated bond issues rose from 65% in 1990 to over 80% in 1997 at the expense of smaller shares for yen and Deutsche mark denominated issues. This probably reflected the stability of the pegs of most Asian currencies to the US dollar. The opposite was true in Latin America where the share of US dollar-denominated bond issues fell from 85% in 1990 to just over 60% in 1997 while the shares of issues denominated in yen, the Deutsche mark and other European currencies rose. In the case of European emerging market bond issues, the currency composition barely changed with about 60% being in Deutsche marks.

Derivatives

The rise in international investors' exposure to emerging markets was accompanied by the development of offshore derivative products. Derivatives enhance the ability of investors to manage the risks associated with their emerging market investments and foster arbitrage between different instruments. A noteworthy feature of these products is that they allow investors to circumvent official controls on financial transactions. One example is the over-the-counter (OTC) non-deliverable forward (NDF) foreign exchange contract, which allows investors to hedge foreign exchange risks on financial instruments of emerging market countries that have underdeveloped local forward and futures markets or rely on capital controls. The price of these contracts is linked to movements in a particular emerging market currency, but settlement is made in US dollars. The Asian segment of this market has been particularly active. Other derivative instruments include exchange-traded emerging market debt derivatives, such as futures and options on Brady bonds, emerging market index funds, OTC swaps and options on stocks, and equity derivatives.

Hedge Funds

The recent financial market turmoil in Asia drew attention to the role of institutional investors, particularly of hedge funds. Some have suggested that hedge funds precipitated the sharp movements in assets prices in Asian markets, either through the sheer volume of their own transactions or through the tendency of other market participants to follow their lead. However, little concrete information is available about the extent of hedge funds' activities. As a result, there is no consensus on the implications of

these activities for financial stability, much less on whether and how to adapt the regulatory framework in response. Hedge funds are eclectic investment pools that are not subject to the usual disclosure and prudential requirements that apply to, say, mutual funds, even though they engage in the same type of transactions as other institutional investors. A recent Fund study on the role of hedge funds has concluded that, despite their ability to leverage their capital, hedge funds are much smaller than other institutional investors (e.g. pension funds, mutual funds and banks) and that observers are sceptical that they precipitated the financial crisis in Asia or even played a major role in it. Indeed, the broadening of international investment vehicles, of which hedge funds are but one example, has had a positive effect on global financial markets.

II What Went Wrong in Asia?

A striking feature of the Asian crisis is that the weaknesses in affected Asian economies did not arise from the classic macroeconomic problems – excess demand, trade fueled by loose fiscal and monetary policies, resulting in high inflation and large current account deficits – which characterised the debt crisis of the 1980s. Indeed, most of the countries hit by the crisis pursued relatively sound macroeconomic policies for many years. Their fiscal positions were in surplus, inflation performance was good, and, in most cases, current account positions seemed manageable. The primary sources of difficulties instead lay in the financial and corporate sectors and the way in which capital movements were regulated.

Background

By way of background, a short sketch of the situation of each country leading up to its request to the Fund for assistance is useful.

Thailand

The macroeconomic situation in Thailand was deteriorating prior to the crisis. By 1996, the failure to dampen overheating pressures had become increasingly evident and the current account deficit reached 8% of GDP – a warning signal by any standard. The financing of an external current account deficit of this magnitude was facilitated by the opening of an important channel for short-term capital movements through the establishment of the Bangkok International Banking Facility (BIBF) in 1993. The express aim of the BIBF was to enhance the capability of Thai finan-

cial institutions in international lending and other international banking business, thereby reducing the cost of foreign borrowing for Thai entrepreneurs. Foreign banks were afforded two incentives for participation in the BIBF which tilted the playing field toward shorter-term financing, and away from long-term capital. First, the BIBF enjoyed various tax privileges; and second, indications that the future granting of licenses to establish banks in Thailand would be determined, *inter alia*, by the scale of foreign banks' participation in the BIBF. The three years following the establishment of the BIBF saw a burgeoning of the current account deficit (by some 3% of GDP), financed by short-term capital inflows. The facility allowed weak domestic financial institutions to intermediate short-term capital inflows. These institutions lacked the ability to assess and manage risks of intermediating such capital. Moreover, Thailand maintained a fixed exchange rate, and responded to overheating by tightening monetary policy, thereby putting upward pressure on domestic interest rates. This both encouraged residents to borrow in "cheap" dollars, and foreign investors to take long baht positions – the so-called carry trade.

As markets began to perceive the unsustainability of the current account deficit in the context of slowing exports and concerns about competitiveness, the exchange rate came under attack. Following speculative pressures on the baht, the authorities introduced measures restricting domestic financial institutions from undertaking certain types of transactions with foreign financial institutions, which were designed to limit speculators' ability to take short positions, as well as limiting the ability of speculators to unwind existing short positions.¹ Notwithstanding these measures, capital outflows continued. The authorities defended the exchange rate through ultimately unsustainable intervention in the forward market. (By mid-July the forward/swap obligations amounted to about \$28 billion compared to spot reserves of \$31 billion.) In the face of persistent outflows, on July 2, 1997, Thailand abandoned its exchange rate peg and allowed the baht to float. Later in July, the Thai authorities asked the Fund for help – but only when their net foreign exchange reserves were nearly depleted as a result of attempts to defend the exchange rate.

1 These included: a temporary limit on baht lending to nonresidents through foreign exchange swap and other transactions in order to prevent the build-up of baht positions on the offshore market; limit on outright forward transactions with and selling baht against foreign currencies to nonresidents; and, daily reporting requirements on foreign exchange transactions with nonresidents.

Indonesia

The turmoil in Thailand soon spilled over to Indonesia and the rupiah fell sharply on July 27. While the macroeconomic imbalances in Indonesia were not as pronounced as in Thailand, the economy suffered from deep rooted structural problems. Trade restrictions, import monopolies, and regulations impeded economic efficiency and competitiveness, and also reduced the quality and productivity of investment. Indonesia's regulations regarding capital account transactions were quite liberal. The system permitted a broad range of money market and credit transactions between residents and nonresidents. In particular, it allowed resident entities, especially nonbank private sector companies, unrestricted offshore borrowing from nonresidents. In contrast to Korea and Thailand, Indonesia's external debt difficulties are concentrated in the corporate sector, rather than the banking sector. Indonesian corporations became overexposed, particularly at the shorter maturities. These difficulties did not stem from the structure of exchange controls. Rather, it reflected an inability – or unwillingness – of the domestic banking system to exert discipline over corporations' financial structure, and a willingness of the foreign creditors to extend short-term credits, notwithstanding the structure of corporations' liabilities. As a result the corporate sector in Indonesia accumulated sizable external liabilities denominated in foreign exchange.

As in Thailand, the banking system was weak. Nonperforming loans accounted for almost 14% of total loans at state-owned banks at end-June 1997, and a number of insolvent institutions continued to exist with central bank subsidies.

Following the fall of the rupiah at the end of July, measures to tighten liquidity conditions failed to stem the growing exchange market pressures, and the authorities allowed the rupiah to float on August 14. In late September, after a period of relative stability, the rupiah depreciated sharply, triggered by Indonesian banks buying foreign exchange to cover their imprudent exposure to exchange rate risk in the form of options. This led Indonesia to ask the Fund for help in early October 1997.

Korea

A cyclical slowdown in economic growth in Korea and emergence of financial difficulties in key corporate conglomerates (*chaebols*), which reflected overinvestment in projects that were not able to earn adequate rates of return, created pressures in the financial sector in 1997. Non-performing loans grew rapidly and banks' spontaneous access to international capital markets shrank, and came to an abrupt halt in November. The difficulties

in the financial sector reflected a combination of factors. Exchange controls limited the ability of corporations to access foreign savings directly. Instead, the controls forced corporations to access international capital markets through capital intermediation by banks. As a result, the *chaebols* became heavily dependent on debt intermediated by Korean financial institutions. Corporate entities, many of which were pursuing unwise expansion strategies in the context of weak corporate governance, fell into difficulties and were kept afloat by further extension of credits. The management and supervisory and regulatory authorities paid little attention to the analysis and containment of risks.

Against this background, the downward pressures on the Korean currency intensified in the last week of October, and equity prices fell sharply, reflecting diminished confidence about prospects for an orderly workout of corporate debt problems and the growing difficulties encountered by the financial sector in rolling over external loans. After intervening heavily to defend the currency, the authorities allowed the currency to float in late November and asked for Fund help – again, only after they had virtually exhausted their reserves.

Financial Sector Flaws

In all three countries, weaknesses in the financial sector lay at the heart of the crisis. In particular, these weaknesses included: limited capacity of financial institutions to assess and manage risks and inadequate prudential supervision in the context of Thailand and Korea of regulations encouraging intermediation of short-term capital inflows by weak financial institutions. These deficiencies were a recipe for disaster reminiscent of the Mexican crisis of only a few years earlier.

Weak Risk Management

The limited capacity of financial institutions to assess and manage risks engendered imprudent and improper decisionmaking. Borrowing was used to finance unsound investments and projects, many of which were unable to earn a satisfactory rate of return. As a result, the quality of bank assets deteriorated sharply, ultimately leading to the loss of market confidence that helped spark the crisis. Poor risk management led to mis-matches of maturities and exchange rate risk, causing a fundamentally unstable financial structure, with unhedged positions and a concentration of liabilities at the short end of the maturity spectrum.

Foreign players in these markets also failed to anticipate the problems. Many of them were operating in Asia on the basis of little information,

wishing not to miss out on the boom but without appreciating the risks. When the problems in Thailand became evident, they began asking tough questions about the vulnerability of other economies in the region. This is part of what has been referred to as “contagion”.

Some institutions were simply unwilling or unable to assess the risks they were taking. The case of Korea provides a glaring example, where a number of off-shore institutions (guaranteed by domestic Korean banks) took highly leveraged bets on exchange rate movements in ASEAN currencies. When these deals went bad due to the fall in exchange rates, such investors seemed genuinely surprised at the magnitudes of the losses they incurred.

Inadequate Prudential Supervision

Regulators did not require financial institutions to analyse the risks of on- and off-balance sheet items and paid little attentions to lending and trading strategies, and liquidity management. Indeed misguided regulation – notably in Korea – forced transactions off-shore and off-balance sheet, where enormous risks could escape from the limited capabilities of the supervisors – almost to the point where the attitude of investors seemed to be: “If we can’t have our casino close to home, we’ll play elsewhere.” At the same time, corruption and conflict of interest pervaded the regulatory systems in all three countries. Cozy relations between companies, banks, and supervisors encouraged a rolling-over of debts long after the bank should have foreclosed. And these problems were obviously exacerbated where loans were extended to companies owned by well connected individuals. Finally, poor regulatory standards meant that some banks – notably in Thailand – could show loans on their books as performing, when this was untrue by any reasonable measure.

In the case of Korea, the regulatory framework provided incentives for short-term flows through the banking system, further increasing the vulnerability of the system. Exchange controls limited the ability of nonresidents to purchase equities and bonds issued by Korean corporations, and residents’ ability to borrow directly from international markets. As a result, the *chaebols* became heavily dependent on debt intermediated by Korean financial institutions. In addition, lack of competition from well managed international financial institutions perpetuated the weaknesses in the financial system. As noted earlier, Thailand tilted the playing field toward short-term flows channelled through the BIBF.

Additional Factors

Beyond the financial sector, but related to it, additional factors were at play.

Public Sector Support to the Corporate Sector

In a number of instances, public sector support to ailing corporations or implicit guarantees of support in case of need compounded difficulties. In some cases, corporate entities, which were pursuing unwise expansion strategies in a climate of weak corporate governance, were kept afloat by further extensions of credit at the behest of the government. This allowed them to further deteriorate their balance sheet and that of the lending financial institutions. In others, as Paul Krugman recently argued, financial institutions in the region were able to operate with an implicit guarantee.² Banks could raise capital at home and abroad. These liabilities then financed highly speculative investments with a payoff expectation of: "Heads I win, tails somebody else loses." This behaviour fueled a speculative boom, making the financial situation that much more precarious.

Exchange Rate Policy

An important factor in the overall picture was historically fixed exchange rates which engendered expectations of continued exchange rate stability and lulled investors into complacency. To some extent, the complacency seemed warranted, given the strong macroeconomic performance that underpinned those expectations.

Investors' Behaviour

On the part of investors, the search for higher yields led to excessive risk-taking. This behaviour may have been more pronounced in Japan where a sluggish economy and unresolved problems in the financial sector may have encouraged imprudence in the search for investment opportunities. In the case of Korea, for example, the search for higher yields by domestic investors led to behaviour tantamount to gambling: unhedged borrowing in yen to lend in rupiah, with an expectation of capitalising on the higher yields in rupiah.

2 See *What happened to Asia?* on P. Krugman's website.

III What Needs to Be Done?

Prevention is better than cure. This principle has been a driving force behind both the reflections on reform of the international monetary system in the wake of the Asian crisis and the work of the Fund, which has always put surveillance at the core of its activities. Accordingly, most of this section of the paper is devoted to crisis prevention. A variety of issues will be considered. On each of these topics, both reforms that could be undertaken by many different actors and avenues for strengthening Fund surveillance are addressed. No system of crisis prevention will ever be fool-proof of course. This section therefore also considers improved mechanisms of crisis management.

CRISIS PREVENTION

Part I of this paper described how capital flows have evolved during the past decade, not only in volume but also in composition and how capital markets have gained in sophistication, including through widespread use of derivative products. Part II analysed causes of the Asian crisis, including the surge in capital inflows to many Asian countries in the 1990s and their recent abrupt drying-up, the central role of banking systems in intermediating these flows, weaknesses in regulatory and supervisory frameworks, and macroeconomic policy inadequacies. Combining these elements, improving the functioning of the international monetary system, and the Fund's surveillance over it, could centre on five elements: improving information provision to market participants, increasing the transparency of economic policies, facilitating the dissemination of Fund's views of members' policies, strengthening financial systems, and promoting orderly capital account liberalisation.

Data Provision

Comprehensive, accurate and up-to-date data are essential ingredients of sound decisionmaking by both private market participants and public entities. With hindsight, the Asian crisis revealed that the data known to market participants – and sometimes to the Fund – regarding foreign exchange reserves and short-term indebtedness, as well as comprehensive information on the health of the financial system of certain countries, suffered from severe deficiencies. When the facts finally came to light (as they always do): market reactions were severe, and they endured when skepticism about official statistical information contributed to difficulties

in re-establishing market confidence. Improving data provision to the public therefore is crucial. In some instances, this requires significant modifications to statistical systems, and in others improved dissemination of existing data.

Improving Statistical Systems

With the furious pace of innovations in international financial relations, statisticians face a formidable task when attempting to develop comprehensive, timely and accurate statistics for countries' international investment positions. A number of sources, including the BIS, the OECD, the World Bank, and private companies, report data on external indebtedness. Many countries compile data on debt liabilities through a domestic or external liability registration or surveying process. Monetary survey data and commercial banks' financial statements can also provide data on foreign liabilities of the banking sector. However, all these sources suffer from weaknesses, due to limitations in coverage or lack of completeness stemming from the absence of a comprehensive reporting requirement. Even the use of all these sources together may fail to give a complete picture of a country or a sector's external liabilities. This is particularly true for short-term liabilities.

Statistical improvements are thus needed. It must be recognised that this is bound to be a complex and lengthy task. The existence of complex relations between on-shore and off-shore institutions (e.g. foreign subsidiaries of domestic firms), the development of off-balance sheet transactions such as swaps, forward contracts, and options, and difficulties in the classification of certain instruments in domestic or foreign debt, all present very real obstacles to deriving a true picture of a country's international investment position. Nevertheless, efforts must be made to overcome this obstacle. In the first instance we should focus on short-term debt given its volatility and its role in the Asian crisis, and the IMF has started a process aimed – in the first instance – at identifying gaps in the coverage of available data and at offering recommendations for better reconciliation of existing data sources and improved data compilation.

Enhancing Data Dissemination

Regular and timely data dissemination of a wide array of economic statistics is not only beneficial to market participants but also in the best interests of national authorities. Indeed, rapid publication of accurate data in both good and bad times is for governments one of the best protections against the false hope that current difficulties will miraculously vanish and that corrective measures can be safely postponed.

This lesson, which emerged from the analysis of the Mexican crisis, led the IMF to launch in 1996 the Special Data Dissemination Standard (SDDS) and to establish and maintain an associated Dissemination Standard Bulletin Board (DSBB) on the IMF's website (www.imf.org). The SDDS specifies coverage, periodicity and timeliness for 17 data categories of macroeconomic statistics, along with advance release calendars and other aspects of data access, integrity and quality. The DSBB was conceived as the location to identify members subscribing to the SDDS and as a convenient source for access to countries' information about their statistical practices (metadata). In addition, the DSBB eventually became a location for access to some subscribers' national data. At present, 43 Fund members subscribe to the SDDS, 37 of them have their metadata posted on the DSBB, and 12 of these have hyperlinks from the DSBB to national internet data sites. The SDDS is in a transitional period until the end of 1998, by which time subscribers should be in full compliance with the standard.

The IMF is presently considering ways in which the SDDS could be strengthened. In particular, the sequence of events leading to the Thai and Korean crises suggests extending the SDDS to cover foreign exchange reserve liabilities (including off-balance-sheet transactions such as forward contracts and other financial derivatives), private external debt, and indicators of financial sector soundness (so-called macro-prudential indicators). Of these three elements, inclusion of foreign exchange reserve liabilities in the standard is perhaps the one presenting the least technical difficulties. As discussed above, coverage of private external debt, including short-term debt, may require significant new data compilation efforts. Definition and inclusion of some macro-prudential indicators, such as data on sectoral concentration of lending and the maturity structure of assets and liabilities, may possibly be derived from existing analytical accounts of the banking sector and other bank supervisory data. However, derivation of other key prudential ratios would appear to depend critically on national rules for asset classification, valuation, and provisioning. Their eventual inclusion in the SDDS might thus be dependent upon a prior major international effort to establish commonly accepted bank accounting standards, including rules for loan classification and provisioning.

Policy Transparency

Beyond good data, sound judgment on investment and other economic decisions require a clear understanding of the design and conduct of national economic policies. Policy transparency can help avoid shocks provoked by abrupt changes in private agents' behaviour caused by unantici-

pated policy changes. It can also increase policy credibility, with for instance positive consequences on the climate for long-term productive investment.

In the past decade, numerous initiatives have been implemented in different countries to improve policy transparency. Some of these initiatives concerned monetary policy: a number of industrial countries clarified the central objective of their central bank (maintenance of price stability or achievement of a public inflation target), while providing it with a framework conducive to fulfilment of its objective – e.g. by granting the central bank operational independence. Others pertained to fiscal policy, such as New Zealand's adoption of the pioneering Fiscal Responsibility Act of 1994. The outcome of these initiatives suggests that transparency in fiscal and monetary operations – defined as public openness in government institutions, fiscal and monetary policy intentions, public sector accounts, indicators and forecasts – can indeed contribute to macroeconomic stability, allocative efficiency, and fairness, increase confidence in a government's economic policies, and thus limit the risk of financial market shocks.

In the fiscal sphere, a recent review points to the importance of a number of sound practices, which might be considered possible elements of an eventual code of fiscal conduct.³ Examples of such practices are: a clear demarcation between the public and private sectors, publication and quantification of the extent of government intervention in areas such as support to banks and enterprises, information on the costs of any quasi-fiscal activities of state-owned financial institutions and non-financial enterprises, public disclosure of budget documents, open procurement and hiring practices, audits of budget operations subject to public scrutiny, no recourse to discretionary tax concessions or negotiated tax liabilities, and fiscal accounts covering the entire general government.

Dissemination of Fund Views

The Fund may also be in a position to improve information about members' policies by making known its views on them – and, perhaps, in so doing creating increased incentives for appropriate changes, when necessary. When approaching this issue, the Fund has been mindful of two widely shared considerations: first, increasing the transparency of IMF policy assessments may be a powerful means to strengthen the effectiveness of surveillance; second, dissemination of information must not come at the

³ See G. Kopits and J. Craig (1998), *Transparency in Government Operations*, Occasional Paper No. 158, IMF, Washington D.C., January.

detriment of the quality of the policy dialogue between the Fund and its members, including the candid exchanges that take place in the context of the IMF's main vehicle for bilateral surveillance known as the Article IV consultation process.⁴

Balancing these two factors, the Fund had traditionally made public the results of its multilateral surveillance exercises, the bi-annual *World Economic Outlook* and *International Capital Markets* reports, and disseminated a vast amount of applied research. In April 1997, considering the general trend toward increased openness in a number of member countries – including through the release of concluding statements and joint press conferences following Article IV consultations – the Fund's Executive Board decided to go a step further. It agreed to the issuance of Press Information Notices (PINs) on a voluntary basis, following the conclusion of Article IV consultations, for member countries seeking to make known the views of the IMF to the public. PINs are typically 4 to 5 pages long: they contain a background section with factual information and the Fund's assessment of the member country's economic prospects and policies, as reflected in the IMF Executive Board's discussion of the Article IV consultation. Since the inception of this policy, Article IV consultations have been concluded with roughly 110 member countries. Approximately half of them have elected to have the Fund issue a PIN.

Is it desirable to go still further? The general issue of transparency of Fund advice clearly remains alive, especially in the wake of the Thai experience where repeated confidential warnings of impending serious difficulties went unheeded. It has been pointed out that the Fund's Articles of Agreement contains a provision stipulating that, by a qualified majority of votes in the Executive Board, the Fund may “decide to publish a report made to a member regarding its monetary or economic conditions and developments which directly tend to produce a serious disequilibrium in

4. Article IV refers to Article IV in the Fund's Article of Agreements. This article is the one that enshrines the Fund's surveillance responsibilities. Specifically, it states in part that “each member shall: (i) endeavour to direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability, with due regard to its circumstances; (ii) seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions; (iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members; and (iv) follow exchange policies compatible with [these] undertakings” and that “the Fund shall oversee the international monetary system in order to ensure its effective operation, and shall oversee the compliance of each member with [these] obligations”.

the international balance of payments of members.⁵ It should be noted that this provision has never been used, perhaps because the Fund has been concerned that involuntary dissemination of views based on confidential information provided by a member would have serious long-term consequences on the quality of the dialogue with its members.

Overall, while it is difficult to predict the evolution of the balance of arguments between the benefits of transparency and those of confidentiality, one would expect that more and more countries would on their own come to value the benefits of regularly providing to market participants the Fund's assessment of their policies.

Financial Systems

In a large number of countries, long-simmering financial system weaknesses have at one time or another severely affected macroeconomic developments. The Asian crisis is, in this respect, only the latest manifestation of an often repeated pattern. This consideration has led numerous international bodies to consider how financial systems could be strengthened. In April 1997, the G-10 published a report on financial stability in emerging market economies. In September of the same year, the Basle Committee on Banking Supervision issued its Core Principles for Effective Banking Supervision. In January 1998, the IMF produced a document entitled *Toward a Framework for Financial Stability*. Other institutions, including the World Bank, have also been active in this area.⁶ All these efforts of course built upon the extensive work done by the BIS for a number of years, which resulted for instance in the 1988 Basle Capital Adequacy Accord and the subsequent Market Risk Amendment.

Principles for Sound Banking and Financial Systems

These various endeavours have helped identify key elements of sound banking and financial systems. These elements include: a legal environment conducive to the full enforcement of contracts, including effective bankruptcy procedures; internationally accepted accounting principles; robust payment and settlement arrangements; demanding standards for

5 Article XII, Section 8, of the Articles of Agreement of the International Monetary Fund.

6 See Group of Ten (1997), *Financial Stability in Emerging Market Economies: A Strategy for the Formulation, Adoption and Implementation of Sound Principles and Practices to Strengthen Financial Systems*, BIS, April (available on the BIS website); Basle Committee on Banking Supervision (1997), *Core Principles for Effective Banking Supervision*, BIS, September; IMF (1998), *Toward a Framework for Financial Stability*, International Monetary Fund, Washington, D.C., January.

disclosure of key financial information; effective systems of risk control; adequate capital requirements; a structure of ownership of financial institutions conducive to strict stakeholder oversight; openness in banking and financial markets, within essential prudential safeguards; competent management; deposit insurance arrangements, lender-of-last-resort facilities, and exit policies conducive to the preservation of stakeholders' incentives to exercise oversight and act prudently; independent but accountable supervisory and regulatory authorities; sufficient supervisory powers, including powers to issue and withdraw licenses, request and verify relevant data, conduct on-site inspection, restrain unsound practices, and force the exit of financial institutions; and international cooperation and coordination of national supervisory authorities.

In addition, these efforts highlighted that development of a set of sound principles and practices in a variety of domains could significantly contribute to the strengthening of financial systems. This set prominently encompasses international, high-quality accounting and financial reporting standards, which would ensure that information contained in financial statements of both non-financial enterprises and financial institutions is accurate, timely, comprehensive, and comparable across countries.

Financial Sector Surveillance

The Fund's role in financial sector issues stems from its responsibilities in promoting sound macroeconomic policies and the potential impact of banking crises on the macroeconomic environment. It stems also from the near-universal membership of the IMF, which makes it very well placed to disseminate standards and best practices for use in the financial sector, such as the Core Principles for Effective Banking Supervision recently developed by the Basle Committee on Banking Supervision. These considerations had led the Interim Committee of the Board of Governors of the Fund to call for greater attention to financial sector and capital account developments in the aftermath of the Mexican crisis.⁷ Recent events in Asia confirm the merits of that call.

With limited resources, the Fund's attention to financial sector issues will have to be selective and its focus put on the identification of problems that have a potentially significant macroeconomic impact. A full assessment of the health of individual financial institutions or the certification of

⁷ See "IMF Updates Surveillance over Members Economic Policies," In: *IMF Survey*, April 21, 1997; and *Communiqué of the Interim Committee of the Board of Governors of the IMF*, April 28, 1997 (both documents available on the IMF website).

the overall soundness of financial systems go beyond the scope of Fund surveillance. Rather, Fund surveillance should aim at probing vulnerabilities in financial systems and at increasing the awareness of their potential consequences. Such an assessment could be facilitated by the examination or development of bank soundness indicators in key areas, such as foreign-exchange exposure of financial institutions, sectoral credit concentration, exposure to large holdings of securities, and the share of resources obtained from the central bank. It could also encompass examination of aspects of the institutional, legislative, supervisory and prudential regulation frameworks that could entail risks for the soundness of the financial system. In cases of widespread problems in the financial system necessitating major restructuring, Fund involvement would likely be addressed in the context of a programme supported by the use of Fund resources, in close collaboration with the World Bank – which would be expected to have primary responsibility over banking system restructuring – and possibly other multilateral institutions.

Even with this limited agenda, adequate conduct of financial sector surveillance will require devotion by the Fund of a substantial amount of staff resources. It will also require upgrading the skills of Fund staff in financial sector issues.

Capital Account Liberalisation

Capital account liberalisation can be greatly beneficial to countries that undertake it and, overall, to the international economy. It can broaden the means to finance trade and investment in recipient countries and thus boost investment and growth. It can provide investors with increased opportunities for portfolio diversification and achievement of higher risk-adjusted rates of returns. It can provide access to sophisticated technology in financial intermediation and make domestic financial systems more efficient. At the same time, it carries well-known risks if, for instance, macroeconomic conditions are not adequate or liberalisation is not appropriately coupled with a strengthening of the domestic financial system. A proper objective is thus the promotion of orderly capital account liberalisation.⁸

Recent events in Asia reinforce these conclusions, as they provide examples of difficulties created by both disorderly capital account liberalisation

⁸ For detailed discussions of these issues and of the future role of the Fund, see *The Role of the IMF: Past, Present, and Future*, Remarks by Michel Camdessus at the Annual Meeting of the Bretton Woods Committee, Washington, D.C., February 13, 1998; and *Capital Account Liberalisation and the Role of the IMF*, Remarks by Stanley Fischer at the seminar on Asia and the IMF, Hong Kong, September 19, 1997 (both available on the IMF website).

and insufficient capital account liberalisation. As discussed in Section II, in Thailand, free capital flows coupled with weak financial institutions and ineffectual banking supervision can be seen to have led to excessive short term borrowing from abroad and easy financing of risky long-term projects and speculative activities – in the context of rapidly rising domestic asset prices. In Korea, exchange controls forced corporations to access international capital markets through banks. As a result, large corporate conglomerates became heavily dependent on debt intermediated or guaranteed by Korean financial institutions. In addition, these institutions' short term debt rapidly grew, as a substantial share of their resources came from borrowing from international banks and as this type of interbank financing is usually provided at short maturities. Thus, the financial structure of both non-financial and financial corporations came to suffer from severe weaknesses.

Given its mandate and its nearly-universal membership, the Fund is uniquely placed to play a central role in efforts to promote orderly capital account liberalisation. As a matter of fact, it is already actively supporting members' efforts toward liberalisation. The Interim Committee of the Board of Governors of the IMF considered that an amendment to the Fund's Articles of Agreement would provide the Fund with the most effective means to fulfill this role.⁹ Such an amendment would make the promotion of capital account operation a specific purpose of the IMF and extend, as needed, the Fund's jurisdiction through the establishment of carefully defined and consistently applied obligations regarding the liberalisation of such movements. With the use of safeguards and transitional arrangements, it would allow the IMF to encourage the liberalisation of capital flows while paying due regard to the varying circumstances of member countries.

At a recent IMF-sponsored seminar in Washington, there was a wide consensus on the benefits of capital account liberalisation. At the same, many participants cautioned that the pace and sequencing of liberalisation had to be carefully adapted to the specific circumstances of each country, including their macroeconomic situation and financial system structure.

CRISIS MANAGEMENT

While stringent efforts should be made to reduce the likelihood of crises, it

⁹ See *Communiqué of the Interim Committee of the Board of Governors of the IMF*, April 29, 1997; *Communiqué of the Interim Committee of the Board of Governors of the IMF*, September 21, 1997; and *The Interim Committee Statement on The Liberalization of Capital Movements Under an Amendment of the IMF's Articles*, September 21, 1997 (all documents available on the IMF website).

is certain that no system can guarantee that future crises will not happen. Thus, we need to extend our reflection to how financial crises should be managed. This section considers first the role of the Fund and of other official creditors during crises. It then turns to the involvement of the private sector in the resolution of crises.

Role of the IMF and of Other Official Creditors

Since the Bretton Woods conference, the general rationale for IMF financial support to members is enshrined in Article I(v) of the Articles of Agreement, which reads: “[The purposes of the Fund are:] To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.” This rationale remains as valid today as it was more than fifty years ago.¹⁰

Put differently, the provision of financial resources by the IMF conditional on the implementation of a strong programme of economic policies remains an essential part of crisis management: prompt implementation of corrective policy measures by the affected member(s) is a key to mitigating the impact of a crisis and limiting contagion effects; and supply of adequate financial resources is essential to ensure balance of payment financing while corrective measures take effect and private sector confidence is being re-established. Thus, the IMF retains a central role in crisis management. To fulfill this role, it is clearly essential that the IMF dispose of sufficient financial resources.

Other international financial institutions and bilateral official creditors are also likely to play important roles in financial crisis management. The size and volatility of private international capital flows increase the probability that, in the event of a crisis, financing needs may be substantial. Therefore, as seen recently, provision of sufficient financial resources may require contributions from a number of official multilateral and bilateral sources. In addition, with high probability, a crisis will reflect structural weaknesses as well, requiring not only adjustment to macroeconomic policies but also structural reforms. International financial institutions with expertise in the relevant structural issues would thus be expected to be

¹⁰ For a detailed discussion of the rationale for IMF financial support, see P. Masson and M. Mussa (1995), *The Role of the IMF: Financing and Its Interaction with Adjustment and Surveillance*, IMF Pamphlet Series No. 50, IMF, Washington, D.C.

closely associated with the design of the programme of remedial policies.

Beside support from a strong reform programme, success of financial rescue packages depends to a crucial extent on their ability to restore private sector confidence. This cannot be obtained when doubts exist about policy direction and rumours abound. Thus, perhaps more than at any times, policy decisions have to be fully transparent in times of crises. Publication of letters of intent, describing the authorities' policy commitments vis-à-vis the Fund and the international community, is one way to achieve this goal. Immediate improvements in the quality, comprehensiveness or timeliness of economic data provision is another.

Involvement of the Private Sector

Provision of official financial assistance in a crisis must not lead market participants to downplay the risk of investing in one country or another: private sector borrowers must face appropriate incentives, which entail that they should appropriately share the profits and losses resulting from their decisions. Limiting moral hazard stemming from official intervention in financial crises requires that the private sector be involved in the resolution of crises.

The globalisation of international financial markets, the switch away from syndicated bank lending toward sovereign bond issues, and the lack of modern experience with participation of bondholders in the management of sovereign liquidity crises have raised concerns that crisis management procedures developed in the 1980s may no longer be fully adequate. In particular, there is a risk of a disorderly sovereign bond default stemming from aggressive creditor litigation, if a sovereign were to face severe liquidity difficulties. Such a disorderly default would make resolution of the crisis, including adoption of a strong adjustment programme and provision of new financing, that much more difficult.

This prospect, which has been given serious consideration by both the G-10 and the IMF, has led to reflections along three lines: introduction of new legal provisions in sovereign bond contracts, establishment of an international bankruptcy court, and allowance of IMF-sanctioned temporary debt standstills.¹¹ All three types of proposal have appeals and drawbacks. Introduction of clauses in bond contracts on sharing, qualified majority voting, and bondholder representation could facilitate orderly

11 For the G-10 analysis of this issue, done in the aftermath of the Mexican crisis, see Group of Ten (1996), *The Resolution of Sovereign Liquidity Crises*, May (available on the BIS website).

renegotiation in case of necessity. However, it would only apply to new bonds and not to the large existing stock of bonds. The appeal of an international bankruptcy court is in the parallel with national bankruptcy procedures: such a court might be able to prevent a race to seize assets while a country is given breathing space to “restructure”. However, this analogy is not perfect: sovereigns cannot be sanctioned as corporate management can be for past inappropriate policies; thus, moral hazard on the debtors’ part could be high. In addition, variations in national bankruptcy procedures might make it very difficult to agree on a single international code. Finally, IMF-sanctioned debt standstills could contribute to crisis resolution: it might facilitate provision of conditional financing from the Fund and catalyse resources from other sources. However, care should be taken that the possible imposition of standstills does not affect the efficiency of capital markets and create incentives for excessive borrowing on the debtors’ side.

After initial consideration, establishment of an international bankruptcy mechanism has received little support. Conversely, while substantial questions remain to be worked out, further work on the other two proposals – new legal clauses in bond contracts, and IMF-sanctioned temporary debt standstills – would appear worthwhile.

Two Final Thoughts

In conclusion, let me return with two thoughts on crisis prevention and, specifically, on Fund surveillance.

The earlier discussion of crisis prevention highlighted the benefits that could be gained from dissemination of various standards and codes, such as the Basle Core Principles for Effective Banking Supervision, international accounting and disclosure standards, and an international fiscal code of conduct. As outlined above, much work remains to be done in these areas, and achieving international agreement may be far way off in some cases. However, looking ahead, one might expect the Fund to play an increasingly important role in encouraging members to adopt internationally-agreed standards and, in its areas of expertise, monitor compliance with those standards.

Events in some Asian countries have reminded us that for surveillance be effective governments must be willing to pay due attention to its warnings and recommendations. To strengthen the effectiveness of surveillance, cooperation between regional fora and the Fund might be enhanced. While the Fund has unique responsibilities in surveillance, regional fora have an inherent interest in effective surveillance over economic policies in their region, given the risks of contagion, and a unique perspective stemming from in-depth knowledge of local conditions. There would thus

appear to be natural opportunities for cooperation between the Fund and regional fora. In particular, regional fora may be in a position to apply appropriate peer pressure to help implement recommended policy changes.

Comment on “Reflections on the Asian Crisis: Causes, Culprits and Consequences,” by Jack Boorman

Stephany Griffith-Jones

This is a very good paper which has a lot of interesting and valuable information on the domestic causes of the crisis, the differences between the countries, and the role of derivatives. I want to complement and develop points, rather than necessarily argue with Jack's paper.

At first, a general point is that people who have in the past criticised institutions like the IMF, should consider that there are too many difficult issues out there that need to be resolved. I think that we all need to work together as the world has become so complex – among other things, because of the globalisation of capital markets – that the simple black and white solutions don't really work anymore. The paper's emphasis is on domestic financial imperfections, but what doesn't come out so strongly in the paper, although it did much more in the presentation, is the emphasis on imperfections in the international capital markets. What Greenspan has called these “visceral engulfing fears” that shake markets are a deeply worrying trend. The fact is that these imperfections in the financial sectors, both domestic and international, have undermined the extremely dynamic and strong economies in Asia. I think that the most worrying thing about the Asian crisis, and previously about the Mexican crisis, is that these imperfections in capital markets seem to be strongest for economies that either are, or are perceived to be, highly successful. Mexico was supposed to be the most successful reformer in Latin American, the Czech Republic was supposed to be the most successful reformer in Central Europe, and the same was said about the Asian tigers. It's a sort of curse of the successful economies, curse of the successful reformers, and we see this pattern again and again, as Charles Wyplosz shows in his paper.

The pattern you see is when economies are successful, the capital flows in, eased by capital account liberalisation. Then exchange rates get overvalued, or overvalued exchange rates get sustained, and the prices of key assets like land, buildings and shares increase sharply. As a result of increased real incomes and perceived wealth effects, individuals increase consumption and companies increase investment. Banks, of course, are also contributing to this process because they are intermediating these capital

flows. Inevitably the current account deteriorates. Initially this doesn't seem to matter because everybody is loving this country so much that they continue pouring money into it. However, at some point there is a change – it can either be big or small, economic or political, domestic or international – which triggers a very large change in perception, even though the change in the real economy, may actually be far smaller. Then there is this massive outflux. None of us knows how to fully deal with this extremely complex issue, but I think that we have to see what can be done to prevent this from happening. Also, to prevent the problem that I think is a little bit underplayed in Jack's paper, the problem of contagion. I mean, would Korea have had such a massive crisis if things hadn't developed in Thailand? Or, back in the 1980s, would Brasil have had such a big debt crisis if there hadn't been other countries in the region which had previously entered into debt problems as well?

I would like to stress the need for more study on the supply and lend factors. How do different investors and lenders behave? In Jack Boorman's paper there is an analysis of hedge funds, which apparently didn't play as big a role as some people think. However, we need to revise the roles that different institutions – whether it is banks, mutual funds, hedge funds, or non-financial companies – play. How do they behave? Then, from understanding that, we should also explore how their behaviour can be modified. We have to look at issues like more regulations in source countries, or perhaps tax incentives to stimulate more long-term behaviour in the source countries. Returning to the point that was made, for example, by Mr. Witteveen, I think that there is a need for better regulation in the source countries, especially of short-term flows by banks. If it isn't done at the level of the source countries, you may have either recipient countries that are overwhelmed by these flows, even if they try to stop them, or you may have countries that don't seem to be able to sufficiently stop them. I mean, I find it very surprising that the Koreans with their tradition of always being very cautious, always privileging long-term flows, suddenly were receiving these massive amounts of short-term flows. I am afraid that this may happen again and again. One part of the jigsaw must be that the source countries apply tighter regulations on these potentially volatile flows. Regulations of institutional investors, like mutual funds, should also be considered, because at the moment they are totally unregulated from the macroeconomic point of view. The mutual funds played an important role in the Mexican crisis so there is a need not just to focus on improving on what countries can do, but also improving the functioning of international capital markets. Together with Jane d'Arista of Boston University I have elaborated some measures that could be taken, which I will present at the end of my comment.

At the national level, again, I think we need to think of new and creative ways of responding to this new world of highly mobile capital flows. I'm sure that improving the data, improving transparency is very valuable. There are a whole range of new instruments, derivatives and so on, where the information available to central banks is very, very weak. I'm sure that all that can be done by the Fund, and by others, to improve this situation would be extremely valuable. However, there are limits of course, because as we discussed earlier, even when there is very good information, the problem is how it is analysed and how it fits into these changing fads. Then there is this additional problem of rapidly changing circumstances. For example, if you are trying to analyse financial sector soundness, you find that a financial sector looks very different with one particular level of exchange rate and particular interest rate, than it does three months later, in the middle of a crisis, with an exchange rate that is double the level and with an interest rate that is triple the level. So how does one improve information on that? Should we use simulation models? How should one weigh the likelihood of a crisis? I think that these are very serious problems which deserve more thought.

There is also a whole new area for domestic macroeconomic management in this globalising world where crises are not caused by fiscal deficits anymore. Now we have these crises that are caused mainly by private deficits and it is much more difficult to know how to prevent these. Perhaps the key in avoiding these crises is that one should be very prudent in good times, when there is more flexibility, because once things start to deteriorate, the options that the policymakers have are very few and very unpleasant. You can either increase interest rates, or you can let the collapse of your currency happen, or you can cut government spending drastically – none of these being very attractive options. So I think that the main actions must be taken before. In this context, some kind of domestic discouragement of short-term flows could play an important role. Not on its own, but in the context of good macroeconomic policy management. Maybe we have to start thinking of new policies of a more counter-cyclical kind. Maybe if there is a big boom in spending in the economy, spending by the private sector, either in consumption or investment, one should think about increasing tax rates during boom times, so that aggregate spending is slowed down, dampening this overenthusiasm of the private sector. Generating a surplus in the boom times creates space for avoiding future crises. Also, the way in which people borrow, both the government and the private sector, needs to be reevaluated. Borrowers tend to focus too much on the financial costs of borrowing, engaging in short-term borrowing because it is much cheaper. However, if you take into account the risk of any future financial crises, the cheap cost of borrowing may actually

turn out to be very expensive. Therefore new criteria need to be developed for how you assess the structure of your debt.

To prevent a crisis, you may also need very high levels of reserves. Roy Culpeper rightly said that the two countries that haven't had a crisis in Asia are China and Taiwan, countries that haven't liberalised their capital account. However, they are also countries that have extremely high levels of foreign exchange reserves. Now this, of course, is a great luxury, because not every country is in this position. For poor countries to tell them you must not spend on hospitals, you must not spend on schools, but you must have high levels of reserves is a very difficult trade-off, but maybe it is a necessary condition if you want to have a very open capital account.

In terms of financial regulation, you may need to introduce some cyclical elements. For example, countries that have capital inflows that are very volatile may need more stringent capital adequacy rules and other prudential ratios than developed countries do. The bi-ratios are not enough for developing countries, they need far higher ratios. I think they also need, from a domestic point of view, stricter supervision of short-term flows. I'm not sure what can be done about the issue that Jack raised in the context of Indonesia. That is, what can you do about excessive short-term borrowing by companies? How can you regulate that? I feel that this is one of the most difficult issues. It is not just the Indonesians that are wrong, it is difficult for any central bank to regulate those flows. Finally, one may also think about the explicit introduction of cyclical elements in the regulation of banks and other financial institutions. For example, regulators should be looking at what proportion of bank assets are guaranteed by assets whose prices are inflated during the boom and may collapse during the bust period. Maybe they should limit such potentially volatile priced assets, so as to take into account the risk of future possible crises. In other words, one needs to be a bit more pessimistic during the boom times and a bit more lax during the crises times, in order to have a more counter-cyclical attitude.

Stabilising of Portfolio Flow to Emerging Markets: a Proposal

Capital flows to emerging markets have grown at a breakneck speed in the last ten years. Portfolio flows have grown especially fast. Indeed, portfolio flows to the emerging markets of Latin America and Asia grew by more than fifteen-fold between the late eighties and mid-nineties. A major source for these rapidly growing portfolio flows to emerging markets are institutional investors from developed economies, such as pension funds, US mutual funds and UK unit trusts.

Capital flows to emerging markets have clear and important benefits.

These benefits are particularly clear for foreign direct investment, but portfolio flows also have important positive effects, such as lowering the cost of capital for creditworthy firms. At a macroeconomic level, foreign capital flows can complement domestic savings, leading to higher investment and growth. Portfolio flows from developed to emerging economies also have significant long-term benefits for savers in developed countries, who should get higher yields in emerging economies, with higher long-term growth rates than developed economies.

However, large surges of capital flows to emerging economies can also have problematic effects. Firstly, these surges pose complex policy dilemmas, for macroeconomic management, if they lead to overvalued exchange rates (and a growing current account deficit) and excessive money supply expansion (with risk of increased inflation). Secondly, and more important, these flows pose the risk of sharp reversals, as experienced by Mexico and other emerging economies in late 1994, and this year by the Asian economies. Particularly if such reversals lead to a currency crisis, this can lead to serious losses of output, investment and employment. The Mexican Gross Domestic Product fell by almost 7% in 1995 and in Asian countries the growth will slow down significantly. Furthermore, currency crises can be very damaging for foreign investors. Also, frequent crises could tempt some developing country governments down the wrong path of closing their capital accounts, which would be very negative for investors as well as for themselves.

As the volatility of some capital flows to emerging economies is both large and damaging, there is a need for measures to encourage greater stability, without discouraging, over time, the average level of capital flows.

One way of achieving this objective is improved information and disclosure. Since 1995, the International Monetary Fund has made important efforts to improve its information output on emerging economies which is now also available on the internet. However, unfortunately, as is clear from recent events, though better information and disclosure is helpful, it is not enough to curb volatility. It is difficult to establish *ex ante* fully problematic trends. The theory of asymmetries of information, between investors and recipients, provides useful insights into why this happens. Secondly, even if most of the relevant information is available, the criteria with which it is analysed is even more crucial. Indeed, a glass can be said either to be half full or half empty, even if the glass is transparent. Similarly, an emerging economy can be seen to be successful and creditworthy at one moment or as weak and uncreditworthy soon after, if the criteria of its evaluation change.

There may be different ways to encourage somewhat greater stability of portfolio flows to emerging markets. We would like to propose one, which

seems particularly appropriate, as it is consistent with mainstream regulatory thinking which emphasises risk-weighting as a central element.

The proposed measure would imply that institutions like the US mutual funds would be required by their regulators to have risk-weighted capital charge cash requirements for emerging market investments. These cash requirements would be placed as interest-bearing deposits in commercial banks. The risk-weighting would vary by country and through time. The guidelines for risk-weighting would take into account such variables as the ratio of the current account deficit and the external debt to the GDP, the maturity structure of that debt, the banking system's fragility and other relevant factors. This approach is similar to that used by the Bank of England and other central banks to determine risk-weighted provisioning against possible losses on bank loans to developing countries. The guidelines for the US mutual funds would be given by the US securities' regulator (the Securities Exchange Commission) and would be defined by them in consultation with the Federal Reserve and the Treasury, as well as the International Monetary Fund, using these institutions' long experience in analysing currency crises and their causes. Weight would also be given to the views of market analysts. It is important that quite sophisticated analysis is used, to avoid simplistic criteria stigmatising countries arbitrarily.

Given the dominance of institutional investors in the US and the UK markets, this proposal could be adopted first in those two countries, without creating significant competitive disadvantage. However, at a later stage, harmonisation of such a measure should be discussed and coordinated internationally. A clear parallel can be drawn again with bank capital adequacy rules first developed nationally and then coordinated by the Basle Committee.

As the required cash reserves would change with the perceived risk, it would become more profitable to invest in countries with good fundamentals. If these deteriorated in a particular country, investment in it would decline gradually, as its risk-weighting increased. This would hopefully force an early correction, which would encourage a resumption of flows. This smoothing of flows would discourage massive and sudden reversals of flows, thus make currency crises less likely.

The proposed risk-weighted cash requirements could somewhat lower earnings for those mutual funds that do not maintain adequate levels of cash reserves, if deposits have lower yields than other financial assets. However, the introduction of an industry-wide standard of cash requirement would increase investor confidence and attract a larger volume of funding. Our proposal, which would make currency crises less likely, is complementary to measures currently being discussed, such as a new facility by the IMF, which would make currency crises less damaging. Both

types of measures are necessary. However, medicine teaches us that prevention is better and cheaper than a cure.

Financial Crises: Towards an Alternative Approach

Ariel Buira

I Introduction

In a world of increasingly integrated financial markets and high capital mobility, the loss of market confidence in a country or currency gives rise to severe financial crises with significant international effects. This paper suggests that the current IMF approach for dealing with financial crises not only falls short of the purposes of the Fund, as set out in its Articles of Agreement, but is ill-suited for dealing with crises of confidence which may be due as much to market misperceptions and overreactions to the news of the day as to policy shortcomings.

Since crises often provide an opportunity for reform, some suggestions are put forward for improving the policy response to speculative attacks for the benefit of the countries concerned, as well as for the international economy.

II The Fund's Current Approach to Financial Crisis

The purposes of the IMF are set out in Article I of its Articles of Agreement. Six purposes are enumerated including international monetary cooperation, the expansion and balanced growth of international trade, the promotion of exchange stability and of a multilateral system of payments, the mitigation of maladjustments in the balance of payments and the provision of resources to facilitate the correction of such imbalances.

“The promotion and maintenance of high levels of employment and real income and ... the development of the productive resources of all members (are) the primary objectives of economic policy” (Article I, ii). Further reference to these primary objectives is made in Article I(v) which specifies that a purpose of the Fund is “to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity”.

Although the intention was that the availability of the Fund's resources should prevent countries from experiencing financial crisis, in practice the

institution has often found itself helping its members cope with crises after they occur (Boughton, 1997, p. 3). In recent years, four countries have requested the support of the Fund following a sudden reversal in market confidence: Mexico (in 1995), and Thailand, Indonesia and Korea in 1997.

These sudden reversals in market confidence have created a new kind of problem for emerging markets and for the Fund. Indeed, the Fund's Managing Director characterised the Mexican crisis as "the first financial crisis of the twenty-first century", recognising that it was different from earlier financial crises and implicitly suggesting that it called for a different response from the Fund.

How has the Fund responded to this new problem? The Fund has taken the view that "a financial crisis calls for a similar response ... as any other balance of payments problem, except that the response should be quicker and possibly much larger than in a more traditional case" (Boughton, 1997, p. 6). In its own words, the Fund has sought to provide "both directly and with the assistance of partners, a package of financing sufficient to promote a restoration of confidence in the framework of an adjustment programme. The latter programme would need to justify the confidence by insuring that the authorities were taking the steps necessary to correct the problems that had 'caused' the loss of confidence and adopting policies that would even otherwise permit a return to a sustainable growth path." (EBS/97/225 Supplemental Reserve Facility, pp. 2-4).

"In all four cases, the Fund provided resources in the credit tranches under the stand-by arrangements with very large and heavily front-loaded access. The size of the stand-by arrangement and the degree of front-loading reflected judgements regarding the amount necessary – given forceful strong adjustment measures and the financial resources made available by other participants in the packages – to restore confidence. In making such judgements, a view had to be taken of the amount of short-term exposure for which there was a significant risk of non-roll over." (EBS/97/225, p. 4). In practice, the above statements would seem to imply that: (i) the loss of confidence is due to poor policies on the part of the country and may be reversed by forceful adjustment measures; (ii) to restore market confidence, first let the crisis erupt and then adopt an economic programme backed with large financial support. To my mind these assumptions may be challenged. Let us consider them in turn.

1. Reasons for the Loss of Confidence

The assumption that any loss of confidence is due to poor policies on the part of the country is questionable. While Thailand had a large current account deficit and the bhat was probably overvalued, the current accounts

of other countries in the region that came under attack – Taiwan, South Korea and Hong Kong – were much stronger and Japan continues to run the largest current account surplus in the world. Yet, they all suffered speculative attacks. In fact, short-term capital movements often appear to be less dependent on economic fundamentals than on investors' search for profit, based on perceptions of vulnerability which may arise from a misreading of current national or international political events. More generally, there is wide recognition in the literature, including the papers of the Fund, that capital flows to emerging economies are often volatile for reasons that bear little relation to country risk. Among the more widely accepted economic reasons for this volatility are:

1. Exogenous and unanticipated changes in the financial conditions of the industrial countries can produce severe destabilising effects in capital importing countries, which are unrelated to their policies or creditworthiness. Industrial countries generally formulate their economic policies based on domestic considerations, with little regard to the international repercussions of their actions. On several occasions, this has led to unforeseen rises in the level of real interest rates and exchange rate fluctuations that have increased the cost and sharply diminished the availability of international financing to developing countries.
2. Capital inflows and commercial bank lending have been markedly procyclical, reflecting macroeconomic conditions in both capital-exporting and capital-importing countries. Capital flows from the former when returns are low due to low levels of domestic activity or to low rates of interest. Capital comes to the latter most readily when economic and business prospects are good, while capital flows tend to decline when the economy slows down or when problems or uncertainties of any kind appear in the horizon. Thus, capital markets themselves tend to undermine the creditworthiness of countries. As the BIS stated some time ago, "It may be useful to imagine what would happen in a national context if during the recession banks were suddenly to cut off the flow of new credits to the corporate sector and to begin closing off existing short-term credit lines. The inevitable result will be a financial collapse which will frighten even soundly managed firms, including banks ... Such a financial collapse would therefore not permit any easy inferences with respect to the quality of the pattern of bank lending and of corporate investment before the outbreak of the crisis, whereas the conclusion could safely be drawn that something had gone seriously wrong with the macroeconomic management of the economy."
3. Market behaviour is often characterised by information asymmetries and contagion effects. Country risk analysis, which is far from perfect, is often dominated by "herding" behaviour. Recent episodes of financial

market turbulence illustrate that a country might lose its creditworthiness overnight, leaving authorities little time to react. In a number of cases, the sudden loss of creditworthiness may be unjustified. Countries may face abrupt changes in the cost and availability of liquidity when unexpected events, such as major macroeconomic or financial shocks, trigger sudden shifts in market sentiment. As the market liquidity dries up, the country may face excessive adjustment costs. Moreover, as we have seen repeatedly in Latin America and more recently in Asia, there is a tendency to evaluate a country's creditworthiness as a function of its regional location or stage of development rather than on its own merits. When a country in a certain region experiences difficulties with payments markets often tend to suspend new credits to all countries in the same region or with similar characteristics.

The 'bandwagon' effect, which abruptly reduces liquidity across the board, can produce harmful effects on capital-importing countries, and have a destabilising impact on the international economy and monetary system. In many cases, the process of restoring creditworthiness is unduly delayed as investors hold back and wait for the recovery, thus making it more protracted and uncertain. Being cautious, bank regulatory agencies and credit rating agencies may wait to see the compliance with the economic programme over a period of, say, a year before revising their appraisal.

2. Restoration of Confidence and the Costs of the Current Approach

Too often, the current approach seems to imply that the best way to deal with a financial crisis arising from a loss of confidence is to let the crisis erupt and then try to restore confidence with an economic programme and with large financial support.

Typically, a crisis of confidence in a country's capacity to make payments leads to a run on the currency, thus provoking a sharp devaluation (i.e. Mexico 115% in 1994-1995, Thailand 87%, Korea 96%, Indonesia 228%). Such devaluations go well beyond any that might conceivably have been postulated as necessary to restore a sustainable balance on the external accounts.

The sequel to such devaluations is well known – as domestic prices of tradables adjust to reflect their international price, inflation rises sharply and domestic interest rates follow. Wages typically lag behind, leading to a fall in consumer demand and because of uncertainty, falling demand and higher interest rates, a decrease in investment takes place. As these factors lead to a decline of GDP and rising unemployment, the country falls into a recession.

At a time of recession, all theories would advise an expansionary fiscal

stance. However, the fiscal policy at the centre of the Fund-supported programme invariably requires fiscal retrenchment or equilibrium and is markedly pro-cyclical. By then, due to the lack of access to non-inflationary sources of finance, this has become the only response available to the authorities, since deciding to relax fiscal policy could lead to a collapse of confidence in the viability of public finances and deepen the crisis.

The conjunction of sharp currency depreciation, inflation, recession, falling real incomes, higher unemployment, rising interest rates and falling asset values, almost inevitably leads to a banking crisis. Mortgage holders, who typically account for 20–25% of banks portfolios, often find that they are unable to meet payments that have become a multiple of those originally envisaged. Moreover, the value of real estate given as collateral has fallen to well below the value of the loan it guarantees. Payment difficulties are also encountered by many firms as sales fall and debt service payments rise due to higher interest rates, or to the dramatic increase in the domestic value of their dollar denominated debt following the exchange rate depreciation. In turn, the banking crisis hinders economic recovery as credit becomes scarce and the need to support banks adds to the difficulties of public finances.

The heavy costs of a financial crisis triggered by a loss of market confidence may be illustrated by the Mexican experience. Asian countries that have recently suffered financial crises may be expected to face similar problems.

Following the sudden interruption of capital inflows in late 1994 and early 1995, economic activity in Mexico contracted by 6.9% in real terms in 1995. This was the sharpest decline in six decades, since the Great Depression, and was reflected by a marked rise in unemployment which, coupled with an upturn in inflation, cut the living standard of the population considerably.

Throughout 1995, GDP showed marked declines – compared with the respective quarters of the year before. The worst drop took place in the second quarter when GDP fell by 10.5%, with respect to the same quarter of 1994. Large decreases continued in the third and fourth quarters, even though with 9.6% and 6.6% they were not as large as that of the second quarter.

The diminished availability of foreign resources in 1995 brought about a marked decrease in aggregate demand that was passed on to production. The absorption of the economy – the sum of private and public consumption and investment – fell 15.9%. This contraction was only partially offset by larger exports of goods and services. Therefore, aggregate demand, at 1980 prices, declined by 10.2% in 1995.

Average industrial wages in 1995 fell by some 44% below their 1994 level and rose only modestly in real terms in 1996. Their decline and the

rise in unemployment brought about the most severe fall in private consumption ever recorded in Mexico, i.e. 12.9%, with expenditure in durable goods falling 45.7%, whereas the decline in non-durable goods was 8.3%.

Gross fixed capital formation decreased 30.9% in 1995. Its two components reported declines of 33.9% in private investment and 18.9% in public investment. Spending on domestic capital goods fell sharply, 29.4%, particularly on purchases of transportation equipment, 93.5%. Expenditure on imported capital goods fell 35.3%. In order to attain the fiscal balance envisaged in the programme, public sector spending declined 8.4% in real terms, thus contributing to a further decline in activity.

The crisis gave rise to a sharp increase in banks' non-performing assets. The authorities have estimated the cost of the bank rescue programmes at \$48 billion or about 13.5% of GDP, while private estimates run higher. Notwithstanding efforts at bank recapitalisation (because the level of non-performing loans has not declined as expected), the banking system remains fragile and fresh credit is scarce.

What started as a speculative attack against the currency, that might have been defeated, developed into a crisis of confidence, which gave way to an economic collapse with grave social, political and redistributive effects and to a major banking crisis, the costs of which will be paid for many years to come.

The Mexican recession was deep, but thanks to the structural reforms of the last decade and the government's determination in the pursuit of the economic programme, it was also short and the recovery strong, with GNP growing at 7% in 1997. Nevertheless, in reviewing what has been generally considered a successful adjustment, one cannot help asking: Was the high cost of this adjustment really inevitable? Could the country have been "provided with the opportunity to correct maladjustments in the balance of payments without resorting to measures destructive of national or international prosperity"?

Financial collapses make deflations and depressions possible because they destroy the confidence on which economic activity depends. The Fund's approach to financial crisis, which is based on austerity, i.e. tight credit, higher interest rates and fiscal retrenchment, does not help avoid recession and banking crises. Thus, it increases uncertainty and compounds the problem. Yet, as we shall see, the Fund could help avoid financial crises by helping sustain confidence in critical moments.

III The Need for a More Prudent Approach

A prudent approach would be for the country, possibly in consultation

with the Fund, to determine the level of capital inflows that it is able to absorb without pressures on domestic prices or the balance on current account. Capital flows beyond that level could be discouraged, for instance, through the requirement of non-interest bearing deposits of a given proportion of the amount to be invested, so as to reduce the return on such flows. Over a number of years countries like Chile and Colombia have successfully applied a non-interest bearing deposit requirement to limit portfolio capital inflows.

The liberalisation of capital flows is generally positive for the world economy as it provides greater opportunities to both borrowers and lenders. However, financial markets have shown a tendency towards great swings. Divergent macroeconomic conditions in capital-importing and capital-exporting countries give a cyclical character to private capital flows. Thus, there are periods of overshooting and of inadequate expansion or even contraction of liquidity for a country or a group of countries. To deal with this phenomenon, it has been suggested that countries receiving substantial capital flows should, as a precaution, sterilise a significant proportion of these by holding them in their international reserves. While this policy has been followed by many of the countries concerned, it is a very costly form of self-insurance that may give rise to heavy losses in the central bank – a quasi fiscal deficit – due to the interest rate differentials existing between domestic and reserve currency denominated paper. Like other forms of self-insurance, this one could be replaced by a less costly group insurance, if the Fund or some other organisation were to make it available to countries.

Financial market volatility and overreactions pose new and difficult challenges for which, in many cases, both national financial authorities and the international community are unprepared. Indeed, these problems are often difficult to resolve if not to comprehend fully. Thus, one may well ask whether in present conditions, the full liberalisation of capital movements now propounded by many, is appropriate in all cases. Will countries awash in domestic savings, such as some Asian countries, benefit? Would countries with a weak financial system benefit from full liberalisation? Can a distinction also be made between long-term and short-term capital flows? Should a distinction be made between opening of financial services to competition and full freedom of portfolio flows?

Jagdish Bhagwati of Columbia University, argues, “(Capital markets) are very volatile. Suddenly expectations can turn around. You may be very healthy but suddenly you catch pneumonia. And then you may have to do unspeakable things to your economy just to regain that confidence because you are now hooked to the system ... Markets may do something when you have done nothing wrong and you may have to do something wrong in

order to convince the markets that you are doing something right! I would put off (capital account) convertibility for quite a while.” Bhagwati observes that many countries have grown well without capital account convertibility, including Western Europe and Japan earlier and China today. “In my judgement it is a lot of ideological humbug to say that without free portfolio capital mobility, somehow the world cannot function and growth rates will collapse” (Interview in *The Times of India*, 31 December 1997).

The new challenges posed by the growth and integration of financial markets call for a parallel development of international financial institutions to allow them to provide sufficient financial support to member countries and to act as overseers, and when appropriate, as regulators of international capital flows.

IV Toward An Alternative Approach to Confidence Crises

In order to deal with the major issues raised above, an alternative approach to confidence crises could be developed with the following two components: (i) elimination of foreign investors’ protection from market risks; (ii) changing the IMF approach.

1. Eliminate the Protection of Foreign Investors

An issue that is implicit in the approach taken in recent Fund supported programmes is the notion that foreign investors should be protected from market risks. The rescue packages provided to Mexico, Korea, Thailand and Indonesia by the Fund and the authorities of certain industrial countries have been tailored to meet all payments to foreign creditors falling due in the short term, thus keeping them from suffering any losses. This raises the issue of moral hazard.

Investors must share the risks arising from the volatility of capital – which currently fall largely on the recipient country. The moral hazard arises from the rescue of investors by financial support packages. Under the current arrangements, they are protected from market forces by the IMF and certain industrial countries, thus allowing them to undertake operations without any risk.

Under market rules, investors take risks and may gain high returns, or suffer heavy losses. However, when foreign risks have materialised they have been saved from their mistakes by international rescue operations organised by the champions of the market. Thus, gains are private but losses are socialised and absorbed by the capital-importing country whose development may be set back several years as result of a crisis of confidence.

Investors must be made aware of the impact of their actions on the economy of the country and provided with incentives to act responsibly from a social point of view. This could mean that if a sudden massive reversal of capital flows, a run on the country, were to cause a financial crisis, the authorities of the country in consultation and under the supervision of the Fund, could force creditors to take certain losses through a bankruptcy type procedure or, impose certain limitations on transfers, i.e. reschedule capital withdrawals in a manner consistent with the country's ability to pay without disruption of its economic activity.

2. The Policy on the Use of Fund Resources

The current Fund approach was designed to deal with balance of payments crises that resulted largely from significant imbalances in the fiscal or monetary accounts, but is not well suited to deal with confidence crises in today's financial markets, that often are not the result of such imbalances. By placing emphasis on the contraction of demand and the rise in interest rates to strengthen the balance of payments, this approach discourages investment, compounds the difficulties faced by banks and public finances and, generally, adds to the recessionary impact of the reversal in capital flows on domestic economic activity. Typically, this policy stance deepens the domestic crisis as the problem is allowed to become much greater and more costly before it is resolved.

The essence of the problem is that financial markets may overreact to any ambiguous signal and aggravate the "bad" news. Given the volatility of capital flows, countries often face a confidence crisis in their currency that may bear little relation to their economic fundamentals. Indeed, when markets are nervous, the authorities may freeze their policy stance for fear that a policy shift might be interpreted as an admission of weakness and unleash or intensify a speculative attack that might snowball and get out of hand. However, if the authorities were seen to be in a position of strength, as could be the case if they are known to have ample support from the Fund or other sources, they would be able to show greater policy flexibility in response to changing circumstances.

Essentially, an alternative approach to dealing with financial crises would aim at preventing a speculative attack from developing into a full-fledged crisis by the timely provision of sufficient financial support to sustain confidence coupled, if appropriate, with a policy reform package.

The Fund could provide member countries with good economic fundamentals with a readily available stand-by credit to be drawn in the event of a significant speculative attack on the currency. The amount of such a credit should be sufficiently large to discourage speculators, say the equiva-

lent of no less than six months of imports and interest payments. The money would be available “in toto” at very short notice and drawings should not be subject to tranches or prior performance conditions.

In exchange for the support received, the country would commit to undertake any policy adjustments that might be appropriate over a predetermined period, starting shortly after the resources are made available and normally not exceeding six months after the drawing.

The order of magnitude of the financial support to be provided by the Fund under this scheme may be illustrated with reference to Mexico. Recall that Mexico’s quota in the Fund is SDR1.7 billion or about \$2.5 billion. Mexican imports of goods in 1994 were some \$79 billion and external interest payments amounted to \$15 billion. Thus, the provision of the equivalent of six months of imports and debt service payments would have amounted to some \$47 billion, a sum somewhat larger than the financial package put together by the US, the Fund and Canada.

Obviously, for the Fund to be able to sustain a much increased level of financial support to its members and remain credible, the size of the Fund or its borrowing capacity would have to be increased substantially. However, in practice, most of the Fund’s support would – like the nuclear deterrent – remain unutilised. Indeed, if Fund support is timely, sufficient and fully credible, the resources provided are unlikely to be drawn – or if drawn, unlikely to be used since speculators would know they cannot win.

In fact, the Fund would play a role similar to that played by central banks in the national context when they act as lenders of last resort. Experience shows that when the central bank is openly prepared to support a bank facing a liquidity problem, a run on the bank is preempted and the amount of support required from the central bank, if any, is much smaller than would otherwise have been the case.

Would a policy of readily available credit or “payment in advance” give rise to a problem of moral hazard? This seems very unlikely. Recall that major recipients of capital from the markets are successful countries that generally follow sound policies and that this support would be limited to countries that, in the view of the Fund, pursued generally good policies.

Moreover, consider that a country that did not comply with its policy commitments to the Fund would, in all likelihood, become prey to a costly financial crisis as it would probably suffer an outflow of capital and forfeit access to all forms of external credit. Thus, the political and economic costs of non-compliance are likely to be considerably greater than those of adopting any additional policy measures the Fund might recommend.

In fact, the opposite case is more likely. As the Fund, in the normal course of surveillance or in Article IV Consultations suggests policy adjustments, a country desiring unchallenged and immediate access to Fund

resources in the event of a speculative attack would be likely to adopt the policy measures suggested promptly, for this would be a small price to pay in order to ensure that it not fall prey to a crisis of confidence. Thus, the scheme proposed could lead to an improvement in the quality of policies pursued by an important and growing group of countries.

Since 1952 the Fund has maintained that it cannot insure that it is “making its resources temporarily available to members” unless it makes its lending conditional on the adoption of adequate macroeconomic policies. Implicit in this approach is the belief that a financial crisis is always and everywhere the result of poor economic policies. Therefore, unless those policies are corrected, the country will not be in a position to repay the Fund. In this approach, the Fund would appear not to have sufficiently adapted its policies in response to the new nature of the financial risks faced by many emerging market economies in a world of volatile capital.

Is conditionality required to ensure repayment to the Fund and thus to preserve the revolving character of Fund resources? Note that neither the World Bank nor the regional development banks have made demands on borrowing countries of the type characteristic of the IMF programmes. Yet no one imagines that repayment of their loans is less assured than that of loans made by the Fund. In practice, repayment is insured not by project appraisal, but by the fact that no country would willingly risk the drastic consequences for its access to all forms of credit that would result from a default to any one of these banks. The same consideration applies to repayments to the Fund whether or not the loans involved carry upper credit tranche conditionality.

As shown by the experience of France in 1992, international support can fend off a speculative attack and prevent a crisis in a country with sound fundamentals. Thus, the liberalisation of capital markets and the increased scale of international capital flows are recent phenomena that should be matched by an increase in the financial support available to countries. Since the flow of capital is crucially dependent upon the confidence of international investors, ample and timely financial support may prevent a crisis. Thus the Fund should be ready to act quickly before countries fall prey to a financial crisis, rather than coming in after the event to pick up the pieces.

As provided by Article I(v) of the Articles of Agreement, a purpose of the Fund is “to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity”. Surely, the avoidance of a financial and exchange market crisis is an objective covered by this provision.

V Conclusion

Timely international support, which could prevent a crisis and save a country from its high costs in terms of output, inflation and employment, should be available to countries with good fundamentals and sound economic policies (thereby increasing the incentives for their adoption). In certain other cases, support could go hand in hand with the adoption of an economic programme designed to strengthen fundamentals.

If speculators become aware that a country has the full support of the international community and therefore that their chance of success is nil, they will not bother to mount an attack on a currency. This outcome would be in keeping with the purposes of the Fund and the interests of the international community, which inevitably shares the costs and risks of a deep crisis in one or several of the emerging market economies.

As Keynes once said “this is not a Red Cross philanthropic relief scheme, by which rich countries come to the rescue of the poor, it is a piece of highly necessary business mechanism which is at least as useful to the creditor as to the debtor”. A development along the lines suggested would permit the world to benefit from the considerable contributions that the liberalisation of international capital flows may make to world economic development, while reducing the risks posed by unbridled speculative capital movements.

References

- Bhagwati, J. (1997), Interview in *The Times of India*, 31 December.
- Banco de México, *Informe Anual*, various issues, *The Mexican Economy 1995*.
- Bank of International Settlements (1983), *Annual Report*.
- Boughten, J.M. (1997), *From Suez to Tequila: The Fund as Crisis Manager*, IMF Working Paper 97/90.
- Buira, Ariel (1997), *Financial and Development Issues in Emerging Markets*, presentation to the Second Committee of the United Nations General Assembly, New York, November 4.
- Calvo, G. (1996), “The Management of Capital Flows: Domestic Policy and International Cooperation”, In: G.K. Helleiner (ed.), *The International Monetary and Financial System: Developing Country Perspectives*, St. Martin Press, New York.
- Eichengreen, B., R. Portes et al. (1995), *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors*, CEPR, London.
- Folkerts-Landau, D., D.J. Mathieson, et al. (1997), *International Capital Markets: Developments, Prospects and Key Policy Issues*, IMF, Washington.

- Goldstein, M., D.J. Mathieson and T. Lane (1991), *Determinants and Systemic Consequences of International Capital*, IMF Occasional Paper No. 77, Washington.
- Haussman, R. and M. Gavin (1997), "Fiscal Policy in Latin America: What Needs to be Explained?", IDB Paper presented at the 8th International Forum on Latin American Perspectives, IDB-OECD, Paris, 20-21 November.
- IMF (1993), *Articles of Agreement*, Washington, April.

Comment on “Financial Crisis: Towards an Alternative Approach,” by Ariel Buira

Pradumna B. Rana

Mr. Buira’s basic thesis is that the IMF is ill-suited to deal with a crisis of confidence. This is for two reasons: (i) the IMF equates financial crisis with a balance of payments crisis and uses similar prescriptions, and (ii) the IMF first lets the crisis emerge and then introduces adjustment programmes. Therefore, he proposes an alternative approach to deal with a crisis of confidence. This approach has two components. First, investors must be aware of the impact of their actions. This would mean that if a sudden massive reversal of capital flows were to cause a crisis, the authorities of the country in consultation and supervision of the Fund, could force creditors to take certain losses through a bankruptcy type procedure, or impose certain limitations on transfers. Second, an alternative approach to dealing with financial crisis would aim at preventing a speculative attack from developing into a full-fledged crisis by the timely provision of sufficient financial support to sustain confidence coupled, if appropriate, with a policy reform package.

Mr. Buira’s analysis makes eminent sense. I will focus my comments in two areas. First, the IMF has changed over the years. For example, much of the balance of payments difficulties in the 1970s could be attributed to structural factors rather than expansionary demand policies. The IMF, therefore, introduced the Structural Adjustment Facility (and Extended Structural Adjustment Facility). Further changes have been made in IMF policies, and IMF programmes now cover financial sector restructuring, strengthening of corporate governance, and other reform measures. Second, the timely provision of funds from the IMF to preempt a crisis, rather than react to the crisis, is a good idea. However, without policy reforms and “conditionality” such actions cannot be effective. The Philippines, after three decades of IMF programmes, recently graduated from the IMF programmes and has a precautionary facility in place.

Mr. Buira also emphasises the need for a prudent approach in dealing with capital flows. Large surges in private capital inflows can complicate macroeconomic management by leading to economic overheating. Also, volatility and reversals in private capital could be destabilising. In fact, this is an important lesson emerging from the East Asian financial crisis.

Let me now build further on Mr. Buirá's analysis by applying it to the East Asian financial crisis.

Root Causes of the East Asian Financial Crisis

All currency crises tend to be different. But, now a consensus is emerging on the root causes of the East Asian financial crisis. First, the root causes of the crisis in East Asia were structural – weaknesses in the financial and corporate sectors, compounded by policy mistakes in managing private capital inflows and global financial integration. Macroeconomic fundamentals were relatively less important contributory factors. In fact, the region had the strongest fundamentals among the developing regions. Second, the problems in East Asia were not due to fiscal profligacy, but to excessive borrowing by the private sector mainly in the form of short-term capital. Government policies that permitted the borrowing were also, of course, at fault. There was a sudden investor confidence and foreign capital flows reversed in 1997.

The first implication of the differences in the root causes of the crisis is that in the East Asian case, various macroeconomic austerity measures of the IMF had to be complemented by structural measures, including measures to deal with private sector debt and coordination between diversified creditors and debtors. In fact, macroeconomic austerity is only one component of the IMF-led rescue packages to the Republic of Korea, Thailand, and Indonesia. IMF-led rescue packages also seek to: (i) accelerate banking and capital market reform; (ii) promote efficiency in trade and industrial sectors including trade finance; (iii) promote good governance and corporate management; and (iv) mitigate the social costs of adjustment.

Second, structural problems are more difficult to resolve for the following reasons: (a) a set of fully articulated structural reforms is difficult to design in the middle of a financial crisis; (b) the required political and economic consensus might be difficult to achieve; (c) the structural reform agenda will take time to implement, and the results may take even more time; and (d) progress in implementing structural issues will be more difficult to observe and assess.

Asian Development Bank's Assistance to the Affected Countries

The Asian Development Bank (ADB) has argued, from the very beginning, that the East Asian crisis was a different type of crisis and required a different set of prescriptions. There is now an evolving consensus on this view. Accordingly, the ADB joined the IMF-led rescue packages for Thailand, Indonesia, and Korea and committed over \$9 billion emergency assistance

to support structural reforms and capacity building efforts, and to mitigate the costs of structural reforms.

Thailand. The ADB pledged \$1.85 billion focused on financial and social sectors. A \$300 million Financial Sector Programme Loan was approved on 19 December 1998. A \$500 million Social Sector Programme Loan and a \$1.0 billion Export Financing Facility was approved more recently. The latter was organised with 10 international commercial banks.

Indonesia. The ADB has pledged \$3.5 billion over the next three years of which \$1.5 to \$1.8 billion will be new money. A \$1.5 billion Financial Governance Reforms Sector Programme Loan is at an advanced stage of preparation. A Social Protection Sector Development Loan is also being prepared.

Korea. A \$4.015 billion Financial Sector Programme Loan was approved last December.

Finally, the East Asian crisis has highlighted that contagion tends to be the most serious among neighbouring countries. There may, therefore, be a need to complement individual country and global surveillance with regional efforts. Such an effort will involve peer surveillance and an unique perspective stemming from an in-depth knowledge of local conditions. Under the Manila Framework, and as requested by the ASEAN finance ministers, the Bank is considering the establishment of a regional monitoring mechanism.

Lessons from the East Asian Crisis

Since the Latin American debt crisis of the early 1980s, the incidence of financial crisis around the world has tended to increase. The costs of such crisis have also increased. These trends are expected to continue in the future as integration of financial markets increases. Globalisation also magnifies the benefits of good policies and the costs of bad policies. It, therefore, places a premium on economic reforms. The non-affected countries should not be complacent.

In terms of macroeconomic responses, a consensus appears to be emerging that responsible fiscal management, supported by monetary sterilisation and some nominal exchange rate flexibility, is an appropriate response to surges in private capital. The Bretton Woods system of pegged exchange rates was successful in maintaining low interest rates globally in an environment where capital mobility was low. That situation does not prevail any more, because most industrialised and developing countries have liberalised exchange controls and regulations on repatriation of profits and interest, and have removed discrimination against investors.

The banking system plays a dominant role in the allocation of capital in

developing countries, and the health of this system largely determines whether a developing country will be able to exploit the benefits of financial integration and avoid its pitfalls. In many Asian developing countries, since the early 1990s, the financial sector has been partially liberalised and deregulated. However, the banking sector is still very weak and fragile, because institutional development has lagged behind. The poor health of the banking sector needs to be addressed urgently so that vulnerability to globalisation is reduced. Actions are required for: (i) reforming the institutional structure in areas such as the regulatory and supervisory framework, transparency and disclosure of information, accounting systems, market infrastructure, and risk management; (ii) human resource development in various areas such as regulation, supervision and accounting; and (iii) overall governance of the sector to avoid, among others, insider trading and moral hazard types of lending to speculative and corporate sectors. These reforms will take time to implement; hence actions should be initiated now to prepare banks for globalisation. Competition should also be promoted in countries where this is a problem.

Actions should also be initiated to develop well-functioning capital markets to reduce the risks of potential instability in an integrated world. Actions are required in three areas: (i) market infrastructure (where the consequences include high transaction costs, frequent delays in settlement, and outright failed trades); (ii) protection of property rights (in particular those of minority shareholders); and (iii) disclosure of market and company information and control of abusive market practices.

Countries must be prudent in capital account liberalisation. Capital account liberalisation must be sequenced properly. The preconditions for successful liberalisation are: a sound macroeconomic framework consistent with the choice of exchange rate regimes, a strong and well-regulated domestic financial sector, and a strong autonomous central bank. Prudence in capital account means neither a return to pervasive capital controls nor a rush to immediate liberalisation. The role of temporary controls on short-term capital is still very much debatable. An ongoing ADB/World Bank study suggests that such controls could be effective in the short run, but not in the long run.

Floor Discussion of “The International Institutions’ Current Approaches and the Prospects of Their Future Activities”

Crises, Markets and Rational Expectations

The papers presented by Jack Boorman and Ariel Buira led Charles Wyplosz to reflect on financial markets and rational expectations. “In fact, financial markets are performing according to rational expectations. Rational expectations allow for mistakes – not systematic mistakes – but it does allow for mistakes. This is a genuinely important point to understand if we want to cope with this kind of crisis. Markets have a very low probability of a huge disaster so there is a low risk premium. This does not mean that the markets are irrational, it simply means that they don’t think the probability is a very high one. In this sense, they are rational and there is nothing wrong with what we observe, we just observe bad luck.”

Wyplosz continued by referring to the specific weaknesses of the countries which experienced the crisis. “Jack Boorman gave us a long litany of the weaknesses that have been observed in the Asian countries which have gone into crisis, leaving us with the impression that these were messed-up countries. Are these the only countries with these characteristics, and if not, how many countries have similar situations and are just very happy that no one is talking about them? It seems to me that in reality, most countries have these same weaknesses and it is just a fact of life, so it is not necessarily very useful to explain crises by these weaknesses; I think it is something deeper.”

Boorman responded to Wyplosz by saying, “I don’t want to give the impression that if you had only been looking at these five or six things that I mentioned, everyone would have gotten it right. In the *post mortem* phase, it is always easy to point to characteristics that turned out to be elements of weakness. Nor do I want to convey the impression that it is easy to select the other countries that are facing the same difficulties as these countries, because I don’t think that these countries were fundamentally flawed. We have to think first and foremost of prevention, but prevention does not only include policy, it also includes institutions. One of the ways in which these countries failed, which led to this crisis, was the failure to have institutions that could withstand stress. It is easy for an institution to

get through the good times. There is a temptation to relax supervision and regulation, and you allow things to go on in the market that shouldn't be going on. The lesson is that you have to play to a rather high standard. You have to insure that the institution is not just good for the next week or next month, but that the institution is going to be able to withstand a reasonable degree of pressure. How you calibrate this is a very difficult thing, but this needs to be the approach of regulators and supervisors."

Yung Chul Park said that in the case of Korea, the financial institutions were not supervised in the proper way. "The supervisory authorities did not even understand what was meant by prudential regulations. But this is understandable because prior to financial liberalisation around 1993, supervision in Korea was control and regulation oriented. During the period of deregulation, we simply lifted these regulations and a vacuum was created during the transition period. It takes a long time to put a prudential regulation system in place, and we are still struggling to establish an effective supervisory system. This is something that some of these emerging market economies may learn from the Korean experience."

Howard Brown remarked that in spite of all the controversy on the diagnosis and prescription, all of the participants would surely agree that "the commercial banks have behaved absolutely appallingly in Asia, and since there is no one here from a commercial bank, I feel pretty comfortable in making this assertion. I include the commercial banks in the emerging markets and also some of the banks from the more developed economies. Some will go further and suggest that this is *prima facie* evidence of a failure of regulation and supervision and that, therefore, we need an international supervisor or regulator which might just be the IMF taking on some extra activities in its spare time or perhaps a new institution. Stephany seems to be pointing in this direction when she plies for regulation of short-term flows in some countries. I imagine if that were to be effective, you would need to coordinate it internationally. Is there a need for an international supervisor or regulator and if so, where is it best housed?"

Rumman Faruqi also suggested the need for "greater attention for the development of a framework to deal with these investors and some of the speculation which seems to be destabilising the markets. This is an area where the BIS might be in a better position to develop those guidelines. I would be interested to know what others, especially Mr. Witteveen, think about what ought to be contained in this framework and how you could go about regulating short-term investors."

H. Johannes Witteveen responded by suggesting how international bank credit might be monitored. "I don't think we need a new supervisory institution since it is always difficult to create new institutions. We need coop-

eration and a specific framework. In the BIS, several banks have cooperated quite well in developing common rules for capital adequacy. They could cooperate in the same way in developing certain methods for influencing the amount of short-term international bank credit – either for certain individual countries or groups of countries or even for the market as a whole. If total international liquidity increases more than a certain percentage, it creates all kinds of dangers and more room for speculation.

In the context of the BIS, with some consultation with the IMF, periodic decisions could be taken as to whether international bank credit to certain countries or groups of countries has increased more than is desirable. There should be instruments of the main central bank to discourage this, for example, by non-interest bearing reserve requirements which is very effective. If the main central banks would do this, the smaller central banks would probably have to follow. Then you would have a certain restraint from the source countries. The borrowing countries could use a similar mechanism, then international bank credit would become more expensive and would be discouraged. It would not solve all the problems, but it would be an important and logical contribution. We should not forget that we only got this dangerous phenomenon of the business cycle under control in the advanced countries because we have effective monetary policy, but we have nothing of the kind in the international economy. In the international economy, these enormous capital movements can become so powerful that they easily overwhelm the small and emerging countries. This is something that the international community should study.”

Boorman said that Chile maintained effective regulations concerning borrowing by corporations. “They will only permit corporations who have a certain rating from the rating agency to borrow. Also, they will only allow minimum levels of overseas fundraising, which limits the corporations in the country who can actually access this kind of borrowing. This set of regulations applies to short-term borrowing. Whether we should take this further is difficult to answer, especially if we want to think in terms of an international organisation or regulatory/supervisory body. Country situations differ dramatically and they need to be dealt with on an individual country basis. Having said that, there is enormous scope for countries to learn from each other, and the Fund would be a good centre for information on this. There is enormous scope for other international organisations, particularly regulatory bodies, international organisations of commodity markets, IOSCO, BIS, to cooperate far more than they do and for the leading agencies in those areas to develop and propagate best practices. The Fund can help in the surveillance area as we are doing with the core principles from the BIS.”

The IMF

The discussion about creating an international institution to supervise and/or regulate capital flows led the participants to discuss the role of the IMF during the crisis in more detail. Many had suggestions as to how the IMF might respond to future crises. Kunio Saito began this part of the discussion by elaborating on the approach used by the Fund. “The Fund has often been criticised for using the same approach since the 1950s, but these days we are doing some different things as well, such as dealing with governance issues. However, then I am told that that is not what the IMF is supposed to be doing – at least that is not what they did in the 1950s. Nevertheless, that is one of the things that we began doing because it is what the international financial community wants us to do.”

He then turned to the specific issue of the IMF’s austerity programme. “It has been suggested that the austerity programme causes recession and bankruptcies and makes debt payments more difficult. Unfortunately, the crisis was not handled as it should have been, and it has been blown up to a scale that the region has not experienced before, with a loss of confidence on both the investment side and the consumption side. But the recession exists, with or without the IMF, and there will be a very tough economic situation for the rest of this year. Under these circumstances, Mr. Buira asks why continue the austerity programme? Why not accommodate the situation and let the Central Bank act as the lender of last resort? Why shouldn’t the IMF behave in the same way and accommodate the situation? I see two problems with this. One is the policy substance. If we do this, we just address the symptom, the other adjustments do not take place, and while the recession may not be as bad and bankruptcy may be less, the basic problem is still not addressed. Unfortunately, this time around Asian countries face basic problems. Second, accommodative stances are not appreciated by the market. One example is the Indonesian budget. After the programme was approved, there was some misunderstanding in Indonesia about the announced, rather expansionary budget. The result was further deterioration in terms of the market and the rupee started to depreciate again.”

Ariel Buira agreed that the crisis was not handled well. “When it is not well-handled, you have a recession, and then there is no way out. You have to apply an austerity programme and pro-cyclical fiscal policies and so forth. There is no other choice because deciding to relax fiscal policy would lead to a collapse of confidence in the viability of public finances and deepen the crisis, so on that point we agree. Should the IMF be a lender of last resort? You suggest that this would address the symptom and not the basic problem. Well, it depends on what you think the basic problem

is. If you think the basic problem is fiscal imbalance and monetary imbalance, of course it would make no sense for the Fund to be lender of last resort. But I was careful to say that the Fund should be a lender of last resort *only* to those countries which have good policies.”

Charles Wyplosz turned the discussion to the issue of IMF jurisdiction on capital account liberalisation and related it to the amount of IMF intervention. “Jack Boorman told us that there is a majority in favour of this, but I presume this is an IMF majority which is heavily weighted with a few members and which is not necessarily a majority of interested countries. I have no problem with the IMF going around the world encouraging countries to think about capital account liberalisation, provided that all of the necessary caveats are built in. What I would like to stress is that there are very different views about how to liberalise capital accounts and I have a strong fear of a single guru who decides what is good and what is bad. In other words, I am concerned that the IMF would become the first and last word on the issue, when in fact there is a tremendous amount of controversy and debate about it. I would like to have more than one authority in place so that there is a healthy debate.

Finally, what should the IMF intervention amount be? My reading of this amount is that the amounts were essentially targeted at the needs of the borrower country in the short run, and this is worrisome with regard to the moral hazard problem toward lenders. We are told that lenders lost money, but certainly they were cautioned, and these big amounts were provided to prevent them from losing money. How should we think about this question as to how much money should a country get? In the good old days, there were lots of capital account restrictions, and the IMF money was intended to deal with the current account. In fact, these things were officially measured in months-of-exports. Now, as it were by having current account capital liberalisation, we are having trouble tailoring the amount. If you tailor it to the capital account, you are not going to think in terms of months of capital accounts, probably not even in weeks. If you are going to go into debt, days or hours with fully liberalised capital accounts are important. It is difficult to know where to start and where to end, and I think this is the wrong way of thinking. In a symbolic manner, the IMF should put its money where its mouth is. The IMF should say, we have a programme, we have signed a contract on it, and we put a few hundred million here just to show that we are serious about it. If you believe that financial markets work more or less correctly, then let them do the rest. The IMF has given the stamp of approval and put some money on the line, but these huge amounts of money seem to be out of line.”

Disclosure

György Szapáry suggested that there was room for the IMF to play an important role by disclosing its views, using an approach similar to that adopted by the EMU. “The IMF could first warn the authorities about the deteriorating economic situation and suggest steps to take. If nothing has been done, say, for 3 or 4 months, the authorities would be warned again. If still nothing has been done, after another 3 or 4 months, the Fund would disclose its analysis and critical views. This is an approach that has been adopted in the stability pact by the EMU; since the European Central Bank has no authority over fiscal policy, it established a rule-based approach with a precise time-schedule for warning and disclosing. A rule-based approach to the disclosure of Fund views would be all the more helpful, since, as I observed earlier, one cannot rely on the views of the rating agencies alone. I am aware of all the arguments against disclosure of Fund views – danger of creating panic, moral hazard, etc. – but the threat of disclosure could prompt countries to act. I know that many countries do not like that idea, but it would be worthwhile to discuss and to consider it.”

Rumman Faruqi suggested that one of the policy lessons drawn in Jack Boorman’s paper is the need for more data requirements, increased transparency of domestic policy management and a greater role for the Fund of disclosing country policies and country risks to the market, etc. “In the case of data dissemination the Fund has set up a system for supplying more sophisticated data to the market. But I was talking to a senior member of a Western bank who told me that one item of data which should not be made public is the data on external reserves. This is because one of the risks of external reserves data is that it could be misinterpreted by the market and generate an overreaction. Also, if the reserve position is provided on a real-time basis, it could turn out to be much more destabilising in market behaviour. One of the points that we need to look at is exactly how should data dissemination be pulled together because the Fund, as well as other institutions, needs to learn how the market reacts as a result of data supplied from different sources.

As for the Fund disclosing information, there might be a great deal of resistance to this suggestion. Some of the Article IV consultations are extremely sensitive and many member governments might feel that their confidentiality was jeopardised if this information is made public. I do not know how the Fund intends to disclose this information and I would like to hear more from Jack Boorman on this issue. There is clearly a risk that if this issue is not handled carefully, it might create some problems.”

Mike Kennedy mentioned that the experiments with disclosure at the Bank of England and even the Federal Reserve have been positive and

tended to help stabilise markets. "It helps because somebody expects something to happen after the information has been disclosed. They expect certain actions to be taken. I would like for Mr. Boorman to elaborate on what happens when you disclose information through the issuance of Press Information Notices (PINs)."

Boorman said that since the PIN process was only started in May of 1997, the evidence is not yet conclusive. "In one sense, the PIN for the US was received with a yawn, for a number of reasons, probably because the US is doing quite well and, therefore, there is not much to criticise and also because there is an enormous number of respected institutions continuously commenting on the US. In New Zealand, I am told that the PIN caused a great deal of discomfort for the Finance Minister. And the PIN for South Africa, a country where there ought to be attention to this, went relatively unobserved."

Susan Phillips believed that substantial work needs to be done in order to determine what exactly should be disclosed. "Some of the solutions that were discussed by Jack Boorman and Stephany Griffith-Jones are market-based solutions, and if you believe in markets, then you want to see more market-based regulatory approaches. But even if you feel that markets have unfairly impinged on a country's sovereignty, you still have to deal with them. In any case, we always seem to come back to markets, and in order for markets to work, there must be transparency and disclosure. While we can identify this as a solution, there is an awful lot of work that needs to be done in order to figure out what should be disclosed. It is simply not that easy with some kinds of instruments. Take derivatives for example, we can all recognise that we need to know what kind of contingent claims there might be on a balance sheet or on a country, but to know exactly what ought to be disclosed is very difficult. One might argue that perhaps there should be a disclosure of the philosophy of risk management, but this is very descriptive and difficult to quantify. When you get down to quantification, some of these disclosures become very challenging. Even within the accounting profession, there is no agreement on what should be disclosed. When we say that we need more disclosure and transparency, we need to be aware that there is a lot of work to be done to identify what is meaningful. We do not serve anyone well if we do a major data dump without putting the risk exposure of a firm or country into context."

Jack Boorman agreed with Phillips on the complexity of the disclosure issue. "Right after Mexico, we got into a sort of debate with the IIF (Institute of International Finance). We started developing what became the SDDS, and the IIF began to set itself up as the institution through which disclosure would occur. But we took fundamentally different approaches. The IIF laid out 24 or so measures that they thought the

emerging markets ought to disclose and they started publishing them. While this is good to some extent, it also leads to the problem of data dump. The approach we took was a statistical developmental approach which required quality statistics with integrity resulting from robust statistical presentation systems. In the end, I think we have won that debate. You have to start with the core and it has to be good information. But this is highly complex. Thailand presents an interesting example. We as well as various other people were looking at the problem-loan ratios in Thailand. It turned out that they were highly misleading, because there was a provision in Thai law that if any payment against overdue interest was made, the loan was taken off the problem-loan list. That is not a sensible way to portray problem loans in the banking system. So there are a lot of numbers out there, but they are not always what they first appear to be.

I disagree with Mr. Faruqi's friend who suggests that markets will not work better with more information on the real reserve position of the country. The two things that markets hate most are uncertainty and surprises. In the cases of Mexico and Thailand, there was a good dose of both, which has proved enormously damaging to these countries. The early and continuous release of information is basically intended to prevent uncertainty and surprises. It is better to have the market realise that the Thai authorities have spent 2 billion dollars in the forward market and have the market react in a disciplining fashion, than to find out two months later that the Thais have used all of their reserves in the forward market in a failed attempt to sustain the currency.

As far as the views of the Fund are concerned on disclosure, this is a difficult area and I frankly don't know where we are going to come out. There has been resistance within segments of the Board to each step that has been taken. We have gotten as far as releasing these PINs, and there is still a lot of resistance to releasing the Article IV consultation reports, although I do think it will happen. But there is a difference between the kind of thing that is going on in the EMU stability pact and what we are talking about here. There is a very simple rules-based provision under the stability pact where information about the fiscal position and so forth can be disclosed. Here we are talking about something much more complex and much more judgmental. We are talking about the risks that a country may be running because of a whole panoply of policies. That is a different proposition. As far as our relations with the country are concerned, we already have a system where we warn the countries, and I think that the message is received quite clearly. Certainly the Thai authorities were under no illusion regarding our views about the risks that they were facing. To go public with this information is problematic. This is why I think the next step will be the release of the Article IV consultations, because that is

a routine analytic piece and people can read into it what needs to be read into it, but it's not a warning at a particular moment in time."

Park rounded off the issue of disclosure by reviewing the Korean reserve situation during the crisis. "In New York, I heard that the Korean authorities lied to Federal Reserve Chairman Greenspan and Treasury Secretary Rubin on the reserve figures. If this is true, it is inexcusable. I cannot believe that we would lie about figures to such influential individuals. About 5 or 6 people knew the amount of falling reserve holdings: the President, the Central Bank Governor, the Minister of Finance, the Deputy Prime Minister for Economic Affairs and a couple of people who were tabulating and reporting these figures. During this period, they did not want to let anyone know about the level of falling reserves until it was decided to go to the IMF. Before that, they wouldn't tell anybody. I don't know why it was such an important national secret, but it was the mentality at the time.

With regard to usable and unusable foreign reserves, there is no standard definition of foreign reserves. After we decided to go to the IMF and after we agreed on the financing package, the IMF and the Korean government agreed on the concept of usable and unusable reserves. Before that, we simply did not know the actual amount of reserves that the Central Bank was holding. Toward the end of October, I was told by the Central Bank authority that the Central Bank lending to commercial banks and other financial institutions amounted to about 50 billion dollars and that this amount of money was lent mostly on a short-term basis. Obviously the commercial banks knew that loans were from the Central Bank, so they used these loans to make long-term loans to the Korean corporations. There was this mismatch problem which resulted in a misunderstanding between the Central Bank and the commercial banks."

Part III

Specific Issues Confronting Regulators and Supervisors at the International Level

Four Themes of Sound International Supervision

Susan M. Phillips

It is a pleasure to be here to address this international conference of fellow banking supervisors and other distinguished international participants. Conferences like this one are important forums for discussing current issues in international banking supervision among the supervisors, bankers, and other financial industry participants of many nations. Such communication has become critical as the financial operations of the banks we supervise become more global, complex, fast paced, and interwoven. I would like to thank De Nederlandsche Bank and the Forum on Debt and Development for organising this conference, which I hope will help us build essential bridges among banking supervisors and open new channels of communication internationally at all levels.

Although it is difficult to predict financial crises with precision, financial services firms and their supervisors can navigate the difficulties posed by such crises by utilising sound risk management practices and certain supervisory principles. I would like to focus my remarks today on four fundamental themes underlying the 1997 Basle Supervisors Committee's Core Principles of Effective Banking Supervision. As I discuss each theme, I will naturally draw on our experience in the United States, while making a few observations about the applicability to the current Asian banking situation.

- The first theme is the need to focus supervisory efforts on the specific risk profile of individual institutions.
- My second theme is the need for sound accounting and disclosure systems to provide sufficient transparency to allow the financial markets and supervisory agencies to evaluate institutions' financial conditions.
- My third theme is the need for adequate capital and the challenges we face in keeping capital standards current.
- Finally, we must recognise the need for international banking supervisors to work closely and cooperatively together to achieve effective coordinated supervision of global banks and other financial firms.

I Risk-Focused Supervisory Approach

One of the goals of banking supervisors is to help identify and address

weak banking practices early so that small or emerging problems can be addressed before they become large and costly. To do that in today's global fast-paced markets, and in an environment in which technology and financial innovation can lead to rapid change, the Federal Reserve is pursuing a risk-focused supervisory approach. Such an approach plays a critical role in helping us to achieve our supervision and central banking responsibilities of:

- working to ensure the safe and sound operation of the banking organisations that we supervise,
- promoting an efficient and effective financial system that finances economic growth, and
- ensuring that financial institutions do not become a source of systemic risk, threat to the payment system, or burden to taxpayers by making them absorb losses arising from inappropriate extension of the federal safety net.

The Federal Reserve has undertaken its new risk-focused examination approach to respond to the dramatic changes that are occurring in the banking and financial services business, including tremendous advancement in technology and securitisation, the breakdown of traditional product lines, the expansion of banks' global operations in the world's financial markets, and the development of new risk management systems. Furthermore, developments in technology and financial products, combined with the increased depth and liquidity of domestic and global financial markets, have enabled banks to change their risk profiles faster than ever before. A key goal of the Federal Reserve's risk-focused approach is to enable banks to compete effectively in this dynamic financial services sector, while focusing examiners on banks' ability and willingness to deal effectively with their own risk exposures rather than on standardised examination checklists. Economists will recognise risk-focused supervision as a form of "incentive compatible" regulation.

US banking supervisors in the past focused primarily on validating bank balance sheets, particularly the value of loan portfolios, as of a specific point in time. Losses on banks' loan portfolios historically have been the principal source of their financial problems. Concentrating on the quality of banks' loans and the adequacy of their reserves was, and continues to be, essential to sound banking supervision. As part of the examination process, examiners reviewed the soundness of management practices, internal controls, and internal audit activities, but that review was not the examination's primary focus. The Federal Reserve's adoption of a risk-focused approach, however, reflects its view that examiners should target their work on individual banks' specific risk profiles, including the traditional examination of loan quality and reserves.

This need for fundamental change in the traditional approaches of bankers and supervisors became evident in reviewing the lessons learned from the turmoil, stress, and change in the US banking system over the past decade. Ten years ago, many of the United States' largest banks announced huge loan-loss provisions on doubtful loans to developing countries, while many banks were also struggling under the weight of loans to the energy, agriculture and commercial real estate sectors. By the end of the 1980s, more than 200 banks were failing annually. There were more than 1,000 banks on the problem list of the Federal Deposit Insurance Corporation, which is the US banking agency that insures bank deposits and serves as receiver for failed banks. This period includes the costly crisis of the US savings and loan industry – which is composed of institutions chartered to make home mortgage loans available to the American public.

In response to these systemic developments, bankers and supervisors each changed their fundamental ways of operating and managing risks. For their part, bankers recognised the need to rebuild their capital and reserves, strengthen their internal controls, diversify their risks, and improve internal risk management systems. The Federal Reserve, in turn, responded to these changes by adopting its risk-focused examination system tailored to assessing the quality of individual banks' internal processes and risk management systems. The need for this approach is illustrated by the failure of several high-profile international banking organisations that did not have adequate internal control and risk management systems.

Adopting a risk-focused approach improves the examination process by targeting examinations more directly on specific institutions' problems. The approach is appropriate for large complex institutions and for smaller banks. However, it also makes such examinations more challenging for examiners because they must be knowledgeable about each bank's business activities, risk profiles, and risk management systems. Furthermore, we are trying to make these examinations more efficient for examiners and bankers by employing valid statistical sampling methods, as well as by computerising part of the examinations and utilising regulatory and bank data for pre-examination scoping. This initiatives will all free examiner time to devote to banks' specific risk exposures and minimise examiner on-site examination time. Revision of the Board's examination manuals and training curriculum has been necessary to accommodate the new supervision approach and methods.

In addition, banking supervisors need to assess the integrity and independence of a bank's decisionmaking processes, giving special attention to any conflicts of interest or insider influence that could distort this process. The Basle Committee's Core Principles for Effective Banking Supervision

address this point by recognising the need for effective measures to control directed lending and transactions with affiliates that are not on an arm's-length basis. Specifically, the Core Principles state that, to prevent abuses arising from connected lending, banking supervisors should require that any loans banks make to related companies and individuals be on an arm's-length basis; that such extensions of credit be effectively monitored; and that other appropriate steps are taken to control or mitigate the risks. For example, the Federal Reserve's Regulation O, whose application was expanded to directors in the early 1990s, is aimed at making sure that any loans a bank makes to officers or directors are on the same terms that are available to the general public.

Finally, the Federal Reserve places great reliance on on-site examinations to make the presence of supervisors tangible to bankers and to facilitate the review of records and documents that are essential to assessing a bank's financial condition. Such on-site examinations also permit examiners to observe whether bank policies are being followed in practice, or, alternatively, whether they only exist on paper. Although I recognise that many other countries do not conduct on-site examinations for legal and other reasons, the Federal Reserve concurs with the position taken by the Basle Committee's Core Principles that it is important for supervisors to perform some on-site supervision.

II Need for Sound Accounting and Financial Transparency

The Federal Reserve believes that sound accounting and transparent financial information is a fundamental pillar of a strong banking – and, indeed, financial – system. Transparency is essential for the market to be able to make decisions on an informed basis. The arm's-length negotiations of informed investors and issuing banks provide the strongest market basis for the issuance and pricing of equity and debt securities, as well as loans. Banking supervisors should strongly advocate transparency to aid effective supervision and market discipline. Indeed, they can encourage the process directly through appropriate regulatory reporting requirements and even making all or part of those reports public.

It is important for governments to allow market forces to reward prudent behaviour and penalise excessive risk-taking. Sound, well-managed firms can benefit if better disclosure enables them to obtain funds at risk premiums that accurately reflect lower risk profiles. Inadequate financial disclosure, on the other hand, can penalise well-managed firms, or even countries, if market participants do not trust their ability to assess firms' or countries' fundamental financial strength.

Regulatory structures that overly protect banks from market forces, or that allow lax accounting and disclosure to disguise firms' financial problems, remove market discipline on banks and permit them to operate less efficiently. Deposit insurance systems and the public safety net are examples of regulatory interference with market forces, despite their public benefit. They create a moral hazard by allowing institutions to take on what might be excessive risk without proportional fear that their ability to raise funds at favourable rates will be impaired. This is illustrated by the costly US savings and loan crisis of the 1980s. Lax accounting and capital standards allowed economically insolvent institutions to continue operating and attracting insured deposits at attractive rates because the deposits were government insured. This, in turn, delayed government and public recognition of the scope of the problem and tremendously increased the cost of its resolution to the deposit insurance system and the American taxpayer.

To be credible to global investors, accounting standards should be established by independent professional organisations and enforced by a combination of market discipline and national oversight authorities. Particular to banking and the credibility of banks' financial statements is the establishment of prudent levels of reserves. Investors must be confident that banks are establishing sufficient levels of reserves and recognising loan impairment in a timely fashion. Compliance with sound accounting, disclosure, and reserving standards not only protects safety and soundness, but also gives the world's investment community confidence in its analysis of risk exposure from investing in various countries and companies. The absence of such confidence, on the other hand, may lead investors to overreact to adverse financial events in such countries by ceasing investment, immediately withdrawing current investment funds and demanding a high return for any remaining or renegotiated investment in such countries. Today's technology and global financial markets enable investors to take these actions very quickly with dramatic consequences, as has recently happened in some Asian countries.

Another issue related to the efficient operation of market forces is that government intervention in the credit and investment decisions of banks distorts market discipline and pricing. Such programmes frequently cause banks to make less than arm's-length investments in, and loans to, non-economic government-affiliated projects or to individuals associated with such projects. Once these loans are made, it is difficult for national supervisors to demand that banks apply prudent reserve and charge-off policies, let alone foreclose on such loans. In addressing governmental interference with market forces at their meeting in London in February, representatives of the G-7 countries unanimously supported the International Monetary Fund's requirement that countries receiving IMF funds make structural

reforms to reduce inappropriate government interference in the market economy. The message that governments should heed is that, ultimately, market forces will come to bear with severe results if firms or nations are artificially protected from market forces.

III Sound Capital as a Risk-Absorbing Buffer

My third major theme – the importance of adequate capital – has drawn much attention in the past decade as a result of the Basle Accord. The idea is pretty simple: if we want banks to be prudent in their risk-taking, there is no substitute for requiring banks' owners to have their own money at risk. With that requirement, supervisory interests and banks' private interests are more closely aligned and banks have fewer incentives to take excessive risks. When banks' managers and directors assess the riskiness and profitability of prospective business opportunities, they will weigh heavily the potential effect of new business activities on their banks' capital positions.

Capital must be sufficient, but "How much capital is enough?" The answer is linked, of course, to the level of risk that an institution takes. Institutions that aggressively pursue risky business strategies clearly need a stronger capital base than those with more conservative objectives and products.

While a fairly simple approach, the Basle risk-based capital framework has proven to be a balanced risk-focused framework for setting minimum capital standards for thousands of banks of all sizes worldwide. It is important, though, that banks not misuse this minimum prudential standard by substituting it for more rigorous internal evaluations of capital adequacy suitable for their own risk exposure and the sophistication of their financial strategies. For example, US supervisors support the development by a limited number of sophisticated banks of advanced credit risk models for assessing such institutions' internal capital needs to keep their probability of default within their established parameters. Such systems represent significant advances in developing systems to tailor banks' assessments of their capital needs for their credit risk exposure. On the other hand, the cost and complexity of such systems raises issues about their current feasibility as part of the uniform capital measure for all institutions. In any case, banks must rely on their own internal capital assessment systems targeted to their risk profiles and financial sophistication, as well as complying with the necessarily broadbrush, uniform capital standard established under the Basle Accord. We must look constantly for better ways to design regulatory capital standards and to promote adequate risk measurement in

banks. On this note, the US Federal Financial Institutions Examination Council held a conference for bankers and supervisors last December to consider a myriad of views on ways that capital regulation should be modified to address changes in banking and risk management. The New York Clearing House Association just completed a pilot study of the pre-commitment approach to capital requirements for market risk. The Federal Reserve Bank of New York also recently organised a conference, in conjunction with the Bank of England, Bank of Japan, and the Federal Reserve Board, for the exchange of economic papers on developments in risk assessment and management, as well as on how such advances should be incorporated into the international capital framework. Although considerable progress has been made in amending the Basle standards in such areas as market risk, there will no doubt be additional changes as new tools are developed to address credit risk differentials, interest rate risk and, perhaps even, operational and legal risk. Indeed, capital standards should be thought of as an evolving process.

IV Coordinated International Supervision

We all recognise the need to achieve coordinated international banking supervision based on cooperation and strong working relationships between home country and host country supervisors. New challenges in attaining this goal are presented by the advent of new technologies, the geographic expansion of banking activities, and the globalisation of financial markets. We should work together, relying on the leadership of home country supervisors, to analyse banks on a consolidated global basis as the financial market does. Home country supervisors need sufficient global information and international cooperation to perform their supervisory responsibilities, while enabling host country supervisors to oversee the activities of international banks in their countries.

A key issue arising for all of us, both internationally and domestically, is the growing prevalence in world markets of financial conglomerates – which blend banking, insurance, securities, and other financial activities in a single diversified global entity. Universal banking in some nations' financial firms has long combined banking and securities activities, and to some extent insurance powers, in a single entity. Such financial conglomerates, which are growing in number and size, engage simultaneously in a myriad of businesses and seek to integrate those businesses to cross-market their varied products. This presents a significant supervisory challenge because most of our legal frameworks use separate and different approaches for each traditional segment of the financial industry. In many cases multiple

agencies are involved. I expect many would observe that the United States is an extreme example of multiple regulators and multiple agencies. In some sense, our system is showing signs of the strain, but, the checks and balances afforded by this multiplicity has permitted significant innovation and expansion in the US financial services sector.

The challenge of achieving coordinated international supervision of such conglomerates is addressed in the consultative documents, "Supervision of Financial Conglomerates," developed by the Joint Forum of Financial Conglomerates. These working papers were announced on February 16th, 1998 by the Basle Committee on Banking Supervision, the International Organization of Securities Commissions (IOSCO), and the International Association of Insurance Supervisors (IAIS). The Joint Forum, which was formed to help coordinate the international and inter-industry supervision of financial conglomerates, requested comment by July on these papers. The documents make concrete recommendations for steps that supervisors in each of the securities, insurance, and banking sectors can take to enhance supervision of the group-wide risk exposures of these global and inter-industry conglomerates. The documents also stress the need to enhance cooperation and information exchange among the supervisors in each country and industry segment.

Implementing these recommendations may necessitate changing the legal framework of our financial oversight frameworks, but major changes in our financial institutions and markets demand changes in the supervisory frameworks of our countries. The United States is no exception.

V Conclusion

In closing, I want to reiterate that banking supervisors must work together to achieve effective consolidated supervision of global banks under a shared set of supervisory principles, such as the Basle Committee's Core Principles. Furthermore, I believe that the best way to implement effective global supervision is to focus on the four themes that I have highlighted – the benefits of risk-focused supervision, the value of sound accounting and disclosure, the need for adequate capital, and the importance of international supervisory coordination. I look forward to our continuing joint supervisory efforts toward coordinated international bank supervision.

Comment on “Four Themes of Sound International Supervision,”

by Susan M. Phillips

Paul Cantor

Risk Based Auditing

Principal responsibility for the success or failure of the firm rests with its directors and management. Comprehensive corporate governance is one element needed to achieve long-term stability and success. This includes development of the company’s policies and procedures, particularly relating to risk management, an effective division of duties, internal and external audit, succession planning and other factors within the control of the firm. However, the supervisory audit by the regulator also should be a key element of overall corporate governance.

The supervisory audit must add value to contribute to effective corporate governance. While traditional tick and check audits may successfully identify frauds or defalcations, they are unlikely to get at core financial sector risk issues. The move toward risk-based auditing, in which the principal risks of the firm are identified and reviewed, promises to enhance the value of the supervisory audit. When this occurs, the supervisor adds depth to the corporate governance process, and as a result, to the credibility of their function.

Change precipitated by market liberalisation creates an environment of potentially increased instability. The importance of the supervisory role increases in recently-opened markets. Firms will seek to expand their operations to capitalise on the new opportunities. In these circumstances, the firm’s own corporate governance practices may fall behind the increased market involvement. The result is increased risk, which can lead to liquidity or solvency issues for the firm. Widespread risk management shortfalls in the financial sector can lead to more generalised macroeconomic exposure. This in turn threatens not just the sector and its shareholders but the environment for economic development overall.

Capital Adequacy

The BIS capital adequacy guidelines are an important step in establishing standards by which financial institutions can be compared. Value will be

added by upgrading these standards to distinguish between sub-categories of credit risk, and extending the guideline further to market risk and operations risk.

The leading edge of risk evaluation is likely to be centred in the risk management divisions of sophisticated financial institutions and their advisers. This leads them to development of risk analysis tools responsive to their needs. The US Federal Reserve has indicated that it is prepared to work with such institutions in the application of these models to the management of their risk. Depending on the portfolio mix, it is probable that this internal analysis will sometimes lead to capital requirements that are lower than those called for by the formula approach. Supervisors will need to exercise caution in accepting this proposition, as adverse changes can lead to erosion of the firm's ability to operate with lower capital requirements.

Moreover, the inevitable issue of precedent will lead to pressure from other firms for supervisors to apply such standards to them. Close liaison among supervisors from different jurisdictions will be needed to avoid regulatory arbitrage in these cases. It also erodes the ability to make comparisons among institutions based on common standards.

These comments are intended to be cautionary not limiting. Efficient allocation of capital contributes to a healthy market

Transparency

The importance of transparency cannot be overemphasised. Exposing transactions to the bright glare of sunlight greatly reduces the risk of undesirable behaviour. Transparency is an issue within the firm as well as between it and outsiders. A financial institution should have separate risk taking and risk review functions. Bank supervisors will wish to assure that the internal risk review function has sufficient access to information on the risk taker's deals to make a good assessment of risk. This is the first line of the defense.

Ensuring that an understanding of the risk is embedded throughout the firm is a key ingredient for ensuring that commercial institutions bear their share of the loss when events go off the rails. Failing this, a lack of transparency becomes a shield for the lender as well as a veil for the borrower. Neither accrues to the benefit of efficient or effective markets.

Coordinated Supervision

Regulators have long recognised the value of working together to deal with issues of fraud and corruption.

There are new reasons to work together. Global trends in capital flows and technology are causing financial institutions to consolidate their operations. This applies to more than just the mega-mergers seen in recent months such as SBC and UBS. Institutions are merging across business lines like Salomon Brothers and Travellers Insurance. In addition, increased focus on risk means that most institutions are consolidating their risk management functions. The plain fact is that this coordinated approach can work to the disadvantage of regulators and supervisors unless they too work together.

Steps need to be taken to ensure a coordinated approach to financial sector supervision. The United Kingdom has drawn together its supervisory functions for banking, insurance and securities to achieve this. International institutions contribute to this trend. These include the Basle Committee of the BIS and regional and international meetings of financial sector supervisors. Recent initiatives include the Toronto Centre for Financial Sector Supervision sponsored by the World Bank and the Government of Canada in cooperation with the Schulich School of Business at York University. The Toronto Centre gives bank supervisors from emerging market countries direct contact with other bank supervisors in a programme directed to transferring know-how based on their own experience with bank failures and rescues.

Promoting International Financial Stability: The Role of the BIS

William R. White

I Why Financial Stability is Important

It is not surprising that central bankers worry about financial stability, even those central bankers who do not have statutory responsibilities for banking supervision. Weak financial systems can have long-lasting and insidious macroeconomic implications (the problem of “financial fragility”) that are naturally of concern to central bankers. Moreover, sudden failures in financial institutions, financial markets or payment systems (the problem of “systemic crisis”) threaten contagion effects warranting the close attention of central bankers given their traditional role as lender of last resort. The seemingly ceaseless string of financial crises through the 1980s and 1990s, in both industrial (e.g. Scandinavia and Japan) and emerging market economies (e.g. Mexico and South Asia), indicates that these are practical and not theoretical concerns.

One problem arising from financial fragility is that central banks will be tempted to forbearance in the conduct of monetary policy, with associated risks to price stability and an increased likelihood of asset price bubbles. Even if the monetary authorities do not choose to behave in this fashion, market perceptions that they may be forced to do so may actually encourage speculative attacks on currencies and eventually a process of self-fulfilling expectations.¹ Conversely, attempting to pursue stabilising macroeconomic policies when the financial system is already fragile can lead to institutional failures, giving rise to both heavy costs for national Treasuries and important negative feedback effects on the real economy.² These processes were seen in Sweden, Finland, Mexico and still more recently in a number of Asian countries. A stronger financial system would alleviate both macroeconomic problems. In the same spirit, it should be noted that unstable macroeconomic policies can also contribute to financial instability through asset price bubbles and other channels. In short, monetary stabil-

1 Following the seminal article by Obstfeld (1986), the possibility of multiple equilibria has been noted increasingly in the academic literature.

2 For a summary of the explicit fiscal costs of some recent crises, see Caprio and Klingebiel (1996).

ity and financial stability are two sides of the same coin and central bankers should be concerned about both. This is perhaps the principal lesson to be learned from the financial crises we have witnessed around the world in the past two decades.

Sudden failures in financial markets or payment systems can also have far-reaching effects. Major changes in the prices of financial assets, perhaps but not necessarily related to movements in underlying fundamentals, could threaten the solvency of individual institutions. A recent example of such phenomena was the impact of the sudden decline in the value of the Mexican peso and some Asian currencies on the creditworthiness of private borrowers and in turn their bankers. Such unexpected developments could also lead to exaggerated concerns about counterparty risk with associated reductions in liquidity in other financial markets. The recent drying up of trade credit in Indonesia and some other Asian countries is an example of what might happen. Finally, technical failures in payment systems, which currently process many trillions of dollars daily in the G-10 countries alone, would threaten a massive payments gridlock whose effects could easily extend beyond the financial sphere into the real economy. The disruptive effects of such a development would obviously increase (and perhaps non-linearly) the longer the problem persisted.

It is also the case in the modern world that financial instability is unlikely to remain contained within national borders. All financial disruptions are likely to have an international dimension because the three pillars of any financial system – financial institutions, financial markets, and payment and settlement systems – are increasingly international. In the early 1980s, virtually every OECD country curtailed or even refused the right of establishment to foreign financial institutions. By 1995 this discrimination had virtually disappeared in industrial countries and is being reviewed in many emerging markets.³ Cross-border transactions in bonds and equities in 1980 amounted to 10% of the GDP of the Group of Seven (excluding the United Kingdom); by 1995 this had risen to 140%. Derivative instruments were essentially unknown in 1980; daily turnover (notional amounts) had risen to almost \$1.5 trillion by 1st April 1995 and one-half of these trades involved a non-domestic counterparty.⁴ Finally, the fact that new information is now available instantaneously and almost costless around the globe further increases the likelihood that shocks in individual countries

3 For a fuller treatment of international agreements designed to facilitate international financial transactions and contribute to the health of the international financial system, see White (1997).

4 See Bank for International Settlements (1996a).

will be propagated elsewhere, even when such contagion might not be warranted by underlying economic fundamentals.

II A Strategy for Promoting Financial Stability

Any strategy for promoting global financial stability must begin by recognising two facts. First, the pace of change in modern financial markets is extraordinary, ongoing and irreversible. Second, financial transactions are becoming increasingly complicated and opaque and are involving an ever widening and changing cast of characters. The implication is that the “system” which policymakers aim to stabilise is both difficult to define at any moment in time and rapidly changing.

An important underlying force driving both developments is continuing improvements in computing and telecommunications which have implied a sharp reduction in the costs of carrying out even extremely complicated financial transactions. Deregulation, which implies a significant expansion in the importance of market forces, has also contributed materially to the process of change to date. Yet, in part at least, deregulation is a by-product of technological change which has made it far easier to avoid existing regulations. For example, when Microsoft can be traded at a transactions cost of 2 cents a share on the Internet, Japanese domestic regulations that enforce a cost of \$5 are simply unsustainable.

Better and cheaper communications has also contributed materially to the breakdown of sectoral and national distinctions in international financial markets, as well as to the growing participation of a whole host of new players. The importance of this last development should not be underestimated since such new participants as pension funds, mutual funds and hedge funds are not likely to behave like traditional banks, a possibility which implies new uncertainties about how the international financial system might react during periods of stress. The fact that emerging markets are also far more important on the global stage than they were ten years ago, and that emerging financial markets have many idiosyncratic properties (often including a lack of transparency and good corporate governance), further complicates the task of formulating policies to ensure financial stability.⁵ This combination of complexity and rapid change, allied with the increased integration of the international financial system, points however to four strategic implications.

First, measures to strengthen the system must be *comprehensive*. There

5 See Goldstein and Turner (1996) and White (1996).

are no simple answers. This implies that wide-ranging measures must be directed to promoting the good health of each of the major components of the international financial system: financial institutions, financial markets and payment and settlement systems. In each instance, the overriding objective must be the stability of the system as a whole; that is, policymakers must seek to ensure that disturbances in one component of the system are not easily transmitted throughout the system because they can interact with some other weakness elsewhere.

The second strategic implication is that policymakers and regulators must rely increasingly on *market-led processes* to provide the discipline required to lead to prudent and stabilising behaviour. It seems to be a fact that regulators everywhere are having trouble keeping up with modern investment practices. Nor do they wish to respond with still stricter regulation of the traditional sort. This would be very costly in terms of efficiency, would only invite more evasion, and would likely lead to moral hazard problems and still greater dangers in the future. Rather, regulators are increasingly choosing to rely on the judgements of market participants, who are likely to be more up to date with evolving practices. In turn, the market will allocate rewards and punishments as necessary, both to owners of firms and to their directors and managements. This will help improve internal governance and encourage appropriate behaviour.

For market discipline to work effectively, regulators should put growing emphasis on disclosure and increased transparency. Better information aids “good judgement” as well as minimising the risk of “bad judgement”; say the likelihood that creditors might mistakenly shun good counterparties. However, since firms are often hesitant to increase voluntary disclosure, an important role for the public sector is to convince a small number of important and well managed firms to start the process going. Other firms will then have little choice but to follow for fear of being accused of having something to hide. This strategy was recommended in a recent BIS document⁶ (the Fisher Report) on the disclosure of derivatives transactions, and also underlies the strategy of the IMF in asking for better macroeconomic data from emerging countries (SDDS) in the wake of the Mexican crisis.

This approach might also be used to support efforts, recently undertaken, by the G-10 Deputies⁷ and the Basle Supervisors,⁸ to reduce the risk of financial instability in emerging markets. Here the basic idea would be to build on the recently agreed set of international “Core Principles” govern-

6 See Euro-currency Standing Committee (1994b).

7 See Group of Ten (1997).

8 See Basle Committee on Banking Supervision (1997a).

ing the behaviour of (say) banks and their supervisors. Subsequently, a set of quantitative indicators of the health of the financial system might be drawn up⁹ and applied in the first instance to countries whose financial systems were known to be in good condition. With time, the market (including rating agencies) might come to insist on similar information from other countries which in turn would encourage pressures for desirable financial sector reforms. Recognising that the Core Principles were conceived of as minimum standards, the “hurdle rates” sufficient for banking systems to be judged healthy might be significantly higher in emerging than in industrial economies. Financial systems of many emerging markets are subject to relatively large macroeconomic shocks, to potential transitional problems in the context of financial deregulation and may be prone to greater swings of sentiment than in more developed markets.¹⁰ All such considerations should be taken into account when setting minimum requirements.

The third strategic implication is that market discipline must be a *complement to*, rather than a substitute for, *the traditional activities of regulators and policymakers*. Publicly available information may arrive too late or be of too poor quality to support adequate market discipline. Moreover, safety-net provisions may also alter the incentives of market agents to respond appropriately to the receipt of new information.¹¹ Finally, it would be simply naive to assume that the markets will always exercise discipline appropriately. Throughout history, there have been instances recorded of excessive price volatility in financial markets, “bubbles” and other misalignment of financial asset prices.¹² Moreover, banks and other financial institutions, buoyed by waves of “excessive optimism” or even “irrational exuberance”,¹³ have frequently lent large sums of money to borrowers who ultimately proved unable to pay. Recent events in a number of Asian countries would seem to provide further evidence of this particular kind of market failure, albeit along with a number of other important shortcomings.

It is particularly worth noting at the present moment that imprudent behaviour and excessive risk-taking by financial institutions often follow

9 This follows along lines originally suggested by Goldstein (1997).

10 See Goldstein and Turner (1996).

11 In the recent Asian experience, a number of central banks failed to provide timely data about their own exposure in forward markets and/or their commitments to support the foreign exchange requirements of private sector entities. Safety-net considerations may have affected the willingness of local depositors to keep their assets with local banks and the willingness of foreign banks to lend to local banks.

12 For an overview of such considerations, see Bank for International Settlements (1996b) and (1998a).

13 This former phrase was introduced by McKinnon and Huw (1996), the latter more famously by Alan Greenspan.

periods of declining profits due either to deregulation, and the associated loss of monopoly rents, or bad investment decisions in the past. Examples of such phenomena can be found in the domestic behaviour of US banks in the 1980s¹⁴ and the expansion of Asian loans by certain Japanese and European banks more recently.¹⁵ Given the strong current trend to financial deregulation in emerging markets, and the likely effects of similar phenomena in industrial countries (“Big Bang” in Japan, the effective demise of Glass-Steagall in the United States and the effects on European banks of the introduction of the euro¹⁶), regulatory oversight will continue to have an important role to play for the foreseeable future. Indeed, it is plausible to argue that the combination of these changing circumstances, allied with the spread of Internet and other technologies¹⁷ (as well as important demographic changes¹⁸), could be ushering in an unprecedented period of transformation in modern financial markets. If so, policymakers will need all the instruments available to them if this process of change is not to prove disruptive.

The role of policy overseers will, however, have to change to reflect this required complementarity between market discipline and regulatory oversight. Just as monetary policy in a deregulated financial system must be conducted “with the grain of the market”, regulatory oversight must be increasingly directed to improving market processes. In response, regulators have already begun to strengthen the focus they put on the adequacy of internal control procedures. This applies both to financial firms and to firms providing infrastructure services in the international financial

14 The losses associated with the debt crisis of the early 1980s were followed (if not necessarily caused) by vigorous expansion into LBOs, property loans and proprietary trading.

15 At a CEPR conference in London on 4th-5th February 1998, David Folkerts-Landau of Deutsche Morgan Grenfell stated that many European banks had responded to declining rates of return in European banking in the early 1990s by “targeting middle-market Asia”. French banks have been repeatedly warned by the Bank of France to cease making international loans at margins that are too low to cover all-in costs. Crédit Lyonnais is known to be the French bank most significantly exposed to Asia.

16 See McCauley and White (1997).

17 Technology allows both the unbundling and the rebundling (pooling) of risks. This contributes to the development of securities markets as opposed to the use of intermediated credit. Moreover, new technological developments have supported the advancement of non-bank financial intermediaries at the expense of banks, and the advancement of specialist “non-banks” to the detriment of both. Finally, by making information cheaper to obtain publicly, technology directly attacks the insider information which is at the heart of relationship banking.

18 The broad implications of projected demographic trends in the OECD area has been the focus of recent OECD studies. See Roseveare et al. (1996). The Deputies of the Group of Ten currently have a Working Group looking into the macroeconomic and international financial implications.

system.¹⁹ There must too be a greater willingness to use market developed (firm specific) models for evaluating risk exposures of various sorts (market risk, credit risk and liquidity risk); this process too is also well begun. Regulators will also wish increasingly to set or suggest standards for external disclosure. This will foster the use of market discipline in general and will facilitate the participation and contribution of rating agencies in particular. Finally, it is worth noting that as markets evolve, as they will certainly continue to do, the complementary nature of the relationship between the regulator and the markets will have to continue to evolve as well.

The fourth strategic implication is that regulation or guidance from policymakers must be the by-product of *international agreements among policy-makers* from different countries. Given the reality of international competition, efforts must be made to establish a “level playing field” for regulatory purposes. Participation in such agreements must also be widespread enough to avoid the danger of regulatory competition (regulatory arbitrage) for non-participating countries. Finally, given the required complementarity between regulatory and market discipline, the dialogue leading up to international agreements must somehow involve both public sector and private sector participants. The BIS plays an important role in facilitating such an international dialogue.

III The Role of the BIS in Promoting Financial Stability

The Process of Achieving Agreement

Before turning to what the BIS does, it is perhaps useful to be clear about what it does not do. In particular, it does not normally use its own financial resources to promote or finance particular courses of action by its members. In these respects, its mandate is completely different from that of other international financial institutions such as the IMF, the World Bank and the regional development banks. Rather, since being founded in 1930, its unchanged mandate has been to promote international cooperation on monetary and financial issues, principally but not exclusively among central banks. Leaving aside the banking services provided by the BIS to central banks and international institutions (which have resulted in a balance

¹⁹ In the realm of the governance of banks see Basle Committee on Banking Supervision (1998b). With respect to governance issues in the area of financial infrastructure, see Committee on Payment and Settlement Systems (1997c).

sheet of about \$130 billion), the BIS could be described as being essentially a talking shop. However, this talk had led to many important decisions being taken with significant international implications. While the small BIS staff organises and facilitates meetings, and its research papers (both published and unpublished) help raise the analytic quality of the debate, the greater value added is provided by the national representatives who attend meetings at the BIS and contribute to international cooperation in other ways.

International cooperation at the BIS is based firmly on the principle of national (state) control.²⁰ This recognises the reality that sovereignty in the modern world still resides at the level of the nation-state and that national legislatures (particularly from larger countries) are often not willing to cede their power to international bodies. Moreover, this approach also helps alleviate concerns about the existence of a “democratic deficit”; that is, the fear that important decisions might be made by technocrats rather than public servants directly accountable to nationally elected politicians. The depth of such concerns is evident to anyone following the current debate about the introduction of the euro, the desirability of the European Central Bank being politically accountable, and the future political structure of Europe. Yet such concerns are by no means confined to Europeans alone.

Members of the various committees which meet at the BIS negotiate positions among themselves. Each clearly pursues national objectives and, in general, each has been in close contact with private sector agents in his own country to ascertain their views. The objective of the exercise is to find a negotiated agreement which is mutually acceptable, across countries and to both public and private sector agents, and which can then be ratified by Ministers and Governors and subsequently implemented using national legislation or regulation. The fact that the size of committees is relatively small facilitates the decisionmaking process, as does the tradition of making decisions by consensus. The recognition that a failure to reach an international agreement would open the door to both unfair competition and regulatory arbitrage also drives the process forward.

The fact that national legislators have been willing to accede to such a process, and that private sector participants likely to be affected have also generally signed on, testifies to the moral authority exercised by these international agreements and the perceived legitimacy of the process itself. Moreover, although the committees which meet at the BIS have generally

20 Fuller description and analysis of alternative processes for achieving international agreements can be found in Kapstein (1992) and (1994).s

drawn their members from the G-10 group of countries, many of the agreements reached (most notably, capital adequacy standards for internationally active banks) have simply been accepted by non-G-10 countries as effective global standards. In this regard, the influence of private rating agencies has often played a useful supporting role as have the efforts made by the various committees to disseminate publicly their findings and agreements.²¹ Other international financial institutions, such as the IMF and World Bank, have also played a major role in communicating to a wide range of non-G-10 countries what might be thought of as “best practice” in the industrial world. It is also notable that this model, which leaves decisionmaking firmly in the hands of experts from nation states and relies on international organisations to spread the word, is the model recently recommended by the G-10 Deputies (in association with many representatives of emerging markets) in their recent report on financial stability in emerging market economies.²²

These positive comments about the “Basle process” should not blind us either to shortcomings evident in the past or to some important challenges for the future. The most important problem in the past has been that, in spite of problems often being identified at an early stage, it sometimes took a crisis of some sort to galvanise into action the process of finding a solution. By way of example, the Basle Committee on Banking Supervision was set up only after the failure of the Bankhaus Herstatt in 1974, even though it had been recognised well in advance that banks with large international operations posed special problems. It is also instructive that the problem of “Herstatt risk” (i.e. the credit risk arising from lack of simultaneity in the settlement of the two legs of foreign exchange transactions) was highlighted at the same time (1974) but the first significant attempt to address the problem was not made until over twenty years later.²³ Having registered this shortcoming, it is also true that the various committees meeting at the BIS have become significantly more proactive in recent years. This will become evident below.

As for future challenges to the current process, the first complication is the need to involve participants from emerging markets. Hong Kong and Singapore are already the fourth and fifth largest foreign exchange markets in the world and other financial markets are expanding rapidly elsewhere. The growing industrial might of countries like Korea, China, Brazil and others must also be recognised, even if recent events in Asia suggest that

21 A full list of all recent publications by the BIS and the various committees which meet there can be found at <http://www.bis.org>.

22 See Group of Ten (1997).

23 See Committee on Payment and Settlement Systems (1996b).

there can be setbacks along the way. If the credibility of the decisionmaking process rests on the involvement of national experts from jurisdictions most affected by the decisions taken, then input from emerging markets will be increasingly important. The issue is how to reconcile such an expansion with the maintenance of the intimate club-like atmosphere (also involving shared values and shared conceptual frameworks) that facilitate agreement and decisionmaking on the basis of consensus.

A second important complication is the breaking-down of the barriers between different markets and different kinds of financial institution. Not only are national regulatory frameworks generally based on such distinctions but so also are international committees. At the very least, there needs to be a channel for communication among such bodies as the Basle Committee on Banking Supervision, IOSCO and the International Association of Insurance Supervisors (IAIS). The recent decision in the United Kingdom to consolidate all forms of financial supervision in the hands of a super-regulator may presage a more radical solution to this problem, but one which raises still other complications. In particular, the decision to site this regulator outside the Bank of England, but to give the Bank responsibility for overall systemic stability, raises the question of overlapping mandates for those two bodies. Again, there may be international implications if non-central banks come to play an increasingly important role in the BIS process. Similarly, the establishment of the euro and the European Central Bank raises the question of future representation on the various BIS committees. The answer to this will presumably depend on the nature of the relationship which evolves between national supervisors and the supranational European System of Central Banks.²⁴

A final challenge has to do with managing the balance of influence between public sector and private sector representatives in the process. While in the past, public sector participants generally made proposals and the private sector responded, increasingly the opposite is true.²⁵ This trend is, however, to be welcomed in that it is consistent with the concept that it is the private sector that should be held primarily responsible for avoiding possible failures in private financial markets. The role of the public sector will increasingly be to ensure that such private initiatives are commensurate with the total costs (including externalities) of such failures. As noted above, however, it may well take many years for this new balance to be struck.

²⁴ For a discussion of such issues see McCauley and White (1997) and Centre for European Policy Studies (1998).

²⁵ Consider the recent reports by the Group of Thirty (1997) and the Institute of International Finance (1997).

Specific Measures to Promote Financial Stability

The objective of this part of the paper is to record more specifically how various committees meeting at the BIS contribute to implementing the strategy for financial stability described above. Before doing so, it seems worth reiterating that the likelihood of financial stability, both at the national and the international level, will be significantly enhanced if governments follow stabilising macroeconomic policies. This objective is also firmly endorsed by the BIS which indeed regularly organises a wide range of meetings directed to improving the conduct of monetary policy in participating countries. While these meetings have traditionally focused on events in the G-10 countries (regular meetings in Basle of the G-10 Governors, the Gold and Foreign Exchange Committee, economists, model builders and many others), an increasing number of meetings now focus on macroeconomic developments in emerging markets as well.²⁶ However, since macroeconomic stability is a necessary but certainly not a sufficient condition for ensuring financial stability, the implication is that more specific measures to foster financial stability are still warranted and are indeed urgently required.

In this regard, it was suggested above that the international financial system is based on three pillars; financial institutions, financial markets, and payment and settlement systems. The analytical model underlying this suggestion is that of a flow-of-funds matrix underpinned by the infrastructure (payment systems and other “plumbing”) required for it to function.²⁷ Perhaps more by luck than design, there is a BIS committee dealing with each of these individual pillars; the Basle Committee on Banking Supervision (institutions), the Euro-currency Standing Committee (markets) and the Committee on Payment and Settlement Systems (infrastructure).²⁸ Pursuing the analytical framework one step further, it is evident that disturbances at the level of institutions, markets or infrastructure will have implications for market clearing conditions (interest rates, exchange

26 The proceedings of some of these meetings and the papers prepared for them are now available in a new series of BIS Policy Papers. See for example, Bank for International Settlements (1998b).

27 See White (1994).

28 For the sake of completeness, it should also be noted that various other Committees of national experts also meet regularly at the BIS and contribute in rather more technical ways to issues having implications for international financial stability. The Committee of Legal Experts has at various times considered the possible undesirable implications of having different legal codes (in particular, bankruptcy procedures) governing financial transactions in different countries, and the Committee has recently considered as well legal questions surrounding the introduction of electronic money. Committees of security and →

rates, etc.) in the flow-of-funds matrix which could well have macroeconomic implications. While all three of the BIS committees recognise these interactions, and increasingly share information in consequence, it is the Euro-currency Standing Committee that has traditionally been most interested in the overall dynamics of these systemic processes.

a. The Basle Committee on Banking Supervision

The Basle Committee on Banking Supervision, whose traditional preoccupation has been the stability of banking institutions, is the best known of the committees which meet at the BIS. Set up in 1974, the Committee first directed its attentions to ensuring that all internationally active banks were adequately supervised on a consolidated basis. The first agreement of this sort was the Basle Concordat²⁹ which established the principle that no foreign banking establishment should escape supervision, and that such supervision should be adequate. The Concordat has been revised a number of times in light of changing circumstances and perceived shortcomings, but a key principle has been maintained throughout; the home or parent supervisor is responsible for the global operations of banks headquartered in their territory and should supervise them on a consolidated basis.

The Minimum Standards paper of 1992³⁰ was a further effort to put such principles into practice. Four standards were laid out to ensure that home supervisors do practise effective supervision (if not, the host country can refuse a banking license) and to ensure that the home supervisor has adequate access to information about cross-border activities of its banks (if not, the home supervisor can refuse to allow the business to continue). Nevertheless, members of the Basle Committee and other supervisors continue to feel that the flow of information among themselves remains subject to legal impediments. Accordingly, at the International Conference of Banking Supervisors in Stockholm in 1996,³¹ delegates from over 150 countries endorsed a further report prepared by a joint working group of the Basle Committee and the Offshore group of Banking Supervisors. In

computer experts meet regularly at the BIS and commonly exchange views on technical issues having systemic implications. One such issue currently receiving attention is how the official community should itself respond to the "Millennium bomb" problem. This work complements the recent document (September 1997) issued by the Basle Supervisors directed to encouraging the private sector to address this problem in a serious way (see Basle Committee on Banking Supervision, 1997b). A global conference, jointly organised by the Basle Supervisors, IOSCO and the Committee on Payment and Settlement Systems will take place at the BIS in April 1998.

29 See Basle Committee on Banking Supervision (1975).

30 See Basle Committee on Banking Supervision (1992).

31 See Basle Committee on Banking Supervision (1996).

this report 29 recommendations were presented. These included suggested procedures for the conduct of cross-border inspections by home authorities monitoring their own banks, and approaches for dealing with corporate structures which create potential supervisory gaps. Ongoing problems include those posed by countries which still do not allow onsite inspection by home country supervisors (Singapore and France, for example) and fears that information sent to other supervisory agencies will find its way into the public domain under the laws of the recipient country (a particular concern in the United States). In both cases, changes to domestic legislation are required which may prove difficult to achieve.

A second preoccupation of the Committee has been to ensure that internationally active banks maintain a level of capital commensurate with the risks they run. The Committee's first achievement in this area was the promulgation of the Basle Capital Accord³² which was published in 1988 and laid out minimum capital adequacy requirements based on relative levels of exposure to various forms of credit risk, both on and off balance sheet. While a number of issues remain to be resolved by the Committee, such as the treatment of short-term capital flows into emerging markets via domestic banks, this hard-won agreement did succeed in both levelling the international playing field and increasing levels of bank capital after a long period of deterioration in most G-10 countries. By September 1993, all G-10 banks with significant international operations were meeting or exceeding these minimum requirements.

This success clearly owed something to the legitimacy of the Basle process, but also reflected the fact that the Accord suggested a clear quantitative standard on which market participants could focus and impose discipline. More recently, the complications posed by having different accounting conventions in different G-10 countries have received more attention and this problem is also beginning to look more capable of resolution. Ongoing discussions between the Accounting sub-group of the Basle Supervisors and the International Accounting Standards Committee are directed to resolving some of these problems. Success in this area would also provide international benchmarks to help guide and improve accounting standards in many emerging markets. Without such improvements in the basic numbers, it is difficult to draw much comfort from banks in emerging markets claiming to have met the minimum capital adequacy requirements.

The Basle Committee has recently made a further significant extension to its work in the area of capital adequacy. Whereas credit risk initially fig-

32 See Basle Committee on Banking Supervision (1988).

ured centrally in the calculation of minimum capital requirements, increased attention is being paid to market risk. Moreover, in its calculation of exposure to market risk, the Committee is now prepared to use the results generated by firms' own internal models, subject to certain restrictions.³³ This has been a significant step, among many others, in the direction of regulators working more closely with the grain of the market. Yet new challenges in the area of capital adequacy are also emerging. Credit derivatives are rather new instruments but are spreading rapidly, and they may have the potential to change dramatically the nature of financial intermediation. Consequently, the required form of regulatory oversight might eventually also have to be reviewed.

A landmark extension of the work of the Basle Committee was mentioned briefly above. In October of 1997, at the time of the IMF meetings in Hong Kong, the Committee released a new set of Core Principles for Effective Banking Supervision, based on large part on their deliberations and decisions taken over previous decades. These principles reflect the strategic considerations described above and constitute a significant development in at least four respects. First, they are comprehensive and cover all aspects of banking. Second, they provide a checklist of good practice for use by supervisors, international financial institutions, rating agencies and other market participants. Third, they were drawn up with the active participation of official representatives from emerging markets. And finally, they apply to all banks and not just those that are internationally active. This is a major development, the significance of which may not yet have been adequately appreciated.

The obvious remaining challenge is to ensure that these Core Principles are actually implemented. The Committee intends to begin by asking supervisors around the world to endorse the Core Principles and this will be followed by a questionnaire to determine whether actual supervisory practices are consistent with them. In cases of inconsistency, the intention would be to agree on a clear and definite timetable for change with a report on progress made being prepared for the next International Conference of Banking Supervisors in October 1998. This implementation strategy will complement the broader efforts being made to implement the results of the recent G-10 Deputies' study on financial stability in emerging market economies.³⁴ Broadly put, such implementation will demand an

33 See Basle Committee on Banking Supervision (1995).

34 The Secretariat of the G-10 Deputies has recently sent out a questionnaire to a wide range of national and international bodies to ascertain what each has done to support the strategy laid out in the original G-10 report. A report on progress to date and potential further steps will presumably be put forward to the Ministers and Governors of the G-10.

important degree of political will in all countries concerned. Mustering such will, particularly in the face of monopoly rents and the entrenched interests they support, will not be an easy task. Ways must also be found to evoke market discipline in ensuring that required changes are carried out.

Reflecting the breakdown of sectoral barriers and the growth of international financial conglomerates, the Basle Committee has had increasing contacts with its international counterparts representing both the securities (IOSCO) and the insurance (IAIS) industries. Indeed, all three groups now meet regularly in the Joint Forum on Financial Conglomerates and joint documents are beginning to emerge.³⁵ To facilitate such work, the IAIS Secretariat moved physically to Basle at the beginning of 1998. However, it is a fact that progress in establishing a consolidated supervisory framework has been slow, sometimes because of the difficulties of ensuring cooperation among different regulatory agencies at the national level. Such concerns may have provided some of the motivation for the recent proposal by the Group of Thirty (1997) that the relatively few, large international conglomerates should establish, promulgate and oversee their own industry standards, subject to review by a single international auditor with the active cooperation of supervisory bodies. What remains to be determined is whether this would provide an adequate degree of complementarity between market and regulatory discipline. An active debate on this issue seems both needed and likely.

b. The Euro-currency Standing Committee

Financial markets are the second major pillar of the international financial system. Analysing new developments in this area and the possible policy requirements arising from them has traditionally been of interest to the Euro-currency Standing Committee. This Committee was originally established to look into the expansion of international bank lending, and the LDC debt crisis was its principal preoccupation for much of the early 1980s. To provide increased possibilities for the official and private sectors to monitor risk in this area, the Committee gave the BIS a mandate to coordinate the collection and dissemination of relevant international banking data from national (creditor) sources. Indeed, in recent years the international banking statistics have expanded in both content and geographic scope and further improvements are underway.³⁶

The Working Group which prepared the original report (including many participants from emerging markets) has also been reconstituted as an Advisory Group for this endeavour.

35 See Basle Committee on Banking Supervision (1998a).

36 Loans made by banks will increasingly be available on an "ultimate risk" basis. That is, loans made to (say) a Brazilian bank in the United Kingdom will be classified as →

The BIS statistics on international bank lending have received particular attention recently in light of the Asian crisis. This crisis is similar to the debt crisis of the early 1980s in that banks have been the principal international creditors.³⁷ Moreover, the BIS is now also maintaining an extensive data base on international securities markets and has dramatically expanded its coverage of derivatives markets. In addition to the triennial survey conducted by central banks, seventy-five major financial institutions will begin regular reporting on their derivatives activity commencing in June 1998. Analysis of recent data and associated regulatory developments in all these areas (banking, securities and derivatives markets) is presented in various BIS publications.³⁸ While seeking to be neither alarmist nor prescriptive, this analysis does also attempt to highlight points of strain in the international financial system. Examples going back to 1996 included comments on the heavy exposure of Thai and Korean banks to short-term foreign currency financing, and the sharp reduction in both credit and market risk premia associated with relatively risky investments worldwide. The fact that these concerns were generally ignored, as were the similarly muted warnings by other international financial institutions, seems worthy of further reflection.

Over the last decade, the Committee has focused on the implications of financial innovations – and in particular of the rapid growth of derivatives markets designed to facilitate the transfer of market risk – for the functioning and stability of markets. While the general conclusion reached has been that derivatives enhance market efficiency,³⁹ financial innovation has also brought with it a diminution of transparency in markets and made it more difficult for market participants to assess the creditworthiness of individual counterparties. To help deal with these problems, the Committee (in association with the Supervisors) has taken steps to encourage key market participants to improve their public disclosure practices, notably in the area of market and credit exposures, by drawing on information generated by their internal risk management systems. The semi-annual global statistics on derivatives markets, which the BIS will begin to col-

Brazilian and not UK exposure. The number of reporting countries is also likely to expand to record loans by (say) Korean banks to (say) Russian borrowers. The timeliness of the statistics is also being addressed.

37 In contrast, it differs from that crisis in that sovereign borrowers were of primary importance in the early 1980s and today it is primarily private borrowers in Asia.

38 In particular, see the quarterly “International Banking and Financial Market Developments” and the semi-annual “The Maturity, Sectoral and Nationality Distribution of International Bank Lending”.

39 See Euro-currency Standing Committee (1986) and (1994a).

lect in mid-1998, should also help participants assess the significance of their own positions in these markets.⁴⁰

Since the financial world is always changing, new questions pertinent to the mandate of the Euro-currency Standing Committee are always arising. One set of issues has to do with the implications for financial stability of structural changes in financial intermediation, notably a world in which non-bank financial entities and markets are coming to play increasingly prominent roles. A further source of concern is the resilience of liquidity in linked markets under stressful circumstances.⁴¹ Many markets are dominated at the wholesale level by a relatively small number of key players (–albeit often different ones in different markets), and their interactions as they strive simultaneously to adjust to common shocks can be an important determinant of market outcomes. Although short-term financial market volatility seems to have decreased over the last decade or so, we have observed occasional bouts of price “gapping” as well as sudden reversals of longer-term price movements without any obvious economic rationale. The reasons for this, and the possible implications for the solvency of market participants, need further assessment.

c. The Committee on Payment and Settlement Systems

The third pillar of the international financial system is the payment and settlement system. As the gross volume of financial transactions has expanded in recent years, the exposure of individual firms to possible non-payment by a counter-party has increased commensurately. Absent timely settlement, they too might be unable to meet their obligations, raising the prospect of gridlocks of potentially significant proportions. In recent years, the Committee on Payment and Settlement Systems has made many concrete proposals as to how these systems might be strengthened. While the focus has been on the timely settlement of large-value transfers, issues relating to retail payment systems (especially the implications of electronic money)⁴² have also begun to receive attention. Typically, the action needed requires cooperation between the public and private sectors, but as far as possible the private sector has been encouraged to help itself.

The work of the Committee has consistently emphasised the importance of large-value interbank fund transfer systems, for the obvious reason that

40 See Euro-currency Standing Committee (1996).

41 For a recent discussion of market dynamics, market liquidity and the role of information in price determination in stressful situations, see Euro-currency Standing Committee (1997).

42 See Committee on Payment and Settlement Systems (1996a).

banks continue to be at the core of the international financial system. One of the Committee's first projects was a detailed analytic review of payment system developments in the G-10 countries, the results of which were published in 1985 in the form of a "Red Book" on payment systems. Since then, similar books have treated payment systems in a number of other countries, both industrial and emerging, and Red Books are regularly revised in light of changing practice. As well, considerable efforts have been put into evaluating different kinds of cross-border and multi-currency interbank netting schemes and various reports have laid out agreed (by the G-10 central banks) minimum standards for such private sector systems.⁴³

The Committee's most recent work focused on banks is a Report on Real-Time Gross Settlement (RTGS) systems.⁴⁴ These systems, which are now in place in most G-10 countries along with many others, protect against gridlock by ensuring final settlement of all transactions, transaction by transaction in real time. The Report not only provides an overview of key concepts and principal design features but also the risks associated with such systems and some broader policy implications. It addresses the particular differences between systems already in place, the management of liquidity in such systems, and the various procedures used to queue payment instructions. The Report is the first of its kind and is likely to prove particularly useful to both emerging and industrial countries still in the process of modernising their settlement systems.

In recent years, the Committee has extended its interest beyond banks to settlement systems for securities and foreign exchange, and clearing arrangements for exchange-traded derivatives. In all cases, the nominal values of the daily transactions are very large. Various reports on arrangements to support securities transactions have been published since 1992, with the latest effort focusing on a disclosure framework for systems operators that will allow participants in such arrangements to better evaluate the risks they are running.⁴⁵ As for exposure to settlement risk in foreign exchange markets, the Committee has established that settlement exposures are much larger than had previously been thought. In a Report published last year,⁴⁶ they also indicated ways in which participants could reduce such risks and strongly suggested they do so to avoid a punitive response from public sector authorities. As for clearing arrangements for exchange-traded derivative instruments, the Committee published a report

43 Among others, see Committee on Payment and Settlement Systems (1990a), (1990b), (1993) and (1995).

44 See Committee on Payment and Settlement Systems (1997a).

45 See Committee on Payment and Settlement Systems (1997c).

46 See Committee on Payment and Settlement Systems (1996b).

in March 1997 which systematically reviewed such arrangements, identified weaknesses and made recommendations for remedying them.⁴⁷ As with many other Committee reports, it contains a great deal of factual and comparative information not available elsewhere.

Finally, the Committee recognises that issues having to do with the use of collateral to manage risk, and with the operational reliability of the infrastructure (e.g. business continuity planning, especially with regard to IT services) are also germane to a well-functioning payments system. So too are many legal issues, such as the enforceability of netting agreements and the complications likely to arise from the absence of an international agreement on bankruptcy procedures for internationally active financial institutions. The bottom line is that the task of ensuring timely settlement in all circumstances remains incomplete and the Committee's agenda is still full.

d. Global Participation in the Work of the Committees

Finally, the increasing efforts made by the various committees to involve non-G-10 countries in their work deserves to be emphasised. The Core Principles were drawn up with the close cooperation of non-G-10 supervisors, and the "Report on cross-border banking" was prepared jointly with the Offshore Group of Banking Supervisors. Regional supervisory groups meet regularly with representatives of the Basle Committee in attendance, and there has been a significant increase in supervisory training by G-10 supervisors in association with the Secretariat of the Basle Committee. Finally, the Committee has recently initiated joint meetings with regional supervisors on the occasion of its quarterly meetings in Basle. All of these efforts are directed to building a truly global network of supervisors and the wide dissemination of documents, standards and guidelines developed by the Committee in association with others. Similar initiatives have recently been undertaken by the Committee on Payment and Settlement Systems with similar objectives in mind. The Euro-currency Standing Committee had, for many years, "extended" meetings involving representatives of important non-G-10 financial centres. However, it is now actively engaged in discussing how broader participation might be made more effective.

47 See Committee on Payment and Settlement Systems (1997b).

IV The Role of the BIS in Crisis Management

It has been analytically convenient above to deal separately with the three major components of the international financial system and the BIS committees which support each. This approach also emphasises the comprehensive reach of the Committees' concerns. However, a deficiency of this approach is that it fails to emphasise the relationships between the various components of the system, as well as the further links to macroeconomic variables of interest to central bankers. In fact, it is the complex reality of these interrelationships that makes the pursuit of financial stability such a challenging task and also accounts for the fact that there have been so many financial crises along the way.

Before turning to the role of the BIS in crisis management, it is important to note that, even at the *domestic* level, a certain "constructive ambiguity" often applies about the potential role of the public sector. This is to avoid bad behaviour and moral hazard on the part of the private sector. Given that no two crises are the same, the amount of preplanning that can be done is in any event limited. Perhaps the most that can be hoped is that the prospective players in the unfolding drama – the central bank, the Treasury, supervisory bodies and deposit insurance agencies – know each other well and have well established lines of communications, so that decisions affecting all can be speedily agreed upon. At a moment of crisis, the time allowed for decisionmaking is not likely to be great. Moreover, as we have seen in South Asia, the failure of domestic policymakers to take credible policy actions quickly (particularly if these policies have been prescribed in the context of an IMF programme) can result in the market imposing heavy penalties.

The provision of *international* support to help resolve financial crises with international ramifications should be equally ambiguous if moral hazard is to be avoided.⁴⁸ In any event, liquidity support from the International Monetary Fund to sovereign borrowers must continue to be firmly linked to conditionality and the adjustment of domestic policies. Moreover, support should be provided in such a way as to insure that all the parties whose behaviour contributed to the crisis (both debtors and

48 A new but unwelcome form of ambiguity has emerged in the context of the Asian crisis. The short-term liquidity requirements of a number of countries have been so great as to call into question whether the Fund had adequate resources to restore confidence on the part of private creditors. For example, as of July 1996 the short-term debt (less than one year to maturity) owed by Korean debtors to international banks amounted to almost \$70 billion. See Bank for International Settlements (1998c). Private bankers did finally agree to establish a process for rolling over this debt. However, to the extent this was not purely voluntary, the difference between this procedure and a debt rescheduling is moot.

imprudent creditors) pay some part of the costs. As for liquidity support to internationally active banks, the G-10 Governors have agreed that such support should be provided in the first instance by the home country authorities. However, this decision still leaves unclear whether the home authorities will be prepared to do so. The willingness of the Bank of England to allow Baring Brothers to fail is a welcome indicator of this ambiguity. What is also unclear is the extent to which other national authorities might act to support the home authorities in different circumstances. The 1996 agreement between the Federal Reserve and the Bank of Japan, under which the Bank of Japan could obtain dollar funds through repo arrangements, gives some indication of the possibilities in this regard. Given the scope, increasingly wide participation and the regularity of the meetings which take place in Basle, the BIS makes an important contribution to international financial stability by ensuring that policymakers (at least central banks and other regulators) know each other well and have open lines of communication. This is the institution's most important contribution to crisis management although not its only one. The international community (in particular the central banks of the G-10 countries) have often found it appropriate to provide bridge loans through the BIS to countries in financial difficulties who are awaiting the receipt of funds from the IMF, the World Bank or other such bodies. Such bridge loans often provide needed liquidity, are an indication of international support for the policy changes normally associated with Fund programmes, and ensure a continuing central bank involvement in the process of crisis management. While this role might be thought less important in the future, since the Fund can now disburse much more rapidly than before given the new Emergency Financing Mechanism, some possibilities still remain open. For example, given its expertise with arranging bridge loans, the BIS might be asked to help draw up multilateral legal agreements to ensure equal and fair treatment of sovereign creditors should loans go bad. Attempts to use bilateral agreements to secure a "second line of defense" in support of the IMF programme for Korea in recent months have become extremely complicated and are not yet complete.

For completeness, it should be noted that the BIS, in addition to providing support for bridge loan facilities, is also prepared to act as a principle and to lend funds on both a collateralised and an uncollateralised basis. Needless to say, the sums available in this fashion must be strictly limited by concerns about prudent behaviour and the continuing good financial health of the BIS itself. Nevertheless, there have been occasions when even the relatively small loans made by the BIS may have been useful in stopping small problems from potentially turning into much bigger ones.

V Conclusions

As the process of liberalisation and globalisation proceeds, markets increasingly replace the dictates of governments and regulators. This is perhaps even more true with respect to financial markets than in other areas of economic activity. As a corollary, the influence of those government bodies which work closely with markets tends to be enhanced. In part, this may explain the perception that both the domestic and international profile of central bankers have risen in recent decades. Without delving too far into bureaucratic theories of institutional behaviour, the desire to expand their influence may be a further reason explaining why both central bankers and other regulators are increasingly relying on market processes to achieve their objectives. The role and reputation of the BIS has been similarly enhanced in that international cooperation among central banks and other regulators in large part takes place in that forum.⁴⁹

Another change affecting the work of the BIS in recent years has been the growing emphasis being put by governments on issues having to do with financial stability as opposed to price stability and traditional macroeconomic preoccupations. It is of some note that the last three G-7 Summit Communiqués (Halifax, Lyon and Denver) put strong emphasis on such issues while hardly mentioning international macroeconomic policy coordination; the Birmingham Summit seems likely to have a similar focus. It is also notable that, at the semi-annual meetings of the G-10 Governors and Ministers, the General Manager of the BIS has in recent years reported regularly on work being undertaken at the BIS in this area. This is not to say that traditional macroeconomic concerns have somehow become less important. Rather, these recent developments indicate that the BIS, and those who regularly meet there, now seem to have a wider scope for contributing to global economic welfare than perhaps ever before.

References

- BIS (1998a), "The Role of Asset Prices in the Formulation of Monetary Policy," In: *Conference Papers Vol. 5*, forthcoming.
- BIS (1998b), "The Transmission of Monetary Policy in Emerging Market Economies," In: *Policy Papers No. 3*, January.

⁴⁹ An important early paper describing this cascading process (from markets to central banks to the BIS) was written by Padoa-Schioppa and Saccomanni (1994).

- BIS (1998c), *The Maturity, Sectoral and Nationality Distribution of International Bank Lending*, January.
- BIS (1996a), *Central Bank Survey of Foreign Exchange and Derivatives Market Activity 1995*, May.
- BIS (1996b), "Financial Market Volatility: Measurement, Causes and Consequences," In: *Conference Papers Vol. 1*, March.
- Basle Committee on Banking Supervision (1998a), "Supervision of Financial Conglomerates," Papers prepared by the Joint Forum on Financial Conglomerates, BIS, February.
- Basle Committee on Banking Supervision (1998b), *Framework for the Evaluation of Internal Control Systems*, BIS, January.
- Basle Committee on Banking Supervision (1997a), *Core Principles for Effective Banking Supervision*, BIS, September.
- Basle Committee on Banking Supervision (1997b), *The Year 2000: a Challenge for Financial Institutions and Bank Supervisors*, BIS, September.
- Basle Committee on Banking Supervision (1996), *The Supervision of Cross-Border Banking*, Report by a Working Group comprised of Members of the Basle Committee on Banking Supervision and the Offshore Group of Banking Supervisors, BIS, March.
- Basle Committee on Banking Supervision (1995), *An Internal Model-Based Approach to Market Risk Capital Requirements*, BIS, April.
- Basle Committee on Banking Supervision (1992), *Minimum Standards for the Supervision of International Banking Groups and Their Cross-Border Establishments*, BIS, July.
- Basle Committee on Banking Supervision (1988), *International Convergence of Capital Measurement and Capital Standards*, BIS, July.
- Basle Committee on Banking Supervision (1975), *Report on the Supervision of Banks' Foreign Establishments*, BIS.
- Caprio, Gerard and Daniela Klingebiel (1996), "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?," In: *Annual World Bank Conference on Development Economics*, Washington D.C., 25th-26th April.
- Centre for European Policy Studies (1998), *Capital Markets and EMU*, Report of a CEPS Working Party, 13th January (draft).
- Committee on Payment and Settlement Systems (1997a), *Real-Time Gross Settlement Systems*, BIS, March.
- Committee on Payment and Settlement Systems (1997b), *Clearing Arrangements for Exchange-Traded Derivatives*, BIS, March.
- Committee on Payment and Settlement Systems (1997c), *Disclosure Framework for Securities Settlement Systems*, BIS, February.
- Committee on Payment and Settlement Systems (1996a), *Security of Electronic Money*, BIS, August.

- Committee on Payment and Settlement Systems (1996b), *Settlement Risk in Foreign Exchange Transactions*, BIS, March.
- Committee on Payment and Settlement Systems (1995), *Cross-Border Securities Settlements*, BIS, March.
- Committee on Payment and Settlement Systems (1993), *Central Bank Payment and Settlement Services with Respect to Cross-Border and Multi-Currency Transactions (Noël Report)*, BIS, September.
- Committee on Payment and Settlement Systems (1990a): *Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries (Lamfalussy Report)*, BIS, November.
- Committee on Payment and Settlement Systems (1990b), *Large-Value Transfer Systems in the Group of Ten Countries*, BIS, May.
- Euro-Currency Standing Committee (1997), *The Measurement of Aggregate Market Risk*, BIS, November.
- Euro-Currency Standing Committee (1996), *Proposals for Improving Global Derivatives Market Statistics (Yoshikuni Report)*, BIS, July.
- Euro-Currency Standing Committee (1994a), *Macroeconomic and Monetary Policy Issues Raised by the Growth of Derivatives Markets (Hannoun Report)*, BIS, November.
- Euro-Currency Standing Committee (1994b), *A Discussion Paper on Public Disclosure of Market and Credit Risks by Financial Intermediaries (Fisher Report)*, BIS, September.
- Euro-Currency Standing Committee (1986), *Recent Innovations in International Banking (Cross Report)*, BIS, April.
- Goldstein, Morris (1997), "The Case for an International Banking Standard," In: *Policy Analyses in International Economics*, 47, Institute for International Economics, April.
- Goldstein, Morris and Philip Turner (1996), "Banking Crises in Emerging Economies: Origins and Policy Options," In: *Economic Papers No. 46*, BIS, October.
- Group of Ten (1997), *Financial Stability in Emerging Market Economies: A Strategy for the Formulation, Adoption and Implementation of Sound Principles and Practices to Strengthen Financial Systems*, BIS, April.
- Group of Thirty (1997), *Global Institutions, National Supervision and Systemic Risk: A Study Group Report*, Washington D.C.
- Institute of International Finance (1997), *Financial Supervision in a Global Market: A Preliminary Private Sector Perspective*, Report of the Task Force on Conglomerate Supervision, February.
- Kapstein, Ethan B. (1994), *Governing the Global Economy*, Harvard University Press, Cambridge, MA.
- Kapstein, Ethan B. (1992), "Between Power and Purpose: Central Bankers

- and the Politics of Regulatory Convergence,” In: *International Organizations*, 46(1), pp. 265-287.
- McCauley, Robert N. and William R. White (1997), *The Euro and European Financial Markets*, Working Papers No. 41, BIS, May.
- McKinnon, Ronald I. and Huw Pill (1996), “Credible Liberalizations and International Capital Flows: the ‘Overborrowing Syndrome’,” In: Takatoshi Ito and Anne O. Krueger (eds.), *Financial Deregulation and Integration in East Asia*, University of Chicago Press, Chicago and London.
- Obstfeld, Maurice (1986), “Rational and Self-Fulfilling Balance of Payments Crises,” In: *American Economic Review*, March, pp. 72-81.
- Padoa-Schioppa, Tommaso and Fabrizio Saccomanni (1994), “Managing a Market-Led Global Financial System,” In: Peter B. Kenen (ed.), *Managing the World Economy: Fifty Years After Bretton Woods*, Institute for International Economics, Washington D.C., September, pp. 235-268.
- Roseveare, Deborah, Willi Leibfritz, Douglas Fore and Eckhard Wurzel (1996), *Ageing Populations, Pension Systems and Government Budgets: Simulations for 20 OECD Countries*, Working Paper No. 168, OECD Economics Department, Paris.
- White, William R. (1997), “International Agreements in the Area of Banking and Finance: Accomplishments and Outstanding Issues,” In: George M. von Furstenberg, Boston (ed.), *Regulation and Supervision of Financial Institutions in the NAFTA Countries and Beyond*, Kluwer Academic, Dordrecht and London, pp. 48-81.
- White, William R. (1996), “Keynote Address” and “Summing Up,” In: *Proceedings of the 12th Pacific Basin Central Bank Conference on The Impact of Financial Market Development on the Real Economy*, organised by the Monetary Authority of Singapore, Singapore, 18th-20th November, pp. 3-8 and pp. 306-316.
- White, William R. (1994), *Systemic Risk and Derivatives: Can Disclosure Help?*, Special Paper Series No. 66, London School of Economics, Financial Market Group, December.

Comment on “Promoting International Financial Stability: The Role of the BIS,” by William R. White

Armand Pujal

I would like to begin with underpinning the main aspects of Bill White’s presentation, which tackled the issue of financial stability as a whole. I will then focus on the way in which the Basle Committee contributes to addressing the issue of financial stability.

Financial Stability: The G-10’s Response

Given the prominence of financial markets in the globalisation and de-regulation process, it is worth underlining the increasing responsibilities of central bankers and other regulators, who are often closer to the markets than governments. Moreover, financial stability has become one of the major priorities for international organisations, although the more traditional macroeconomic preoccupations remain an area of considerable concern as well. In short, monetary stability and financial stability are the “two sides of the same coin”, thus justifying the central bankers increasing involvement.

The strategy to promote financial stability has taken place within the G-10 Deputies Report proposals, which were released last year. In this respect, it is important to highlight that the strategy has to be global – involving developed and emerging markets – and that those overseeing the policy have to endorse new responsibilities in order to reflect the required complementarity between market discipline and regulatory oversight. It induces a strong cooperation between policymakers from different countries as well as an increasing involvement of both public sector and private sector participants.

In this context, the BIS has demonstrated that it has many assets to enhance international cooperation. For years, it has been the best place for G-10 central bankers to meet, and its role is being extended to emerging countries. It is a talking shop where national experts have become used to a high level of cooperation. The Committees wherein this work has taken place have dealt with topics related to the three “pillars of the financial

system”, that is: (i) the financial institutions; (ii) the financial markets; and (iii) the payments and settlements systems.

The cooperation between the Committees dealing with these three issues has led to crucial decisions with significant international implications. However, we should avoid understating past shortcomings nor keep silent regarding the future challenges the BIS will have to face. One such challenge is that the trend of enlarging the number of participants (mainly including more emerging countries) and the maintenance of a club-like atmosphere (which has proven very efficient up to now) will have to be reconciled. Other challenges I would like to emphasise are: (i) the far-reaching consequences of the vanishing barriers between different markets and different financial institutions, requiring the different supervisors to set up adequate communication links; and (ii) the growing influence of the business community, which is primarily responsible for avoiding possible failures on financial markets.

Regarding the specific measures the Basle Committee has taken to promote financial stability, I will focus on the first “pillar” and on the Basle Committee which, to my mind, implements the relevant approach towards improving efficiency in all the topics under review. This will lead me to focus on: (1) the dissemination of universal principles for banking supervision; (2) the initial outcomes of the international supervisory cooperation on financial conglomerates; and (3) the development of current prudential issues.

Core Principles for Sound Banking Supervision

The trend of extending the influence of the BIS standards to the non-G-10 countries – especially the emerging countries – and of welcoming them as participants in the standardisation process, is a major challenge for the G-10 and, therefore, also for the BIS. The strain on the banking system, which several major emerging countries are currently witnessing, reinforces the necessity to address this issue. The 25 “Core Principles for Effective Banking Supervision” is the first remarkable outcome of a global action, involving the main multilateral institutions. It establishes a universal standard for creating a sound supervisory environment.

The purpose of these achievements – to promote the Principles and to monitor the responses to their implementation – and the way they have been elaborated, rely on the cooperation between G-10 and non-G-10 countries, as well as between the BIS, the IMF and the World Bank. The BIS has monitored the conception process and has the leadership role in the promotion of the principles through the Liaison and the Consultation

Groups. The IMF and the World Bank instead have focused on the implementation of these principles. Such a joint action ensures the legitimacy and the enforceability of the resulting standards. Combined they form a strong leverage for financial stability. To summarise, on a global and cooperative basis the Basle Committee has managed to set a universal standard, within a reasonable time period, and has provided the practical tools to promote its implementation.

The Core Principles are not only a successful example of a widespread cooperation, but they also ensure the progressive shift from basic quantitative prudential standards – to be enforced by the banks – to global ones, including both qualitative and quantitative criteria, involving the banks and other participants (mainly the supervisors). All of these elements are critical in reaching the target of financial stability which encompasses many different concerns: financial, organisational or institutional, all of which require a global oversight.

The BIS has clearly demonstrated that these achievements do not result from a short-term strategy, but that they are a permanent response to the present challenges. The BIS has planned to set up, towards the end of 1998, a Training Institute for Financial Stability, which will provide assistance to G-10 and non-G-10 supervisors concerning either banking or non-banking issues.

Cooperation Between Supervisory Institutions and the Leadership of the Basle Committee on Prudential Issues

As we have seen, the cooperation has improved between G-10 and non-G-10 countries, as well as between the major institutions which are involved in promoting financial stability. Nevertheless, the cooperation process may require further efforts. Indeed, the barriers have fallen between the actors of the different financial market segments, i.e. banks, insurance companies, and other financial institutions. However, on the regulators' and supervisors' side, adequate cooperation remains to be improved. Realising this, the joint Forum on Financial Conglomerates, in which the Basle Committee, the IAIS and the IOSCO operate jointly, tackles the following issues: (i) appraisal of a conglomerate capital adequacy on a group basis; (ii) information-sharing between supervisors and an easing of legal impediments; and (iii) coordination of supervisors' actions, as well as identification of the main coordinator.

We must acknowledge that this process has been a long-standing one. One may point out here the weakness regarding the process of addressing the Herstatt risk issue. Even having taken into account the complex techni-

cal background, the practical outcomes may appear minimal at the moment. As a matter of fact, the pending legal impediments concerning information sharing remain an obstacle.

It is clear that, as a talking shop, and in its role of creating consensus, the BIS structures have reached a limit in terms of their influence on national regulations. Nevertheless, as barriers have fallen throughout the financial markets, the different regulators will acknowledge that a joint action on common concerns is necessary. In that respect, the in-depth research and the consistency of the works-in-progress under the aegis of the BIS are the essential factors from which to expect some practical outcomes in the long term.

Obviously, the Basle Committee's works do not encompass only the international and trans-sectorial cooperations. Despite the fact that the mandate of the BIS, and of its hosted committees, does not include the direct management of crisis (e.g in Asia), they are strongly involved with crisis management. This raises the question as to whether the BIS can practically contribute to ensure and/or restore financial stability. The answer is "yes" by all means. Hence, many of the issues which have emerged from the present crisis have been or are being addressed by the Basle Committee.

Let us just briefly point to the results of the Basle Committee's work so far:

- The creation of a practical framework for the assessment of banking internal control systems.
- The setting of principles for the management of interest rate risk.
- The introduction of market risks to the 1988 Amendment, which includes the possibility to use the banks' own risk measure with internal models.
- The continuous promotion of the markets' transparency and the harmonisation of accounting practices in banks.
- Finally, in addition to financial and accounting issues, the Basle Committee has extended its action to more operational matters, such as preparing the information systems for the year 2000 and the management of both electronic money and electronic banking activities.

This approach is consistent with the release of the Core Principles, since the same comprehensive approach has been implemented for the more specific workshops. As a result, a complete toolkit of best-practice standards is being created, step by step, in order to develop sound, global banking management, which is the minimum requirement to ensure financial stability.

Floor Discussion of “Specific Issues Confronting Regulators and Supervisors at the International Level”

The Multilaterals: A Clear-Cut Division of Roles?

A first issue raised was whether the roles of the BIS and the IMF could be clearly distinguished. Tom de Swaan agreed with William White’s assertion that BIS recommendations and guidelines ought to address all countries and he suggested some questions to guide the discussion. “A major issue at stake is how can the BIS work in such a way that these countries feel incorporated and represented in the work of the BIS while maintaining the high level of efficiency that the BIS has shown in the past? What is the relationship of the BIS to other multilateral institutions like the IMF, the World Bank and the regional development banks, and how can it contribute to the issue of financial stability?”

Yilmaz Akyüz observed that the BIS is not a universal organisation and wondered to what extent this is a problem in setting general rules. “There are similar cases such as the evolution of the OECD Multilateral Agreement on Investment which was negotiated in closed shop by the OECD members. To what extent does this lack of universality pose a problem for the BIS and for developing countries? With regard to mandates, of course, institutions have tried to avoid trespassing on each other’s territory, but it is becoming quite difficult with WTO going into financial services and discussing ideas about trade in financial instruments needing similar rules as other services. To what extent would this cause overlap, interaction or even gaps between WTO and BIS?”

Jack Boorman responded that the delineation of mandates is relatively clear, particularly on the issue of capital account transactions and movements versus the provision of financial services. “The WTO sees its mandate in the area of the *provision* of financial services, which means the rights of establishment and so forth, capital account *mobility* is an area for which the Fund has a mandate.”

Roy Culpeper questioned BIS’ leverage in dealing with issues of systemic risk. “I am not convinced that an institution which takes a soft law approach is the right kind of institution to deal with the rapidity and thoroughness that systemic risk demands. Since the response time is quite often in terms of weeks, days or even hours, you cannot simply rely on the goodwill of the gentlemen of the club to persuade their legislators to do something about it.”

William White stressed that his paper hardly deals with crisis management, because that is almost entirely the realm of the Fund, while structural issues fall under the World Bank's competence. "Crisis management, and indeed the macro elements of preventing a crisis, belong to the Fund. The BIS commands a narrow, but nonetheless very important range of territory which does not conflict with the important work being done by others – it is different.

Having said that, there is one element of overlap in crisis prevention. In the G-10 Deputies study it is recommended that national groups work together to set standards, international principles, best practices, etc. The deputies then recommended that it was the job of the IMF and the World Bank to apply and monitor these principles. There is a system of feedback between these national and international organisations which should encourage interaction in a way that will lead to better policy, in an evolutionary manner, over time. So, while we have our separate areas, there is an interaction as well."

Stephany Griffith-Jones emphasised the possible emergence of gaps. "Are there places where the market dynamic has been so rapid that there is *no* regulatory oversight or concern with systemic risk? For example, who would regulate institutional investors? Securities regulators don't have this type of concern, and although the IMF does, it doesn't have the power. So it seems that in addition to overlap, institutional gaps exist as well."

White referred back to the G-10 Deputies study which suggested the desirability of additional international standards in some areas. "The study noted nine gaps where one could foresee the need or desirability of having international standards. Those nine gaps were: (1) infrastructure for deep and liquid markets; (2) transparency and reliability of information; (3) corporate governance; (4) safety net issues (which I think are terribly important); (5) the value of the franchise; (6) rents (can they get too low?); (7) legal frameworks (particularly conflicting international legal frameworks); (8) making the best use of information (why did the foreign banks lend so much money to Asian countries? why did the Asian countries borrow it?); and (9) dealing with weak institutions. These nine areas raise a number of questions. Is it indeed desirable to have international standards in each of these areas? Is it feasible? And if so, who is going to do it? So there are gaps, but at the BIS a process is underway to identify them and do something about them."

Boorman stated that while the institutional architecture was in a state of flux, he did not view it as a major problem. "Certainly we look to the BIS and particularly the Core Principles as giving us the guiding architectural design or framework that we can take to the individual countries. The Fund does not pretend to have the capacity or the desire to assess the situ-

ation of individual institutions in the financial sector. We see ourselves doing an overview of the architecture of the supervisory institutions in place. Are they sensibly structured? Or are they, for example, within the Finance Ministry which also happens to be the owner of the institutions, therefore raising questions about conflict of interest? We are not examiners and we do not intend to become examiners. The work of the BIS and its committees is extremely important in terms of providing us with the framework for our mission chiefs and I think it is working reasonably well.

The same issue arises with the World Bank in terms of how we define and delineate our responsibilities. We view ourselves as the identifiers of problems, and if it involves something like bank restructuring, then we call in the World Bank which is bolstering its expertise in this area. The channel of communication between the Fund and the Bank, as well as the BIS works quite well.

There are gaps though, and we are in a particularly dynamic environment now. The demise of Glass-Steagall, as Bill put it, is going to change the operations of American banks, perhaps in very significant ways. The competitive forces between major international banks are going to force them into areas they may not have been in before. The financial vice-presidents of major corporate, non-bank institutions are engaged in enormous transactions cross border. It is very fluid and how it will play out is not yet clear. The kinds of issues that Bill is pointing to require more examination by committees, and the committees of the BIS are probably the right place to do it.”

Akyüz was not so easily persuaded, “Surveillance is going into various areas which are considered as structural weaknesses, including certainly the financial sector. I don’t see the distinction between the IMF and BIS as being as clear-cut as you may wish it to be. As far as WTO’s involvement with trade and financial services is concerned, the UNCTAD view is that the distinction between the capital account liberalisation and the trade and financial services is not as clear-cut as these two institutions (IMF and WTO) would like to make it seem.”

De Swaan agreed with Boorman about the existence of a state of flux. “This is true for the role and function of the IMF, as well as the BIS. The report Bill White was referring to was written by the ‘enlarged’ Deputy G-10 because it included a substantial number of non-G-10 countries. It recognises that, given the complexity of issues such as supervision, regulation, oversight of payment systems, etc., it is wise to rely on national experts. They are closely connected to the individuals who actually do the inspections in banks and witness the developments in the markets, so it is better to leave the establishment of rules and minimum standards to those

national experts. The IMF is playing the major role of insuring that these rules and standards are being implemented.”

White responded to Boorman’s comment about the need for BIS committees and groups of experts to examine issues arising from the particularly dynamic banking environment. “I want to point out that when BIS committees get together and look into these things, they are in large part basing their insights on documents produced by the OECD, the IMF and the World Bank who have invested substantial effort in understanding the dynamics.”

Yung Chul Park was also sceptical about the clear-cut distinction between the multilateral organisations. “We have been told today that everything is OK, there is no conflict of interest between these organisations, there is a flow of information between them, it is all very smooth and adequate... but in my experience this is not always the case. In Korea, we have dealt with the IMF, the World Bank, the OECD, the ADB, and on top of that with the US, the EU, and sometimes even with the French and British governments. They all come with a different perspective, different objectives and different interests, and there is no way we can coordinate their different policies. This situation is made worse by the fact that we have to service our debts to all of these different parties.”

Bank Behaviour and the Herding Instinct

Godert Posthumus brought up the issue of herding behaviour by banks. “One rule of banking is to do what all of the other banks do. This raises the question of whether we can somehow monitor how many creditor banks are doing what and where? Normally, this should be done by the country concerned, but as of yet, they don’t have the system to do it.”

White joined in by asking, “Why did the banks lend so much to Asia? Bankers said, ‘Asia is the future, so we had to give them the money.’ And when you asked them whether they looked at problematic aggregate statistics – I mean, a year and a half ago we knew that Korea had close to a \$100 billion worth of international bank exposure and that 70% was due within 3 months – did you not think this could be a problem? They answered ‘no, we didn’t really look at that’. This kind of herd behaviour has gone on forever and I don’t know what can be done about it. One thing we should look at more carefully is the issue of the safety net. Why wasn’t there a run on the Korean banks domestically by the depositors? Because they all thought that the Korean government was going to bail them out. Why did the big international banks lend them so much? In the first instance, they thought that the Korean government was going to bail them out. And indeed, the Korean government told them at one point that they would do

just that. And if they didn't get bailed out in Korea, they thought they would be bailed out at home because they are too big to fail. Some of the most active banks were the European banks who had either a poor capital position or who had government guarantees. Safety nets deserve careful study."

Amaret Sila-On commented that more thought should be given to the moral responsibility of the lender. "We got into trouble because of the ease of off-shore banking. Anyone can borrow 2 million dollars. How do you tell the lenders to be more careful? If the example is made that the IMF doesn't bail them out every time, perhaps we will have a better system and more financial stability."

De Swaan stated that the herding instinct becomes dangerous when banks and institutions lose their own vision because they are simply following their neighbour's lead. Jack Boorman warned against viewing the issue of herd behaviour in a naive fashion. "You have separations between research departments, analysis people and the people who cut deals. You don't make money in banks and investment houses by staying in the centre, you make money by being at the margin and the individuals doing this get rewarded. An aggravating fact is that there is a tendency of second-tier institutions to think that the first-tier institutions know what they are doing. And then, when there is a problem, the second-tier institutions run away, so there will always be crises."

Paul Cantor found it difficult to fathom how such a situation could evolve, given that all major banks in the world run annual country-risk analysis programmes. "These are a very important part of the lending process because they allow senior management to make an overall assessment about the risk exposure in individual countries, and on the basis of this, to delegate authority to lenders and traders during the course of that year." Griffith-Jones suggested that one problem was that the analysts are not always listened to by the managers. "It is true that they all have research departments, but often the senior managers don't listen to them. Bonuses are an additional aggravating factor." White relayed an experience at a BIS meeting with private bankers. "It was amazing how many of them said, 'yes, indeed, our own people had warned us.' A number of them suggested that more discipline could be imposed if loans of this sort were actually made market to market in order to bypass the bonus issue." He added that regardless of where you looked, people are willing to take on risk which one would assess as inappropriate a number of years ago.

Susan Phillips observed, "Rogue traders can bring down very large firms and we have seen some examples of this in recent years. Whether we like it or not, on occasion we are going to have people in individual institutions who take risks which are not proportional to the capitalisation of the firm

or the risk profiles that the bank wishes to undertake. Trying to find ways to make these incentives a bit more compatible is a challenge. From a supervisory perspective, the best thing we can do is look to internal controls. Try to look for separations within internal audit systems. See if banks have approaches in place to determine whether there is the capacity for a trader to go off the screen and trade the firm into bankruptcy.”

Supervision and Regulation

Tom de Swaan said that the enormous increase of attention on the supervision of individual institutions indicates a clear movement from the macroeconomic steering of the economy to a more micro focus. “There is also a move away from what I would call the regulatory form of supervision to a market-based form of supervision. The best example of this is the market-risk package in the capital accord that came into force on January 1, 1998, whereby the supervisors allow individual banks to calculate their regulatory capital requirements, based on internal econometric models they use for assessing market risks. But the main question is whether these models are robust enough to encompass other risks as well. An additional question is whether international cooperation and international standard setting in this field should be dictated by a relatively small number of very sophisticated global operation institutions. In a large number of countries, we are witnessing very severe problems with traditional credit-risk taking which should be covered, in my opinion at least, by very traditional forms of capital adequacy.”

Louis Kasekende suggested that strict supervision and regulation might make capital shy away from countries that are going through a transition. Phillips said that it was a delicate balance because supervision instills confidence and that this may attract capital. “But we also recognise that a supervision system cannot be developed overnight. In the US, we are required to certify that foreign banks, desiring to establish themselves in the US, are subject to consolidated, comprehensive supervision in the home country. Given that many are unable to do that, we were able to amend the Act to ‘demonstrated progress toward this goal’. This has been particularly helpful given the context of emerging markets.”

Yung Chul Park expressed concern about the emphasis put on supervising individual institutions rather than the industry or a group of financial institutions. “I am sure that this will increase the tendency to cross the line of prudential regulation if you start looking into the books of every individual institution. Wouldn’t the regulatory power of the supervisory authorities be increased to such a degree that it would defeat our efforts to liberalise and globalise financial markets? It might be better to try to har-

monise rules and standards of supervision at the regional level rather than at the global level. There is going to be a EMU and a European Central Bank, and NAFTA countries will pretty much follow US standards and rules of supervision, so perhaps the regional level will be more influential.

With regard to market-based supervision: In this electronic age, software vendors come up with new risk-management software every day. How can supervisors still handle commercial banks which rely on very sophisticated risk-management models? These models are so sophisticated that, except for a few people at the computer division of these institutions, no one knows how they work. The senior managers have a hard time understanding what the computer print-outs really mean. To avoid this problem in Korea, we have been thinking of requiring most of these banking institutions, especially the larger ones, to use a single risk-management model. If they use the same model across the industry, the supervisory manager would then know at least what they are doing in terms of managing risk.”

Phillips responded by admitting that it was a challenge to stay ahead of the curve with regard to the models, but she was wary of a one-model approach. “It cuts off innovation and the development of new and better ways to manage risk. This concept might be more useful if you are going to have a two-tiered level of regulation for smaller institutions and smaller banks that are just getting started. In these cases, the one-model approach or the 8% across the board international capital standard probably makes sense. In the US, I was told five years ago that we would never be able to keep up with the models. In the Basle supervisors’ committee, there was initially strong reactions against using internal models at all. But the fact of the matter is that supervisors can be educated. So to the extent that we view it as a process, we don’t become so concerned with constantly being behind the curve.”

She continued by explaining the pre-commitment approach to capital as a way of training examiners to judge the merit of sophisticated models. “At the beginning of a period, the banks would pre-commit to how much capital they would need to address market risk. If they don’t hit those levels, then some kind of a penalty would be applied. Now this approach has all kinds of problems, not the least of which is the issue of appropriate penalties, but it is an approach that is worth considering. Why shouldn’t we ask institutions to put their money where their risk is and commit to it up front? At least, in terms of transparency, everyone would know what kind of risk approach the individual institution is taking.”

Stephany Griffith-Jones raised the issue of greater volatility of international capital flows going in and out of developing countries and how this will influence supervision. “We can assume that this greater volatility is

reflected in greater volatility of macroeconomic variables like in the exchange rate. If you have a crisis in Europe, you have certain devaluations, but they are never as large as the devaluations we have seen in Asia or Mexico. And if the effects in the real economy are greater and more damaging, the negative welfare effects are also greater because there are many more poor people. The question then is: Should there be different or stronger criteria for bank regulators in developing countries given this situation? Should there be higher capital adequacy requirements? There are, of course, costs and benefits to this approach because higher capital ratios are costly and would increase the cost of credit. While this is undesirable, it may give a stronger buffer if we think that crisis will be more likely. Maybe this higher cost at the microeconomic level for firms is compensated by a lower likelihood of costly banking crises.

A second set of issues concerns the implications of this potentially greater volatility of emerging markets for the regulation of bank lending. What have we learned from the Mexican crisis and from the Asian crisis for bank regulations, particularly for short-term flows? Should the standards be tightened up and if so, how? While there is a desire to discourage excessive flows, stifling flows may also be damaging for both the banks and the developing countries, so it is a very thin line to tread.

Third, because these risks are also present in other kinds of flows, such as securities flows, should the same factors which are considered for bank flows also be considered for portfolio flows? In this area, I have proposed cash reserves, also for institutional investors like mutual funds, which would not only provide a more level playing field, but which would apply the same concept of risk rating which is increasingly important in the international arena. Of course, I understand that there are important differences between these institutional investors and banks, so it would have to be adapted, but some of the general principles are valid because they are also vulnerable to the same kind of volatility.”

Susan Phillips emphasised that the Federal Reserve approach does not only concentrate on large banks in industrial countries. “Certainly the large sophisticated banks may be able to utilise some kinds of risk management systems that smaller banks may not be able to, but we have very much the same kind of challenge in the US. Quite frankly, we have openly discussed the notion of a two-tiered regulatory approach to large and small banks. So I wouldn’t want to say that some of these risk-based systems are not applicable to emerging countries, because in fact they are. While the regulatory structure that you end up with for smaller institutions might be somewhat different than for larger, it is still a risk-based approach.”

She continued by focusing on the difference between regulatory capital and economic capital. “We see that banks try to assess the appropriate cap-

italisation based on economic risks, which would include market risk, as well as credit risk and even legal risk, reputation risk and operations risk. Trying to capture that approach to apply it to regulatory capital calculations is part of the challenge. And bankers themselves are just getting to the point where they are developing more sophisticated approaches to bottom-line economic capitalisation.”

Phillips then responded to Griffith-Jones’ concern about capital requirements for mutual funds and other types of financial institutions. “We have had capital requirements for securities markets for many years, but they are not as risk adjusted; they tend to be a bit mechanistic and there is a good deal of room for improvement in those areas. In the case of mutual funds, for example, capital is not the problem because they have the assets, so the original purpose of the capital requirements for mutual funds does not apply. What we are trying to do is to prevent mutual funds from concentrating in particular countries.”

Barbara Stallings suggested that the supervisory issue was much more dramatic. “In large parts of the world, we find institutions that are just learning to be banks. They never had to do things that banks engage in everyday. That is certainly the case in Central and Eastern Europe, where the whole notion of markets had to be developed. But in Asia and Latin America, moving off the government-directed credit notion of a bank, toward banks that have to do things like credit analysis, is a whole new experience. Unfortunately, the banks and the supervisors have to begin to engage in these activities in a context that is increasingly sophisticated. These banks are learning to be banks at the same time that there are so many actors on the scene who are so sophisticated that it is almost an unfair game. Given this, how can we begin dealing with some of these issues at a basic level?”

Ariel Buira concluded by suggesting that two-tier capitalisation for small and large banks or for banks in industrial countries and emerging economies might affect competition. “Certain groups of banks might be placed at a permanent disadvantage because they are required higher capitalisation. In this way they would never be able to compete with the larger, more sophisticated banks.”

Data Dissemination and Transparency

Jack Boorman explained the Special Data Dissemination Standard which is being developed in the Fund. “It is not just a mechanism for dumping statistics, but it is a statistical system with components which try to assure the quality and integrity of the data that will ultimately be distributed. We have been pressed to extend this in a number of areas to improve reporting

on external debt, including debt of the private sector and reserve related liabilities, as well as on data in the prudential area. Individuals are looking for something, from the macro prudential point of view, which will give a sense of the vulnerabilities in the banking system and also the evolution of risk taking in the banking and financial sector. If you are a bit backward-looking in this area, some of the things you might look at are capital adequacy ratios and problem loan ratios, but in light of what Susan has said regarding risk-based supervision and examination, I am asking myself, whether a ratio of capital to some measure of unadjusted assets has any particular meaning? You've got to look to the riskiness of the assets to know how much capital you want. A similar situation arises with the problem loan ratio – will a system that is based on risk taking even generate something like that if there is not an audit approach to the balance sheet of the institution? We are being pressed to try to incorporate these things within the SDDS, but we may be well behind the curve if we take up traditional measures. If that is the case, what should we be thinking of and who do we work with in this area?"

The discussion turned from data dissemination to transparency when Amaret Sila-On voiced a note of caution. "I am neither an academician nor a central banker, but I have done something difficult for my country. In doing so, I have come to learn that you have to take other elements into consideration, particularly the political and cultural elements. If supervision and international arrangements for stability are to become effective, these elements of international relations and understanding various national traits will have to be taken into account.

Just to illustrate. In Thai the word 'yes' has five meanings. The first is 'I hear you'; the second means 'I understand, but'; the third means 'go jump in the lake'; the fourth one means 'perhaps we can do something together'; and the fifth one means 'okay, it will be done'. Now I suggest that Indonesians probably have more than five meanings and those meanings are not very clear to my friends at the IMF. This is something that the individuals around this table who are trying to fashion a new model for financial stability will have to think about. It doesn't matter how sound your system is, if people do not accept it because they have different rules and cultural backgrounds, they will not apply it and it will not work. We have the same laws as you have because we copy them from you, but we practice them differently. We practice them according to the structure of society. If you commit a crime, theoretically, you are equal under the law, but in practice, the law will be meted out in accordance to your place in society. This is true in many countries around the world. Unless the people in the West understand this, there are bound to be more mistakes.

In many countries, in institutions like commercial banks or even central

banks, they will always hide the real figures – they will hide them from themselves, from other departments, from the government and from the international authorities. Even at the depth of our problems, I have experienced this with the government and the Central Bank. Unless you probe very cautiously and know where to push the button, the real figures will not emerge and this is only because they want to preserve what little power they still have. Unless you know how to deal with this, you will not get the real figures and you cannot fashion a workable solution.”

Yung Chul Park, responded to Sila-On. “With all due respect to Mr. Sila-On, is it not about time for us to change? To make sure that ‘yes’ means ‘yes’. Why do we insist that the West understands our culture? We should at the same time try to understand their culture. That is what transparency is all about. This is the mistake we have made for a long time. We have long felt that we have our unique Asian culture, unique Asian values, whatever they are, and then expect that other societies will understand our system and our way of doing things.”

Sila-On agreed that Asians should change their ways but observed that “it will take time. It will take time before Indonesia will move to even a Korean standard, maybe 10 years.”

Susan Phillips finished up the discussion by pointing out that disclosure could be beneficial to the institutions which are doing the disclosing. “I am reminded of an experience when I was involved with stock exchanges. We were trying to get the exchanges to be more transparent in terms of what they publicise. We encountered massive resistance from NASDAQ, which is our over-the-counter market. However, once they finally decided that they would go with disclosure, they found it to be a wonderful advertising tool for the liquidity of their markets. Furthermore, if there is not an improvement in transparencies, capital is going to be withdrawn. Capital can flow in and capital can flow out. If countries or firms want to rely on international sources of capital, transparency is going to become the norm, and as these arm’s length transactions occur, the lenders are going to start demanding increasing transparency. It is not only the supervisors who are requesting it, but we are starting to see more market pressures for disclosure.”

Part IV

Specific Issues Confronting Regulators and Supervisors at the National Level

Thailand: Path of Financial Restructuring

Amaret Sila-On

With the world's interest clearly focused on the events in East and Southeast Asia, I would like to update you on the recent policy initiatives and ongoing activities on financial reform and restructuring in my country. Given that the currency turmoil started in Thailand, we certainly hope that the principle of "first-in first-out" will apply and bring us out of this situation soon. I would like to start with a short background of events leading to the crisis, followed by Thailand's subsequent adoption of the IMF programme. I will then conclude with a note on the future prospects for financial sector restructuring and development in Thailand.

I Events Leading to the Crisis

During the late 1980s and early 1990s, Thailand's rapid economic growth was hailed as one of the great success stories of Southeast Asia. This extended period of growth was propelled by buoyant export performance following the decoupling of the exchange rate from a single peg to a basket peg system in 1984; and a dynamic investment outlook, especially from Japan's booming domestic economy. In 1993, the establishment of the Bangkok International Banking Facility (BIBF) – a special vehicle to provide offshore banking services – became an important channel for foreign funds to accommodate the growing domestic needs for investment, asset acquisition and industrial expansion. Following double digit growth during 1988 to 1990, the country's growth rate stabilised at around 8-9% in the early 1990s.

By the mid 1990s, a number of factors, both external and internal, combined to bring about a sharp economic downturn, which culminated in one of the most painful chapters of Thailand's recent economic history. The widening current account deficit to around 8% of GDP in 1995 sent out red alert worldwide, which was apparent to everyone but ourselves. Yet it was the sharp drop in exports, from some 24% annual growth in 1995 to a 0.2% contraction in 1996 that finally sent out distressed signals. This phenomenon may have an origin rooted since the 1994 devaluation of the Chinese currency, which along with the delayed adjustment of Thai export

competitiveness, the strengthening of the US dollar, and an inflexible exchange rate mechanism, resulted in a crisis of confidence. On the internal front, the intensification of the financial sector problem stemming from inadequate measures to cope with the influx of foreign funds through the BIBF, and the 12-month income recognition rule of financial institutions non-performing loans, heightened the atmosphere of cynicism and subsequently brought on a series of speculative attacks on the currency. Business cycles are recurring events worldwide, and as such were no strange phenomena in Thailand. Yet the financial sector's inherent weakness of maturity mismatching, reckless lending and mis-allocation of foreign funds, proved to be non-resistant to this particular downturn. On 2nd July 1997, the authorities announced a change in the exchange rate regime, and one month later Thailand entered the IMF programme.

II IMF Programme

The discipline and austerity programme imposed on the country during this IMF programme period has seen a lower output growth, indeed the first negative GDP growth in Thailand's modern economic history. Higher inflation, and a narrowing current account deficit ensued, as the process of consolidation takes place. Nevertheless, the economy's strong underlying fundamentals – high savings rate, an abundance of agricultural, natural and human resources, diversified economy and export base – remain important assets during the restructuring process.

Financial Sector Restructuring

The cornerstone of the present government programme, with the IMF concurrence, is the determined efforts to restore confidence through strict fiscal and monetary disciplines, and a comprehensive financial restructuring programme. In this connection, a wide-ranging programme has been mapped out encompassing sweeping changes in the supervisory and regulatory practices, as well as the legal infrastructure and operational procedures. In August 1997, the authorities took decisive steps to segregate unviable and insolvent finance companies from the rest of the system through the temporary suspension of their operation. Companies wishing to resume business are required to submit rehabilitation plans to the newly established Financial Sector Restructuring Authority (FRA) of which I am now Chairman. Those whose plans are considered unviable would undergo an orderly liquidation process. Following the decision to close all but 2 of the 58 suspended finance companies in early December 1997, the disposal

of asset began in February 1998, in a most transparent and strictly market determined process. This is set to be completed by December 1998 as stipulated in the third Letter of Intent with the IMF.

To assure reasonable bids for the assets of the closed finance companies, two new government-owned institutions, the Radhanasin Bank (RAB) and the Asset Management Corporation (AMC), were set up with a mandate to participate in the auction process along with other private bidders. The RAB is expected to bid for the highest quality assets and be guided by the strictest commercial principles. The AMC is charged with the responsibility of managing the assets and maximising asset recovery and to aim for the lowest quality assets.

With regard to the legal and regulatory infrastructure, on March 4, Parliament approved the new Bankruptcy Law, while work is ongoing to expedite the procedures of foreclosure with a view to facilitating the orderly winding down or rehabilitation of insolvent companies.

Strengthening the Core Financial System

As Chairman of the Financial Sector Restructuring Authority, I have been entrusted to oversee the process of asset disposal for the closed finance companies. I should like to point out, however, that the size of the assets of the 56 closed finance companies – some 860 billion baht or \$20 billion – represents a mere 11% of the total size of the country's financial system of some 8 trillion baht or \$190 billion. The remaining part which is the core of the financial system comprising 15 operating Thai banks, 35 finance companies and a number of BIBF of both domestic and foreign banks, is indeed the most crucial and whose strength and viability will provide the foundation for the growth and development of the country's economic system. This is where most of the work and attention is focused on, in particular on the determination process and reclassification of asset quality.

On asset classification, the Bank of Thailand, as the responsible supervisory agency, has progressively tightened rules and regulation concerning asset classification and provisioning requirements, as well as income recognition of banks and finance companies. Effective 31st December 1997, loans which are 6 months in arrears will be classified as substandard, an adjustment from the old rule of 12 months with collateral, and banks must provide 15% reserve against it, while the rate applicable to finance companies is 20%. This loan loss provision is fully tax deductible. In addition, accrued interest will be recognised as income up to 6 months compared to the old 12 months rule. Commercial banks have to use this definition when disclosing non-performing loans. Furthermore, the Bank of Thailand will adopt a package of new regulations covering loan classification and provi-

sioning that is consistent with the best international practices. The package will be gradually phased in and fully implemented by the year 2000.

With regard to the recapitalisation process, local financial institutions are actively seeking foreign strategic partners. Early this year, the Government intervened in 4 medium-sized banks which were unable to raise capital, and replaced its management and ordered a capital write down. Recapitalisation was subsequently undertaken through a debt-equity conversion by the Financial Institutions Development Fund – a separate juristic entity from the Bank of Thailand – entrusted to provide liquidity support during the deposit run on the financial institutions. Further interventions are not anticipated as the remaining institutions are undertaking recapitalisation plans, while the reprivatisation of the intervened banks will be made as soon as possible.

Encouraging Foreign Private Investment

To ensure that new investment in local financial institutions lead to the development of a sounder banking system, an additional guideline on the “fit and proper” qualifications of executives and management, as well as licensing requirements have been announced. Given the limited availability of domestic capital, the restriction on foreign participation in Thai financial institutions was amended accordingly to encourage new capital from abroad and ensure the successful implementation of the recapitalisation. Foreign investors are allowed to take majority shareholding in local financial institutions for up to ten years, following which the amount of shares so acquired would be grand fathered. For other types of financial institutions such as securities companies, the relevant laws governing the limit on foreign equity participation, namely the Alien Business Law, will soon be amended to permit 100% foreign ownership.

Strengthening the Supervisory Role of Related Government Agencies

An important corollary from the current financial institutions crisis has been the issue of supervisory oversight. In this connection, the government will form a task force including eminent international financial experts to develop specific proposals regarding the independence and institutional strengthening of the central bank. This is expected to result in revisions to the Bank of Thailand Act by 1998. In addition, the government will undertake a comprehensive review of the roles of various financial institutions as well as the supervisory and regulatory framework. It is expected that these efforts will result in a modern and efficient supervisory regime that can support the development of a sound and competitive financial system.

III Future Prospect

In looking ahead, this episode of crisis will bring about significant changes to the existing supervisory and operational landscape of the country's financial system. Thailand's financial system has largely been dominated by commercial banks accounting for almost 70% of the share of the financial sector, of which more than half is accounted for by the four largest banks. The recent financial distress have drained funds from the smaller banks and other financial institutions to the larger banks, thereby re-enforcing this highly skewed structure. Recognising this, the authorities are aiming to improve the structure of the market towards a more balanced development of the equity, bond and credit markets. As Chairman of the Stock Exchange of Thailand, I am also actively involved in the modernisation of the country's capital market to provide an alternative for fund mobilisation, thereby lessening reliance on commercial banks credit allocation decisions. International standards will progressively be adopted as regard transparency and accounting practices as well as financial auditing and disclosure. A new departure in the present credit appraisal system based on cash flows rather than asset-based is also evolving. General resource allocation will be improved through market-oriented signals, while capital adequacy standard will continue to be strengthened further.

Amidst this painful process of adjustment, signs of improvement have emerged on the macroeconomic front. The current account deficit, the initial trigger of uncertainty over its sustainability, has narrowed by almost 80% in 1997 compared to 1996, representing an improvement following the flotation of the baht. Inflation, on the other hand, has been kept at a manageable level of below 12%. Since September 1997, when the economy turned in a current account surplus – the first in 34 months – the country has been able to generate more foreign exchanges to service its external obligations. This is a positive sign leading to the restoration of confidence in the gradual recovery of the economy.

The present economic and financial difficulties are by no means unique to Asia or Thailand. Although the transition phase will be painful to all those affected, it should be viewed as a sign of correction and adjustment towards a more mature and developed system. On the political front, the country has made significant strides with the enactment of the new constitution which will pave the way for the evolution of cleaner politics and good governance, which should benefit the country at large, as well as our trading partners.

Let me assure you that after these painful events, we shall not be complacent. We recognise that in the upcoming years, there are hard work and tough decisions that require strong political will. This is especially crucial

during the next six months. As the current trend in Thailand is showing progressive improvement, this has given hope and encouragement to all of us in Thailand to face up to the challenges ahead. With the support and understanding of the international community, as well as the culture flexibility and work ethics of the Thai people, the economy should be able to recover and regain its sustainable growth path, within the next two years.

Some Financial Issues in Transition Economies: The Case of Hungary

György Szapáry

As the last speaker at the end of a two-day conference and having been invited to speak at this conference just a few days ago, I am afraid that I will not be able to add any innovative thoughts to the discussion. I propose to talk briefly about three issues: first, about bank regulation and supervision issues faced by Hungary and, I believe, by all the other transition countries; I propose then to say a few words about the impact of the Asian financial crisis on Hungary; and, finally, I will touch upon some of the issues concerning exchange rate and monetary policies in transition economies, as seen through the experience of Hungary. These topics have been addressed by the previous speakers and I propose to now add some of my own thoughts to these issues.

I Bank Regulation and Supervision

One of the characteristics of the transforming economies has been that, compressed into a few short years, these economies have encountered, since the start of the reforms, all the difficulties and problems of the financial system that other countries have had to deal with at some time during the last five decades. Weak risk assessment practices, insufficient internal controls within the banks, inadequate accounting standards, weak supervision and, last but not least, an unprecedented economic recession have led to the accumulation of large bad loan portfolios by financial institutions, often followed by bankruptcies. At the start of the reforms, when the mono-bank system was abolished and a two-tier banking system was established, with a separate central bank and separate commercial banks, the latter started their lending activities immediately, although supervision and regulation of the banks were not yet fully in place. In Hungary, as in other transition countries, the authorities had to create laws and regulations, and had to develop their supervisory skills while the commercial banks were already operating. One of the main weaknesses of the financial system, in the early years of the reforms, was that most credit institutions were state-owned. Lacking a truly profit-oriented ownership, the banks were ill placed to resist political pressure or to undertake the needed internal reforms.

With banks accumulating a large amount of bad loans, it had become increasingly evident to the Hungarian authorities that privatisation could not take place without bank consolidation. Therefore, Hungary undertook a bank consolidation programme at the end of 1992 which took about two years to complete. Consolidation basically took the form of providing the banks with market interest rate-bearing government bonds equal to the amount of bad loans. The bad loan portfolio was for the most part left to be worked out by the commercial banks. The total amount of the consolidation reached about 7.5% of GDP at the end of 1994, and the cost to the government budget in the form of interest paid on the consolidation bonds was 1.6% of GDP in 1995. This ratio has been declining since then as inflation and nominal interest rates have fallen and the GDP has grown. Following the consolidation, the capital adequacy ratio of all the consolidated banks was brought up to 8%. Thus, the road toward bank privatisation was paved.

Bank privatisation has brought many benefits: technological upgrading, improved bank management, increased competition, and new, faster services. Hungary, with a population of 10 million, has already over two million credit cards and several banks have opened so-called direct banking services, where all services can be obtained via telephone. It is interesting to note that people in Hungary seem to be very receptive to technological change. This may be due to the fact that the services provided before were very poor. To give an example, previously people often had to take off several hours from their work in order to withdraw money from a bank. Therefore, when automatic teller machines and credit cards came around, people were eager to seize this opportunity of getting faster service.

Undertaking a comprehensive programme of strengthening bank supervision early on in the reform process is a very important issue in transition economies, as there is no time for the sequencing of institutional development. Indeed, one cannot first establish the supervisory agency, then train the supervisors, and only then allow commercial banks to operate. The authorities of the transition countries have had no other choice than doing everything simultaneously. As a result, supervision is still lagging behind the rapid development of the commercial banking activity in these countries. Great efforts need to be made to improve regulation and supervision. In Hungary, we have passed the necessary laws and regulations, but as we gain experience, we realise that further work is needed in this area. Hungary will start accession negotiations with the EU this year and thus will have to adopt all of the EU directives. We have already adopted many of them as we were going along, but there is still more to be done. Training of supervisors is also a very important element in the task ahead.

I would like to single out four of the Basle core principles that, in my

view, particularly apply to transition economies. First, banks must establish adequate internal procedures and practices for evaluating risks. Risk assessment was not a real issue under the socialist system, because credit was directed and expertise of evaluating credit risks was not developed. Second, it is necessary to establish adequate management information systems within the banks, an area also particularly weak at the start of the transition. Third, strict rules to prevent abuse of connected lending need to be formulated. For instance, there were some Hungarian banks established whose owners clearly did not see banking in the way it should be seen. They considered banking as a way of channelling credit into their own businesses, a practice which naturally resulted in bankruptcies. Fourth, it is essential to secure capital adequacy ratios that are high enough to cope with the uncertainties inherent to the transition. This may mean a higher ratio than the Cook ratio of 8%. Hungary has 36 commercial banks, and for a country of 10 million people, this clearly seems to be too many. One can, therefore, expect that there will be mergers and acquisitions. It is going to be an interesting case to watch, because all but seven of the commercial banks are foreign owned. The bank mergers in Hungary will probably follow the mergers of their mother-banks abroad. One such merger has already taken place.

II The Impact of the Asian Crisis

The effects of the Asian financial crisis on Hungary were limited. We experienced no significant capital flight and, as a result, the exchange rate depreciated very little. Hungary has a pre-announced crawling band system and the exchange rate moved away from the most appreciated edge of the band only for a few weeks – at the most by 1% – but most of the time following the Asian crisis the move away from the strong edge of the band was below 0.5%. There was, however, a temporary fall in the equity prices on the Budapest Stock Exchange. This fall was quite sharp and it was caused mostly by a sell-off by domestic investors. Why did foreign investors stay put and not withdraw from the Hungarian capital markets in the wake of the Asian financial crisis? It could be just luck, but I believe that it certainly helped that Hungary had good economic fundamentals and that the country was seen as going in the right direction. Indeed, there has been a substantial reduction in the fiscal and current account deficits, as well as in the country's net external indebtedness. At the same time growth has accelerated, while inflation has declined. Although there is no guarantee that strong economic fundamentals will protect a country from contagion, they will help the country to better cope with its effects (see below).

III Exchange Rate and Monetary Policy¹

In a small, open economy like Hungary's, the exchange rate plays a dual role: it can protect external competitiveness and it can provide a nominal anchor for domestic price stability. In the short run, these two objectives can be conflicting and policymakers must decide on the relative weights to be assigned to each of these objectives. We in Hungary considered that it was important to protect our competitiveness, since the balance of payments remained a binding constraint as Hungary also inherited a high level of foreign indebtedness. It was considered that the higher rate of inflation in Hungary – relative to its main trading partners – was due to the inflation forces inherent to the reforms. These include changes in relative prices and wages, ingrained inflation expectations, and fiscal pressures emanating from systemic reforms (e.g. bank consolidation, pension reforms, closing of unviable firms). Since it takes time for these inflationary forces to fade away, the nominal exchange rate has to be depreciated in order to maintain competitiveness. Given these circumstances, in March 1995 the Hungarian authorities adopted a pre-announced crawling peg system with a band of $\pm 2.25\%$ on either side of the central rate. The National Bank of Hungary (NBH) has only committed itself to intervene at the upper and lower edges of the intervention band, though it has reserved the right to intervene also within the band. The rate of crawl was originally set at 1.9% per month and was gradually reduced to 0.7% per month starting in October 1998 (-announced in August 1998).

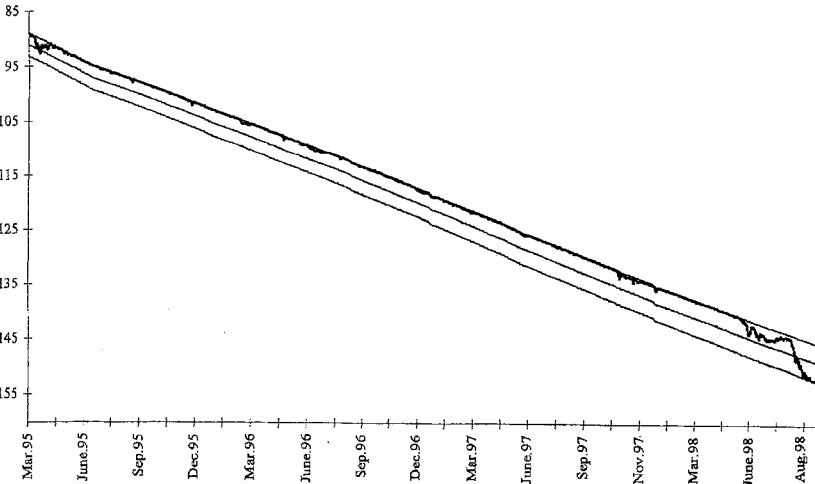
The rate of crawl has been set by the authorities in light of the developments in the balance of payments and inflation, also taking into account the improvement in productivity. Considering that the average level of productivity in Hungary falls well below that of the more advanced countries, the potential for productivity growth is relatively high in Hungary. During the five years ending in June 1997, the productivity of labour in the manufacturing industry rose by an average of 14% per year. Taking into account the faster productivity growth in Hungary, as compared to its trading partners, the rate of crawl has been set somewhat below the anticipated inflation rate, allowing the exchange rate to contribute towards a reduction of inflation while maintaining competitiveness. On a CPI basis, the real effective exchange rate has appreciated by about 9% between March 1995 and June 1998. However, on a unit labour cost basis, the real effective rate has depreciated by approximately 23% during the same period.

Chart 1 shows the movements of the exchange rate within the interven-

1 These remarks have been updated to reflect the impact of the financial crisis currently taking place in Russia.

tion band. As can be seen, the exchange rate remained at the upper edge of the band throughout almost the entire period since the introduction of the crawling peg, reflecting the confidence of the markets. Following the outbreak of the financial crisis in Russia, however, the exchange rate depreciated to the lower edge of the band and, in order to prevent the exchange rate to depreciate beyond the band, the NBH had to intervene. The pressure on the forint remained modest though and the amounts of the intervention were limited. The weakening of the forint principally reflected the liquidation of foreign portfolio investments as foreign investors tended to withdraw from the emerging markets in general. No attack on the forint and no domestic capital flight could be observed, which I believe is a reflection of market confidence in the good fundamentals of the Hungarian economy.

Chart 1 Hungary – Position of the Forint within the Intervention Band, 1995-1998
(value of the basket in forints)



The interest rate policy pursued by the NBH since the adoption of the crawling peg has had a double objective: to maintain positive real interest rates high enough to provide adequate incentive for saving in domestic currency, while at the same time limiting the inflow of capital induced by interest rate differential. The pursuit of these admittedly conflicting objectives has required a careful assessment of the sources of inflation, the nature of the capital inflows (there are inflows which are not induced by interest rate differential, such as foreign direct investment or portfolio

investment in equity), and the cost of sterilisation. The interest rate policy pursued by the authorities led to the maintenance of a premium on domestic interest rates, although that premium has substantially declined over time as the borrowing requirement of the government has shrunk and inflation has fallen.

When the exchange rate is fixed, as it is in fact in the Hungarian pre-announced crawling system, and markets have confidence in the sustainability of the crawl, the existence of the premium on domestic interest rates leads to capital inflows which have to be sterilised in order to prevent the emergence of excess liquidity. In fact, Hungary did experience capital inflows which needed to be sterilised. However, the cost of sterilisation was not excessively high, representing an average 0.16% of GDP per year over the three-year period 1995-97. I do not want to minimise that cost, but if I compare it to the benefits of the crawling peg – that is, maintenance of external competitiveness, moderation of inflation and establishment of credibility – I would argue that the benefits have far exceeded the costs. The crawling peg could, of course, not have been successful without the support of other policies. The substantial reduction of the fiscal deficit, coupled with the marked downsizing of the state budget, so that consolidated government primary expenditures as a ratio of GDP shrank from about 55% in 1993 to 39% in 1997, have helped the disinflation process and created room for the private sector to expand. The speeding-up of structural reforms, in particular privatisation, has contributed to the growth of foreign direct investment and productivity. Finally, the reduction in real wages during the first two years of the crawling peg regime also helped to improve productivity and the balance of payments. If there is a lesson to draw from the Hungarian experience, it is that the crawling peg can be a helpful tool of macroeconomic management, as it combines the flexibility and credibility needed during the inherently uncertain period of reforms, provided it is part of a comprehensive policy mix aimed at ensuring macroeconomic balance.²

² A more detailed analysis of the Hungarian experience with the crawling peg is available in György Szapáry and Zoltán M. Jakab, "Exchange Rate Policy in Transition Economies: the Case of Hungary," to be published in the *Journal of Comparative Economics*.

Banking Supervision in Developing Economies^{*}

*Christian Larrain*¹

I Introduction

Any thought given to the problems of supervising the banking industry in developing economies leads to the question of whether there are specific aspects of those economies that result in the need for an ad hoc regulatory and supervisory framework. The response to this query is less than evident, particularly since banking crises are not restricted to the developing world. In fact, they have hit hard and often in developed nations as well, as demonstrated by the Savings and Loan scandals in the US in the 1980s and a protracted period of financial instability associated with real estate loans in Japan that refuses to fade away. To one extent or another, the problems associated with credit exposure are a disconcerting common denominator in all of the world's banking crises. Furthermore, one may ask whether a paradigm exists to classify a developing economy. In fact, the economic and financial literature has coined the concept of the "emerging economy" to refer to a group of some 20 to 30 economies that in the recent past have experienced strong, consistent processes of economic reform combined with high, sustained rates of growth. These include such economies as Brazil, Chile, China, India, Taiwan, Korea, etc. In this context, it is difficult to compare the features of the financial systems in emerging economies such as Hong Kong and Singapore – with their well-consolidated, highly-competitive structures – with those of such developing economies as Honduras, Paraguay or Nigeria.

The author's view is that, at the level of "stylised events", a series of factors exists at the level of both market operations and public institutions that tend to be present to a varying extent in non-developed economies

* This paper has been prepared under the Project of Technical Support to the Intergovernmental Group of Twenty-four on International Monetary and Financial Affairs, with financial support from the Government of Denmark. It is also published in UNCTAD, *International Monetary and Financial Issues for the 1990s, Vol. X* (New York and Geneva, United Nations Publications, forthcoming).

1 The author thanks Gerry Helleiner and Guillermo Ramírez for helpful comments on an earlier draft.

(emerging and developing) and that are unique to them. Abundant specialised literature exists to describe the features that characterise the problems of supervision in those economies, including the volatility of their markets, errors in the design of financial liberalisation programmes that have led to lending booms, institutional weaknesses, inappropriate accounting standards, etc.

This paper seeks to assess the primary factors behind financial instability and banking supervision in developing economies.² While recognising the macroeconomic origin of many of the problems that affect the banking system in developing economies, this study focuses on the microeconomic elements associated with both the quality of institutional management and the deficiencies in monitoring effected by the market itself, as well as on the institutional weaknesses of regulation and supervision in these economies.

In addition to this introduction, the paper consists of three sections. The first describes the financial markets and the weaknesses in supervision in developing economies, understood in the broadest sense. The second section makes policy recommendations designed to strengthen supervision in those economies and distinguishes between first and second-generation reforms. The former are primarily applied in recently privatised financial systems that are unsophisticated and where supervision is extremely precarious. Second-generation reforms are to be implemented in more developed and consolidated banking systems which have already benefited from the learning curve in the operation of financial markets in both the public and private sectors. The third section suggests what positions developing countries should take in international forums with respect to issues such as capital adequacy, operation of financial conglomerates, and consolidated supervision.

II Problems of Supervision in Developing Economies

There are six key characteristics that determine the primary weaknesses of developing economies' financial systems. They are:

- (a) precarious public institutions;
- (b) a lack of tradition in market operations and an excessive weight of public ownership in financial institutions;

² Unless otherwise noted, "developing economies" should be understood, in the context of this paper, to mean relatively less-developed economies, as well as emerging economies.

- (c) inappropriate accounting and portfolio classification systems;
- (d) a high concentration of ownership in financial and goods markets;
- (e) an expensive and inefficient financial system;
- (f) a lack of international diversification in banking portfolios.

These elements give rise to a series of problems that affect the stability of markets and weaken the quality of the supervision provided in developing economies. These include high credit risks, continuous operations among related parties, a lack of market support for institutional monitoring, inappropriate criteria for the entry and exit of financial institutions, etc.

Obviously, in applying these stylised facts to specific economies, the relative bearing of each element will be different. For example, one can expect that in the most backward economies, the most pressing problems will relate to basic asset supervision and related-party lending. In emerging economies, with better consolidated financial systems, it is likely that one of the most significant challenges will be posed by the lack of international diversification in the portfolio. For the more backward economies, on the other hand, given the precariousness of regulatory agencies, it is likely that the internationalisation of their loans would bring more costs than benefits. These distinctions are significant when recommending policy. Despite their importance, these aspects are very often overlooked during analysis.

a. Precarious Public Institutions

Perhaps one of the most decisive features of the weaknesses in supervision in the developing economies is the precariousness of their institutions. This problem is manifest at three levels: insufficient qualifications among the staff of regulatory agencies to identify the risks taken by private institutions; insufficient authority to take corrective action once problems have been identified; incorrect incentives for the supervisory authorities that often cause them to hesitate when taking measures in cases of potential bank insolvency (Larraín, 1994).

As noted by Corrigan (1996), the essential component of the process of banking supervision is the inspection that takes place on site with a sample of individual loans. This helps determine the current and future status of those loans and thus their potential for timely repayment. This type of review requires a high level of sophistication on the part of banking inspectors. This task is perhaps the weakest link in the supervision chain in developing economies, since without clarity on the future perspectives of a loan it is impossible to correctly assess a bank's condition.

Interestingly, these insufficiencies tend not to be concentrated at the level of senior officials at these institutions, but rather among those

charged with field inspections and/or desk supervision. The causes for this phenomenon are varied, yet it is important to highlight the big gap in income between supervisory agency staff and equivalent positions in private industry. This leads to a high turnover at these agencies. As a result, it is often quite difficult to acquire and retain the necessary staff experience and qualifications.

Furthermore, supervisory agencies' ability to identify losses is of limited use unless they have sufficient power to enforce corrective action. Supervisors should have enough authority to impose sanctions if compliance with prudential regulations wanes. Depending on the institutions being supervised, such sanctions can include: fines, dismissal from management posts in cases of imprudent practices, restrictions on the activities banks may undertake, proceeding in the extreme to liquidation (BIS, 1997). The problem is, however, that even when supervisory agencies have formal authority to take corrective measures, the administrative requirements as to the evidence they must gather are so exacting that it is extremely difficult for them to compel a bank to increase its capital reserves or apply more prudent policies in specific areas.

The third requirement for prudential supervision is for supervisory agencies to act decisively. However, the political and legal context often encourages banking supervisors to delay the liquidation of an insolvent institution or the application of corrective measures (Kane, 1989; Benston and Kaufman, 1988). The costs of failing to take timely measures can be high. When exit policies are weak and unstable banks are allowed to compete with solid ones, the former have an incentive to survive in the short term by competing aggressively. Clearly, this can debilitate financially secure banks and increase the cost of the solutions eventually required (Lindgren, 1996). Another weakness in many developing economies is that, given the greater involvement of the government in such economies and the scope of banking ties with industrial conglomerates, the pressure applied to banking supervisors to forestall corrective measures may be greater than in most developed economies. The liquidation or penalty on a banking operation may generate not only illegitimate protests from powerful lobbies but may also lead to a suit being filed against the supervisor (Goldstein and Turner, 1996).

b. Lack of Tradition in the Operations of Financial Markets

Quite clearly the solvency of the banking system does not depend solely on the role played by public regulatory agencies. Rather, it needs to be supplemented by responsible actions by bank management itself, as well as by monitoring by those institutions' shareholders and depositors. In other

words, market discipline is a must.

Despite the processes of financial liberalisation that commenced some years ago, in many developing economies the financial systems have not had the benefit of a learning curve³ that allows them to perform their risk-assessment role properly. This is compounded by a traditionally strong presence of the public sector in the system's operation, and a lack of monitoring by depositors themselves to help discipline bank management.

The initial conditions for financial systems have been identified in the literature as a determinant factor in the success of liberalisation processes (Caprio *et al.*, 1993). A bank's net worth, the initial composition of its assets and liabilities, its available information, human capital, and incentives system, all reflect pre-existing controls that condition banks' response to reforms. When the system is devoid of qualified bankers and the incentives guiding banking operations revolve around governmental directives, an abrupt shift toward liberalisation could generate significant losses (*ibid.*).

Liberalisation policies have typically been associated with excessive expansion in lending. In fact, increased confidence stemming from the reforms can engender overly optimistic expectations about the future. Free of lending restrictions, banks respond to new potential demands from sectors previously subject to controls (most often consumer loans, real estate, etc.). Their experience in establishing prudent lending limits is limited since the restrictions previously in place barred them from the newly attainable levels. If all the banks attempt to do the same thing, price bubbles will emerge for assets. The deterioration in the quality of the loans will only become apparent when the bubble bursts as a result of a domestic or foreign shock (BIS, 1996).

Where the tradition of bank monitoring by depositors and shareholders is weak, managers have little incentive to temper their behaviour. Bad management of pre-crisis situations aggravates these negative incentives, since bank stockholders and large holders of bank liabilities have not always been forced to pay for their risk-taking practices. Government intervention can harm incentives for disciplined management, for example, by creating expectations of rescues among owners and creditors of financial institutions. Such face-saving measures include weak exit policies for troubled institutions and overly generous last-resort lender policies. Rojas-Suárez and Weisbrod (1996) conclude that the failure to punish shareholders is a key factor in explaining the weaknesses of banking restructuring processes in Latin America in the 1980s.

The real problem is that governmental support has been *de facto* rather

3 The benefits of competition emerge over time and are the result of a learning curve. For an application to the financial system, see Arrau (1996).

than *de jure*, and has normally exceeded the explicit insurance involved. In fact, most developing economies offer only partial and limited formal coverage of banking deposits. In this vein, as Goldstein and Turner (1996) indicate, the problem lies in the discretionary nature of governmental support in coming to the aid of large creditors and/or bank owners to an extent far beyond the previously agreed levels. This generates higher moral hazard in the banking sector.

c. Accounting Standards and Asset Classification Systems

Independent of the level of development attained by an economy, a realistic review of bank assets and an appropriate estimate of income and expenditures constitute fundamental aspects in determining those institutions' financial soundness. If most of the assets are in fact loans, an evaluation of the quality of the portfolio is crucial to ascertaining a bank's financial status. Typically, when the loan classification system fails, profits are overvalued and realistic provisions cannot be established to confront current or future losses. Furthermore, accrual of interest on non-performing assets cannot be suspended since very often bank managers are anxious to conceal their portfolio's real condition (Folkerts-Landau and Lindgren, 1997). This is one of the most problematic aspects of banking system operations in developing economies. Paradoxically, a large number of countries do have "formal" asset classification systems. Obviously, the catch is to be found in the implementation of such regulations.

The first problem lies in the poor quality of the information available. De Juan (1996) suggests that *in situ* supervision is essential in Latin America, given the lack of reliable financial bank statements. To systematically and efficiently review the portfolio classification prepared by a financial institution, a key element lies in computer-based informational support on which a sampling mechanism can be based (Ramírez, 1991). However, developing economies frequently lack historical databases containing financial statements, borrower databases, risk controls, and computer systems to apply and cross-check this information. All of these are vital in terms of guiding the *in situ* supervision process and focusing on those aspects presenting the greatest potential weakness and risk.

These problems are compounded by the practice of "evergreening", also a recurring problem in developing economies. In many countries, accounting standards for classifying uncertain or non-recoverable assets are not strict enough to prevent the banks that make bad loans from making themselves look good by lending more money to troubled borrowers. Where loan classification depends solely on the status of prior payments – more than on an evaluation of the debtor's exposure and the value of the collat-

eral – it will be easier for bankers and their clients to collude in disguising losses through a series of restructurings and interest capitalisations (Goldstein and Turner, 1996). Studies by a variety of authors (Gavin and Hausmann, 1996; Rojas-Suárez and Weisbrod, 1996) show that information on bad loans reported publicly in bank financial statements was a poor indicator of the real financial condition of banks in Latin America in pre-crisis periods.

A final important aspect has to do with the problem of the mismatch of currency that often affects banking systems in emerging economies. Normally, significant differences in interest rates exist, with the domestic rates in the developing economies being more attractive. As a consequence, there is a strong temptation for financial institutions to borrow in foreign currency and lend in domestic currency (Goldstein and Turner, 1996). The incentive to borrow in hard currency abroad is also present for non-financial-sector debtors, although this option is usually only open to the largest borrowers. In this context, an abrupt devaluation can generate significant losses for financial institutions and others, as witnessed in Mexico in early 1995.

Nonetheless, the problem is not resolved solely by having banks maintain balanced positions in foreign currency. As many borrowers who lack the ability to generate hard currency go into debt in dollars, a devaluation can make them insolvent. From the bank's perspective, the devaluation can create a serious problem in terms of credit exposure. This was a significant factor in the financial crisis that affected the Chilean economy during the early 1980s. Also in Thailand financial institutions were recently weakened by the impact of currency depreciation on customers with foreign currency liabilities (IMF, 1997).

d. Loans to Related Parties and Conglomerates

In developing economies, there tends to be a high concentration in ownership of property and distribution of income. The presence of large financial conglomerates with assets in both the real and financial sectors of the economy is a typical feature of those economies. As a result, executives rarely oppose concealed transfers of resources from the bank to a related company in which a bank partner participates because this would be seen as contrary to the interests of the other owners and endanger their individual reputations (in 1996).

Loans to related parties have been a source of severe problems in bank insolvency in Chile, Argentina, Indonesia and Thailand, among others (Morris and Goldstein, 1996; IMF, 1997). The problem, however, does not lie in a lack of limitations and legal statutes to regulate those limits. In

Latin America in particular, legislation has moved forward to establish caps on this type of lending. Studies by the BIS show that in developing economies, legal limits are often more stringent than in developed economies (BIS, 1996). The real problem lies not in a need to modify the legal limits but, once again, in the arena of practical implementation.

Problems of implementation tend to emerge at two levels. The most obvious is regulators' inability to identify or "map" the economic groups that own the banks. Although this is an essential element in enforcing the limits, the supervisory agencies in most developing economies are unable to comply with this basic requirement. Furthermore, banks tend to "disguise" the presence of connected loans by reaching agreements with other banks to create cross loans. In other words, bank X lends funds to the companies related to bank Y and bank Y lends to the companies related to bank X. Another traditional mechanism for concealing operations with related parties is through branches in tax havens which in turn provide loans to related companies in the domestic economy.

Another typical problem in emerging markets is that the approach used in the law to define related parties seeks to precisely define which company controls the conglomerate and, through exacting definitions and external indications, to determine what types of companies can be deemed to belong to that conglomerate. This system, apparently more legal and perfect, has proven to be disingenuous in practice. When the precise components for determining affiliation are known, it is not difficult to imagine ways to elude the law. Unlike the experience in other spheres, the evidence shows that discretionary power here is preferable to strict rules.

The problems associated with these conglomerates, nonetheless, do not end here. In developing economies there are numerous "de facto financial conglomerates" with a presence both in the banking industry and in such financial activities as stock brokerage, insurance brokering and investment funds. This situation poses a threat to the bank since the bankruptcy or insolvency of one of the financial companies associated with it can be passed along to the bank itself. The risk of contagion stems from the presence of common, controlling elements in the banks and other financial institutions belonging to the conglomerate and/or the fact that they share a corporate image, use a common infrastructure, share client bases, etc. In other words, a system of financial conglomerates appears to be in operation, even though the scope of the "fire walls" or consolidated supervision mechanisms have yet to be defined.

Similarly, the presence of a non-regulated parent company that controls banks makes it possible to acquire financial institutions abroad – even in poorly regulated locations – thereby generating a grey area for effective consolidated supervision by the regulator in keeping with the Basle para-

meters (Larraín, 1997). In fact, several Latin American conglomerates have internationalised across the region through their shareholders. This generates a non-covered risk of contagion for the domestic financial system should those institutions have problems in their international activities. Similarly, investments have been made by these conglomerates in tax havens, such as the Cayman Islands, where supervision is practically non-existent.

e. Expensive, Inefficient Intermediation Margins

In today's increasingly globalised world of financial market operations, banks' long-term viability and stability require that they remain competitive on the international level. This in turn requires efficient banking systems capable of evolving within a framework of "reasonable" margins of intermediation. In this sense, a bank sustained on the basis of oligopolistic revenues inherent to protected environments, becomes more vulnerable to losses and potential insolvencies when confronted by unexpected financial events or increased international competition (Lindgren, 1996).

In the current Asian crises, inefficiencies in financial systems, stemming partly from constraints on competition, may also have contributed to the scale of capital inflows because the spreads between lending and deposit rates in domestic financial institutions, wide by the standards of the industrial countries, contributed to relatively high lending rates that, together with exchange rate policies, encouraged borrowers to seek funds abroad (IMF, 1997).

A series of studies shows that intermediation margins in developing and emerging economies tend to be considerably higher than in developed nations. This is particularly true in Latin America. According to a BIS (1996) study, net interest margins were above 5% in the nations of Latin America (1990-94 average), significantly higher than the norm in more consolidated financial markets where the rate rarely runs at over 3%. The same study suggests that higher margins do not necessarily respond to a higher exposure and/or an inflationary context, but are more closely linked to high operating costs. It is not unusual to find that those costs come in at over 5% of assets in Latin America, as compared to levels below 2% in more consolidated markets such as Germany, Singapore or Hong Kong. In any case, the differences in intermediation margins often reflect different levels of banking efficiency rather than different risk conditions.

The main explanation for that inefficiency is that banks in developing economies operate in contexts that do not favour competition. The rates of concentration and oligopolisation tend to be very high – in most cases as a result of inappropriate criteria regulating entry rather than as a response to

any structural conditions in the market that favour concentration. According to data from the BIS (1996), banking concentration – measured as the percentage market share of the five largest banks – was over 55% in Mexico, Chile, Venezuela and Brazil, as compared to figures of under 40% in Hong Kong and Singapore, and under 15% in Germany and the US. Entrance regulations have often been used in a discretionary manner to discourage competition from foreign institutions. This has had a negative impact on the transfer of technology and know-how to those markets.

Another factor contributing to a lack of competition and efficiency in these financial systems is the continuing role of government ownership. The same BIS (1996) study indicates that the percentage of private ownership in the financial system in 1994 was just 58% in Argentina, 52% in Brazil, 77% in Colombia, and 13% in India, compared to 100% in all of the consolidated, competitive financial systems. Normally, the policies in place at publicly-funded banks result in an emphasis on targeted loans. This keeps banks from evaluating their exposure properly and causes them to operate with the strong implicit backing of the state. These factors generate unfair competition in the system and serve as an incentive for inefficiency.

f. Lack of Portfolio Diversification

A series of studies associated with the BIS, indicate that one of the important weaknesses in developing economies' banking systems is the absence of international diversification in their portfolios (BIS, 1996; Goldstein and Turner, 1996). Specifically, emphasis is placed on the case of small economies with exports concentrated in a few commodities that offer banks limited options for diversification. In these circumstances, the financial system can only be isolated from shocks in the domestic economy through international diversification. However, the presence of international lending in developing economy bank portfolios continues to be very low. In those cases where international diversification is present, it is usually due more to direct investment by foreign banks than to cross-border lending.

In addition to a lack of expertise in evaluating cross-border loans, international diversification has been hampered by the scarcity of international currencies and/or restrictions on the free flow of capital. Moreover, these loans constitute new challenges for supervisors, particularly in terms of country risk. This risk is naturally different from the exposure associated with the individual borrower and includes both sovereign and transfer risk (Dale, 1984). If a bank is unable to recover its cross-border loans, the result may be a direct, negative impact on its capital. This can lead to insolvency

unless proper reserves or diversification are in place. This thinking suggests that if minimum experience or expertise does not exist in a given country, the cost of international diversification may be higher than the benefits to be reaped from it.

III Policy Recommendations for Reinforcing Prudential Supervision in Developing Economies

This section presents the reforms necessary to strengthen the stability and enhance the quality of supervision in developing economies distinguishing between first and second-generation reforms. First-generation reforms are essentially: the opening of the financial system to foreign institutions; the strengthening of prudential supervision; and, the strengthening of the role of the market in monitoring banking institutions as a necessary complement to public sector supervision. This “packet” of reforms is most applicable in less developed economies. Second-generation reforms include: international diversification of the banking portfolio; regulation of financial conglomerates; and, evaluation of the quality of bank management. Clearly, this type of reform is most justified among more complex markets – typically emerging economies – where supervisory agencies have the needed expertise. As such, they will be better poised to implement new supervisory instruments to cover the new risks. It does not make much sense for economies that have yet to resolve their basic problems of supervision, such as having a good portfolio classification system or controlling limits on lending among related parties, to implement this type of reform.

First and second-generation financial reforms should not necessarily be interpreted as being mechanical or strictly sequential; that is, finishing the first round is not a prerequisite to beginning the second. It is perfectly possible that second-generation reforms may be implemented alongside first-generation changes, depending on the characteristics of each specific market. For example, a supervisory law on consolidated financial conglomerates – a second-generation modification – can contribute to strengthening supervision and enforcement mechanisms for operations among related parties, a first-generation reform. Nor should second-generation reforms be interpreted as necessarily belonging to more developed economies. There may well be cases of less developed economies that have consolidated an institutional strength that will enable them to take additional steps, such as internationalising their banks. Similarly, it is also quite likely that some basic problems in supervision will remain in emerging markets, as demonstrated by events in South Korea, Thailand and Indonesia.

FIRST GENERATION REFORMS

A. Improving the Efficacy of Prudent Supervision

Strengthening Institutions

One of the first tasks in improving the effectiveness of supervision in developing economies is institutional strengthening. This means taking action to improve supervisory agencies' ability to identify problems, reinforcing their power to take corrective action, and establishing clear rules that reduce stonewalling in implementing necessary measures.

Firstly, such change requires an improvement to the qualifications and experience of the staff working for the supervisory agencies. Supervisors will need resources to train their staff in both *in situ* supervision and in analytical capabilities for desk-based reviews. Staff members must also be open to understanding new developments in the marketplace. They need to be sufficiently familiar with bank operations to know where to look and how to identify weaknesses below the surface. Supervision teams need to be skilled in evaluating lending systems, borrowers' ability to pay, the adequacy of provisioning, etc. (Folkerts-Landau and Lindgren, 1997). Given that a significant portion of the qualifications for these positions are not to be found in the formal educational system, it is essential that the supervisory agencies themselves be capable of training their staffs. This means providing the opportunity for a professional career, where meeting certain goals will lead to better job descriptions and pay. In this context, it is crucial that salaries at these agencies run not too far below pay for similar work in the private sector.

Secondly, supervisors need to be granted real power to take corrective action in problematic situations. Usually, when a bank's financial standing begins to deteriorate, supervisory agencies have a range of options to choose from in order to remedy the problem. For example, following each inspection, a bank's examiners may meet with management, including the board of directors, to discuss the bank's operations. These informal discussions are often enough to rectify the less serious sorts of problems. In more serious cases, regulators may have recourse to recapitalisation plans, or they may block outward transfers of funds, limit the bank's exposure in certain types of operations, restrict the payment of dividends, limit growth, make staff changes at management levels or impose a freeze on bank operations (Larraín, 1994). To limit banks' questioning of decisions made by the supervisor, these agencies must keep an updated log of the results of previous visits to each bank, as well as a copy of the commitments achieved in conversations with bank management. This way, corrective decisions by

the authorities will be perceived to be less arbitrary. Banking supervision can significantly affect the progress of the industry and the property rights of bank owners. While it should be possible for interested parties to appeal rulings by supervisory agencies, the process is more effective if the supervisors themselves are not personally liable for damages caused by any actions legitimately performed in the course of their duties.

Thirdly, banking legislation should establish clear rules that limit stone-walling by the supervisor in insolvent situations. This should not be construed to mean a mechanical law that seeks to cover each and every potential situation and defines regulators' responsibilities down to the very last detail. Rather, the idea is that the law should define clear, objective measures to be taken by the regulator with regard to banks confronting problems of solvency. How drastic those measures will be depends on the financial institutions' degree of under-capitalisation. Two good examples of banking legislation that includes the concepts expressed in the preceding paragraphs are the Chilean and US laws.

In the US, Prompt Corrective Action has been applied since 1993. This approach seeks to link supervision more directly to equity. For example, banks in Zone 3 with sub-minimum capital on hand are subject to penalties such as restrictions on the payment of dividends and risk-intensive activities, possible removal of management, etc. Banks in Zone 4 can be subject to more serious measures such as intervention or closure. The Chilean banking law of 1996 contains a similar approach. For banks failing to achieve required minimum capital adjustments (corrected for non-provisioned losses), an automatic mechanism has been established to adjust equity by requiring shareholders to provide fresh resources without delay. For banks with severe problems of insolvency, defined as a Cook Index below or equal to 5%, the law requires the board to call a "creditors' convention" as an alternative to straightforward intervention and/or liquidation.

Improving Asset Supervision Capabilities

The ability to identify problematic situations of banking insolvency in developing economies requires overcoming one of their primary weaknesses: the ability to supervise assets. This means placing greater emphasis on *in situ* supervision than desk-based reviews. The poor quality of information in developing economies calls for supervisors to reinforce on-site inspections as a tool in identifying problematic situations early on (De Juan, 1996). Thus, if a bank has initially been classified simply as a "troubled" or "problem" bank and then fails within six months, it may be that it was not audited with sufficient frequency. Inspections should be conducted

at least annually, although the larger banks – with greater systemic exposure – should be reviewed biannually, at the minimum.

A second requirement for improving the ability to supervise assets is improvement in sources of information. No information should be kept from the supervisor that influences an inspectors' ability to prioritise the components of an on-site review. Inspection information support systems must select the loan samples to be reviewed in the field. For that purpose, at least a bare-bones system must be devised to provide data on the status of borrowers in the financial system as well as a historical file of borrowers and their ratings. That file will grow as experience is gained in classifying assets (Ramírez, 1991).

To correct the problem of “evergreening”, De Juan (1996) suggests that a loan should be classified as uncertain or non-recoverable whenever the borrowers' repayment ability is weak, even if he or she is up to date in the payments. In this case, banks should be required to provision up to the amount of the expected loss, the accrual of interest should be suspended and, most importantly, the bank should not be allowed to refinance loans to those borrowers.

In terms of the problem of mismatches, a comparison should also be made of the borrower's ability to generate hard currency and the denomination of the debt, and the result must be incorporated into the portfolio classification and evaluation systems. In any case, sufficiently detailed supervision should be maintained to ensure that bank mismatches stay within reasonable limits as a percentage of equity.

Problems in Lending to Related Parties

In addition to clearly limiting the operations eligible for transactions with related parties and establishing drastic penalties for those who break those limits, regulators also need some leeway in defining and establishing additional presumptions of wrongdoing as market operations become increasingly sophisticated in finding ways to dodge the law. In this sense, discretionary powers seem to have several advantages over firmly-set rules. Supervisory agencies also need to create divisions capable of clearly identifying the composition of the primary conglomerates and their member companies. Without this ability, enforcing the limits contained in the law is impractical. One of the most serious shortcomings among Latin American supervisory agencies is precisely their tremendous ignorance of the morphology of these groups. This lack of familiarity with the composition of the business community permits private enterprise to continually overstep the limits established by law. In addition, supervisors should

ideally have a separate file or database on borrowers related by ownership or management to each financial institution.

B. Strengthening Market Discipline

Having a stable, solid financial system also calls for a strengthening of market discipline as a complement to adequate supervision. The primary components of that added strength are: limited insurance for deposits, greater market transparency, and a credible mechanism for allocating losses among the private sector. Market monitoring as a complement to supervisory activities requires that depositors and investors perceive that they may lose their funds and savings should a bank become insolvent. In developing economies, the state has traditionally stepped in when problems have occurred. This behaviour serves as a disincentive to market-imposed monitoring.

The first rule of market discipline is limited deposit insurance. The purpose of such insurance should be to protect only the small depositors, those who have neither the expertise nor the incentives to monitor the status of financial institutions (Folkerts-Landau and Lindgren, 1997). However, as noted earlier, the primary problem is the perception of implicit insurance that debilitates the credibility of this mechanism. In addition to limited deposit insurance, it is essential that in problematic cases the cost of insolvency be assumed by the banks' owners and, if necessary, by the non-guaranteed creditors. Unless the market has experienced this situation, incentives for disciplining activities by banking institutions are unlikely.

As part of a regulatory system that allows troubled institutions to normalise their situation early on – thereby reducing the potential of destabilising effects on financial markets – it is important to have a private mechanism that can serve as an alternative to state support. In this vein, special supervisory measures, provisional administration and liquidation, and intervention of guarantee funds have the common denominator of involving the state and leading to potential moral hazard. Furthermore, they tend to bring about strong noise or turbulence in the financial market. The experience in Latin America shows that, in practice, the problem of disorderly bankruptcy has typically been addressed by discretionary intervention in the troubled bank by the state, which nationalises it, either temporarily or permanently, and absorbs the resulting losses.

An example of a private mechanism to resolve insolvency can be found in Chile's banking legislation. When there are severe problems of insolvency or ongoing lack of liquidity that have not been resolved through the markets' usual means (capital repositioning, sale of loan portfolios or mer-

gers), the law allows creditors or depositors holding non-liquid liabilities (liquid assets are 100% guaranteed) to reach an agreement with the troubled institutions that will allow them to swap the debt for equity in the institution. This safeguards the institution's continuing operation and serves as an alternative to straight liquidation. Under the agreement, subordinate bonds are automatically capitalised up to an amount that enables them to reestablish a Cook ratio of 12%.

Furthermore, market discipline requires fostering transparency about the status of the institutions. For the market to operate in a framework of rewards and punishments, it needs to be able to distinguish between solid and potentially problematic banks, as well as to demand appropriate risk premiums. Transparent information should permit a careful evaluation of the banks' exposure profile, its profitability and the capital available to cover those risks. This can be accomplished through annual and quarterly financial statements, with certain information contingent upon certain events, such as an increase in provisions, expectation of significant losses or an increase in bad loans.

Nevertheless, the public disclosure of information on the financial institutions should not involve a classification or rating by the authorities, since this may bring more costs than benefits. In other words, if the supervisor rates a given institution well and that bank subsequently has trouble, the public may seek to blame the supervisor. Similarly, a bad rating could, at some point, generate instability for a given institution. These arguments, of a general nature, can be particularly relevant in developing nations given their strong dependence upon these institutions and the tradition of authorities stepping in to save banks.

C. Opening to Foreign Investment and Access Standards

One of the important challenges in modernising financial systems in developing nations is the need for greater openness to foreign investment. As financial institutions from more developed nations physically move into developing economies, growing competition will emerge. Under oligopolistic conditions, this will generate an increase in the supply of financial resources at a lower cost, to the direct benefit of credit users and depositors in the receiving nation. Perhaps more importantly, their physical presence results in the transfer of technology and know-how. This will help to develop new skills in more backward nations. Since foreign bank portfolios are less concentrated in lending to companies in the host nation, and because they usually have access to external sources of liquidity and hard currency (from their headquarters on out), they will be capable of confronting a shock in the local economy better than the domestic banks. In

addition, they will be less vulnerable to governmental pressure (Goldstein and Turner, 1996).

Despite allegations that discretion in access criteria has been intended to ensure the solvency of the system and protect local depositors, in practice it has been used in many developing nations to protect the domestic banking industry. However, there have also been cases in which indiscriminate access to the industry has generated destabilising competition. The challenge, then, is to generate access standards with clear and objective rules that serve to filter out not competition but rather unscrupulous businessmen. Although access rules alone cannot guarantee that a bank will be well managed once it has been granted access to the industry, they can be an effective method for reducing the number of at-risk institutions that endanger the system's stability.

The essential criteria that must form the basis for the regulation of access to the financial industry are, we believe: the financial strength of the major shareholders; capital contributed by the financial institution; the presence of a critical mass of technical qualifications and experience; the honesty and integrity of the shareholders, board members and manager; and, in the case of foreign banks or foreign bank groups, the capacity of regulators in the country of origin to engage in effective supervision. With some differences, a similar set of criteria for the regulation of entry of financial institutions is described in detail in the BIS' "Core Principles for Effective Banking Supervision" (Basle, 1997). As the recommendations of the Basle Committee indicate, the presence of clear and objective criteria reduces the potential for political interference in the granting of licenses, and ensures that strictly technical criteria prevail. The regulatory authorities should have the power to deny licenses to those who do not meet the requirements established by law.

SECOND GENERATION REFORMS

A. International Diversification of the Banking Portfolio

Country-risk provisioning is a common instrument in developing countries because it allows banks to reduce the impact of potentially negative external events which can arise in the process of cross-border lending. This form of provision should be done parallel to the granting of credit to a given country, independent of the particular characteristics of each credit situation (Larraín, 1995). Different models exist for country-risk provisioning schemes – e.g. that of the United States, which is highly dependent on the discretion of regulatory bodies; that of Britain, which is based on

matrixes; that of Spain, which emphasises private classification. It is crucial for developing countries to have such country-risk provisioning to complement individual loan assessments and classifications. For banks and for regulators, however, the aforementioned schemes represent a great challenge in terms of evaluating risk.

When authorising cross-border lending, individual financial institutions should be the ones who compile pertinent information on their borrowers and the country context for the lending, in such a way that a bank supervisor could go back and evaluate risk situations. If a loan, for example, does not comply with required criteria, it should be given a poor rating. Likewise, international lending situations should be consistent with the banks' general international development strategy. This requires a strong system of internal controls and information gathering to ensure adequate management. These criteria, which can also be applied in the case of domestic investments, are of fundamental importance to cross-border lending because regulators typically have much less access to information internationally than domestically. In many cases, developing economies receiving such loans do not have adequate regulations on providing reliable information. The recent banking law in Chile (1997) is a clear example of legislation intended to cover various risks that are associated with and originate from international banking.

B. Supervision of Financial Conglomerates

The operations of financial conglomerates are a significant part of the economic landscape in developing countries. As indicated above, their presence generates complications both domestically and internationally. The Basle Committee has proposed a series of minimum standards for the supervision of international banking conglomerates. Those worth highlighting include: the responsibility of the supervisor in charge of the home office, the need for simultaneous authorisation by officials in the host country and the country of origin, and the need for continual exchanges of information among regulators.

Although these recommendations seem like steps to an "ideal" regulatory scheme, it can be difficult to actually implement them in developing countries. One problem originates in the atmosphere within which bank shareholders make investments. That is, there are controlling groups in banks that on their own have diversified their investments in financial institutions in other countries, often through parent company ventures, rather than working through domestically-regulated ones. In such cases, regulators in investment-receiving countries have not had the proper resources to apply or enforce the Basle recommendations, since in effect

this procedure is not real internationalisation based on foreign banks.

Similarly, thorny complications arise when countries make accords on supervisory cooperation and information exchange which do not comply fully with bank secrecy laws or other accords. In these cases, discrepancies not only affect shareholder investments but also bank lending. The few countries that do have pertinent legislation regarding supervision agreements authorising the participation of their banks in the international market confront the problem that if these accords and agreements do not function properly, banks will be unable to invest internationally, and the incentive will rise for their shareholders to invest on their own in the international market.

Evidently, banks' participation in the international market through unregulated pathways brings with it clear risks for domestic banks. These risks originate in market perceptions that such activity will set off a chain reaction of collapse that spreads to local banks. In other words, although shareholders believe they are internationalising their investments and their exposure, in practice they are putting the financial systems of their own country in jeopardy. Moreover, the precarious situation of supervision makes it difficult for many nations to comply with the Basle consolidated supervision system. To think that countries that have not even been able to supervise adequately their domestic operations can be responsible for the international operations of a conglomerate is wishful thinking.

The obvious recommendation is that it is necessary for all nations to accept the Basle standards and in particular for home countries to block their poorly supervised banking groups from investing in international markets. A second-best recommendation is that when it is inevitable that non-regulated international investments will be made – either because the host country permits it or because it is not possible to prohibit such activity – a drastic “fire wall” should be erected, to totally separate financial, commercial or any other kind of domestic banking from the bank operating in international markets. Doing so will define the boundaries of responsibility of the various bank actors.⁴ This policy will also push countries to protect their markets against unregulated banking groups.

Many times developed countries are reluctant to sign banking or financial accords with developing countries. In these cases, one possibility is to exempt from a given accord those investments in countries that, in accordance with protocols defined by regulators, are consistent with acceptable

⁴ In many developing nations, constitutional regulations make it difficult to prohibit international investing through bank owners. Chile and El Salvador are two examples, among many, of such cases.

supervision and risk standards. For example, the recent Chilean law exempts those countries which international risk classifiers have approved as acceptable for investment from such stipulations.

Domestically, the operation of conglomerates also presents significant challenges. More complicated than just dealing with their different operational structures – either the Anglo-Saxon, or holding, or the more European banking type – having a consolidated supervision system, is challenging. Perhaps the most complex part deals with those conglomerate operational structures that have less than transparent control systems, through either domestically or internationally unregulated parent companies, that make applying law difficult. Banking law requires the definition of a control threshold and/or minimum holding so that a financial group is forced to submit to consolidated supervision. In practice, however, conglomerates can avoid regulation by changing control thresholds or by controlling conglomerate activity indirectly. Dealing with this problem, which is similar to regulating related parties, represents an enormous challenge for supervisory agencies.

There is no universally applicable formula for the supervision of conglomerates. One scheme that can be applied to mixed investment groups typically operating in developing countries – controlling both financial and industrial activities through relatively “murky” ownership ties – is the holding model. This model relies on regulated parent companies to separate out all the financial arms of the conglomerate giving rise to an umbrella-type coverage with which it is possible to apply consolidated supervision. This regulated parent should be barred from investing in industrial sector activity, in which shareholders can invest directly, erecting a “fire wall” that separates the activities of the financial conglomerate from the rest of the economy.

Another issue that needs to be dealt with in developing countries is the absence of supervisory infrastructure that regulates companies taking advantage of synergies between different arms of a financial group. For example, such groups share names or corporate images, thereby increasing the risk of contamination for the bank, because there are no regulatory authorities with the resources to prohibit the use of a corporate image while that group is not under standard consolidated supervision. Likewise, clear regulations that permit the utilisation of a network of bank branches by other businesses within the conglomerate, like insurance companies, do not exist. It is crucial to make progress in regulating such operations, in order to avoid subsidies that can skew the level playing field of the financial system.

Developing countries have many gaps to fill to overcome the lack of legal institutions to regulate the structure and supervision of financial con-

glomerates. With the exception of Mexico, which has a comprehensive legal framework, and Chile and El Salvador, which are in the process of developing appropriate legislation, Latin America's system of financial supervision and law lags well behind that of more advanced parts of the world (Larraín, 1997).

C. Evaluation of Management Quality

The first line of defense against problems of bankruptcy is administrative competence (Folkerts-Landau and Lindgren, 1997). This notion has been included in recommendations by the BIS (1997), in the "Core Principles" quoted above, and in recent work by the IMF (1997). One of the weakest areas in bank supervision in developing countries is the aforementioned evaluation of management, despite the fact that it is one of the crucial mechanisms that permit banks to make future projections. In effect, more than just figurative snapshots obtained by reviewing quantitative financial indicators, management evaluation is the determining variable in predicting a bank's future, particularly during times of economic turbulence. A solid internal auditing system, effective use of all management information systems, strategic development plans and continuing development of human resources are key essentials to good management. In many developing countries, putting these essentials into practice can be difficult.

To endow bank examiners with the skills they need, the focus should be on preparing them to conduct evaluations in the following areas: capital, assets, market risks, profits, and management. Flexible examiners who can see the big picture are preferable to specialists who analyse isolated trends within the bank.⁵ Such preparations and skills tend to clash with institutional norms in the majority of developing countries, which lack the resources to employ inspectors who have the capacity to look past mere risk-management analyses. These policies are also fundamentally based on the idea that there can be compromise and cooperation between a bank's Board of Directors and its management. An examiner should identify problems and reveal them to the board with all available evidence, recommend changes, and then leave the bank to choose the best route to overcome the problems.

This is especially complex when a bank's financial indicators show a perfectly healthy outlook, but the bank has management problems. For example, a bank could be fulfilling minimum capital standards and showing high profits. However, a more thorough inspection could reveal that many of

5 Nonetheless, examination teams specialising in highly complex subjects, like financial exposure or computer systems, can be useful.

these positive indicators are the result of irregular profits and/or aggressive lending policies that do not comply with acceptable standards. If this were the case, the bank would be undercapitalised. Given that management is responsible for defining appropriate policies for the bank's operation and establishing the necessary capital, this bank would receive negative marks for capital reserves, investment quality and management, even though it had apparently complied with all minimum banking rules. In all of this, the attitude of the inspector is essential since the idea is not to interfere in the bank's decisions.

Likewise, in those countries that have a shortage of high-quality, professional boards of directors, it is crucial for banks to reinforce a sense of commitment within the institution and avoid working solely for controlling groups or their interests. A better link between examiners and board members, including ensuring that the latter have access to the conclusions of inspections even when serious problems are not detected, permits more input "from above" and can help boards in many cases become better supervisors. Such cooperation can also improve basic management, which can be discussed in periodic meetings between examiners and boards.

The application of a strategy emphasising good management requires regulatory authorities to hire highly skilled and experienced personnel, who are provided with access to the necessary resources. These resources are not always readily available in developing countries, especially when we consider that boards of directors in such countries do not have a tradition of commitment or precedents for allowing supervisory authorities to interfere in the general operations of their banks.

IV Developing Countries and International Regimes for Prudential Supervision

The increasing international activity of banks from developed countries and the risks that have emerged in this practice have given rise to a series of agreements among these countries involving recommendations for their national regulatory authorities. The most active forum for discussion of such issues is the "Basle Committee" formed by the member countries of the Group of Ten (G-10). The Basle Committee has reached agreements on appropriate capital adequacy ratios for banks, consolidated supervision of international financial conglomerates, and the so-called "Core Principles for Effective Banking Supervision".⁶

⁶ Given its importance and international legitimacy, this document is the central reference for this paper and it should be the base from which the developing countries continue to work.

This last one constitutes a document that synthesises the principal areas around which the Basle Committee has worked in the sphere of banking supervision, including such aspects as licensing, mechanisms for prudential supervision, responsibilities of regulatory bodies and supervision of international conglomerates. The document was prepared by representatives of the G-10 countries, consulting with some non-member countries such as Chile, China and the Czech Republic, among others. This consultation was a new and positive development permitting the broadening of its sphere of influence concerning minimum standards for banking to a wider range of countries.

The recommendations in the Basle document on core principles are useful as an ideal framework for banking supervision, within the context of well-established and independent public institutions in economies where market discipline plays an important role. However, this context is not that of developing economies today. Some of the problems dealt with in the Basle document have little relevance for the majority of developing economies, e.g. market risks and value at risk, while the recommended approach to some other issues is difficult to implement in their context, e.g. evaluation of the quality of management. Furthermore, as has been seen, there is great heterogeneity in the needs for reform among the developing countries, and it must somehow be incorporated into the discussions.

This section aims to contribute to the development of a position, for the developing and emerging countries, on the principal matters at issue in international banking supervision. Such a position should be based on a solid understanding of the specificity of the problems of supervision in developing economies and the most important courses of action to follow in matters of international policy. Taking the “Core Principles” document as representative of the kind of approach now being taken in international forums, the position of the developing countries should aim to: (i) establish certain priorities that better reflect the needs of developing economies; (ii) deal in greater depth with certain areas, now touched upon only superficially but of great relevance to developing economies; (iii) incorporate other subjects pertinent to developing economies but absent in current debates.

Below we discuss the principal areas around which the position of the developing economies about matters of banking supervision should be shaped, and some of its essential components, without entering into details of proposals already elaborated in previous sections of this paper.

Capital Adequacy

One of the most important and widely implemented advances in matters of

international standards for banking is the 8% capital requirement. Some point to the need for developing countries to establish capital requirements greater than the 8% minimum, given the higher idiosyncratic risk of their economies relative to those of the G-10 countries. Likewise, there are proposals to increase capital requirements to compensate for the weaknesses in matters of portfolio classification and provisioning requirements frequently found in the developing economies.

It is evident that, in the short term, raising capital requirements can increase systemic stability. In the long term, however, the international competitiveness of the financial systems of developing countries can be damaged, as long as the developed countries keep the 8%, and that may also deteriorate the long-term stability of the system. A better solution was incorporated into the recently approved Chilean legislation: it establishes a minimum requirement of 8% but also gives incentives to the banks that have 10%, giving them greater opportunity to open new international and domestic business. This approach provides a better balance between the social and private benefits of capital requirements. In any case, indiscriminately raising the capital requirements for all developing economies does not seem appropriate.

Financial Conglomerates

Up until now, clear recommendations exist in matters of minimum standards in the realm of international activities of conglomerates, but far more ambiguous standards are applied to the operation of conglomerates in the domestic field. The reality in the majority of developing economies is that the central problem exists with purely domestic conglomerates. There are few developing economies that have banking conglomerates whose main activity is internationally oriented (Chile is one such example). The big problem is the existence of *de facto* conglomerates created by investments by bank owners in other financial businesses, generating the risk of “contamination”. The central problem generated by this type of conglomerate is that it is produced by structures of concentrated ownership in which it is not the bank itself that diversifies, making it very difficult for regulatory bodies to intervene and supervise in a consolidated manner. Lack of transparency in respect of locating the centre of power of such conglomerates faces the regulatory body with a “grey area” that hampers supervisory work. The elaboration of specific proposals for dealing with this problem should be raised by developing country authorities.

Consolidated Supervision

In the supervision of international conglomerates, among the key agreed principles are the responsibility of the regulator in the country of origin for the consolidated supervision of the group and the need for information exchange between the parent and the host countries. The central idea is to ensure that no part of the conglomerate is left outside the ambit of supervision.

Even if it is not a widespread phenomenon, there are a few emerging economies in which banks have internationalised. In these cases the application of the principle of consolidated supervision faces several complications. First, in countries with weak supervision capacity, to cede supervisory responsibility to the regulator of the head office may involve more costs than benefits. In many economies that have shown weak supervision capacity at the domestic level, it is difficult to imagine that their authorities may provide adequate supervision at the international level. The principle of consolidated supervision can thus generate a problem of moral hazard that, if not somehow offset, may eliminate the net benefits of banking internationalisation.

An obvious solution in these cases would be to prohibit the internationalisation of the bank. Once again, however, the problem may arise from foreign investments undertaken by the owners of the domestic bank. Faced with the impossibility of forcing such internationalisation to be done through the bank, the second-best solution is to give wide powers for the local regulator to impose a “fire wall” that totally isolates the local bank from all kinds of direct or indirect financial or commercial ties with owners’ investments abroad.

The need for information exchange between regulatory bodies is faced, in numerous cases, with national regulations on banking secrecy that prohibit such an exchange. These and other problems are almost absent from documents elaborated in current international forums. The idea would be for the principles of consolidated supervision to incorporate more options than they actually do now.

Internationalisation

Recently, in organisations such as the World Bank, the Inter-American Development Bank and the International Monetary Fund, the recommendation of internationalisation as a tool for risk diversification in developing countries is acquiring growing strength. Such internationalisation usually involves foreign direct investment as well as international portfolio diversification.

However, for this internationalisation to have more benefits than costs, it must be backed by an adequate capacity for supervision, particularly in spheres that imply competencies different from those required in the corresponding domestic field, such as those relating to the analysis of country risk. These elements are often omitted from the debates among developed countries, where internationalisation processes rely strongly on the self-regulation mechanisms of the banks themselves.

One obvious recommendation in this field is to design an adequate legal framework that gives powers to the regulator to appropriately cover the new risks of international operations. This framework must deal with matters such as appropriate provisioning for country-risk limits for diversification by project and by country, requirements for internal controls within the banks themselves, limits to their maximum exposure as a percentage of capital, etc., all of which would facilitate a process of solid internationalisation. Without an appropriate legal framework and the capacity for implementation on the part of regulatory bodies, internationalisation may bring more costs than benefits to individual developing countries. In general this set of issues is insufficiently dealt with in international forums.

Management Evaluation

The quality of management is a central element in financial system performance. But institutional weaknesses, inspectors' lack of expertise, and absence of professionalism in boards of directors which are often under the influence of economic groups and their interests make recommendations relating to its improvement particularly difficult in developing countries. To ensure that management evaluation becomes effective, these problems must be addressed in international discussions of supervision.

Credits to Related Parties

Although most developing countries have legislation that imposes severe limits on financial sector operations with related parties, there are very few countries that have managed to establish an effective regime to control this type of operation in practice. This is a central problem for developing economies, which are characterised by a high degree of concentration in ownership of assets. It is essential that developing countries set forth their problems in this sphere at the pertinent international forums. They may be able to benefit from existing relevant expertise in developed countries so as to better translate principles into effective practice.

Entry Requirements

The “Core Principles” adequately describe the central criteria that must govern the regulation of access of new institutions to the banking industry. This constitutes a useful tool for those countries that have not yet established such criteria within their domestic legislation. One of the frequent problems in the implementation of developing country legislation in this sphere, however, is the considerable discretion left to regulators. The absence of objective criteria is often used to restrict the access of foreign institutions to the market, as a result of pressure from domestic interest groups that enjoy great influence in many developing economies. In the same manner, on occasion, this discretion has allowed indiscriminate access of banking institutions to the system, under the aegis of the application of liberal principles, and consequent potential weakening of the stability of the system. Greater effort to develop objective requirements for access to the industry would be welcomed by many developing countries.

Exit Mechanisms

Although it is one of the key issues for the long-term stability of any financial system, there are no internationally accepted standards concerning exit. The continued presence of precarious institutions that do not resolve their problems – whether through liquidation, intervention, merger or some other mechanism – weakens the financial system. This constitutes a prominent problem in developing economies, where regulatory bodies are very susceptible to pressures from interest groups which seek to avoid adequate correction measures. The establishment of clear exit rules – including automatic mechanisms for patrimonial adjustment, solutions permitting continuation of banking activity on the basis of private arrangements or liquidation – would represent a tremendous advance for the stability of financial systems in developing economies.

Supervision of Assets

A good system of asset supervision, including appropriate classification of portfolio and provisioning requirements, is a high-priority objective that has not been achieved in many emerging economies. This objective, of crucial importance to developing economies, is insufficiently dealt with in current discussion of international standards. The main problem typically rests with implementation, including the absence of adequate systems of information, more than formal legislation. Unlike the situation in developed countries, where the process works mainly on the basis of self regula-

tion, the role played by regulatory bodies in this area, emphasising *in situ* supervision, is a key element. This issue should be strongly emphasised by developing country representatives in international discussions.

Market Risks

Recognising the weaknesses of the capital adequacy ratio of 8%, and the explosion of derivative instruments in developed countries, the Basle Committee has made great efforts to develop better measures of what is required to cover market risks. Its concept of “value at risk” aims at a common measurement standard so that institutions themselves can estimate the maximum loss of the value of a financial position in a given period of time. This new approach also comprises a series of qualitative standards that private institutions must face, such as an independent unit of risk control, etc.

Though the “value at risk” approach represents an important advance to complement the capital adequacy ratio of 8%, its pertinence in developing economies is debatable. In general, the exposure of developing country banks to market risks emanating from derivatives markets and other new instruments is far lower than that of developed countries’ banks, given the insufficient development of derivative markets and other coverage instruments. Moreover, some of the suggested methodologies are too sophisticated to guide coverage of financial risks in developing economies. Of much higher priority in developing economies is the development of simple techniques to limit the exposure of banks to exchange risks and the incorporation of the exposure of debtors to the risk of devaluation in the evaluation of credit risks and the classification of assets.

V Conclusions

There are six key characteristics that suggest weaknesses in developing countries’ financial systems: (i) weak public institutions; (ii) lack of experience in the operation of financial markets and excessive emphasis on public ownership of financial institutions; (iii) inadequate accounting and risk-assessment standards; (iv) high concentration of ownership in financial institutions; (v) expensive or inefficient financial intermediation; and (vi) lack of an internationally diversified banking portfolio. These characteristics give rise to a series of problems that can affect market stability and weaken the quality of supervision in developing economies. They can also contribute to increased credit risk, a lack of market support in institutional monitoring, and inadequate standards for the entrance and exit of financial

institutions.

Although idiosyncratic events within financial markets generate specific obstacles to supervision in developing economies, the challenges of financial reforms are generally determined by the level of complexity and development in the financial market, and the ability and expertise of the supervisors. First-generation reforms are best applied to low and middle-income developing economies, in order to overcome the deficiencies that typify their financial systems. Second-generation reforms are better suited to more complex markets – typically emerging markets – in which regulatory agencies have the expertise necessary to create new methods of supervision to cover new and changing risk situations. It is illogical to think that developing countries that have not created fundamental regulatory mechanisms, such as basic systems of investment classification or loan controls, will be capable of implementing these types of reform, which require expert personnel to implement and oversee them. First and second-generation financial reforms should not necessarily be implemented in a mechanical or strictly sequential fashion, in which finishing the first round is a prerequisite to beginning the second. It is perfectly possible that second-generation reforms may be implemented alongside first-generation changes, depending on the characteristics of each specific market.

The position of developing and emerging countries in international forums should be based on a solid understanding of the specific problems of supervision and the principal required courses of policy action in those countries. The recommendations in the Basle documents constitute general principles, useful as reference to what makes an ideal framework for banking supervision, within a context of well-established markets and independent public institutions with the required authority and expertise. However, the reality of the majority of developing and emerging countries is far removed from such a context. Its supervisory weaknesses lie more in the implementation of agreed principles than in the definition of legal frameworks. The main issues on which the developing countries should concentrate as they develop their own positions in international forums are: capital adequacy, financial conglomerates, consolidated supervision, internationalisation, management evaluation, credits to related parties, entry requirements, exit mechanisms, supervision of assets and market risks.

References

Arrau, Patricio (1996), “Competitividad de la Banca Chilena y su Proceso de Internacionalización,” In: Paul L.H. and F. Suárez (eds.),

- Competitividad: El Gran Desafío de las Empresas Chilenas*, Centro de Estudios Públicos, Santiago de Chile.
- Benston, George and George Kaufman (1988), "Regulating Bank Safety and Performance," In: Haraf W. and R. Kushmeider (eds.), *Restructuring Banking and Financial Services in America*, American Enterprise Institute, Washington, D.C.
- Bank for International Settlements (1996), *66th Annual Report*, BIS, Basle, June.
- Basle Committee on Banking Supervision (1997), *Core Principles for Effective Banking Supervision*, BIS, September.
- Caprio, Gerard, Izak Atiyas and James Hanson (1993), "Financial Reform: Lessons and Strategies," In: S. Faruqi (ed.), *Financial Sector Reforms in Asian and Latin American Countries*, World Bank, Washington, D.C.
- Corrigan, Gerald (1996), "Building Effective Banking Systems in Latin America: Tactics and Strategy," Draft prepared for the IDB, November.
- Dale, Robert (1984), *The Regulation of International Banking*, Cambridge.
- De Juan, Aristóbulo (1996), "The Roots of Banking Crises: Microeconomic Issues and Supervision and Regulation," In: Hausmann R. and L. Rojas-Suárez (eds.), *Banking Crises in Latin America*, IDB, Washington, D.C.
- Folkerts-Landau, David and Carl-Johan Lindgren (1997), "Toward a Framework for Financial Stability," Draft paper, IMF, Washington, D.C., September.
- Gavin, Michael and Ricardo Hausmann (1996), "The Roots of Banking Crises: The Macroeconomic Context," In: Hausmann R. and L. Rojas-Suárez (eds.), *Banking Crises in Latin America*, IDB, Washington, D.C.
- Goldstein, Morris and Philip Turner (1996), *Banking Crises in Emerging Economies: Origins and Policy Options*, Economic Papers No. 46, BIS, Basle, October.
- Group of Ten (1997), *Financial Stability in Emerging Market Economies: A Strategy for the Formulation, Adoption and Implementation of Sound Principles and Practices to Strengthen Financial Systems*, BIS, April.
- IMF (1997), *World Economic Outlook*, Interim Assessment: Advance Copy, IMF, Washington, D.C., December.
- Kane, Edward (1989), *The Savings and Loans Insurance Mess: How Did It Happen?*, The Urban Press Institute, Washington D.C.
- Larraín, Christian (ed.) (1997), *Supervisión Consolidada de Conglomerados Financieros*, Ministerio de Hacienda, Santiago de Chile.
- (1996), *Operación de Conglomerados Financieros en Chile: Una Propuesta*, Serie Financiamiento del Desarrollo, CEPAL/PNUD, Santiago de Chile.

- (1995), “Internacionalización y Supervisión de la Banca de Chile,” In: *Estudios Públicos No. 60*, Santiago de Chile.
- (1994), “The Modernization of Bank Supervision,” In: *CEPAL Review*, No. 54, CEPAL, Santiago de Chile, December.
- Lindgren, Carl-Johan (1996), “Maintaining a Sound Banking System,” Draft paper, IMF, February.
- Ramírez, Guillermo (1991), “Evaluación y Clasificación de Activos: La Experiencia Chilena,” In: G. Held and R. Szalachman (eds.), *Regulación y Supervisión de la Banca: Experiencias de América Latina y el Caribe*, CEPAL/PNUD, Santiago de Chile.
- Rojas Suárez, Liliana and Steven Weisbrod (1996), “Banking Crises in Latin America: Experiences and Issues,” In: Hausmann R. and L. Rojas-Suárez (eds.), *Banking Crises in Latin America*, IDB, Washington, D.C.
- Sorsa, Piritta (1997), *The GATS Agreement on Financial Services: A Modest Start to Multilateral Liberalization*, IMF Working Paper, Geneva, May.
- Stiglitz, Joseph (1993), *The Role of the State in Financial Markets*, Proceedings of the World Bank’s Annual Conference on Development Economics, Vol. 2, Washington, D.C.
- US Department of Treasury (1991), *Recommendations for Safer, More Competitive Banks*, Washington, D.C.

Part V

Epilogue

The Challenges for the International Financial System at the Eve of the 21st Century

Age Bakker

The discussions on the promotion of international financial stability in this Fondad-sponsored conference have been wide-ranging and stimulating. The turmoil in financial markets has exposed weaknesses in the functioning of the international financial system, as well as in the policy responses to resolve the crisis. Among the participants there was a wide area of agreement on some of the elements of reform, which are needed in order to strengthen the robustness of the system. But the discussions have also pointed out a research agenda on policy issues where further analytical work is needed.

I Essential Fundamentals

To begin with, there is general agreement on the main ingredients of sound macroeconomic policies in industrial and emerging economies alike. A stable macroeconomic environment with solid government finances, prudent monetary policies and market-oriented structural policies are a precondition for sustainable economic growth and a robust financial sector. The financial crisis has shown, however, that there is not a clear understanding among policymakers and academics of the pros and cons of some elements of what would constitute a sound macroeconomic strategy. First, there is the question of the appropriate exchange rate regime for emerging economies at different levels of development in a liberalised environment. It seems to me that further research is needed on the relative merits of fixed exchange rates, flexible exchange rates, and intermediate systems such as a crawling peg. In doing so, the policy implications of the choice for a particular regime need to be clarified. A second area of research, closely related to the former, might be the deployment of monetary policy instruments once there is a speculative attack on the currency. Some argue that the central bank should increase interest rates swiftly as soon as there is a speculative attack in order to restore confidence. Others have warned about the potential negative effects for the real economy and the financial sector. So we need to look further into these two issues.

Recent events have also shown that sound macroeconomic policies are not enough. At this conference, there has been a search for other fundamentals that count. In particular, we need to look more at the institutional settings that are complementary to sound macroeconomic policies and can thus enhance the robustness of an economy. One of these is the regulatory framework for capital movements. Few would contest the desirability of the ultimate goal of liberalised capital movements. The opening up of financial systems has enabled emerging economies to attract huge amounts of capital for rapid development. Free capital movement can promote growth, prosperity and stability, when properly embedded in sound macroeconomic and structural policies. However, experience in both industrial and emerging economies has shown, that if the liberalisation of capital movements is not accompanied by proper measures in other areas, this may lead to financial crisis. An orderly and proper sequencing of liberalisation and deregulation of financial markets is called for. The speed of opening up particular types of the capital account must depend on how fast and how effectively the reforms in other policy areas are carried through. Progress depends, *inter alia*, on the advances in: (i) privatising financial institutions; (ii) enhancing risk management capabilities in the banking sector; (iii) improving supervisory capacities; and (iv) enacting the appropriate regulations and enforcing them. The financial infrastructure of a country must be capable of handling international capital flows. Equally important, but often overlooked, is that the corporate sector must know how to function in these liberated financial markets. Economic actors have to adjust to the market environment – transparent corporate governance and internal risk management of companies are crucial issues here.

II Volatility of Short-Term Flows

More research is needed with respect to the appropriateness of measures to reduce excessive volatility of short-term capital flows. There may be a case for emerging economies to resort to measures aimed at avoiding excessive short-term inflows. The Chilean experience often is referred to as an interesting example of disciplining the domestic financial and corporate sector by discouraging short-term foreign currency debt accumulation. More work needs to be done as well on the appropriate response to excessive and destabilising short-term outflows. Restrictions on short-term capital flows may provide temporary relief, but they cannot be a long-term substitute for sound macroeconomic and regulatory policies.

In those extreme cases, where temporary restrictions can help to create breathing space for implementing the necessary adjustments, it may be

well advised to do so in the context of an IMF-supported adjustment programme in order not to damage investor confidence. In general, the IMF can play a useful role in helping countries with a properly sequenced liberalisation of capital movements. In this respect, as part of the reform of the international financial system, efforts to empower the IMF for guiding the liberalisation process by amending the Articles of Agreement deserve support.

The volatility of international short-term capital flows have exposed major weaknesses in proper risk assessment procedures by financial market participants, both in debtor and creditor countries. The functioning of financial markets, and especially the mechanisms of international credit expansion, should be part of the research agenda. From understanding how financial markets work one might go to how one could modify their behaviour. It may be worthwhile to remember the circumstances in the late sixties when attempts were made to monitor the development of international liquidity in the context of macroeconomic supervision. The question raised at the time was whether not too much international liquidity was created through the Eurodollar markets. To this there was no easy answer and policy-makers and academics got lost in methodological issues. But I think the question is coming back to us and we should try to develop new ways to examine the market mechanisms of international short-term flows.

III Preventing Contagion and Bailouts

The international response to the financial turmoil thus far has not succeeded in avoiding huge adjustment costs for the affected countries. Nor have efforts to restore confidence, especially in some countries which experienced the onset of the financial crisis more recently, been very successful thus far. In some of these countries this was partly due to domestic political instability, which may have exacerbated the crisis. The mixed effectiveness of the international community's response to the crises makes clear that both the adjustment policies of the countries concerned and the crisis management strategy of the international community need to be evaluated carefully. The current strategy, whereby increasingly large rescue packages are made available to countries in a financial crisis, cannot be sustained much longer. The IMF's liquidity has decreased sharply, problems of moral hazard have increased, and the packages have been only partially successful in combatting the crisis.

Two basic questions with respect to crisis management are still out there where agreement is lacking. First, some have argued that the IMF should dispose of more unconditional liquidity for countries under speculative

attack. Also, proposals for pre-emptive or contingency financing packages for countries in good shape but which risk to be affected by contagion have been advanced. Others, on the contrary, have argued that the IMF packages are getting too large and that the IMF should go back to its original catalyst role. This leads to a second area for research, namely the involvement of the private sector. The handling of the Asian crisis has shown that it is crucial to involve the private financial sector in rescue operations at an earlier stage. Better procedures to deal with a crisis once it has emerged will have to be developed, which should aim at an appropriate burden sharing between the official and private sector in order to avoid moral hazard. Establishing an effective communication network between public and private sectors should be considered. The Institute of International Finance could play a role here. Yet, the way in which the private sector can be involved will continue to depend on the structure of the external debts of the country involved, and will therefore have to be determined on a case-by-case basis.

The analytics and the transmission mechanisms of contagion constitute another important topic for the research agenda. Further work is needed with respect to the factors causing contagion, such as competitive devaluation; the reassessment of credit risk and liquidity risk in volatile market conditions; portfolio benchmarks for regions or categories of countries; and proxy hedging if markets become illiquid. If we know more about chains of causation, countries might be able to prevent contagion from happening.

IV Strengthening the Architecture

There is general agreement on the need to strengthen the robustness of the financial sector. Establishing an efficient and resilient domestic financial infrastructure is an important precondition for reaping the benefits of financial globalisation. The Basle supervisory committee in collaboration with supervisors in emerging economies has defined the core principles for sound and effective banking supervision. What is needed now is that these principles are actually implemented. The international financial institutions have agreed to use these standards as a benchmark for evaluating supervisory regimes in the context of their regular consultations with national authorities. But more work needs to be done. In particular, there is a need for improved risk management among major financial market players. The Basle capital adequacy rules, useful as they have been in creating minimum standards for strengthening bank capital around the world, have become too imprecise and cannot sufficiently differentiate between

various risks. An update of that accord has become rather urgent.

Supervisory action needs to be complemented by the discipline of market forces. Proper risk assessment can be enhanced by improving financial transparency. Information should be reliable, timely and disclosed in an accessible manner by official and private market participants alike.

In sum, there is a considerable agenda for research and for policy action. The international financial institutions and national authorities should coordinate their efforts to reduce systemic risk by strengthening financial sector surveillance. There is no need – or should one rather say no time? – for a complete overhaul of the existing international financial architecture. The building blocks for a cooperative framework are there already. But an urgent strengthening of the architecture is needed.

Appendix

List of Participants in the Conference on “Coping with Financial Crises in Developing and Transition Countries: Regulatory and Supervisory Challenges in a New Era of Global Finance”, held at the De Nederlandsche Bank, Amsterdam on 16-17 March 1998.

Mr. Yilmaz Akyüz	Chief Macroeconomic and Development Policies, UNCTAD, Geneva
Mr. Age Bakker	Deputy Director, De Nederlandsche Bank, Amsterdam
Mr. Jack Boorman	Director, Policy Development and Review Department, International Monetary Fund, Washington D.C.
Mr. Howard Brown	Director, International Finance and Economic Analysis Division, Department of Finance, Canada
Mr. Ariel Buirra	former Deputy Governor, Banco de Mexico
Mr. Paul Cantor	Executive Director, The Toronto International Leadership Centre for Financial Sector Supervision, Toronto
Mr. Datuk Ramesh Chander	Special Adviser, Economic Affairs Division, Commonwealth Secretariat, London
Mr. Roy Culpeper	President, The North-South Institute, Ottawa
Mr. Rumman Faruqi	Director, Economic Affairs Division, Commonwealth Secretariat, London
Ms. Greetje Frankena	Head, IMF Section De Nederlandsche Bank, Amsterdam

Ms. Stephany Griffith-Jones	Senior Fellow, Institute of Development Studies, Sussex University
Mr. Bon Sung Gu	Senior Fellow, Korea Institute of Finance, Seoul
Mr. Miroslav Hrnčíř	Member of the Bank Board and Chief Executive Director, Czech National Bank, Prague
Mr. Louis Kasekende	Executive Director, Research & Policy & Function, Bank of Uganda, Kampala
Mr. Mike Kennedy	Head of the Monetary and Financial Department, OECD, Paris
Mr. Alexandre Lamfalussy	Institut d'Etudes Européenne, Université Catholique de Louvain, Louvain-la-Neuve
Mr. Yung Chul Park	President, Korea Institute of Finance, Seoul
Ms. Susan M. Phillips	Governor, Federal Reserve System, Washington, D.C.
Mr. Godert A. Posthumus	Member of the Council of State, The Hague
Mr. Armand Pujal	Deputy Secretary General, Banking Commission, Paris
Mr. Mukhtar Nabi Qureshi	Deputy Governor, State Bank of Pakistan, Karachi
Mr. Pradumna Rana	Senior Economist, Asian Development Bank, Manila
Mr. Kunio Saito	Director, Regional Office for Asia and the Pacific, International Monetary Fund, Tokyo
Mr. Amaret Sila-On	Chairman, The Financial Sector Restructuring Authority, Bangkok

Ms. Barbara Stallings	Director, Economic Development Division, N-Economic Commission for Latin America and the Caribbean (ECLAC), Santiago de Chile
Mr. Tom de Swaan	Chairman, Basle Committee, Director, De Nederlandsche Bank, Amsterdam
Mr. György Szapáry	Deputy Governor, National Bank of Hungary, Budapest
Mr. Jan Joost Teunissen	Director, Forum on Debt and Development (FONDAD), The Hague
Mr. Max Timmerman	Head, Macroeconomic Cooperation, Multilateral Development Financing and Macroeconomic Affairs Department, Ministry of Foreign Affairs, The Netherlands
Mr. William White	Economic Adviser and Head of the Monetary and Economic Department, Bank for International Settlements, Basle
Mr. H. Johannes Witteveen	former Managing Director of the IMF, Wassenaar
Mr. Charles Wyplosz	Professor of Economics, The Graduate Institute of International Studies, Geneva
Ms. Annemarie van der Zwet	Economist, Supervision Department, De Nederlandsche Bank, Amsterdam