The Management of Global Financial Markets

Forum on Debt and Development (FONDAD)

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The Management of Global Financial Markets

Edited by Jan Joost Teunissen

FONDAD
The Hague

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Proceedings of a Conference on "The Management of Global Financial Markets: Challenges and Policy Options for Emerging Economies, the EU and the International Institutions", held at the National Bank of Hungary on 24-25 June 1999 and organised by the Forum on Debt and Development, with the co-sponsorship of the Dutch Ministry of Foreign Affairs, the National Bank of Hungary, the Institute for World Economics of the Hungarian Academy of Sciences, UNCTAD, and the International Monetary Fund.

Editor: Jan Joost Teunissen

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ISBN: 90-74208-16-9

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

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Acknowledgements

This book was made possible through the ideas, support and contributions of many people and organisations. A particular thanks goes to András Inotai (IWE) and György Szapáry (National Bank of Hungary) for their assistance with the organising of the June 1999 conference, held in Budapest, from which this book emerges.

Fondad very much appreciates the continuing support of the Dutch Ministry of Foreign Affairs and the co-sponsoring of this conference by the National Bank of Hungary, the Institute for World Economics of the Hungarian Academy of Sciences, UNCTAD and the International Monetary Fund.

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

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Abbreviations

APEC
BCBS
Basel Committee on Banking Supervision
BIBF
Bangkok International Banking Facility
BIS
Bank for International Settlements
CCL
Contingency Credit Line (of the IMF)
CGFS
Committee on the Global Financial System

CPI consumer price index

CPSS Committee on Payments and Settlement Systems

ECLAC Economic Commission for Latin America and the Caribbean (of the

UN), (in Spanish: CEPAL)

ECSC Euro-Currency Standing Committee (of the BIS; now named

CGFS)

EU European Union FDI foreign direct investment

FDIC Federal Deposit Insurance Corporation (of the US)
FDICIA Federal Deposit Insurance Corporation Improvement Act

Fed Federal Reserve System (of the US) FSF Forum for Financial Stability

G-7 Group of Seven G-10 Group of Ten

G - 30

G-22 Group of Twenty-Two (includes G-7 countries and a range of

emerging economies) Group of Thirty

GDDS General Data Dissemination Standard (of the IMF)

GDP gross domestic product

GKOs Russian Government short-term securities

HLIs highly leveraged institutions

IAIS International Association of Insurance Supervisors

IFIs international financial institutions IMF International Monetary Fund

IOs interest-only strip

IOSCO International Organization of Securities Commissions
IWE Institute of World Economics of the Hungarian Academy of

Sciences

KLSE Kuala Lumpur Stock Exchange
LACs Latin American countries
LDCs less developed countries
LOIs Letters of Intent (of the IMF)
LTCM Long-Term Capital Management

MIER Malaysian Institute of Economic Research

NBH National Bank of Hungary

NBER National Bureau of Economic Research

NDFs non-deliverable forwards NPLs non-performing loans

OECD Organisation for Economic Cooperation and Development

OTC over-the-counter

PFPs Policy Framework Papers (of the IMF)
PINs Public Information Notices (of the IMF)

PGNP price level GNP deflator RM Malaysian ringgit

SDDS Special Data Dissemination Standard (of the IMF)

SDR special drawing right

SRF Supplementary Reserve Facility (of the IMF)

SRR Statutory Reserve Requirement

UDROP universal debt roll-over option with a penalty

UFR use of Fund resources UK United Kingdom

UNCTAD United Nations Conference on Trade and Development

US United States

WTO World Trade Organization

Preface

After a period of gradual internationalisation of the goods markets since World War II, we have witnessed a fast internationalisation of the financial markets in the last decade. Some people might say that this process of globalisation is nearing its end. In fact, it is far from being completed. John McCallum showed that Canadian inter-provincial trade exceeds 19 times the intensity of trade with neighbouring US provinces. John Helliwell made a comparison of intra-national and international financial markets based on the Horioka-Feldstein hypothesis. It showed that for provinces within Canada investment and saving is uncorrelated, in sharp contrast to the high correlation that exists between these aggregates within a country, as Feldstein and Horioka have found.

What does all this really mean? That the Canadian provinces are de facto integrated into a single goods market and a single financial market, but that the world economy is still far away from such integration. Borders do matter, even between countries of such similar cultural heritage as the United States and Canada, and we are still a long-long way from having a global market, either for goods or for capital. Therefore, the questions addressed in this book are not simply how to adjust to the integration of markets that has emerged in the past ten years, but how to adjust to the greater integration yet to come. While it is true that globalisation has reached unprecedented dimensions, we cannot say that we live in a global economy as long as 94% of US portfolios and 98% of Japanese portfolios are still invested at home. We have only started the globalisation process. What this book discusses is not so much the past, but the future.

Ever since Adam Smith and David Ricardo there has been a consensus on the benefits of free trade in principle, but also a perpetual controversy about the constraints in its implementation. The reason is straightforward: implementation means restructuring and that implies temporary costs; it has losers and hurts vested interests. The benefits of free capital move-

¹ McCallum, John (1995), "National Borders Matter: Canada-US Regional Trade Patterns", In: *American Economic Review*, pp. 15-23.

² Helliwell, John F. (1998), Comparing Capital Mobility across Provincial and National Borders, NBER Working Paper No 6624.

³ Feldstein, M. and C. Horioka (1980), "Domestic Saving and International Capital Flows", In: *The Economic Journal*, pp. 314-29.

ments are generally recognised, although the idea of risk pooling (or risk diversification) is probably a more subtle notion than that of comparative advantage in the goods markets, and the gains achieved by capital markets integration are more difficult to measure. During the implementation of capital market integration, we probably have to face more difficult challenges, but especially challenges of a different kind.

One challenge arises from the problem of restructuring costs. The issue is analogous to that in the goods market: financial liberalisation faces problems similar to those of outdated coal and steel industries that the liberalisation of the goods market has to cope with. What are the coal industries of financial markets? Projects or industries that survive only at preferential interest rates or misaligned exchange rates implicitly or explicitly guaranteed by governments, or imprudently managed and supervised banks that have disregarded the fact that they have become exposed to international market risks.

Does financial liberalisation bring about losses? In the short run, certainly. The higher is the shelter, the higher are the costs of restructuring. Hiding or covering weaknesses in the financial system may lead to crises and costs. Transparency and prudence of the financial sector, backed by stable macroeconomic environment, are the conditions for a smooth liberalisation process. This conclusion does not essentially differ from the lessons learned in the goods market: do not let develop non-viable economic projects or structures.

Another set of challenges is more specific to the financial markets and calls for more sophisticated solutions. Tobin's suggestion to pour sand into the wheels of the financial market does not mean that he did not understand the idea of comparative advantage, even in its more sophisticated form that applies to financial services. What he meant was that trade in financial assets is a very information-intensive activity with very small physical transaction costs. This raises behavioural problems, e.g. herdbehaviour, that are definitely new compared with the goods market. Coping with these problems calls for regulations and institutions which are specific to financial markets and which we are still learning how to design and operate. This is one of the issues that this book discusses.

Policymakers have many choices how to enforce prudence and enhance transparency of the banking sector and the availability of information for investors. However, one policy choice could be excluded beforehand: that of keeping national markets separate in the long run. In the goods market this policy was feasible in certain periods, but today – in the new world of information and communication technology – financial markets are much too elusive to be reined in by such restrictive policies. We are going to live in a global world and have to find the way of doing our best in such a

world. We cannot go back to the past, but we have to try to understand it as much as possible in order to improve the functioning of the markets in the new globalised world.

György Surányi

Introduction

The preface of a 1992 publication from the Forum on Debt and Development (Fondad), Fragile Finance: Rethinking the International Monetary System, included the following statement: "In the face of dangerous instability of global financial flows it is high time for policymakers to seriously rethink the role they should play in a market-based international monetary and financial system. National as well as international monetary authorities seem to be lagging behind rapid developments in capital markets and to have little control over dramatic swings in these markets". In 2000, this appeal seems to be as urgent as before. Over the past eight years, we have witnessed a number of serious financial crises affecting economies, businesses and, most importantly, the living conditions of millions of people around the world, particularly in the developing regions. As it turns out, the globalisation of financial markets during the 1990s not only increased opportunities for prosperity and growth in developing countries, but also the risks of misery and recession.

While policymakers in both national and international institutions have been discussing and implementing policies which they hoped would create stability and prevent financial crisis, success has been limited at best. Moreover, some of the applied policies – particularly the ones based on the belief that free flowing capital is good for all and thus deregulation should be pursued by all means – may even have contributed to the propensity for crisis. Indeed, crises cannot and should not always be prevented. But it is indisputable that the incidence of crises in the 1990s has been so dramatic, frequent and difficult to contain that crisis prevention has become a priority issue. Much thinking, discussion and action is needed to find and apply appropriate remedies. Terms like 'herd behaviour' and 'contagion' point to the fact that economics is still about human behaviour – it cannot exclude the psychology of 'irrational' action.

This book consists of four parts. The focus in the first part is on new strategies for dealing with the *inherent* instability of financial markets. According to Jan Kregel, professor of economics and a specialist in international finance currently working for UNCTAD, new strategies are greatly needed. In his view, they should be preceded by a thorough, alternative diagnosis of why these financial crises occurred in the 1990s. Kregel offers his own diagnosis which differs from the mainstream thinking. He stresses that the total amount of private capital flowing to a developing

country usually has very little to do with the recipient country's real development needs. Capital flows tend to overshoot initially and then, when sentiment changes, undershoot. Kindleberger's classic study, *Manias*, *Panics and Crashes*, still applies.

The second contribution in this section is from Bill White, the chief economist of the Bank for International Settlements in Basel. He believes that the different manifestations of instability and crisis – volatility, misalignments and contagion – can be addressed adequately by the existing approaches and initiatives in the so-called Basel community. He would, however, also welcome more radical thoughts about how the financial system might be reformed because he recognises that financial globalisation – with many agents, complex financial instruments and high speeds of change – has brought not only benefits but also a heightened tendency for financial instability and crisis.

The analyses by Kregel and White are enriched by the comment of former deputy governor of Mexico's central bank, Ariel Buira, and a floor discussion including a number of prominent international experts. The issues tackled include the prevention of excessive surges of capital inflows, the lack of global economic governance and need for a global regulator, and the selection of the most appropriate exchange rate regime.

The second part of the book examines how financial markets work and the implications for more effective supervision. In a provocative paper, Martin Mayer, a long-standing specialist and author of books on the behaviour of bankers and other participants in the world of finance, tries to change the terms of the debate. One of his observations is that central banks are the source of moral hazard – commercial banks know that they run very little risk because in times of crisis, they will always be rescued. Another observation by Mayer is that banks are supposed to have information that others lack, but in reality they do not. And while it is believed that dynamic hedging reduces risk, it turns out to be a source of general instability.

Mayer's paper is commented upon by Age Bakker, a Dutch central banker and professor of economics, and Warren Mosler, a practitioner in international finance. Their analyses are followed by a floor discussion in which, among other things, arguments are suggested for improved regulation of capital outflows from *source* countries and limiting the capital inflows in *recipient* countries to amounts that are consistent with their absorptive capacity. Other issues discussed include changing the remuneration system for money traders – in order to reduce their incentive for short-term money trading – and increasing the managers' and shareholders' responsibilities for wild shifts in global capital flows by rewriting the corporate charters of financial institutions.

The third part of the book deals with the national and regional responses to the instability of financial markets. Mohamed Ariff, director of the Malaysian Institute of Economic Research, assesses the East Asian response and draws a number of policy lessons. One is that Asian banks and corporations felt so protected by their governments that they engaged in reckless borrowing and lending. Hence, better national regulation and supervision is needed. Another lesson is that financial liberalisation and deregulation proceeded too quickly and were not properly sequenced. He argues that financial sector reform must first focus on domestic financial markets, and that external account transactions should be fully liberalised only as a last step. Since the Asian crisis was also in part caused by large swings in international, short-term capital flows, action is needed in source countries and at the international level as well, says Ariff. If not, international private creditors will continue to assume excessive risks, comfortable in the knowledge that they will be bailed out if the situation becomes critical.

Ricardo Ffrench-Davis, one of ECLAC's most experienced economists, looks at the role of domestic policies in stabilising capital flows in Latin America. He sketches the surges in capital flows to Latin America, reviews the main macroeconomic effects of these flows, compares the contrasting experiences of Mexico and Chile, and assesses the common features of the Latin American and Asian crises. The policy lessons he observes include: private market agents should not be fully free to determine the volume and composition of capital inflows; indiscriminate liberalisation of capital accounts can be highly detrimental to productive investment and to the welfare of the majority of people and firms; governments should focus on the management of booms, rather than the crises since the latter are, in many respects, the consequence of badly managed booms; and last but not least, since there has been a notorious lack of appropriate monitoring of international financial markets, it is high time to reconsider the international financial order.

In his comment Zdeněk Drábek, a counsellor at the WTO and former high-level Czech official, agrees with all of the policy lessons suggested by Ffrench-Davis with the exception of one: that countries should not indiscriminately open the capital account. In Drábek's view, once a country has liberalised its capital account, it cannot go back to capital inflow restrictions – because of the credibility issue.

György Szapáry, deputy president of Hungary's central bank, complements the discussion on the experience of emerging economies with financial markets by looking at the responses of the Czech Republic, Hungary and Poland to the recent Asian and Russian crises. He observes that the more rigid exchange rate regime in Hungary has performed better (e.g. by

protecting competitiveness) than the more flexible exchange regimes in the Czech Republic and Poland, although he notes that the difference in performance cannot be attributed solely to the exchange systems.

The question of restricting the *in*flow of capital or, in the recent case of Malaysia, the *out*flow of capital, is debated in the ensuing floor discussion. Participants agree that capital controls can fulfil a positive role. Jack Boorman, director of policy development and review at the IMF, admits that the policy community has learned a lot over the last five years about what is sensible in capital controls. If a country decides to liberalise its financial markets, its domestic financial system must be able to withstand the confrontation with international markets, Boorman observes. Other issues addressed in the floor discussion include the lessons that Asia can learn from Hungary's recent experience with policymaking, the level of Asian growth rates that would be sustainable in the long run, and the proper balance between export-led growth and domestic expansion.

The fourth part of the book focuses on gaps in the international institutional framework. Stephany Griffith-Jones, a leading policy-oriented academic and currently deputy director of international finance at the Commonwealth Secretariat, gives an overview of where we currently stand. She first looks at improved transparency and information on developing countries as one way of dealing with currency crises, and she analyses the limits of this approach, as well as the need for improved transparency on international financial markets. She then examines the need to fill global regulatory gaps, and discusses the recently created Forum for Financial Stability. She subsequently deals with the appropriate provision of official liquidity in times of crisis, including a discussion of the recently created IMF Contingency Credit Line (CCL). Finally, she discusses how the private sector can be more involved, both in crisis prevention, via private contingency credit for example, as well as in crisis management, via amendment of bond clauses or via standstill arrangements for example.

Griffith-Jones' paper is commented upon by Jack Boorman of the IMF and John Williamson who, until recently, was the chief economist for South Asia at the World Bank. Boorman assesses the progress made in transparency and standards. He also dwells on the private sector's involvement in crisis prevention, which he considers the most important issue now under discussion, and the provision of contingency financing through the CCL. Williamson focuses his comment on the CCL. He sees an inherent conflict between the provision of additional liquidity through the CCL to head off crisis, on the one hand, and the resolution of crisis through a standstill, on the other.

In the ensuing floor discussion the rationale for the CCL is thoroughly debated by a number of experts including György Szapáry who sees a

number of problems with the CCL. He suggests that it is perhaps not intended for the good countries that are exposed to contagion, but for the countries that might actually be the source of the crisis – which is a different issue. Other points of discussion are the need for a better connection between regulatory and macroeconomic issues, possible alternative ways to solve liquidity problems, and the role of information. Jan Kregel argues that more information would not have prevented the Asian crisis, a view which Jack Boorman disputes.

In the preface to this book György Surányi, president of Hungary's central bank, observes that financial globalisation, which has both benefits and costs, is inevitable. As he says, we live in a global world and have to understand it as much as possible in order to improve the functioning of financial markets. The following pages make an important contribution to understanding and, I hope, improving the management of these markets.

Jan Joost Teunissen Director January 2000

Part I

New Strategies for Dealing with the Instability of Financial Markets

Diagnostics Before Remedies in Formulating New Strategies for Dealing With Instability

Jan A. Kregel

I Introduction

It has now become generally accepted that the recent financial crises in Asia, Russia and Brazil were in large part the result of the excessively rapid, and irrational reversal of capital flows to the countries concerned. It has also been accepted that the crises were aggravated and recovery hampered by excessively strict fiscal policy imposed as part of rescue packages agreed in the period immediately after the crisis. This change in the "establishment" view suggests that some progress is being made in the understanding of the problems facing developing countries, as such ideas certainly were not commonly accepted when they were put forward, for example, in UNCTAD's *Trade and Development Reports* starting some ten years ago and reiterated and re-elaborated in last year's explanation of the Asian crisis (see UNCTAD, 1998).

However, the analysis put forward in the 1998 Trade and Development Report did not consider the decisions that led to the reversal of flows to be "irrational". Rather the behaviour that led to the reversal was seen as the natural response of economic agents to the evolution of economic conditions combined with the process of increasing integration of international capital and goods markets. The crises were not seen as random events, but as "systemic" to the current configuration of the international financial system and thus as events that will certainly recur, no matter what prophylactics are put in place to dampen them. Preventing financial crises will therefore require systemic changes, not simply improvements in the operation of the existing system. Indeed, if one is looking for new strategies to deal with the crises it is crucial to determine whether they are random, irrational reactions to peculiar circumstances or the natural results of the operation of the system. If the latter, then new strategies are indeed called for, if the former then the only thing that has to be done is to improve on the existing strategies.

The theoretical explanation of the difference between these two positions can be found in Keynes' *General Theory* observation concerning the

relationship between real and monetary phenomena. His conclusion, in contrast to his predecessors and contemporaries, was that monetary (or what are often prejudicially called "nominal") factors dominate real factors (which then were classified as "productivity and thrift"). Indeed, Keynes reversed the causality and considered money the "real" factor. One of the implications of this reversal of the traditional causal order was that the entrepreneur's pursuit of maximisation of money profits was not the same thing as the maximisation of the output of real goods and services, nor the maximisation of the number of jobs in the economy. The market system could be considered perfectly competitive and efficient in its allocation of monetary resources, to be maximising monetary returns, without producing at a level of output that was equal to its physical potential, including leaving labour that was willing and able to work at prevailing real wages rates unemployed.

II The Supply-Side View

The same independence between real and monetary factors operates in the analysis of economic development. Developing countries are viewed as facing a "real" resource gap that is the result of their excessively low savings ratios. Thus, developing countries must compensate for their deficiency in real resources by borrowing those real resources from developed countries who in their turn face the opposite difficulties of excessively high savings ratios and insufficiently remunerative outlets for their accumulated real savings. But, in order to attract these real resources developing countries must offer real returns that are more attractive than those available in developed countries. Monetary flows are just the vehicle by which real resources are transferred from developed to developing countries. These flows are determined by the decisions of profit maximising agents who seek to maximise the real returns and thus provide the finance for the investments in excess of the domestic savings of developing countries that allows them to grow more rapidly. To limit or interfere with the free flow of financial resources internationally would thus impede the very process of economic development and create misallocation of scarce economic resources. The result would be not only a lower rate of return to investors in developed countries, but also a lower rate of growth in developing countries. But, this view depends critically on the identity between the maximisation of real and money profits by investors in developed countries max-

 $^{^{1}}$ This is joined by the foreign exchange gap in the so-called "two-gap" models of development.

imising real and monetary rates of income and employment growth in developing countries, and on the movements of finance representing the movement of real resources. As Keynes' theory suggests, there is no reason for this to be the case. At the very least it requires active policy to insure this result.

Keynes' alternative to this approach is that there is no necessary relationship between financial flows and flows of real resources (a similar question was debated after the First World War in the form of the "transfer problem" by which Germany was to make reparations payments), nor is it necessary that financial flows are motivated by international differences in real productivity or real rates of return. Indeed, the view that financial flows should dominate the real sector became the accepted explanation of the economic turbulence that plagued Europe in the 1920s and 1930s and led to twenty years of depressed growth and unemployment that was sufficient to produce social and political crisis for many governments and brought the stability of Europe to an end. The potential for financial flows to produce harm as well as benefit led the architects of the post-war Bretton Woods international financial system to reduce international capital flows to a minimum.

In the 1990s the old view has regained currency as massive international capital flows have emerged in foreign exchange markets, in global stock and bond markets, and in rising cross-border foreign direct investments. But, even when these flows have produced higher growth rates, growth rates have been increasingly volatile because the flows themselves have become increasingly volatile. The rapid reversal of financial flows has come to be associated with distortions that are similar to those that were attributed to inflation: distortion of relative prices and exchange rates that make it difficult if not impossible to allocate capital on the basis of comparative rates of return and thus impede the process of providing increased investments to developing countries. In the more extreme cases, this instability has destroyed domestic financial systems and national wealth, wiping out decades of successful development. In many Latin American countries per capita income levels are no higher today than they were at the outbreak of the debt crisis in the early 1980s.

But, the point that I want to extract from this discussion is the basic difference of view concerning the impulse behind the capital flows. Those who adhere to the view that they are driven by differential "real" returns tend to explain the motivation of capital flows by the decisions of developing countries concerning their development strategies and domestic policies. More market-friendly development strategies, introducing liberalisation and deregulation for domestic goods and financial markets are considered to increase real rates of return. It is the increase in real rates,

brought about by the change in domestic policy, relative to those in other countries that provides the real return differential that attracts the capital inflows. The reversal of these capital flows can thus be explained by reference to the persistent influence of crony capitalists who attempt to appropriate the higher real returns by limiting the application of the reforms, or to a reversal in policy fundamentals or, failing a belief in the ubiquitous fallibility of human nature, to irrationality or "rational bubbles" in which thinking makes it so and in a moment of lemming-like folly all investors engage in irrational self-destructive behaviour and attempt to flee by selling their positions. This point of view is derived from what was called the supply-side or incentive approach during the Reagan administration: changes in incentive mechanisms on the supply side increase rates of return and attract more foreign financial inflows. As in the US in the first half of the 1980s, the experience of developing countries has also been appreciating real exchange rates and deteriorating current account balances, but this is simply a consequence of the rise in productivity and profitability.

III The Demand-Side View

Following traditional terminology, an alternative Keynesian analysis would look to the demand side, and ask what forces may have driven lenders to seek out investments in emerging market developing countries. This is the position that I have adopted in a number of explanations of the recent crises and was the basis of Darity and Horn's book, *The Loan Pushers* (1988). There are two main strands to this approach (there is in fact a third, but it is derivative of the other two).

The first recognises that modern financial markets are seldom composed of initial lenders and final borrowers who meet directly in the financial market place (although direct investments may correspond to this model). Rather, as the 1970's response to the petroleum crisis taught us, most of the funds that circulate internationally are *intermediated* by financial institutions whose profitability and survival depends on positive net interest margins. Indeed, the point is more general: even financial markets that appear to provide direct exchanges are composed by the financial institutions that provide intermediation in them. There are no longer any markets that function without financial institutions that serve as market makers. Indeed, one of the elements that might explain the "push" of funds towards developing countries, as represented by the rapid rise in global capital flows, is the decline in the share of US commercial banks in the assets of all financial institutions operating in the US and the associated fall

in rates of return on equity for these institutions. From the breakdown of the Smithsonian Agreement of 1971 which signaled the final collapse of attempts to save the Bretton Woods System, international flows of capital have played an increasingly important role in determining the behaviour of the global economy. And from that date increased competition faced by commercial banks operating in the US has driven them into different areas of activity, as well as into international markets, to offset their declining returns. Indeed, most US commercial banks, subject to strict limitations on their activities within the US due to a regulatory environment that separates deposit and investment banking, are exempt from these constraints in their international operations. It would also be difficult not to recognise that the increase in capital flows and international competition in banking has been correlated with an increase in financial crises in both developed and developing countries. There is thus a strong possibility that the combination of increasingly free competition in international banking has been a major force behind the push for increasingly free global capital flows, and the accompanying increase in the frequency of financial crises.

The second strand is the increasing frequency with which countries that have applied economic stabilisation policies have been the recipients of large capital inflows, and the fact that these inflows have occurred long before these policies can conceivably be considered to have brought about any fundamental changes in the economy and thus in real rates of return expected by international investors. In the case of Chile, Mexico and Brazil, capital inflows either increased, or resumed, well before there were any visible results from the introduction of stabilisation policies based on exchange rate anchors and liberalisation and deregulation of international trade in goods and financial markets. Indeed, in most cases, capital inflows started well before any significant fall in inflation rates, and imports were increasing much more rapidly than the exposed tradable sectors had been able to introduce any restructuring, or in which financial markets had become stable and well regulated (see UNCTAD, 1999). What could explain the rise in capital inflows if there was no visible real change in underlying economic conditions to justify it?

One explanation is that it was the anticipation of increased real returns brought about by these announced policy changes. But, given the history of failed stabilisation plans this hardly seems credible. It is one thing to justify investment in China at substantial losses for decades on the justification that when the market does take off, it will be so profitable that it will cover all the past losses, and another to argue such a position for investments in Chile or Mexico.

The most probable explanation is that many of these liberalisation plans included stabilisation policies to reduce inflation that were based on an

exchange rate anchor, accompanied by monetary stringency which produced extremely high policy interest rates creating very appetising nominal interest rate differentials that attracted foreign investors. But, even here, investors are supposed to consider risk-adjusted rates of return and this risk is presumed to include exchange rate risk. However, the initial use of the exchange rate anchor reduces the exchange rate risk, or rather passes the cost to the government, and the capital inflow that it attracts increases reserves and makes the exchange rate appear to be much more stable than the government may have initially intended. As the capital inflows continue to strengthen the exchange rate investors reap additional foreign exchange gains and the size of returns soon seems much greater than the declining perception of the risks involved. The large interest rate differentials thus appear to be a one-way bet for the foreign financial institutions seeking to increase their profitability. In this way, stabilisation policy for developing countries becomes a stabilisation policies for banks' profits, and improves their balance sheets.

Thus, the search for improved return on equity by banks facing increasingly difficult conditions due to disintermediation in domestic markets, and restrictions on their ability to compete with non-bank financial institutions, led them to seek intermediation profits in foreign markets via increased lending, to expand their activities to increase fees and commissions on international underwriting activity and to increase their proprietary trading for their own investment portfolio, all of which required the introduction of free international capital flows. The "market friendly" stabilisation policies that were urged on developing countries in the aftermath of the 1980s debt crisis served this purpose well.² It is indeed instructive to note that most large money center banks in the United States now produce about a third of their incomes from net interest margins on traditional intermediation activity, a third from fees and commissions from arranging financing and about a third from what is called proprietary trading, primarily from exploiting international interest rate differentials.

IV Lessons for the Current Reform Debate

There are thus two opposing explanations of the forces that determine the flows of finance in the process of economic development. In one the free

² The third strand is the "yield famine" explanation which explains flows to developing countries by means of changes in yield in developed countries. When developed country rates fall for policy purposes, investors seek higher yields and are willing to incur more risk to get them, producing a rush of money to developing countries that is reversed once the yield famine ceases through tighter monetary policy in developed countries.

flow of international finance is the basic vehicle for the transmission of the real savings that are the source of economic development, and the flow is determined by domestic policies that increase real rates of return. In the other the loss of the franchise of US commercial banks in providing corporate lending and collecting no-cost deposits and the excessive size of nominal interest rate differentials in emerging economies leads to excessively and unintentionally stable exchange rates and underestimates of riskadjusted rates of return on foreign lending. Sharp changes in these risk assessments then lead to volatility of financial flows that are an impediment to the successful development of a national economy within the global trading system.

It is important to note that the difference between the two positions is not about the importance of the financial flows to the development process, but rather Keynes' original point about whether the financial flows respond to real forces and effectuate the real flows of resources or whether they are independent and dominate real variables. There is also a difference concerning whether active policy intervention is required to ensure that the maximisation of financial returns produces the optimal real impact on economic development. This is the debate that is emerging concerning the possible reform of the international financial system. However, the policy alternatives that are currently under discussion do not address this basic question. This is because they are based on the presumption of the identity between real and financial flows.

First, the various proposals for multilateral international treaties to guarantee the free flow of international investment, and the associated proposal to make the IMF responsible for the full liberalisation of capital account flows, do not make any reference to any possible dichotomy between maximisation of financial returns and maximising real development in terms of growth of per capita incomes. Rather, they seem to presume that they are identical. Other approaches, such as the introduction of international standards, and the introduction of sustainable macroeconomic policies seem to presume that the dichotomy that exists at the international level can be eliminated by action at the national level. This is a position that bears further investigation.

It should be noted that the domestic policies that are recommended do not seem to be those most appropriate to ensuring that domestic profit maximisation produces maximisation of domestic growth – rather the opposite, since such an approach appears to require that all countries follow policies to achieve domestic fiscal balance with strictly constrained current account imbalances. One of the main messages of Keynes' Bretton Woods plan was to point out that attempts by all countries to keep current accounts in balance simultaneously ran the risk of inducing global reces-

sion if adjustment policies to eliminate deficits were not treated symmetrically with policies to reduce the corresponding surpluses.

Keynes also warned against the distorting effects of using monetary policy to preserve exchange stability under the gold standard. His argument was simply that when a country was forced to raise interest rates in order to retain gold, this placed an unacceptably high hurdle that had to be met by rates of return on domestic investments, leading to lower investment expenditures. But, and this was the important point, the high rates of interest imposed by the Central Bank in order to prevent gold outflows were not representative of rates that could be earned on productive investments in the rest of the world – in general the rates set by the Central Bank were not only much higher, but bore no relationship to real rates of return available to investors abroad. They were simply the rates required to keep gold at home. Thus capital was diverted from productive domestic employments to investments in government debt, not because there were more profitable opportunities abroad, but simply because the Central Bank was willing to pay rates that exceeded the return that could be made on profitable investment anywhere to protect its gold reserves. The obvious consequence was to reduce investment on a global scale and divert capital into unproductive financial investments. Keynes later generalised this argument by replacing the Central Bank with the investing public, and the interest rates required to retain gold with the high interest rates required to offset what he called the liquidity premium.

Both versions of Keynes' argument seem to be appropriate in the present context. Most countries that have introduced domestic stabilisation programmes that embody what are now considered as sustainable fundamental macroeconomic policies, have employed some sort of exchange rate anchor or have employed domestic monetary policies that are sufficiently tight to produce interest rates that are higher than those available on domestic investment or on investment anywhere else for that matter. The differentials with interest rates in developed countries that are thus produced are sufficiently large to generate flows of domestic and foreign capital into the country, but not into productive investments, which clearly cannot offer such high rates. This distorts the free flow of capital to its most productive global uses. Further these flows, unlike other types of arbitrage flows, do not act to reduce the size of the differentials, since they are not based on market rates, but on policy rates. The natural market result is thus to produce an infinite flow of funds to take advantage of the profit potential. The result is that eventually the stability of the exchange rate is undermined, as is the governments' macroeconomic policy.

It might be thought that some limit could nonetheless be placed on these arbitrage flows by the limits of liquidity creation in developed coun-

try markets. The transfer of funds should have reduced liquidity in developed countries as they flowed to developing countries. But, as Witteveen (1998, pp. 26-7) has remarked, the increase in capital flows into the Asian economies that started in 1996 was not accompanied by any reduction in liquidity in developed countries, rather it continued to increase in excess of domestic needs. Witteveen argues that much of the lending was funded in the international interbank market via a process that echoes that experimented with Eurodollar markets in the 1980s. While this is a possibility, it is more probable that most of the bank lending was effectuated through structured derivative transactions which provide high leverage and are largely off-balance sheet transactions from the point of view of the lending banks (see Kregel, 1998). Whatever the cause, it is clear that there was no constraint on the creation of international liquidity that would limit the arbitrage flows to developing countries. Thus, high leverage is added to the other risks such as exchange rate, market and credit risks. Since the degree of leverage is especially sensitive to expectations concerning other risks, it can change very rapidly, not only creating high volatility but also producing the rapid capital reversals that have come to characterise developing country financial crises.

The impact of rapid variations in the liquidity premium that investors require to hold assets has produced similar effects in the aftermath of the crisis in Russia, where interest rates rose in response to the rapid increase in both credit and liquidity risk premia. The effect was that funds were channeled into the lowest risk employments, usually (only the most liquid, on-the-run) government bonds. However, none of these are productive investments, and more importantly, none are in developing countries, producing a sharp reversal of the remaining private capital flows to developing countries towards the developed countries.

Drawbacks also appear to be present in other approaches to reform of the international financial system, such as standstills, debt workouts, increased emergency lending facilities, etc., all of which simply act to try to remedy the negative impact on development of the operation of the dichotomy after the fact, rather than prevent it. Thus, the two main approaches involve placing the blame on developing countries because of inadequate domestic macro policies or that nothing can be done to remedy the impact of the ever more frequent crises except to act more quickly to stem their negative consequences.

V The Policy Implications

The policy implications of the two positions are also extremely clear. On

the traditional view, if the recommended corrections to provide full information and stable economic policies are followed, then capital flows will be stable and provide the appropriate level of real resources to allow developing countries to fill their real resource gaps and grow at their potential growth rates. On the other hand, if capital flows are driven by the need of large global banks to increase their returns and by arbitrage across policy interest rates that do not converge as a result of these arbitrage flows, then the total amount of capital flowing to a country will have nothing to do with its real development needs. Capital flows will naturally tend to overshoot and undershoot. It is paradoxical that finance theory has managed to move beyond Modigliani-Miller to discuss the optimal capital structure of a firm and its optimal leverage. But, it seems impossible to do this for a country. Yet, if capital flows are not motivated by the real development needs of a country, then it is incumbent on economic policy to control capital flows so that they conform to the optimal level of leverage for a country. For example, a business firm is normally considered to be financially fragile if its debt is more than 100% of equity. It is interesting that the multilateral institutions have developed a wide range of measures for the debt repayment capacity of a country after the debt has been incurred, yet they have not used these benchmark leverage ratios to limit the amount of borrowing that a country should undertake.

This is a direct challenge to the idea that free, unhindered capital flows will automatically reach the level appropriate to the macroeconomic stability of a country. Experience suggests that this is not the case. It does not suggest that capital flows should be prohibited, but simply that government policy should take responsibility for overseeing the total amounts of capital inflow such that foreign exchange cash commitments do not exceed the country's ability to pay under plausible alternative scenarios (stress tests?) concerning foreign exchange earnings.

The other alternative would be to provide controls on the operations of the banks themselves. While controls on bank lending are currently under consideration as the best approach to the regulation of hedge funds, they appear not yet to be under consideration for bank lending to developing countries. Indeed, for the largest global banks the trends appear to be in just the opposite direction. First, we should note that the trend towards consolidation in the banking sector is making for larger and larger banks or banking groups, all of which aim to operate globally and across a wide range of activities. The future thus holds in store increasingly large global banks who will be in charge of the organisation of the flows of capital across national markets. Given the size that will be required in order to operate on a global basis, it is unlikely that there will be more than a dozen of these mega-global banks. At least two-thirds will be formed around US banks.

In addition, the Group of Thirty (see G-30, 1997 and Kregel, 1998) is already preparing the way for the global deregulation and liberalisation of these global banks, just as the thrift industry was deregulated in the US in the 1980s. On the argument that no national regulator will be able to efficiently judge the operations of these banks, and since their operations will be too sophisticated to be understood by national bank examiners, the conclusion is that these mega-global banks will be best regulated by their counterparties, not by public regulators. The probability of imposing lending constraints in the activities of these banks with developing countries thus seems increasingly remote. It is unlikely that it will come from counterparty surveillance. These global mega-banks, operating virtually without surveillance or regulation, will be the dominating feature of the financial landscape in the new millennium. If the financial crises that we have witnessed in the 1980s and 1990s are in fact systemic, it is likely that the financial crises that we will experience in the 21st century will involve the operation of the new global mega-banks and thus will not be a regional crisis, limited to Asia or Latin America, but a truly global crisis since it will involve global banks operating globally and it will impact every country in which they operate. It will also involve a process of global competition amongst these banks, as they attempt to establish their positions and ensure their global market share. We already have some experience of the impact on the stability of bank balance sheets of competition for market share in regional and national markets. Should this be repeated at the global level, a new level of turbulence and instability will be the certain result.

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Comment on "Diagnostics Before Remedies in Formulating New Strategies for Dealing with Instability," by Jan Kregel

Ariel Buira

Jan Kregel has presented a brilliant, thoughtful and original paper and I agree with most of his points, but as you will see, not with all of them. In the Keynesian tradition, he reminds us of the importance of financial flows as a factor of production and the fact that the maximisation of profits does not necessarily lead to the maximisation of output.

Two Different Views

Conventional wisdom goes that developing countries require external savings to compensate for the shortage of domestic savings. In order to attract these savings, countries must offer real returns that are more attractive than those offered in developed countries. Thus, to limit or to interfere with the free flow of financial resources would seem to impede the process of development. Market-friendly reforms, presumably liberalisation of markets and other structural reforms in developing countries, and the adoption of orthodox economic policies are thought to lead to higher rates of return for investors and to help attract capital flows. To this view, which he would call the supply-side or incentive approach, Kregel proposes an alternative.

He posits that modern financial markets have undergone a major transformation. Lenders no longer meet borrowers, they meet banks which in turn find borrowers and increase competition. The declining rates of return and equity of financial institutions have led banks to lend much more aggressively in order to survive and to push for increasingly free global capital flows. The increase in these international flows of capital have played a growing role in the world economy and increased capital mobility is associated with an increase in the frequency of financial crises.

So far so good. Kregel points out that often countries that adopt stabilisation policies receive large capital inflows even before these policies have brought about any real changes in the economic conditions of a country and thus in the rates of return for investors. Moreover, he does not believe that increases in capital inflows can be attributed to changed expectations, since so many stabilisation programmes have failed. Thus, he believes that the explanation for frequent crises lies in the use of exchange rates as an anchor for stabilisation which, coupled with a tight monetary policy, results in very high interest rates that attract foreign investors.

In support of this view he underscores the distorting effects of the central bank resorting to high interest rates to prevent capital outflows. These rates, set by a central bank, not only have no relationships to interest rates abroad, but divert capital from productive investments at home, because the central bank is willing to pay rates that exceed the returns that can be made in productive investments. Thus, they reduce investment and divert capital into unproductive government debt. In Kregel's view, the high rates of interest are policy rates, not market rates. And further capital inflows do not act to reduce interest rate differentials. Thus, the natural market result is to produce an infinite flow to take advantage of the profit potential.

One doubt that immediately comes to mind is that it is not always the case. The recent experience of Latin America and other emerging market economies in 1998, for instance, shows that despite the very high interest rates and the very high spreads prevailing, the inflow of capital to these countries declined very sharply – to about half of the 1997 average. While there is no question that very high interest rates may be the result of policy, in my own experience, the issue is rather more complex and somewhat different. Let me try to explain.

Exchange Rate Policies

Let us first consider the use of exchange rate anchors in adjustment programmes. In the early 1990s, a number of countries suffering from high inflation – Israel, Mexico, Brasil, Argentina – pursued stabilisation policies in which the exchange rate played the role of nominal anchor. They chose to avoid the traditional approach of very restrictive monetary policy, because it would lead to a very sharp rise in interest rates. And this rise in interest rates, combined with downward wage and price rigidities would cause a protracted decline in economic activity and jeopardise the success of the stabilisation. This was a very deflationary and politically high-risk approach. So they sought for another approach and this was the use of the exchange rate as an anchor.

The use of the exchange rate, rather than another nominal variable was preferred, because the transition costs of the programme were presumed to be lower. And indeed one of the positive effects of this was, certainly in the Mexican case, an immediate strenghtening of the fiscal balance. As interest

rates paid on government debt fell sharply, we could redirect something like six percent of GDP to additional social expenditure, whilst attaining and maintaining a fiscal balance, because the inflationary component of interest rates had been so high.

Now, programmes based on the exchange rate tend to bring about a very rapid and pronounced disinflation along with a surge in economic activity. This phenomenon has been explained in several ways. One interpretation has suggested that the rapid decline of the inflation rate is reflected in lower interest rates, which stimulate economic activity. Others have indicated that lower inflation gives rise to a wealth effect and thus to a consumption boom. Alternatively it has been argued that lack of credibility leads people to increase expenditure at the early stages of a programme, as they expect the exchange rate to be abandoned some time in the future and they might as well make the most of it. It indicates that the resulting combination of economic recovery and lower inflation may help the authorities to keep the social consensus and to buy time and gain credibility. The exchange rate provides a signal which is clear and easy to understand for economic agents and thus enhances the credibility of the programme.

Of course several conditions have to be met if a stabilisation effort based on the exchange rate as an anchor is to succeed. Credibility is essential and in order to achieve it, regardless of the nominal anchor chosen, the programme should include sustainable public finances, otherwise it is bound to collapse. Moreover, when the stabilisation programme is based on the exchange rate, an appreciation of the currency is to be expected, as Jan Kregel points out. Thus, a degree of undervaluation of the currency prior to the inception of the programme is absolutely necessary, if a loss of competitiveness is to be avoided. Moreover, the government should make clear its commitment not to deviate from the target for the nominal anchor. And this may require prior accumulation of reserves, to allow the authorities to defend the predetermined level of currency in the face of negative shocks that may affect the foreign exchange market. To improve the chances of success, the programme should further be complemented with measures that contain the level of wages and other nominal variables.

Let's take another case, the case of a freely floating exchange rate and interest rates that are market-determined; and this is also my own experience of another period. Often, the interest rates are far higher than the central bank would like them to be, but it is unable to bring them down substantially in the short term. Sometimes it takes more than twelve months to really bring them down. The central bank has to pursue a policy that helps to restore confidence, which does not mean by definition that it has to follow a tight monetary policy. It may simply follow what one could call a neutral policy. That is a policy which is based on a reasonable esti-

mate of demand for money plus some reasonable projection of inflation. Let's say that this is a reasonable monetary programme. Of course, if you go beyond that, and the monetary policy becomes expansionary, it will scare markets and capital will flow out. So you have a relatively narrow range in which to move.

If monetary policy is not really too tight, why are interest rates so high? Why don't they come down quickly? Well, I think this has to do with what I would call the difference between real interest rates ex ante and real interest rates ex post, that is between expected and observed interest rates. I think that in countries that have suffered very high rates of inflation, large devaluations and so forth, the expectations of savers are adjusted with a lag. They are largely based on their past experience and it takes some time before they change their mind. They are mistrustful and probably rightly so. Thus, if the experience says that inflation last year was, say fifty percent, or anyway a high rate of inflation because of devaluation or for whatever other reason, domestic savers will for a time look for rates of interest that cover them for fifty percent inflation. And not only for fifty percent inflation, because high rates of inflation are very variable and you don't know, if it was fifty percent last year it could easily be sixty percent this year. So you probably want sixty-five, seventy percent interest rates. But of course, the programme is such that inflation is coming down sharply and they end up not with a ten percent or a fifteen percent real rate of interest that they wanted, which was high enough as it is, and would have been restrictive enough, but they even may end up with a thirty percent or forty percent real rate of interest. That of course is murderous. The central bank clearly doesn't want such high rates, because they cause a lot of problems to the productive sector and to the banking sector.

However, the fact that the authorities may project a lower rate of inflation and tell everybody that inflation this year is likely to be twenty percent does not immediately change the minds of savers. It is only after the market experiences a substantially lower rate of inflation, that the savers revise expectations downward. But they do this with a lag. So, in a period of sharply falling inflation, these lags lead to very high rates of real interest, rates that not only discourage productive investment, but cause a lot of problems to the banking system.

Control of Capital Inflows

So the diagnosis is fine in one sense, but in another it is not. When the banks seek higher returns and look for higher rates of interest in developing countries, these rates are not simply policy-determined interest rates. The interest rate differentials persist because, for many domestic investors, the risk-

adjusted expected returns are the same. This is a very subjective risk-adjustment. But, unless you give them this huge differential, say a thirty percent real interest rate, they will not stay in the country, capital will flow out.

Kregel believes that the differences between these two opposing explanations as to what determines financial flows – whether they respond to real forces or whether they are independent and respond to nominal factors – is important for the reform of the system. He however does not develop the point in the paper; he has explained this point a little more in his verbal presentation. He is right: if the real interest rate differentials are the result of stabilisation policies recommended to LDCs, than you should think about a different set of stabilisation policies. Since I don't believe this is generally the case I am inclined to go for the second solution, which is to change the way in which we allow capital to move. Review the way in which capital moves and see whether something could be done to avoid the problems which arise from this volatility.

I know that in a competitive model free capital movements are assumed to promote efficient resource allocation. It is also assumed that free capital movements allow you to achieve a superior inter-temporal pattern of consumption and thus to enhance welfare. However, I think that economic theory admits exceptions to this rule and these arise whenever distortions invalidate the basic assumption necessary to attain this first-best competitive equilibrium. The idea is very simple: if the economy is seen to suffer from a distortion, welfare may be improved by the introduction of another distortion. This of course is the theory of the second-best. Recent experiences of market volatility, in the new global electronically-linked markets, which have led to very costly crises in Mexico and Asia and Russia, have made the potential costs of massive speculative flows difficult to ignore or to underestimate. Indeed, the experiences of crisis countries show that the costs imposed by absolutely free capital movements in global markets have not been given adequate weight while they give rise to questions about market distortions which need careful consideration.

Let me just mention a few, but the list is much longer than what I am going to say. Questions like: Do market failures, such as price distortions in goods and labour markets, the irrational behaviour responsible for much of the recent massive speculation and the encouragement of inefficient patterns of consumption and investment in economies receiving large capital inflows, do these distortions justify interventions to limit portfolio capital inflows? Another question would be: Can speculative attacks on a currency become self-fulfilling and succeed even if a government has followed sustainable policies prior to the attack? Are emerging market economies particularly vulnerable to these attacks? Does the existence of multiple equilibria in financial and exchange markets justify capital controls? Can

certain types of capital controls protect countries from, or reduce the risk of unwarranted massive currency depreciations, triggered by contagion or mass psychology in financial markets? Can one make a distinction between the liberalisation of long and short-term capital flows? Can one obtain the benefits of the liberalisation of a financial system without necessarily liberalising short-term flows?

I agree with many of the points that Kregel raises. I think debt standstills, work-outs and increased emergency lending after the event, while useful, are not substitutes for measures that would help prevent crises. Full information and sound and stable policies are not sufficient to protect countries from the volatility of capital markets. Consequently, in the absence of appropriate measures of protection at the systemic level, I think it is up to the authorities to take appropriate measures to protect the country from the vagaries of financial markets, including resort to some types of controls or market-related measures to limit short-term inflows.

In any event, a country may find it useful to limit the amount of external borrowing, especially of short-term borrowing. A prudent approach might be for a country – this could be done in consultation with the IMF – to determine the level of capital inflows that it can absorb, without experiencing undue pressure on domestic prices and without causing too large a current account deficit. Capital inflows beyond that level could be discouraged for example by requiring, as Chile has done, that capital inflows remain in the country for a minimum of let's say one year or that a fixed fraction be made in the form of non-interest-bearing deposits. Chile and Colombia have done this for a number of years quite successfully and they have obtained a better balance between short-term capital flows and foreign direct investment. By doing so they have reduced the volatility of overall capital inflows.

New Strategies for Dealing with the Instability of Financial Markets

William R. White

I Introduction¹

Strategies for dealing with instability in financial markets could focus on at least three kinds of issues: crisis management, crisis prevention and crisis resolution. Moreover, in each area, radical as well as incremental solutions to perceived problems could be suggested. With respect to crisis management, recent radical suggestions made by George Soros (1998), Stanley Fischer (1999) and Jeff Garten (1998) come to mind. In the area of crisis prevention, the superregulator proposals of Eatwell and Taylor (1998) among others deserve consideration. And finally, in the area of crisis resolution, Sebastian Edwards (1998) has suggested a global restructuring agency, while Steven Radelet and Jeff Sachs (1997) have proposed international bankruptcy procedures analogous to those of Chapter 11 in the United States. This paper will focus entirely on issues pertinent to crisis prevention. This reflects the fact that such concerns constitute the principal preoccupation of the three Standing Committees of national experts which meet regularly at the Bank for International Settlements.²

Professor Tom Peters once famously said: "If you don't know where you are going, you are going to end up somewhere else". To which someone else later added the corollary: "If you don't know where you are going, it doesn't matter how you get there". These are actually serious points that are pertinent to the choice of new strategies to deal with the instability of financial markets. Before turning to solutions, one must be crystal clear as to the nature of the problem. Without such clarity, we are sure "to end up somewhere else". Moreover, the damage caused by choice of an inappropriate solution will be all the greater if the solution chosen is both radical and has pervasive effects.

To make the same point in more practical terms, the incidence of inter-

¹ The Tables and Charts in this paper are drawn from Bank for International Settlements (1998a and 1999b).

² The Basel Committee on Banking Supervision: (BCBS); The Committee on the Global Financial System (CGFS, formerly the Euro-Currency Standing Committee (ECSC)) and the Committee on Payments and Settlement Systems (CPSS).

national financial crises does seem to have been rising over the last 20 years. Moreover, in each and every case, financial crises have been associated with severe economic disruption, increases in unemployment and even poverty; financial stability and macroeconomic stability are thus two sides of the same coin. Yet, it is important to note as well that the characteristics of the most important of these crises have also been different in significant ways.

The emerging market debt crisis of the 1980s essentially involved a limited number of banks as creditors with sovereigns as the indebted parties. In the Mexican crisis of 1994-95, the sovereign was again the indebted party, but most of the lending had been done through disintermediated markets by tens of thousands of different lenders. In East Asia in 1997 and subsequently, a relatively small number of banks were again the dominant lenders (though securities issuance was increasingly significant) but lending was essentially to a wide range of private sector entities, both banks and non-banks. And although not yet seen in the post-war period, crises could also be envisaged involving very large numbers of both borrowers and lenders interacting almost exclusively through disintermediated markets. The central point is that measures to prevent the recurrence of the last crisis may not in fact prevent future crises since crises can arise and propagate themselves in very different ways.

One underlying trend can be discerned, however, and that is the growing reliance on market-based financing processes as opposed to more traditional intermediated finance. At the FONDAD conference last year (White, 1998a), I noted the sharp rise in securities issues by emerging markets, the growing use of securitisation in the financial markets of industrial countries and the virtual explosion in the use of derivative instruments (mostly traded in OTC markets). I noted, moreover, that international financial markets are increasingly integrated in complex ways, global in scope, and rapidly changing with respect to the participants, instruments in use and the technological channels through which financial services are being provided. I concluded on the basis of these observations that a number of principles could be identified to guide the choice of a strategy for promoting financial stability.

First, measures to strengthen the system must be comprehensive and must cover each of the main pillars of the international financial system: institutions, markets and infrastructure. Second, policymakers and regulators must rely increasingly on market-led processes to provide the discipline required to encourage prudent and stabilising behaviour. Third, recognising the limitations of markets (bubbles do occur, market failures do happen), the traditional activities of regulators and supervisors will continue to be a needed complement to market discipline. And finally, what-

ever measures are taken to strengthen the financial system, these measures must recognise its international dimension. If level playing fields are to be encouraged and regulatory arbitrage avoided, these measures will increasingly have to be the result of international negotiations and agreements.

The events of the last year, in particular the spectacular fallout from the Russian crisis and the events surrounding the devaluation of the Brazilian real, provide no cause to question any of these conclusions. Indeed, they only serve to strengthen the belief that the dynamics of market behaviour ought to be a source of increasing concern to policymakers and market participants themselves.³ What also seems confirmed is the strong interrelationships between macroeconomic instability and financial instability. To make this point rather bluntly, strategies for dealing with the instability of financial markets must recognise the extent to which the roots of that instability lie in macroeconomic excesses and the choice of inappropriate exchange rate regimes. Absent better choices in the macroeconomic area, financial crises may be all but inevitable.

This paper begins by considering in more detail what is meant by financial instability and then proceeds to question what underlying causes may have contributed to such instability. It then goes on to consider possible policy responses to the problems identified. In this regard, some emphasis is put on arguments for and against establishing some form of international superregulator, as well as some of the practical problems inherent in implementing those policy measures that seem to have some merit.

II Underlying Causes of Financial Instability

In light of developments in international financial markets, concerns have grown that such markets may themselves contribute to financial instability of different sorts. One possibility is that there may now be greater short-run volatility in asset price movements. Another possibility is the enhanced likelihood of longer-term misalignment in asset prices, where misalignments are thought of as deviations from longer-term equilibrium prices. The third possibility is that international financial markets enhance the likelihood of contagion across previously separated markets. In fact, there are grounds for believing that all three problems may be of greater significance now than previously.

While there is a popular perception that the short-run volatility of asset prices is now greater than it used to be, by some empirical measures this is

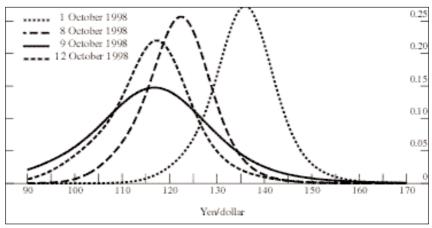
⁴ These distinctions are first suggested in Andersen and White (1996).

³ For a more detailed analysis of these events see BIS (1999b), Chapters III and V.

not in fact the case. If one considers the standard deviations of monthly price changes for a wide range of assets in industrial countries, there was no clearly discernible trend in the 20-year period ending in 1996.⁵ This having been said, there does seem to be supportive evidence for this hypothesis in data drawn from financial markets in emerging countries and from more recent data in industrial countries as well. Moreover, it is a fact that standard deviations are themselves a form of average which may hide occasional large price movements capable of inflicting serious damage on individual agents and even potentially the system itself.

So-called "fat tail" events can be perceived in the 1987 stock market crash, the bond market collapses of 1958 and 1994, the sharp fluctuations in the yen/dollar rate in mid-1995 and the events surrounding the Russian debt moratorium in August 1998 and the subsequent difficulties of Long-Term Capital Management. By way of example, Chart 1 shows the massive swings in perceptions about the future value of the yen/dollar rate in early October of 1998 with the spot rate moving almost 7% on one day alone.

Chart 1 Probability Distributions of the Yen against the Dollar



Note.

The calculation assumes risk neutrality and is based on data posted at the beginning of the days shown.

Source:

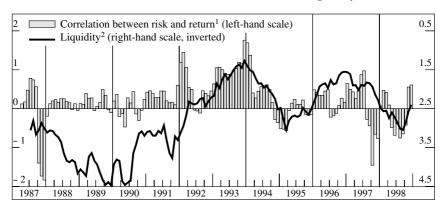
W. Melick (Kenyon College, Ohio) using Deutsche Morgan Grenfell data.

⁵ This stylised fact emerges from BIS (1996). Note, however, that the early part of this period contained the marked turbulence of the 1970s.

The chain of events here seems to have been large losses by heavily leveraged investors in Russian paper, followed by recognition that the credit standing of those investors was potentially seriously compromised. As credit spreads rose, many lenders withdrew from the markets, leading to liquidity shortages which further widened the differentials between yields on higher-quality and lower-quality paper. Confronted with losses arising from these events and calls for margin, investors who had borrowed cheaply in yen were forced to close out their positions, putting sudden and violent upward pressure on the value of the yen.

As is now well known, concerns about the implications of a disorderly winding-down of the book of Long-Term Capital Management were so great that the Federal Reserve Bank of New York felt it prudent to organise a private sector support operation to ensure this did not happen. In effect, we had an instance of both too big and too complicated to fail. These events would seem consistent with modern financial markets having the capacity to sharply increase short-term price volatility. While it may be of only small comfort, it is worth noting that the infrastructure supporting the international financial system, in particular facilities for clearing and

Chart 2 Investors' Attitudes towards Risk and Liquidity



Notes:

Sources:

Datastream; national data; BIS estimates.

¹ Slope coefficient of a cross-sectional repression of realised returns on historical volatility for a number of asset classes.

² GDP-weighted average of overnight real rates in the Eurocurrency market for the United States, Japan, Germany, France and the United Kingdom.

settlement, continued to operate effectively throughout this period of unusual stress.

Assessing whether modern financial markets have become more prone to generate deviations of asset prices from equilibrium prices ("misalignments" or "bubbles") is even more difficult since the concept of an equilibrium price is itself rather fuzzy. A starting point might be the Wicksellian concept of a discrepancy between the market rate of interest and the "natural" rate of interest but this does not really take us very far. A further complication arises from interaction between the behaviour of market participants and the actions of the official sector. As seen in Chart 2, periods of declining policy interest rates in the major industrial countries do seem to be correlated with periods when investors seemed to become relatively less risk-adverse. Should bubbles occur in consequence, it becomes difficult to disentangle the relative contribution of each source.

Concerning the possible contribution of monetary policies to asset price movements, one cannot help but be struck by the fact that, over the last 15 years, financial conditions have been unusually easy in at least one major financial centre at all times. In the mid-1980s, the cost of capital in Japan was reduced to virtually zero as the US authorities demanded measures to stimulate demand growth in Japan, while the Ministry of Finance refused to countenance fiscal easing. In the early 1990s, real interest rates were very low in the United States as efforts were made to resist the "headwinds" generated by previous financial excesses. Moreover, this also contributed to a sharply lower dollar and a massive expansion of investment in Asian countries then pegged to the dollar. And more recently, the difficulties of the Japanese banking system have again led to virtually zero policy rates, significant uncovered borrowing in yen and potential effects on currency values and asset prices in other countries.

Turning now to a possible private sector contribution to recent unwelcome developments in international financial markets, it does seem to be the case that lenders in recent years have been pricing risk rather more aggressively than in the past. This seems to have two basic causes.⁶ One is that competition in the financial services area has increased markedly in recent years. Moreover, even as profits have been harder to come by, the growing concern for shareholder value (especially in Europe) has meant that managers have come under substantially greater pressure to maintain or even expand profit levels. These developments in themselves might have inclined some financial institutions to engage in riskier endeavours. Closely related to this has been the role of public safety nets, which have

⁶ For a description of the global, as well as distinctively European factors at work (including the euro), see White (1998b).

tended to attenuate perceptions of the possible costs associated with such risk taking. Consider, for example, the massive expansion of interbank lending to Korea at very short maturities prior to 1997. Explicit sovereign guarantees meant there was no credit risk. The fact that the loans were denominated in hard currencies and of short maturity indicated there was no market risk. And, after the IMF interventions surrounding the Mexican and early Asian crises, liquidity risk was also considered to be minimal.

What have been the implications of these financial sector "excesses" over the last number of years? Arguably, the first result has been the excessive expansion of the capital stock in a large number of industries worldwide: steel, shipbuilding, automobiles, chemicals, pharmaceuticals, electronic products, etc. It is this excess capacity which has driven down the prices of such products and materially aided the global process of disinflation. The problem of course is that profits are also under pressure; loans taken out to finance capital expansion cannot be repaid; and this in turn threatens the viability of lenders in many cases. While the focus above has been on international financial markets, it should not be forgotten that domestic financial markets also contributed to these excesses. In Asia, for example, by far the largest portion of the credit granted during the boom period came from domestic sources (Table 1). As is well known, many of these domestic banking systems now need significant restructuring.

Table 1 Asian Banking and Financial Markets

	Domestic		Share of 1	<u>s</u> I	Oomestic	(of which: private	
	Bank	State Banks		Foreign	Banks		
	Credit1	1994	1998	1994	1998		sector)
China	125	100	99	0	1	21	-7
Hong Kong	141	0	0	77	77	17	-14
India	50	87	82	8	8	32	-8
Indonesia	89	48		4			
Korea	83	19	28	5	6	68	-54
Malaysia	124	9	18	21	21	85	-53
Philippines	77	19 *		10 *			
Singapore	85	0	0	80	80	18	-2
Thailand	128	7	29	7	16		
Latin America	2 37	37	26	11	18	29	-9
$G-3^{3}$	124	17	21	10	10	127	-53

Notes:

* 1991.

Sources: BIS, IMF, central banks.

¹ As percentage of GDP.

² Simple average of Argentina, Brazil and Mexico.

³ Simple average of Germany, Japan and United States.

The search for yield may also have contributed to two other phenomena; the sharp run-up in equity prices in many industrial countries over the last few years, as well as the massive increase in capital inflows into emerg-

Table 2 International Bank and Securities Financing of Emerging Market Economies (in billions of US dollars, at an annual rate)

	Average	1996	1997			1998		
	1990- 1995 ¹		First half	Q3	Q4	First half	Q3	Q4
International bank lend	ing ²							
Asia ³	37	80	74	-8	-109	-103	-94	-32
of which:								
China	7	13	13	21	-1	-6	-25	4
Crisis countries ⁴	28	58	49	-39	-96	-96	-59	-43
Latin America	1	29	27	43	40	30	-32	-24
of which:								
Argentina	0	5	4	10	12	3	5	-11
Brazil	0	17	13	18	-1	17	-32	-18
Mexico	0	0	3	-5	8	2	-4	6
Eastern Europe ^{5/6}	0	2	4	8	6	7	4	2
Russia ⁶	-2	7	8	17	6	12	-43	-6
Net Issuance of Interna Debt Securities	tional							
Asia ³	15	43	40	44	13	10	-15	-3
of which:								
China	2	2	7	2	1	0	-4	2
Crisis countries ⁴	11	38	28	36	10	7	-16	-5
Latin America	13	41	48	76	-3	50	-1	-8
of which:								
Argentina	6	11	13	26	2	20	5	2
Brazil	4	12	15	19	-6	16	-8	-12
Mexico	2	13	13	11	-2	3	0	2
Russia	0	0	9	5	6	11	25	-1

Notes

Source: BIS.

¹ 1993Q4-1995 for net securities issuance.

² Exchange-rate-adjusted change in claims of BIS reporting banks.

³ Excluding Hong Kong and Singapore.

⁴ Indonesia, Korea, Malaysia, the Philippines and Thailand.

⁵ The Czech Republic, Hungary and Poland.

⁶ Data are available only from 1994.

ing markets prior to the Russian crisis. Both developments have associated dangers, though some are now more obvious than others. As for stock prices, the danger is that easy credit could contribute to the price of financial assets being pushed up (essentially driven by extrapolative expectations) even as excess capacity was driving down the rate of return on the underlying assets. This would not be a permanently sustainable situation, though the dynamics of this process might extend over a surprisingly long period. It is notable that in the United States, where household ownership of equities is by far the most advanced among the industrial countries, debt levels are also at record levels (as are personal bankruptcies) while the personal saving rate is now effectively zero.

As for capital flows to emerging market economies, Table 2 is instructive. In addition to showing the growing use of securities issuance prior to the last quarter of 1997, it also makes clear the brutality of the turnaround when concerns about the riskiness of investments in emerging markets did finally begin to reassert themselves. It is worth noting, moreover, that the vast bulk of bank lending was first provided by Japanese banks and then more recently by continental European banks. In both cases, albeit to varying degrees, domestic profits were under significant pressure at the time and government safety nets were commonly expected to be available.⁷ If capital flows contributed to expansionary excesses on the way in, they also contributed significantly to crisis and recession on the way out. As external financing disappeared for countries with sizable current account deficits, domestic absorption had to be reduced by whatever amount was necessary to respect the underlying accounting identities. Indeed, as even trade credit dried up for some countries, the offsetting competitive advantages provided by a lower currency value could not be exploited.8

The last possibility to be considered is that international financial markets contribute to instability by increasing contagion across markets and countries that were previously more insulated. As for financial markets, there can be little question that they are now much more interrelated than a decade ago. However, what is not clear is whether this is a good or bad thing. On the one hand, individuals now have many more ways to cover risks, and there is the possibility as well that shocks may become dispersed across markets and therefore less harmful. During the events surrounding the LTCM crisis, for example, there was a very sharp reduction in the

⁷ In most instances the guarantees were implicit, but in such cases as the German Landesbank they were explicit.

⁸ It is common to assume that real depreciation leads to expanded production of domestically produced goods and services via substitution effects. However, terms of trade effects and the need to service external debts denominated in foreign currency work (in some cases overwhelmingly) in the opposite direction.

amount of international bank credit extended to non-bank customers (especially highly leveraged institutions), an associated unwinding of positions in derivatives markets, and also a flight by depositors to banks of the highest quality. In the face of these massive strains, the interbank deposit market expanded significantly and thus helped cushion the shock. On the other hand, it cannot be ruled out that a single market or piece of the underlying infrastructure (especially payment and settlement systems) might fail with knock-on effects of significant magnitude.

The problem of cross-country contagion, caused by the behaviour of lenders on international financial markets, received considerable attention during and following the Asian crisis. There is an element of truth in these allegations. The sometimes losses in one market forced liquidations in others, and sometimes withdrawals by retail investors forced generalised liquidations. It is also the case that some investors relied rather mechanically on historical correlations of cross-country rates of return; thus pressure on one currency led to sales of another. As well, liquidity at times dried up in one market, leading investors to cover by selling in other markets which were still liquid. Finally, it may be the case that there was a generalised flight from risk which did not take into account the different circumstances of different countries.

Yet, it was also the case that the crisis-affected countries shared many similar characteristics. A sudden recognition of this reality might imply correlation but not contagion (White, 1998c). Shared domestic shortcomings were excessive capital formation, many bad loans and weak banking systems. At the international level, the fact that these countries were strong competitors with each other in export markets also meant that currency depreciation on the part of one contributed materially to the pressure on others (Chart 3). Moreover, it is a fact that many of these countries were quite heavily dependent on the exports of electronic products whose prices were under severe downward pressure at the time. This was a further common shock.

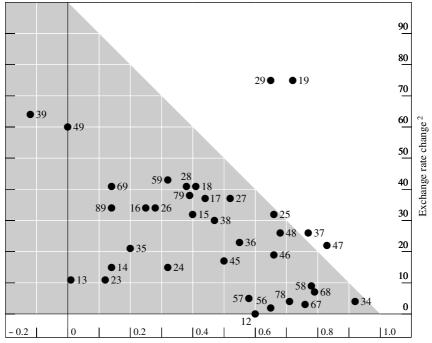
Finally, and worthy of some special attention, all of the affected countries had in effect pegged their currencies to the US dollar in order to benefit competitively as the dollar fell against the yen prior to the spring of 1995. Many domestic investors believed that the peg would be held indefinitely and thus borrowed unhedged in foreign currency to get the benefit of much lower rates of interest.¹¹ When the dollar subsequently also began

⁹ See BIS (1999b), Chapter VIII.

¹⁰ See BIS (1998a), Chapter VI.

¹¹ Foreigners, including many hedge funds, did the same by buying Asian currencies forward on the expectation that they would depreciate less than was implicit in the interest rate differentials.

Chart 3 Export Competition and Exchange Rates in Asia



Correlation of export shares 1

The dots represent pairs of exporters, where 1=China, 2=Hong Kong, 3=Singapore, 4=Taiwan, 5=Philippines, 6=Malaysia, 7=Thailand, 8=Korea and 9=Indonesia.. The shaded area indicates where the dots would fall if trade competition tightly constrained exchange rate changes.

Notes:

¹ Correlations measured across shares in total exports of goods sent to the European Union, the United States and Japan in 11 merchandise trade categories (SITC 65, 75-78, 82-85 and 87-88). A high correlation indicates a similar merchandise mix and similar export destinations.

Sources:

W. Melick and BIS using OECD data, Bankers Trust and Reuters.

to rise sharply, and the effects of the earlier effective depreciation of the Chinese renminbi began to be felt, competitive pressures intensified and current account deficits widened in most countries. When the peg eventually had to be given up in Thailand, those who were short of dollars suf-

² Absolute difference in the percentage changes in exchange rates (measured as US dollars per unit of domestic currency) over 12 months to end-March 1998.

fered severely and this served to highlight the dangers facing those similarly exposed in other countries. As these people tried to cover themselves, they put downward pressure on their own currencies, contributing in turn to the wave of depreciations observed during that period.

III Strategies for Preventing Financial Crises

The thrust of the above comments is that financial instability has a number of manifestations (volatility, misalignments, contagion). Each may have a number of underlying causes, and it is important to know what they are before suggesting how problems might be rectified. Macroeconomic forces, some domestic and some international, have certainly contributed to recent and perhaps prospective difficulties. However, deficiencies in the operation of financial systems (again at both domestic and international levels) have also had an unwelcome influence.

As for deficiencies in the operation of the financial system, one could point to shortcomings in the governance and supervision of many sorts of financial institutions, the tendency of a wide variety of markets to be subject to emotional swings of optimism and pessimism, and many deficiencies in the fundamental infrastructure supporting the financial system. Among such deficiencies, shortcomings and inconsistencies in international accounting standards, uncertainties about legal interpretations, as well as possible defects in payment and settlement systems all have the potential to cause or contribute to financial instability.

A "Top Down" Approach?

A number of people have recently suggested the potential merits of an international superregulator to set standards, oversee international financial markets and impose discipline on those who seem to be behaving in ways inconsistent with international financial stability. Arguments in support of such a proposition would certainly include the globalisation of financial markets, the breakdown of sectoral distinctions worldwide (e.g. between banks, investment dealers, insurance companies and asset management firms), the growing integration and complexity of international financial markets, and the need for efficient information sharing by all relevant bodies. All of this would seem to argue for an organisation capable of seeing the big picture, and then doing something about it. In sum, this proposition would seem to be both comprehensive and fundamentally

¹² See Eatwell and Taylor (1998) and Currie (1999).

international, two of the underlying principles suggested above as being necessary for any strategy for fostering international financial stability.

The principal arguments against the proposition are both practical and political. At the practical level, oversight and supervision must be a very hands-on affair. This was one of the arguments used in Europe when it was decided that banking supervision would stay at the national level rather than migrating to the European Central Bank. Still more practically, one could ask whether the magnitude of the task faced by a single agency might be so great as to be effectively unmanageable. One is reminded that, in writing computer software, it is common to eschew seamless integration in favour of modular development. While the latter may be conceptually less efficient, it is also less likely to be a complete failure.

The political objections to this idea at the current time would seem significant. A superregulator with effective powers to set standards and enforce them globally would be enormously powerful. One could argue that national legislators are not yet ready for this. Consider how very similar arguments led to banking supervision being taken away from the Bank of England once it had been given "independence" in the conduct of monetary policy. Nor do national legislators seem ready to cede the degree of sovereignty that would be needed to make such a superregulator effective in practice. Consider, for example, the current Congressional antipathy to the International Monetary Fund and the difficulty of obtaining legislation to raise Fund quotas. Consider as well the application of the principle of subsidiarity in the European Union. And finally consider the protective attitude taken to their national financial sectors by governments in most countries of the world. It is true that all of these attitudes should and likely will change with time. But that seems more for the future than for now.

Another argument against this superregulator approach is that it could violate the third and fourth principles laid out above for choosing a strategy for promoting financial stability. These principles state that internal governance and market discipline should be at the heart of financial oversight, with the supervisory apparatus playing a complementary and market-consistent role. A superregulator could of course operate in this fashion, but the theory of bureaucracies teaches us that it might well be tempted to act in its own interests instead. That might imply growing recourse to traditional directives (and the need to police them) and less reliance on market processes.

A final set of points has to do with the difficulty of getting international agreement on the mandates, powers and accountability of an international superregulator. Even more difficult: would it be possible to change these agreements in the light of changes in objective circumstances? The history of the United Nations and the Bretton Woods institutions teaches us that

these are not unimportant issues. All of this perhaps argues for a more informal and "bottom up" approach to the promotion of financial stability.

A "Bottom Up" Approach?

Questions of Process Pertaining to International Financial Stability

The "bottom up" approach suggested here essentially involves improving the process already under way to enhance the prospects of international financial stability. This process is based on a piecemeal identification of shortcomings in all the areas discussed above, with attention then being paid to effecting improvements in individual areas. The latter challenge involves identifying what needs to be done and then actually implementing these recommendations. Judging from what has been accomplished to date, this approach seems to adhere to all four of the principles which should underlie any strategy chosen to foster international financial stability. However, this is not to say that what has been done to date is not without shortcomings. In particular, a great deal still needs to be done in the area of implementation. For example, it was suggested as far back as 1995 that international bond contracts should contain majority voting provisions and sharing clauses. Thus far, the industrial countries have refused to lead the way by example. In contrast, the G-10 countries were willing last year to commit to a template for revealing their foreign exchange positions with a view to encouraging emerging markets to do the same.

The identification of international problems affecting financial stability was for a long period the preoccupation of the various committees working under the aegis of the Group of Ten. Among those committees, the three standing committees which meet at the BIS¹³ have made a particular contribution over the years. The publication in 1997 of the Report of the Working Party on Financial Stability in Emerging Market Economies (involving many representatives from emerging markets)¹⁴ also served to move this process forward. In particular, this report recommended the establishment of standards of best practice in a number of areas affecting financial stability. After the publication of this report, the Governors of the G-10 then asked their three standing committees to establish whether there were other area as well (the "gaps" exercise) where international standards might be both desirable and practically feasible. These committees reported in the affirmative and also made specific recommendations.

¹³ BCBS, CGFS, CPSS. The accomplishment of these Committees over the years are recorded in successive BIS Annual Reports under the title "Activities of the Bank".

¹⁴ See BIS/IMF (1997).

Still more recently, following up on a promise made by President Clinton at an APEC conference in 1997, three working groups with proportionally larger representation from emerging markets made still further recommendations with a view to increasing transparency and accountability, strengthening financial systems, and improving the resolution of international financial crises. In short, even after recognising the enormous overlap in much of the work done to date, there is now no shortage of suggestions as to what needs to be done.

Consistent with use of the phrase "bottom up", it is to be noted that all of the committees and working groups mentioned above were made up of senior officials from the national capitals where sovereignty still resides. Moreover, it now seems almost universally recognised that similar groups of national experts should also take primary responsibility for drawing up international codes of best practice.¹⁵ Indeed, following the precedent set by the Basel Supervisors in drawing up the Core Principles for Effective Banking Supervision, similar core principles either have already been promulgated¹⁶ or are in the process of being prepared.¹⁷

Consistent with this "bottom up" approach, the challenge now is to actually implement the most important of the recommendations made to date: in particular, the adoption of international codes of good practice. This will not be easy given shortages of knowledgeable resources in both industrial and emerging countries and often political unwillingness to take steps that might prove personally costly. However, experience to date with the implementation of the Core Principles for Effective Banking Supervision gives some idea as to how to move forward. The Basel Committee on Banking Supervision has established a Liaison Group and is in close contact with regional groups of supervisors; both directly and in association with these groups, it is vigorously advocating the implementation of the Core Principles. Peer pressure of this sort may well be intensified if needs to be. The International Monetary Fund is preparing for the Monetary and Exchange Affairs Department to monitor compliance in the

¹⁵ Exceptions to this general rule, recommended in the Report of the Working Party on Financial Stability, are codes for how officials themselves should behave. The IMF, as directed by the Interim Committee, has already drawn up a Code for Transparency in the Conduct of Fiscal Policy. It is also in the process of finalising a Code for Transparency in the Conduct of Monetary and Financial Policies.

¹⁶ These include: Disclosure of Foreign Currency Positions; SDDS; Enhancing Bank Transparency; Trading and Derivative Disclosures by Banks; Disclosure Framework for Securities Settlement Systems; Core Principles for Securities Regulation; Core Principles for Insurance Supervision.

¹⁷ These include: Transparency about Adherence to International Standards, Principles of Corporate Governance; Disclosures by Financial Institutions, including HLIs; Core Principles for Payment Systems; Principles for the Management of Credit Risks.

context of Article IV consultations, ¹⁸ and the World Bank group will focus on supporting necessary training. The private sector can also help by imposing market penalties on those countries which do not conform to the Core Principles. Finally, consideration might have to be given to denying rights of establishment in major financial centres to financial institutions from countries where the Core Principles for Effective Banking Supervision are being inadequately applied. This eventuality was in fact foreseen as far back as the Basel Concordat (BIS: BCBS, 1975), which was updated in 1992 (BIS: BCBS, 1992). The fact that so many different incentive systems for implementation are being suggested reflects the widespread belief among officials that no single approach is likely to be wholly effective.

Of course, adopting a portfolio of approaches has one major deficiency. Lacking specific accountability, those responsible for individual initiatives might pursue them with inadequate vigour based on the expectation that someone else might be counted on to pick up the slack. In this regard, the recent establishment of the Financial Stability Forum is a big step forward. For the first time, it will bring together representatives of international financial institutions, central banks, Treasuries and regulators at the international level. While established under the aegis of the G-7, its membership was expanded in June 1999 to include four other countries.¹⁹ Moreover, it will identify the work that needs to be done, will set priorities in light of scarce resources and will monitor implementation. Finally, given the high level of the official participants, the Forum should be able to mobilise the political clout to ensure that hard decisions are actually taken. Today, there remains an excessive tendency at the level of committees for international conflicts to be obfuscated, rather than resolved, through the use of accounting, regulatory and other devices.

Questions of Substance Pertaining to International Financial Stability

Rather than simply repeating the long list of existing recommendations as to how international financial stability might be improved, an alternative and higher-level approach might be suggested. In Section II above, problems of financial instability were classified as having to do with short-term price volatility, medium-term misalignments (including the problem of "excessive" international capital flows) and international contagion. What

¹⁹ Countries named to date are Hong Kong, Singapore, Australia and the Netherlands.

¹⁸ It is still an open question whether or not the Fund will announce publicly its assessment of whether a country is in compliance or not.

are the principal policy recommendations, both macroeconomic and structural, that might help alleviate each of these problems?

The dangers of excessive short-run price volatility, and at the limit the failure of markets to function, have been a longstanding source of concern. Serious problems associated with the failure of payment and settlement systems were only just averted in light of the failure of Drexel Burnham Lambert in 1988. More recently, a different aspect of the problem came to the forefront during the events surrounding the Russian moratorium and the near-collapse of LTCM. The heart of this latter problem seemed to be high levels of leverage, not only by so-called hedge funds, but also by the proprietary trading desks of investment firms as well as others. Since many of these firms are unregulated, and since attempts to regulate them could simply drive them offshore, attention now has shifted to other ways to approach this problem.

Three initiatives are under way in the Basel community, each having a somewhat different objective. The Basel Supervisors²⁰ have been concerned that bank lending to such entities could threaten the system by bringing down the banks, should the creditor default because of some market accident. Clearly, restraints imposed from the side of the lenders would also have effects on the capacity of borrowers to leverage themselves and thus indirectly on short-term market volatility. A working group set up by the Committee on the Global Financial System (the Fisher Group) is looking into what kinds of improvements in disclosure by large financial institutions of all kinds would be most effective in improving systemic stability. This reflects concerns that, in the absence of full information, lenders might suddenly refuse to deal with a large number of counterparties, aggravating short-run liquidity and related problems. Finally, another working group of the CGFS (the Patat Group) is assessing whether it would be feasible to provide additional aggregate information on activity in currency markets that could improve market stability by enhancing the capacity of market participants to identify the potential for large exchange rate movements and for contagion, especially in emerging markets.²¹

Another insight arising from the sharp price movements experienced following the Russian moratorium was that commonly accepted risk management procedures may promise more comfort than they actually provide. Normally, credit risk, liquidity risk and market risk are thought of as separable and additive. However, during the events of last fall, these risks

²⁰ The supervisors have already published two studies on this issue. See BIS: BCBS (1999a and 1999b).

²¹ The CGFS has also conducted a series of studies into the nature of liquidity in financial markets and market behaviour under stress. See BIS: ECSC (1997) and CGFS (1999c).

proved highly interactive with heightened concerns about credit risk causing liquidity to disappear, generating in turn price movements significant enough to have effects on perceptions of market risk. Indeed, commonly used measures of Value at Risk turned sharply upwards implying that firms with pre-committed levels of economic capital were forced by their methodologies to retreat from exposed positions. This behaviour may have amplified the original disruption, showing once again how sensible policies at the level of the firm can suffer from "fallacies of composition". The lesson from all of this is that "stress testing" needs to be relied upon more heavily, and that the implications for profits and losses of even highly improbable events need to be given serious consideration.

Measures to reduce the likelihood of medium-term price misalignments (and problems associated with international capital flows) have both a macroeconomic and an institutional dimension. Consideration of the former issue, raises some questions which were hotly debated in the 1920s²² and have resurfaced more recently.²³ The fundamental question is whether monetary policy should be conducted solely with a view to controlling domestic inflation, as measured by some index (PGNP or CPI) of the prices of currently produced goods and services. Or, rather, whether monetary policy should also pay some attention to asset price developments, particularly when they are associated with rapid credit extension and the related possibility that this could feed back on the health of the financial system. As if this issue were not contentious enough at the domestic level, one could also ask whether domestic monetary policies might not sometimes have to be conducted with the international implications of that policy also in mind. The willingness of the Federal Reserve to lower interest rates in the fall of 1998 is consistent with the hypothesis that downside risks on the international side are sometimes taken into account in setting domestic policy. What seems less in evidence is a willingness to admit that domestic policies to lower interest rates, and with it the value of the currency (as in the US in the early 1990s and Japan more recently), may also contribute to problems elsewhere. For example, countries which continue to peg to a depreciating currency may suffer generalised inflation including asset price inflation. And countries which float upwards might still find asset prices under some upward pressure, even if less than under a fixed rate regime.

Dealing with the sporadic tendencies of lenders to underprice risks of all

²² The principal protagonists were Keynes and the Cambridge school on the one hand, and the Austrians (Hayek, von Mises, Robbins, etc.) on the other. See Cochrane and Glahe (1998). $^{\rm 23}$ For a discussion of many of the issues in a modern setting, see BIS (1998b).

sorts is not an easy problem to deal with through institutional reform. To the degree that this tendency is heightened by exacerbated competitive pressures, care should be taken to ensure that deregulation does not proceed at a faster pace than is compatible with good supervision and regulation. To the degree that this tendency is also exacerbated by safety net considerations, these should be systematically reviewed. In this context, it is important to note that there is a clear trade-off between safety net provisions which help manage crises today and the likelihood that associated moral hazard will create even bigger crises tomorrow. The existence of this trade-off leads to the conclusion that the practical design of safety nets is an important issue, and one made more complicated by the realisation that safety net provisions can also interact in complicated ways.²⁴ Recognising that regulatory failures can have systemic implications with macro-economic effects, raises two further questions.²⁵ Should central banks have a role in helping design regulatory regimes, and should they have some advisory role when it comes to enforcement? In many countries there now seems to be a significant degree of uncertainty about the respective roles of central banks and other agencies in promoting financial stability.

Even assuming that biases in the incentive structures affecting lenders could be removed, mistakes would still be made. This implies that greater attention must be paid to governance issues at financial institutions. As suggested in Section I of this paper, the primary emphasis should be on internal governance and adequate risk management systems. A second pillar should be market discipline, and a third pillar should be adequate external supervision. Note that this ordering is quite different from what would have been the norm twenty years ago. For all of these governance processes to work effectively, the sine qua non is transparency about what is actually going on. Obviously, this need for transparency relates to the activities of financial institutions themselves but it also extends to the activities of their clients. And finally, if there is to be transparency, there must be agreement on accounting procedures and definitions. For governance purposes, good accounting standards are the essential building block, and such standards are not always in evidence even in some parts of the industrial world

As for the related issue of international capital flows, solutions must balance off longer-run concerns about allocational efficiency against shorter-

²⁵ For a further discussion, see White (1999), pp. 24-6.

²⁴ For example, the need for deposit insurance may be attenuated by the design of exit policies. Assuming that the information provided to regulators is correct, a process of Structured Early Intervention and Resolution (as in FDICIA in the US) might imply no need for deposit insurance at all.

run concerns about macroeconomic disruptions. In the last year or so, perhaps for obvious reasons, the balance has shifted somewhat and market-based approaches to dissuading short-term capital inflows now seem more generally acceptable. There is also greater recognition of the fact that existing controls should be dismantled more carefully, particularly if (as is often the case) the domestic financial system is not very sound. Countries which do wish to maintain a liberal regime in this regard should also plan for the possibility that rapid inflows could turn into equally rapid outflows. This implies trying to build up reserves as inflows accumulate, paying close attention to maturity mismatches, and the potential use of binding contingent lending facilities with the private sector to ensure financing in times of stress.

Turning finally to solutions for the problem of contagion across markets and countries, it is worth repeating the conclusion above that there remain uncertainties about the seriousness, although not the existence, of this problem. Market interrelationships are the source of many of the efficiencies provided by modern financial markets, and policies to minimise disruptive cross-market price movements would have to take care not to throw out the baby with the bathwater. Cross-country contagion, as a byproduct of financial market behaviour, was also seen to be a problem with undiscriminating swings in sentiment to whole regions being of particular concern. In recent months, however, renewed inflows into emerging markets do seem to be demonstrating a heightened concern for the circumstances of individual countries.²⁷

It was contended above that shared underlying problems also contributed to the appearance of contagion in Asia. In this regard, the biggest shared problem was excessive reliance on a fixed exchange rate system when capital inflows were heavy. The result of such policies was that the peg eventually had to be given up, but on the downside and in an environment of crisis rather than of a measured response to changes in external circumstances.

IV Final Remarks

Domestic financial markets have become much more liberalised in the last few years, and international linkages have also grown remarkably. The multiplicity of agents in financial markets, the complexity of the instruments being used, and the speed of change have brought many benefits in

²⁷ See BIS (1999a).

²⁶ As James Tobin once noted, "It takes a heap of Harberger triangles to fill an Okun gap".

terms of more efficient provision of financial services and the more efficient allocation of credit. Moreover, such benefits translate into faster growth, more jobs and better jobs than would otherwise be the case.

However, what also seems to be associated with developments of this sort is a heightened tendency to financial instability and even sporadic crises. The challenge is to find some means of trading off these costs against the benefits. As indicated above, thinking about how to make the international financial system more stable has almost turned into an industry itself. Most of this thinking has resulted in suggestions for incremental changes to the current system, with implementation now emerging as the real challenge, even for changes that might not seem of great substance. What is also welcome, however, are more radical thoughts about how the system might be reformed in the interests of a better trade-off between efficiency and stability. Recently, suggestions of this sort have become more common. This is surely desirable, supposing of course that radical suggestions still address practical problems and that they also stand some chance of practical implementation.

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Floor Discussion of "New Strategies for Dealing with the Instability of Financial Markets"

The Problem of Getting Too Much Capital

Jack Boorman began by taking issue with Jan Kregel's proposition that market participants are not looking for risk-adjusted rates. "This strikes me as strange because, as Ariel Buira said, investors are considering the government's policy, particularly its exchange rate policy, how its policy feeds through to inflation and, as a result, what the real rate of return in foreign currency is going to be at the end of the day. If you assume that investors are not looking cross-country at adjusted rates of return, how can you explain the differential spreads that exist between countries?

In your criticism of stabilisation programmes, you seem to assume that the country was in equilibrium when some of these measures were introduced. But the fact of the matter is that a stabilisation programme is prescribed because the country is in disequilibrium; this is why it has to adjust interest rates and try to pull capital back into the country. While adjustment policies can have negative effects, investors' expectations will only begin to change after some sustained period of policy implementation. So, ex post, it might indeed appear as if they had very high real rates of return before the crisis. But whether their expectations were based on risk-free, ex ante rates of return when they first moved in, is a totally different proposition."

Jan Kregel stressed that neither Jack Boorman nor Ariel Buira addressed the basic point of his analysis. "Both consider the question of interest rates from the point of view of a particular country and then attribute the level of interest rates to the use of either fixed or flexible rates. The basic point I am making is that whatever domestic strategy you use in a developing country, you will generally have a positive interest rate differential relative to the countries which are the major source of international capital flows. This will produce a situation where your capital inflows are greater than you will be able to employ profitably and efficiently given your domestic productive structure. So the question then becomes: what is the relationship between the flows that your interest rate differentials attract and your domestic capacity to absorb them?

If we look at the German, Swiss, and if my memory serves me correctly, Dutch capital market in the 1960s and the 1970s, there were always controls – not on capital inflows, but on capital outflows. Foreign firms who wanted to borrow in the Swiss market, for example, had to apply to the Swiss Banking Board for permission to float securities in this market. It was presumed that the Swiss currency was so attractive that there would be an excess demand for capital, and that this would disturb the domestic financial market. What we are talking about here is precisely the opposite problem. It is not an excess capital *outflow* that will disturb conditions in the financial market of a developing country, but an excess capital *inflow*.

My point is that whatever type of stabilisation policy you use – I insist again that it makes very little difference whether it is a fixed or flexible regime and whether the absolute level of interest rates is going to be higher under the one or the other – in the end, the level of interest rates will create an incentive for international investors to move capital into the country, regardless of the ability of the country to employ the capital effectively, efficiently and profitably. At this point difficulties will start to develop."

György Szapáry supported Jan Kregel's view. "There can be high real interest rates with both fixed rates and floating rates. Whether the real interest rate is higher under the fixed rate or under the floating rate really depends on the perceived risk. Real interest rates differ from one country to the other; it is a question of how the markets perceive the risk and not whether a fixed or a floating exchange rate regime is in place. The problem is that there is capital ready to jump on this interest rate differential in order to take advantage of it, and as a result you sometimes get much more capital than you need. This is when the difficulty arises. I think that both the recipient countries and the countries of origin share the responsibility for dealing with this problem."

Mohammed Ariff stated that the argument that the interest rate differential between developed and developing countries drives the flow of capital to developing countries is invalid in the East Asian context. He emphasised the distinction between rates of return and interest rates. "In East Asia you have countries where rates of return are pretty high, while interest rates, on the other hand, are not high. In fact, there is a bias against high interest rates because they are not good for the local stock market. Before the crisis, interest rates were pretty low – even in countries like Thailand, Malaysia, Korea and Indonesia – and yet there was a massive inflow of short-term capital into these countries. These flows were not caused by high interest rates, but by high rates of return. So the distinction between rates of return and interest rates is important to bear in mind."

Age Bakker turned the discussion to the role of the exchange rate in stabilisation and mentioned the importance of preconditions for stabilisation. "The jury is still out on the role of the exchange rate in stabilisation poli-

cies. It depends very much on the circumstances. I want to add the European experience to the examples already given. When it joined the European Union, Portugal was in the same position with respect to the core EU members as the Central European countries currently are. The exchange rate has played a major role in the stabilisation of some of the European economies.

Of course, there were important preconditions, such as the ones already mentioned by Ariel Buira: the behaviour of economic agents, especially the behaviour of social partners. But, as European experience shows, they can be influenced by this nominal anchor. I would add another precondition to their behaviour: the importance of a well-functioning financial intermediation. A small country like the Netherlands was also hit by large inflows, but these quickly turned into outflows if no investment opportunities materialised in the Netherlands. So the excessiveness of capital inflows is highly dependent upon whether the intermediation process in the country is functioning correctly."

While Jan Kregel agreed with Age Bakker that well-functioning financial intermediation can insure the rapid departure of excess capital, this rarely happens in developing countries. "Unfortunately, there is still an incentive in developing countries for the domestic financial system to attempt to invest that excess capital domestically since the financial systems are such that the internal rates of return tend to remain higher than they are abroad. So I would again emphasise that we are talking about interest rate differentials. In general, because of their growth potential, developing countries will have interest rates which are likely to be higher than the interest rates in the more developed economies. This is a problem which will not be alleviated by risk adjustment."

Warren Mosler, a practitioner, suggested a paradox. "My understanding is that when you have a floating exchange rate, the rate is always set by political authority and never by the market. On the other hand, a fixed exchange rate is always a market rate and not a politically set rate."

Jan Kregel agreed with Mosler and explained why. "Warren's point concerns the position that we should take when looking at exchange rates. There is a presumption that in Asia, exchange rates were fixed, but officially, they were not. The majority of the Asian countries had adjustable or crawling peg type systems. The reality, however, was that capital flows into the Asian countries resulted in these exchange rates becoming, effectively, fixed: flexible rates are in fact fixed and fixed rates are in fact flexible. If capital inflows are such that you desire a lower exchange rate, but your currency appreciates because of the capital inflow, there is very little you can do about it."

Managing the Booms

Stephany Griffith-Jones would have liked greater emphasis on the role of governments in crises in Jan Kregel's paper. "Indeed, a lot of the problems are induced by financial markets, but developing countries' governments are unprepared to lean against the wave. At the domestic level, we have to start thinking about what Ricardo Ffrench-Davis calls 'managing the booms', i.e. how governments might resist inflows of excessive surges. They may need to fight exchange rate appreciation, use counter-cyclical fiscal policies and perhaps even counter-cyclical financial regulation. We have to think in new ways about what it means to have good macroeconomic policies in the context of very free capital flows and strong volatility."

Ricardo Ffrench-Davis elaborated further on the role of governments in macroeconomic management. "When we try to link the financial sphere with the real economy, we ultimately want an economy that works better, with better allocation of resources, more investment, more savings and more sustainable growth. We should try to build better macroeconomic management that is able to generate more stable real exchange rates and more stable real interest rates – not absolutely of course, we need flexibility in them – than the ones we usually see in emerging economies. If you look only at the Latin American countries in the last one or two decades, you see continuous swings. Interest rates, for instance, were very high in real terms for a while, then in several of the countries, they declined to levels lower than the adjusted real return in the economies. The interest rates then went up again to very high levels. A similar pattern can be seen with regard to the exchange rate. Exchange rates which were quite depreciated, appreciated during the period of big capital surges and when the Asian crisis hit, they depreciated dramatically again. This makes things very complicated for resource allocators who need a certain time horizon: what is the 'normal' interest rate or the 'normal' exchange rate for the coming years?

My second point concerns the debate about flexibility in exchange rate policy. I'm afraid that we are again moving toward advocating either the totally fixed exchange rate, the pegged exchange rate and the currency board, or the totally flexible exchange rate. What we need to do more convincingly than in the past is to manage flexibility. If the emerging economies that experienced capital surges and then faced crises in the 1990s had had more flexibility, exchange rate appreciation and depreciation would likely have been less dramatic than it actually was. We need flexibility, but we also need some management in the sense of avoiding the extreme depreciation and the extreme appreciation that we have been observing in these economies. This is not easy to do. There is clearly a

need for more thought on how one can manage flexibility of the exchange rate and what the interrelations with the management of capital flows are. I am obviously talking about the emerging economies and not about the large, more financially developed economies. Colombia and Chile's experiences with managing exchange rates and capital flows and harmonising the two are very relevant."

Long-Term Versus Short-Term

Stephany Griffith-Jones strengthened Jan Kregel's analysis by making a complementary point on the short-term time horizon of the financial sector. "I want to stress a problem that Keynes already detected and which is much more serious now. It concerns the fact that investors and lenders want to be as liquid as possible, because it is in their interest to make profits in the short term. This implies a severe tension with the development needs of fragile economies, where from both a broad development perspective and a perspective of long-term investment by the private sector, the needs are for long-term money. The problem is that the financial sector has become increasingly clever at being very liquid. Even the instruments that appear long-term, like bonds and so on, have increasingly included options and all of these mirror games with derivatives and so on, which makes them potentially very short-term. This is one of the major challenges that we should address.

This brings me to the issue of the appropriate response. In general, discussions on financial architecture are somewhat abstract and we need to understand the essence of the problem and particularly how the international financial markets work. Based on this, we should design the response. Jan Kregel is right in stating that the response should be focused more on limiting the negative features of these international capital flows without harming the more positive features. This is, of course, very difficult because the financial markets have become so complex and interrelated. For example, while foreign direct investments tend to be more long-term, it is not always the case. So from an international perspective, regulation is challenging. We should look globally, across countries and across sectors, and try and identify the primary sources of volatility."

Regarding short-term capital controls, Mohammed Ariff expressed his concern about the definition of short-term capital. "There is a tendency to treat all portfolio investment as short-term capital, but one does not know until after the fact whether the capital inflow is short-term or long-term. How are you going to restrict the inflow of short-term capital if you do not know beforehand whether it is short-term?"

Jan Kregel answered that anything which exceeds the country's ability to

absorb, is automatically a short-term flow. "On the other hand, profitable investments which generate an internationally competitive rate of return become long-term flows by definition. So we are back to the question: just exactly what are we trying to control? In my view, we should try to control the inflows – they have to be justified relative to the absorptive capacity.

I refer to Hyman Minsky's theory which is based primarily on the comparison between a firm's cash flow commitments on borrowing relative to its ability to generate the flows to meet those commitments. We have benchmarks for domestic firms for the amount of borrowing that is deemed sensible. And financial markets assess a domestic firm's borrowing capacity in terms of what they think is sensible relative to its cash flow commitments. We do this for domestic firms and domestic financial markets do it all the time. Yet, international capital markets do not apply benchmarks and they seem unable to assess them efficiently. Part of the problem is, and again I go back to the interest rate differential, that a substantial part of the flows is motivated simply by differentials in interest rates, which I suggested are nominal rates and which have absolutely nothing to do with the real rates of return from investments within the countries."

Need for a Superregulator?

Turning to the paper by Bill White, Stephany Griffith-Jones raised the issue of whether we need a superregulator or not. "Bill White asked: 'Is it practical to have some kind of global superregulator?'. He is right that it is difficult to get the full picture, but I would turn it around and say: 'Is it practical not to have a superregulator in a world where the financial markets are increasingly globalised and integrated?' If you do not try to do it, you may end up with recurrent crises. Because, as Bill knows better than I do, if you regulate one aspect, crises may spread to the other aspects which are less regulated.

How should you do it? The Basle process is attractive because it is modest and you aren't telling the politicians too much – particularly the US Congress. In a way, I think that you at the BIS have constructed a superregulator without telling anybody. I see the Stability Forum as a next step.

There is a clear economic need and I would argue that there is also a clear political need for a global regulator. The need for the latter relates to the fact that actions by big international players – who are not democratically accountable – have tremendous effects on real economies, on peoples' lives and on political systems. Many say that the IMF is not democratically accountable either, but the IMF has democratically elected representatives on the Board. To whom are the financial market operators accountable?

Regulation through the Basle process brings some kind of accountability, albeit highly technical, to the financial markets so that they serve the objectives of the real economy. Still, I think there is a strong political rationale for moving towards a global regulator."

Bill White explained that the Basle process is based on the notion that national policymakers are unwilling to give up their sovereignty to a supranational body. "Europe is a good example because Europeans have kept all the banking supervision at the national level. They say that there are all sorts of good reasons for it, but I think the bottom line is that they don't want to give up their sovereignty. The Basle process is helpful here because we bring in all the national experts in a particular area, let's say banking supervision, and then these individuals basically hammer out some kind of a consensus on what needs to be done. Once they have done that, after a lot of painful negotiation and compromise leading to sometimes not wholly sensible results, they go back to the national legislators who are still sovereign and basically say, 'We have done a deal'. This international deal has no legal authority whatsoever, it is all in the realm of soft law. Stephany said, 'You are sort of regulating internationally, but you are not really telling people about it'. There is an element of truth in this because the power to impose rules and decisions is at the national level, and the rules at the international level are being negotiated in a very informal way.

The question is: Would you want to have some kind of legal power at the international level as well? One could think of areas in which you would like to have some international laws, an international bankruptcy law, for example, for domestic corporations or for banks that are internationally active. It would be nice if there was a single framework, but there isn't and you are not likely to get one either. So the next best thing is using national authority to try to impose something that has been decided internationally. It is a process question really."

Zdeněk Drábek observed that the first important question is not who regulates the financial sector, but what supply-side factors cause financial instability. "We all share a belief that perhaps macroeconomic fine-tuning and information availability are not what they should be. But what is it specifically on the supply side in the financial sector that is producing this kind of instability? I am astounded to see and hear that banks are prepared to take risks that are enormous and excessive. Why is it that this is happening? Why is there no adequate control from shareholders and bank operators to stop it? If the system allows these excesses, clearly there must be a way of introducing some rules. I don't think we should be concerned with who establishes the rules, but whether there is enough discipline within the banking sector to stop these excesses."

Bill White responded: "Why don't the shareholders try to stop it? I

think the shareholders are part of the problem because they focus first on their return. They say that their returns are not high enough. But obviously, higher rates of return are accompanied by risk. It is only after the shareholders have taken the hit, and they have seen how bad it can get, that they want to stop taking excessive risks. And it is only after a crisis that individuals realise that with extra return comes extra risk. Maybe shareholders have to go through this before they begin behaving more sensibly."

Elemer Terták stressed that banks throughout the world are strictly regulated and controlled, whereas institutional investors – pension funds, insurance funds, hedge funds – are scarcely controlled. "In practice, who is exercising the demand for shareholder value? Not the small shareholder like myself, but these large funds are the real players. Perhaps the control should include these increasingly important funds. This control should look at the considerable pressures on these funds and their large obligations towards the populations they serve. The function of pension funds is to finance pensions, and there are numerous problems in the developed countries because of the ageing population. So now these pension funds are even under substantial pressure."

Bill White agreed that the role of hedge funds, pension funds and other big players is an increasingly important issue: "Talking about financial instability, I put the finger on the banks and the securities markets, but there is no question that there are some dangerous things going on with respect to these large funds. They are another source of instability in the system, and I suspect that we may hear more about them, in particular about insurance companies."

The Irrationality of Spreads

Elemér Terták said that the spreads of the banks always increase after the crisis has occurred and not before. "It is not really risk awareness which is reflected in the spreads, but rather the shocks or the reaction to the shocks. The paradox is that after the shock has occurred and the problem is more or less resolved or the government is improving its behaviour, then the spreads increase and thus the burden becomes high.

I work for a bank owned by a Korean shareholder. I have the feeling that before the Korean crisis we could easily get money in Europe. After the crisis the policy of our bank has not worsened, but because a lot of banks that we dealt with have suffered, they are now demanding very high spreads. Korea's performance was even judged to be good by the IMF and as I see it Korea is on the right track. But now Korea has to pay much higher spreads than ever before even though the policies have never been as correct as they are today."

Ricardo Ffrench-Davis endorsed Elemér Terták's remark by saying that the Latin American borrowing before the crisis was stimulated by decreasing spreads. "Before the crisis more and more capital was being borrowed as spreads were getting lower, fueled by competition. It is difficult to have equilibrium with that. When we are moving into dangerous areas, capital should become more costly, not cheaper. We have to increase the cost of capital when borrowing is too high or when the deficit of the current account is too high or when the appreciation of the exchange rate is too high or when the stock market is too high, etcetera. Something has to start giving a market signal 'be careful', and we should use the market to do that."

Bill White looked at the example of South Asia. "Spreads for borrowing by emerging markets went down before the crisis, which meant a negatively sloped supply curve. When the crisis came, they went right back up again, only to come back down again after the event, so that the lending could resume again. I am not quite sure what one does about it. Looking at South Asia now, the money has started coming back in again with inflows into the stock market and into markets more generally, also into Japan. Now the question is: 'Is that the good news, that the overshoot is now being regressed?', or rather 'Is this just the beginning of the next bubble?'. Given the history of how these markets behave, I would not be at all surprised if it is the latter and not the former. The operation of markets in terms of spreads has not been their finest hour in recent years. How do they get away with it? It seems that you have these forces of domestic competition and the belief that the safety net is in place, and this pushes lenders and borrowers in the direction of doing what they have done."

The Right Exchange Rate Regime

John Williamson questioned Bill White's point at the end of his paper, that a float up of the exchange rate would have resolved all the problems. "Maybe it would have avoided a crisis, but it would have done so at the expense of the boom that occurred in the earlier years or at least in the investment in the tradable goods industries. The problem with floating up is that the tradable goods industries cannot expand enough and hence the boom gets cut short prematurely. I think it would have been more desirable to have avoided the excessive capital inflow."

Bill White responded by saying that there is absolutely no single right answer to the question of what the right exchange rate regime is. "It depends on so many different factors. If you go back to the optimal currency notion and to various other criteria and ask: 'Should you peg immutably to somebody else?', then the answer is: 'It all depends.' You have a list of

pros and a list of cons, add them up and see what applies. There is no single right answer.

The same applies to issues concerning exchange rate expectations. In Latin America, for example, what seems to be a kind of stylised fact is that when the exchange rate goes, domestic prices go too – although this may have changed recently. While Latin America is much less open than Asia, when you look at the relationships between domestic prices and wages and exchange rates, the feed-through is much faster in Latin America. I think this is just because of the signaling effect. There is such a history in Latin America of inflation and even hyperinflation, that when people see the exchange rate go, they know they are in trouble, and they'd better start asking for higher prices and wages. Then the whole dynamic becomes self-fulfilling.

If you could actually fix the exchange rate in a credible way, which is what the Argentineans are trying to do, then maybe you could break that self-fulfilling pattern. But it still leaves you with the problem that Ariel Buira referred to which is: if real wages have gone up in the process of disinflation – and that may be more likely to happen the faster the disinflation takes place – then you may enter into a situation where everybody knows you need an exit strategy, which really means that the exchange rate was not credible in the first place.

In the Asian case, a float upwards would have been helpful when the flows were coming in. Fixing the exchange rate when the flows are coming in will result in a real appreciation of some sort: either domestic prices or asset prices are going to increase. But don't doubt it for a moment: those inflows subject to a fixed exchange rate are going to cause you trouble. And if you let the exchange rate go up immediately, you will have an immediate impact on the relative prices of tradables and non-tradables, and again, you will have trouble. You have to make up your mind where you think there is going to be less trouble. In the Asian case, if the bubble had been pricked earlier, the world as a whole would be a healthier place than it is at the moment."

Part II

The Ways Financial Markets Work and the Implications for More Effective Supervision

In the Interests of Safety

Martin Mayer

I would like to change the terms of these discussions, because I think we all use too many words that distort the reality they pretend to depict.

"Too Big to Fail"

Let me start with a minor example, the phrase "too big to fail," which in the United States has acquired a resonance that dominates discussions. It grows from some rather unfortunate testimony given by Todd Conover, then Comptroller of the Currency, in a presentation before a Congressional committee on the problems of what was then called Continental-Illinois, which had begun 1984 as the seventh largest bank in the United States. It was the largest lender to American corporate enterprise, had failed and been rescued through an extraordinary joint effort by the six even larger banks, the Federal Reserve System and the Federal Deposit Insurance Corporation (FDIC). This was in fact a very special situation, because more than half the bank's total funding - at least \$18 billion - had been provided by foreigners, about a billion of it through the sale of commercial paper in the Caribbean by Continental's holding company. The notion that deposit insurance covered the purchasers of commercial paper issued outside the United States by a holding company that happened to own a bank was, in a word, ludicrous. In the 1960s, because the deposit insurance funds generated an annual surplus and the Johnson Administration was looking for a way to reduce the apparent deficits that grew out of the Vietnam War, the income statement of the FDIC had been put on the federal budget. Keeping Continental afloat was clearly going to cost the FDIC a lot of money (to begin with, the agency had paid \$2 billion for a worthless subordinated note from the bank), and thus the deficit was going to look worse. To justify what had been done, then, Conover promulgated his own rule, which under the pressure of questioning from the committee was hammered into a statement that none of America's ten largest banks could be permitted to close its doors.

In 1991, Congress decisively repudiated the idea that any bank could be too big to fail, rescinded the previous power of the FDIC to make a finding of "essentiality" to permit the expenditure of funds on the rescue of an insolvent bank, and required the banking supervisors to get specific written approval from a two-thirds majority of the Federal Reserve Board and the

Secretary of the Treasury before supporting a bank that no longer had positive capital. "Too big to fail" came to be seen as an expression of moral hazard, an invitation to the largest banks to take excessive risks.

Today, however, commentators should look at the Continental story against another background. Conover's remark was made in 1984, when the banking system was just beginning to emerge from the horror of a monetary policy that concentrated on aggregates and let the interest rates escalate freely. I am not saying that this horror could have been avoided, and I am sympathetic to the argument that we have been able to control inflation in the 1990s mostly because of the violence of the punishment meted out by Paul Volcker's Federal Reserve in the 1980s. But in 1984 there was nothing to see but rubble. These very high American interest rates had devastated the economies of Latin America, where both government and enterprise had borrowed heavily in dollars, and had warped the European cross-rates because European currencies came to be compared against each other according to their ability to resist the pull of American rates rather than by analysis of their comparative economic performance. Domestically, Volcker's rates reduced the value of banks' fixed-return assets while increasing the burden of their variable-cost liabilities. The savings institutions were dead; all the banks were seriously ill, not just Continental, though Continental, which had been increasing its loan portfolio at a dramatic pace, was clearly the worst.

Now, the deposit liabilities of the banking system are the currency of the country, and maintaining the value of the currency is a major function of government. Thus, whether or not there is formal deposit insurance, in troubled times governments are seized with the need to establish that the assets of the banks more than cover their liabilities. In Andrew Sheng's elegant formulation, the losses of a decapitalised banking system are a quasifiscal deficit.¹ Depriving the depositors in a bank of the value of their accounts at a time when other banks may not have sufficient assets to cover their liabilities tells the country that the government has failed to recognise its obligations to its own currency. If the losses cannot be loaded on foreigners, and the experience of the 1980s including, incidentally, the rescue of Continental, argues that this cannot be done, there are only two possible outcomes: either the government raises taxes (or drops its expenditures this is called the IMF-as-bad-guy argument) or the citizenry pays the inflation tax. It should be noted that even the United States had to put the losses of the savings and loans crisis on budget, which is one of the reasons why the FDIC Improvement Act of 1991 was so strong.

¹ Sheng, Andrew, *Bank Restructuring: Lessons from the 1980s*, Washington, D.C., World Bank, 1996, p. 9.

What is deceptive about the situation is that in ordinary times banks can be permitted to fail with no significant spillover or contagion, and bank failures are not uncommon in any market economy. But in ordinary times big banks don't fail. Indeed, a decade before the Continental flap Walter Wriston of Citibank, the prophet of ordinary times, wrote with his then assistant George Vojta, later a guru at Banker's Trust, an article claiming that a really big bank didn't need any capital or any liquidity reserve, because it was unthinkable that the market would refuse to lend money to a big bank when a big bank asked to borrow. In bad times, as the Indonesian collapse demonstrated, any failure can start a run. The problem to be managed, then, is not that some banks are encouraged to be cowboys by the presence of a government guarantee – and that herding behaviour is virtually required in a competitive marketplace that punishes prudence and rewards what later looks like reckless risk-taking - but the fact that the banking system creates the money supply, and the assets that back the money supply are the loans of highly leveraged institutions that rely on maturity transformation as a source of profits. The problem to be managed, then, is the stability of the currency, not whether or not banks should be closed.

The fact is that without great external pressure no central bank will permit the closure of a bank of any size at all during a period of economic turmoil. I testified before Congress shortly after the passage of the 1991 FDIC Improvement Act, to say that the Fed had not the slightest intention of enforcing it. Banks can be kept on life support for a long time through bank examiners who can increase the apparent size of a bank's capital by being kind on the valuation of assets and government negotiators who can persuade other large banks to lend money to a failing institution. (Interestingly, it is now almost impossible to support a large bank from the discount window, because the news that a bank is in the window drives other funders away - which is particularly unfortunate, as Hyman Minsky pointed out a generation ago, because one of the most significant sources of information for a banking supervisor was the knowledge of a bank's portfolio which he got from the collateral available to the window. One mentions also that the theory of controlling bank activity through the control of liability creation - the great contribution of the Federal Reserve, through all the years when Europeans and others were controlling bank activity through their control of asset creation - rested initially on observation of the pressure on the discount window that was heightened or eased by open market operations.) After my testimony, I am informed, there was a little discussion as to whether the Fed should issue a statement that they did indeed permit the closure of troubled banks as the law required, but no statement came forth, perhaps so as not to dignify the testimony, and perhaps because I was right. In general, central banks are the source of moral hazard, because in time of crisis they will rescue both the righteous and the unrighteous. They simply cannot stand the uncertainty that would develop in the economy if people questioned the availability of their current account.

Banks Are Hedgehogs

David Ricardo was I think the first to note that it was accidental that the issuance of the currency and the lending function had been combined in the Bank of England. The Act of 1844 separated the Bank into two separate departments, but for lender of last resort purposes they were essentially conjoined – mostly, as Bagehot pointed out, because only the Bank of England could be asked to keep a sterile reserve large enough to cope with a sudden demand for cash. Doctrine was already in place to link the lending function to money issuance in the theory of real bills, but the real bills propositions, intuitively appealing, fall before the tripartite function of money – as a means of exchange, a unit of account and a store of value. Money can be created in a banking system, and credit can be substituted for money, not only to facilitate exchange, but also to purchase assets, which in turn can be used as collateral for the creation of additional credit. Thus the needs of trade will not govern the creation of money in a banking system, and there is no avoiding a monetary policy. It may be a policy of rules, it may be a policy of discretion, but it remains true as Bagehot said that money cannot manage itself, and for that purpose we still use banks. The great unanswered question of this remarkable decade is why the very large stimulus given by the Fed and others in 1990-91 to save the banks was channeled into asset inflation - especially paper assets, which do not depend so heavily as real estate assets do on the generation of credit rather than into price inflation. It is not a new question. Benjamin Strong as Governor of the Federal Reserve Bank of New York and leader of the Federal Reserve System for the first fourteen years of its life was forever dealing with Congressmen and others who worried that too much of the credit being generated by the open market operations of the district Banks was escaping into "speculation." "If the Federal Reserve System is to be run solely with a view to regulating stock speculation instead of being devoted to the interests of the industry and commerce of the country," he wrote to a colleague as early as 1919, "then its policy will degenerate simply to regulating the affairs of gamblers." Part of the reason for the New

² Chandler, Lester V., Benjamin Strong, Central Banker, Washington, D.C., Brookings Institution, p. 444.

Deal legislation was to control the use of credit in the markets, and the Federal Reserve among its other missions has one to regulate the degree of leverage in the stock market, with special controls on what is called "purpose credit." The current Fed, because such restrictions have been so definitively overtaken by technology, has done nothing to move its 50% margin requirement (though I would have thought something of the sort would be a rhetorical blow against irrational exuberance), but its predecessors into the 1960s moved margin requirements up and down as the volume of credit in the stock market expanded or contracted. Money, in Keynes' lovely formulation, is also "a link between the present and the future." And interest rates are the expression of that link. Unfortunately, they impact on the costs of current activities as well as the price of assets.

Now, partly because the leverage factors are so different, the information systems of banks and markets are largely disparate. Banks, to abuse Isaiah Berlin and Tolstoy yet again, are hedgehogs. They know the one big thing: they know their borrowers. They are not in a risk business; they are in an uncertainty business, and their efforts are to minimise uncertainty. Better judgement about aspects of uncertainty does indeed provide a source of profits from financial activity, while greater understanding of the true relationship of risk and reward does not. Judgement matters. Schumpeter said it almost ninety years ago: "[T]he compensation for greater risk is only apparently a greater return; it has to be multiplied by a probability coefficient whereby its real value is again reduced – and indeed by exactly the amount of the surplus. Anyone who simply consumes this surplus will atone for it in the course of events."

The term we use for the banks' special function – rather deceptively – is "relationships," a word with emotional connotations. What "relationship" means in this context is that banks operate with their borrowers in a context of uncertainty reduction. The loan is to be paid back out of cash flow, no doubt, but we also have collateral. Indeed, until fairly recently, banks were reluctant to lend without collateral. Banks now claim that "risk management" has always been part of their expertise, but this is simply untrue; with few exceptions in few decades, banks have been risk-averse. The gag line was that banks lent money to people who didn't need it. Their stock in trade has been the information that permitted them to lend safely, which was indeed their obligation, because the preponderance of what they lent was money they themselves owed to some third party, who had bought into a blind pool and was never consulted about the banks' lending. Banks parted with their information reluctantly if at all: as an adjective "bank" is

³ Schumpeter, Joseph, *The Theory of Economic Development*, translated by Redvers Opie, Cambridge, Mass., Harvard University Press, p. 33.

paired with "secrecy." For all the talk of transparency by central bankers, the Federal Reserve this year has a bill pending in Congress to increase the penalties on anyone who reveals information about the condition of a bank.

Perhaps the most astonishing and disturbing thing that happened this year in the world of banking and finance is the recommendation by the Bank for International Settlements, worrying about the edges of its risk-adjusted capital requirement rules, that banks should weight the risks on their loans by reference to Moody's and Standard & Poor's ratings – information available to anyone. We are being told that banks can be trusted to make their own weightings for market risk, where they are babes in the woods, but not for credit risk, which is and always has been their proper business. It's Ozymandias – there's a ruined statue in the desert, with a pediment boasting of a glorious past when banks called the tune and markets danced to it. "Look on my works, ye mighty, and despair..." The significance of the new BIS rule, of course, is that banks no longer wish to hold assets in portfolio: they want to securitise and sell them, and the salability of the paper, the relationship of its price to historic cost, will be greatly influenced by the published ratings.

In the old days, the central bank worked on the economy by influencing the behaviour of the banks; enterprise was dependent on banks, and responded to their response to the pressure from the central bank; and the market moved according to participants' perceptions of what would happen to the economy with the change of behaviour and attitude at the banks. The feedback mechanism was that the value of collateral, as George Soros noted in his recent book, is a function of the availability of credit. Now credit comes from all over, and what banks do doesn't matter all that much in the United States, and soon in Europe, too (indeed, part of the problem in the world is that banks still do matter enormously in the less developed countries and it is hard for the industrial countries to understand that, especially where there are touted "emerging markets"). Where information technology has taken hold, the central bank, still charged with keeping the currency stable and the economy growing, must work its magic *through* the markets.

A World of Dynamic Hedging

If banks are hedgehogs, markets are foxes that roam the world picking up snippets of fashion. Banks are stuck with their corporate customers; markets can sell out the stock in a twinkling. The conflict between the information systems, one deep but narrow, one shallow but broad, could not be more striking. Banks generate and keep information; markets forage for it,

publicise it and consume it, spitting forth nothing but a one-dimensional price. Banks historically have been confident in their information, and set a course with it; markets are ready to turn on a dime. As markets rather than central banks set most of the interest rates that matter, and markets rather than examiners value their investment portfolios, securitisation is their target and the instability of their funding multiplies their risks, banks have become less assiduous in seeking information, less confident in the information they have, more willing to go with a flow they and their supervisors only partially understand. As my colleague Barry Bosworth once said, diversification devalues knowledge.

Today, banks *don't* in fact have that much information other people lack. Speaking before the Bretton Woods Committee a couple of weeks ago, Treasury Secretary Robert Rubin said that when the Korean banking system blew up he called the head of a big bank involved in Korea and asked for that bank's information about Korea so the government could make intelligent decisions – and was appalled to find that the bank knew no more than he knew. "Do we," asked E. Gerald Corrigan, former president of the Federal Reserve Bank of New York and chairman of the executive committee of Goldman Sachs, "really understand the long-term consequences of the technologically driven disintermediation of payment flows away from credit-sensitive financial institutions?" To which the short answer is "No, we don't". And the long answer requires searching.

We return to leverage, which is attained essentially in three ways – by banks operating on fractional reserves and fractional capital; by the multiplication of repurchase agreements, and by derivatives. Leverage makes crisis; most financial crises start with real estate because that is the area where leverage is greatest. The development of opportunities for diversification and of hedging techniques has given the academic and regulatory world a feeling that greater leverage is now safe, but in a world of *dynamic bedging* diversification turns out to be a source of general instability rather than stability, because traders are instructed to seek the reduction of damage in one market by selling in another, presumably correlated market. Thus the Czech koruna comes under attack when the Thai baht falls. "Contagion," Kodres and Pritsker write, "occurs through hedging." David Folkerts-Landau of Deutsche Bank, formerly director of capital markets research for the IMF, writes: "The value-at-risk methodology automatical-

Opening statement of E. Gerald Corrigan at the Symposium on Risk Reduction in Payments, Clearance and Settlement Systems, January 25th, 1996, New York; unpaginated. BIS 1998 report; detailed ref. TK.

⁶ Kodres, Laura and Matthew Pritsker, "Derivatives and Global Capital Flows: Applications to Asia", In: *Journal of Economic Literature*, October 1998.

ly imposes a hedging and netting vision on asset management. What counts for market risk is the net position, not the gross position. If, for example, an investor buys ruble paper onshore and hedges it with an offshore dollar forward contract, its net position is in dollars, so it is taking relatively low dollar risk... Thus, state of the art risk management methodology – endorsed and imposed by industrial country regulators – is a primary source for the *contagion* effects of a crisis... [A]pparently bizarre operations that connect the otherwise disconnected securities markets are not the responses of panicked green screen traders arbitrarily driving economies from a good to a bad equilibrium. Rather, they work with relentless predictability and under the seal of approval of supervisors in the main financial centers."

Worse: the levels of abstraction permit the confusion of what were once discreet categories. We find correlations between apples and oranges every day, and sell instruments that make the comparisons. To speak of current account and capital account today is to commit an anachronism: derivatives link the two beyond separation. On May 20th, 1999, Chairman Greenspan testified about his hope that recently developed instruments for the automatic rollover of short-term commitments would require lenders across borders to weigh and accept their risks – but in fact the technology operates in the opposite direction, through the creation of synthetic instruments to permit escape from what appear to supervisors (and national authorities in the borrowing countries) to be long-term investments. The call for developing countries to keep reserves equal to at least a year's interest payments in foreign currencies – borrowers should watch their leverage so lenders don't have to – will not protect currencies against troubles in the domestic banking system, or, indeed, against dynamic hedging.

Two Goals in Financial Policy

The dangers are multiplied because both repos and derivatives exist in an secretive underworld. In theory and occasionally in practice, both are infinitely replicable: there is no real world supply constraint. The instruments that are repoed now can be repoed again in a few seconds; and anybody can write, say, a nondeliverable forward on a ruble/dollar exchange. Nobody can possibly measure – let alone model – the risks that may be involved in a contract if an unknown number of identical or closely correlated contracts are being written simultaneously by others in the market.

⁷ Folkerts-Landau, David and Peter M. Garber, "Capital Flows From Emerging Markets in a Closing Environment", In: *Global Emerging Markets*, Deutsche Bank Research, October 1998, p. 79.

The partners in Long Term Capital Management (LTCM) professed themselves shocked and disadvantaged when it developed that many others had been following strategies similar to theirs. If it hadn't happened, it would be unimaginable that the banking regulators would permit highly leveraged institutions to write their own risk weightings for contracts that are in unknown supply in the market and thus have an unknowable volatility. As Brian Quinn observed at a Group of Thirty conference in Madrid during the 1994 Bank/Fund meetings, letting banks write the risk weightings for derivatives positions is like letting corporations write their own tax forms: it won't produce the results government is entitled to achieve. Indeed, it is incompetence for regulators to permit the growth of markets where open positions are not known to anybody, trader, chief executive officer or supervisor. To this day, we don't know the value of nondeliverable forward contracts written on the ruble - all we know is that much of the loss from last August's explosion has not yet been admitted by the participants.

Keynes in his *Treatise on Probability* quotes Aristotle's comment that "the probable is what usually happens." We are not in fact far beyond that in the application of probability to financial instruments. Most of what is being modelled as risk is really uncertainty, and it is breathtakingly dangerous to confuse the two. One of the benefits of wealth is redundancy. To give it away for the sake of the money that can be made with leverage – even if the losers day to day are foreigners in poor countries where there is no redundancy – is a folly for which our posterity will profoundly rebuke us.

Two goals should guide our policy today in financial matters. One is the separation of the money supply function from the lending function, along the lines of the narrow bank or 100% reserve system that Frank Knight and Henry Simon and Al Hart pioneered in the 1930s. Electronic entries, real time gross settlement arrangements and other uncertainty-reducers in the payments system make such a goal achievable as it never was before. With the threat to the money supply removed, the authorities can permit the collapse of lending entities, and can thus promote caution in their decisionmaking. Drexel is the existence theorem: it was the second largest clearer in the Eurobond market, and its failure was a source of anticipatory terror at Euroclear, but in fact it went under with only a handful of ripples.

The other goal should be a major readjustment of capital requirements and risk weightings to make it more profitable for banks and other players to do their derivatives business through exchange-traded instruments. The exchanges automatically deliver information about the extent of the open interest in a contract, keep their own confidential records of large trader positions and through variation margin compel recognition of volatility

and the limits of safe leverage. Players as well as supervisors need such information, and the fact that they don't demand it merely means that they are exploiting their other information advantages.

Mayer's Laws of Derivatives remain valid. They are three:

One: When the whole is valued at a price less than the sum of the prices of its parts, some of the parts are overpriced.

Two: Segmenting value also segments liquidity.

Three: Risk-shifting instruments ultimately shift risks onto those less able to bear them, because them as got want to keep, and hedge, and them as aint got want to get, and speculate.⁸

The territory is crisscrossed with fault lines; in everyone's interest, we must have a financial architecture constructed to stand up in earthquakes.

⁸ Mayer, Martin, The Bankers: The Next Generation, New York, Truman Talley Books/Plume (paperback), 1998, p. 323 and further.

Comment on "In the Interests of Safety," by Martin Mayer

Age Bakker

Martin Mayer's paper is an extremely interesting contribution which gives a lot of food for thought. The historical flash-backs he mentions in his paper show that uncertainty and risk and earthquakes are here to stay, and so will financial crises. What we can and should do, however, is to make sure that we are better equipped to deal with them when they occur and to limit as much as possible their transmission to the real economy. For this, of course, we need a strong, resilient financial sector and better functioning markets. I think we all agree on this, but how to get there is open for debate.

You have mentioned so many points, Martin, that I will leave out the more technical points like the ones on dynamic hedging and leverage. I think Warren Mosler might be better equipped to deal with those. What I would like to do is to single out three catch-phrases which struck me and comment on them. After that I shall end with three issues for further discussion. The three catch-phrases were, firstly, what banks do doesn't matter all that much. Secondly, central banks are the source of moral hazard. And thirdly, some choices made in the new Basle Accord are astonishing and disturbing. These are all literal quotations. Maybe I should mention the context as well, since you nuanced them. Nevertheless, for the sake of argument it might be nice to look at them in this black-and-white way.

What Banks Do Does Not Matter All That Much

Your first proposition is that what banks do doesn't matter all that much. Your argument is that credit really comes from all over the place. I think a word of caution might be needed here. You say banks are the hedgehogs, markets are the foxes. I didn't know what a hedgehog was, but I just got Bill White's definition: "a small mammal with spines on the outside; when threatened it rolls up in a ball, which is not helpful when the threat is an approaching car." It seems that you have as a definition: not helpful when the threat is the approaching markets, which are in your view the foxes. Of course it is true that the character of the banks has changed a lot, but I would argue that nevertheless the standard intermediation function is still a very important one. One should not forget that banks continue to have a

major share in financial market activities themselves. One could even say that if banks are perceived as hedgehogs, they have been able to disguise their foxy character. This may be more valid outside than inside the US, I agree. However, in the European context the financial institutions are all important, because we don't have a Glass-Steagall type separation of financial activities.

One of the lessons we have drawn from the LTCM crisis which you seem to quarrel a little bit with, is that it shows that the banks have believed the blue eyes of Nobel Prize winners. But in doing this they have not applied normal caution in giving credit. I would argue that it is completely valid to tell the banks that they ought to get enough information on these hedging institutions, just like they do on corporations they are lending to. So in that sense I would argue that to put pressure on the banks is all right.

As I said, I will not dwell on the leverage aspect. What I do want to mention, however, is that we should not forget that the positive aspect of leverage is that it provides more liquidity in the markets. And more liquidity in the markets might also mean less volatility. So there is a trade-off here, and hence one should be careful to not only look at the negative aspects of high leverage.

Central Banks Are the Source of Moral Hazard

Your second, also black-and-white, statement is that central banks are the source of moral hazard. This basically goes down to the question: should central banks at all be in the lender of last resort business? I think that was the point you were making when you were arguing that the money and the lending function should be separated. Of course, a central bank prefers not to be in the lender of last resort business, we would not quarrel about that. But the issue of lender of last resort carries a lot of taboos. One argument against the transparency of central banks is precisely on talking about that lender of last resort function. It should not take the shape of government guarantees, at least no explicit guarantees. I would nevertheless argue that central banks do have an interest in acting as a lender of last resort, if needed. Let me mention two or three arguments.

Firstly, monetary policy instruments are operating through financial markets, through the open markets, so you need a well-functioning payments system. You need a well-functioning banking system in order to be able to carry out your monetary policy. So you need to a certain extent a strong, stable financial system to be able to have a price stability oriented monetary policy.

The second argument is a bit more technical and differs from the US

situation, where the discount window indeed is not used that much. In Europe we have just installed an instrument, which is called the Lombard facility, which in effect is a sort of lender of last resort monetary instrument. As long as banks have enough collateral, they are allowed to go to this window and there is no negative connotation of going to that window. The function of this facility is basically to make sure that the payment system functions well and that there are no liquidity shortages at the end of the day. However, as I said, central banks do not talk about this too much. There is always a moral hazard danger implied, as there is with insurance and with social security nets and with all these other safety nets which a society wants to have. But what is the alternative? The alternative is a dangerous one of chaos and distrust of financial institutions.

So there is a negative external effect of *not* having a lender of last resort, which may exceed the negative effects of moral hazard. Of course you are right that it is not always easy to distinguish a liquidity from a solvency problem, but the lender of last resort function, as far as central banks are concerned, is quite often viewed broader. It is not only the provision of liquidity, but it is also the acting as an honest broker. I think the LTCM crisis is a case in point.

Lender of last resort functions might also be well-organised by a noncentral bank, but for practical reasons they are best performed by the central bank because it is able to generate the liquidity as quickly as possible.

The Basle Accord

Then, your criticism of the Basle Accord. Of course – and I think that we already touched upon this earlier – supervision moves with financial developments. There might be a problem here, because as Bill White said, supervision does not move as fast as the financial markets. Basically it is a follower. That is both good and bad. It is good, because it allows financial markets to be innovative, it allows financial engineering, it allows the development of new financial instruments which have a lot of benefits. It is bad, because it may be that supervision is moving too slowly or even acting in a perverse way, as we mentioned in the FONDAD conference of last year in Amsterdam. Stephany Griffith-Jones at that time made the point about the ill-based 20 percent capital requirement for the inter-bank loans. But supervision is moving.

You made two points, which I would like to comment on briefly. The first one is on the use of external ratings. Personally, I would agree with you that we need to think about that much more. My impression is that this is still open for debate – I'm not a supervisor by the way, so I can easily say this. My understanding, like that of Bill White, is that it has been

extremely difficult to move ahead in this area. The best one could say is that it is now better than the club-like rules we had before, where only the member countries of the OECD had a good rating and consequently a zero risk weighting. That meant that Korea and Turkey were in the zero risk weighting category and Singapore in the higher risk category. At least that is better now, but personally I think it would be even better to have a system which, for instance, would follow the OECD export credit ratings. That is, however, politically extremely difficult to accomplish.

The second point you made on the Basle Accord refers to the use of both market risk models and credit risk models. I would not be opposed to the use of credit risk models, but they are much more difficult to develop than market risk models. One of the difficulties is that you do not have a marked-to-market system in the credit risk, you do not have information on default risks, etcetera. Nevertheless, I would agree here basically – and I don't think this is at all in contradiction with the Basle proposals – that the development of internal credit risk models should be supported by supervisors. What supervisors would do is basically the same as they do with the market risk models, that is to look whether they fulfil all the preconditions and the tests which you would also put to these market risk models. And I also agree on your point that they have not been all that well-adapted to that one-day big shock.

Three Issues for Discussion

These were some comments, which are close to the mind of a central banker. Let me finish by mentioning three issues for discussion, where I myself would still be open for debate. The first is whether the lender of last resort function by central banks, which is now only focusing on banks, should not be extended to non-banks. I think this is a basic issue and I would go along with you in giving much more importance to market developments. It is difficult to argue why a bank should get money from the lender of last resort on good collateral, whereas a non-bank should not, even if it would have the same good collateral. Of course there are a lot of obstacles here to be overcome. In some countries, for instance, central banks can only act as a lender of last resort to those institutions they supervise themselves. That is a legal obstacle. In some other countries - I think the United States is a case in point – the central bank would argue that the liquidity assistance to the non-banks might go through the banking system, so there would be no need to have the non-banks directly in your system. In some other countries, Canada is a case in point, there is already a lot of discussion whether or not banks and non-banks should be treated in the same way.

A second issue for discussion is also on the lender of last resort. Basically there are two issues here. The first is: who acts as a lender of last resort for internationally operating banks. This is not at all clear for some of the cross-border conglomerates which are now growing. Let me mention just one example very close to the Netherlands. We have seen the formation of a Belgian-Dutch conglomerate, Fortis, where there is a memorandum of understanding between the supervisors, saying that there is a lead-supervisor for the distinct activities of this group. In the case of the banking side of Fortis, it is the Belgian supervisor who is the lead-supervisor and in the case of the insurance leg, the Dutch one is the lead-supervisor. This is all agreed on the basis of the relative importance of these activities in each country, which is already a complicated matter. But in that memorandum of understanding there is no mention whatsoever of the lender of last resort, and one could say, rightly so. Eventually when a problem arises, this may be easily resolved between Belgium and the Netherlands. But what about the international banks operating in Argentina, or in Central Europe? Who will then be acting as a lender of last resort? And how to solve the problem of those who would need another currency than the domestic currency?

There is yet another problem for the lender of last resort which has to do with the too-large-to-fail doctrine. Some of the banks are getting extremely large in comparison to their national size. Maybe the Netherlands again provides a good example. One could argue that a bank like ABN-AMRO has outgrown the size of the Netherlands. Nevertheless, that bank – I would not say it in public, but I might say it here – is too big to fail for the Dutch economy. One might also argue that the major Dutch insurance company is too big to fail for the Dutch economy, because the real effects would be disastrous. So I just put this question on the table here, about financial institutions growing so large in comparison to the size of their national economy.

A third and final issue for discussion is that with regard to supervision we are very much focusing on the lending side. A case might also be made for focusing more on the borrowing side. That is an issue we also discussed last year at the FONDAD conference in Amsterdam. Should one not develop standards or codes of good conduct for debt management? What constitutes a good level of debt, both for short-term and long-term debt, how should the asset-liability management of indebted countries be? I am not arguing here for the development of another new standard – we had a discussion on that just a few days ago. Nevertheless, there might be an argument in favour of trying to develop more bench-marking on the borrowing side. These are the three issues I would like to put on the floor for discussion.

Comment on "In the Interests of Safety," by Martin Mayer

Warren Mosler

A couple of people at this conference were concerned that I was against free trade. That is not the case; I am absolutely in favour of free trade, maximum trade. The point that I wanted to make is that when you have a situation where countries have less than full employment and are competing for real capital, you are in a very different situation than when these countries are at full employment. Our textbooks and macro models assume full employment when they discuss the automatic benefits of free trade. They tell us that free trade at less than full employment requires the kind of regulations we are discussing. Nations with unemployed labour compete for capital by offering lower costs for international businesses - particularly the real costs of labour. As long as more than one nation is at less than full employment, free trade will create continuous downward pressure on real wages. If a nation is at full employment it is not affected by this phenomenon, as trade and foreign direct investment is driven by comparative advantage. Foreign direct investment must compete with domestic employers for labour, which means upward wage pressure. Presumably the new real investor pays the higher wage because he intends to produce more real output for the same labour input and therefore can afford to pay the higher wage. So, both wages and output rise.

I want to say something about LTCM, where many friends of mine are working. Martin, you talked about a bailout for LTCM. The principals personally lost 90 percent or more of their capital while the banks, because of the bailout, didn't lose anything. The banks made loans and the end result really vindicated their original credit analysis that had concluded these were safe loans. They got paid off and they made their 25 basispoints or whatever they were making on spreads, and went on to the next trade. Doesn't this make it problematic to criticise the lenders for taking too much risk as the very worst did happen and they lost nothing?

The next point is a little bit technical and refers to the world of central banks. I would not use the word 'lender of last resort', but rather 'broker of last resort', because whenever the central bank comes to the rescue of an insolvent bank, it is only clearing an imbalance. If, for example, Continental Bank needs two billion dollars it means the Fed is looking at its own books and the other banks have a two billion long position and

they do not want to lend to Continental because they are worried about the credit risk. The result is that the central bank has a credit from one and a loan to the other, so the net cash is always zero. The central bank is acting as a broker of last resort when there is a jam-up, when the credit analysis of the other banks won't let them sell off their excess funds.

A few more technical points. Martin Mayer in his paper argues that there are only two possible outcomes: either the government raises taxes or the citizenry pays the inflation tax. I would like to add that the inflation tax is paid at the time the bad loans are made. That is when somebody gets the money to build those shopping centres in the desert and runs up the price of concrete and gasoline and everything else. Four years later, when the thing gets written off, you actually have a deflationary event when the assets get sold and the equity disappears from the books. In other words, the expansion phase has the upward bias on prices and the unwinding phase has a downward bias on prices.

'Too big to fail' is interesting as a moral hazard issue, but we have to remember that just because the institution itself continues does not necessarily mean the equity holders were not at risk. Generally, the stockholders are likely to lose all their money, the debt holders become equity holders, get something back possibly, new equity is raised, and life goes on. The idea that the institution continues does not necessarily mean that somebody did not take risk, and that somebody did not lose everything. Now, if we decide that a capital requirement of eight percent, for example, is not enough, that it is too much leverage and too attractive, then we can raise our capital requirements. That is when the moral hazard issue comes in: how much capital do we want to be on the line; how big is that subordinated piece? In other words, 'too big to fail' doesn't automatically mean there is a moral hazard issue, since the phrase refers only to the institution being too big to fail. If the stockholders can lose all of their equity, along with the holders of tier two capital, the fact that the institution continues is of no practical value to these owners.

Again, when we talk about stability of the currency, a failure is deflationary. So we are talking about preventing deflation. It is stability of the currency, but it is a deflationary situation in that case, as assets get sold during liquidations.

Addressing your question, 'Why do asset values go up?', the simple answer is: it is math. The present value of future cash flows, the discount rate, the whole thing. Obviously there is more to it, but that certainly plays an important part. If you look at the multiples in the Japanese market, they are still very high, even though the bubble has burst and interest rates are very low. Fifty times earnings does not look so bad when you are looking at a zero percent overnight rate. As long as you can still hedge that out, if I

can use the word, by paying fixed in a ten year swap market at two percent, you can work in these discount rates, ten, twenty years in the future. Your returns on equity still can be looked at as a spread. If you look at all the Goldman Sachs valuation models, or whatever valuation models, they are all plugging in a discount rate. It is part of the answer, though it is certainly not the whole answer.

A very good point in Martin Mayer's paper is his quote from a letter by Benjamin Strong: "If the Federal Reserve System is to be run solely with a view to regulating stock speculation instead of being devoted to the interests of the industry and commerce of the country, then its policy will degenerate simply to regulating the affairs of gamblers". I would take out the word 'simply'. I think the human tendency to gamble is always underestimated; stockholders want risk. When I worked at Bache for a brief period of time, I experienced that when you show somebody something with no risk, they are not interested, while when you show somebody something they could lose all their money on, they immediately want to sign papers and they can't wait to get a piece of it. It is just something in human nature. And it is no different when you are running a bank or when you are investing your own money.

In other parts of the paper you talk about: credit risk, uncertainty, risk weighting, securitisations. What securitisations do is allow you to sell off maybe 97 or 98 percent of the asset you just formed, and keep maybe a 2 percent piece. Against that you will take a 100 percent risk weight on your capital. Well, that is fine, but if you kept the whole asset, you would have to take 8 percent risk weight. So in a sense maybe that piece of the securitisation with only a 2 or 3 percent retention should have a 150 percent risk weight. This is something for the bank regulators to look at, because of the math involved. Maybe what you are really looking at is equity, when you retain a piece of the securitisation. Perhaps that should be counted the same way you would count equity risk. These are things to be considered.

A very interesting point is the one about the rating agencies Moody's and Standard and Poor's taking over. I have nothing to add, except that I find it a very interesting situation.

Martin's paper goes on to the central bank and the economy. He argues that credit comes from all over and what banks do does not matter. Let me just react to 'credit comes from all over'. I could not agree more with that. When we talk about money supply control, I think control nowadays is a little bit of a misnomer. Instead of control let's call it influence, where the interest rate is used to influence the money supply. Loans create deposits system-wide. If you have reserve requirements, then the deposits at some point in the future automatically create an overdraft condition. It is then up to the central bank to decide how to price that overdraft and that is

where the interest rate comes from, to use these terms stylistically. There is no getting around it once the loan is made and the deposit is created, the deed is done and the money is there, and the overdraft appears. The central bank's last option is how to price this shortage of clearing balances. It is interesting that if you stop credit at the banking level, you will technically stop the creation of money supply, because money supply is defined as bank deposits, but other things pop up such as commercial paper. Even in Russia they now have something called arrears. And what is arrears other than commercial paper, however less organised and less liquid? When you go into a restaurant and they serve you food, there is a debt right there; there is credit creation, because you have not paid for the food yet. If you go to any frontier town, everybody owes the company store; everything is done on credit, it is very difficult for the central bank to control that kind of thing, it just pops up spontaneously.

Another very good quote is: "diversification devalues knowledge". Martin is absolutely right. You don't need a whole credit department, you just diversify, which is a lot cheaper. Of course bank information then becomes the same as everyone else's.

A very good point is the one about pension funds. We call pension funds real money funds as opposed to the leverage funds. The leverage funds are just about everybody, but the small group of pension funds is of course the real money accounts.

We talked about dynamic hedging having destabilising effects in other markets. Dynamic hedging is destabilising in any market, it doesn't have to be in another market, it can be in the same market. And that comes back to the natural tendency for people to gamble. I will get back to that in a second.

Russia, NDFs – non-deliverable forwards – , dynamic hedging: from my point of view NDFs are counterparty risk more than they are dynamic hedging risk. I was manager of a fund for people who wanted their money in Russian GKOs, which is what they call their T-bills. We bought GKOs, we had NDFs against them. The fund is now in liquidation. Interesting enough, I always thought that if the fund went in liquidation, it would be because the GKOs defaulted and these people would have lost their money. However, the hedge technically worked very well; the NDFs went up in value as fast as the GKOs went down and there should have perhaps been a loss of ten or fifteen percent. Subsequently Russia made good on their GKOs by creating rubles for them and with the hedges that would have been adequate so there would have been the anticipated profit. However, some of the NDF counterparties refused to pay on a timely basis. Now, we are not talking about Russian banks, we are talking about Deutsche Bank, Crédit Lyonnais, ING, Société Générale – \$310 million in

receivables. They just did not pay while they had no good reason for not paying. They are now negotiating with the liquidators, they are slowly paying what they owed. Had they paid on time, the fund would have survived and these people would have gotten their 8, 10, 12 percent return or whatever they were supposed to get. It was not one of those high-flying speculating funds. They lost their money because of the counterparty risk of four of the world's top banks that were not paying on a timely basis on a NDF contract. I have been in this business since 1973 and I never expected it to end this way and it is not over of course. I have never seen anything like this.

We can complain about correlations where the people correlate the Czech with the Thai market or what not, but there are mutual funds out there that advertise that they trade, based on astrology and sunspots and whatever. So, correlating those two markets does not sound so bad compared to trading based on when the moon goes into some formation. (I am not saying that that does not work either, some of these mutual funds have very good track records.) Individuals are not risk averse when it comes to putting up one percent of their portfolio in some kind of risk fund and one percent of the whole world turns into a lot of money.

Let me comment on Martin's point that one of the benefits of wealth is redundancy. He states that to give it away for the sake of the money that can be made with leverage is a folly, for which our posterity will finally rebuke us. Well, certainly we are not going to get rebuked for giving away financial wealth. Nobody really remembers who lost what in the railroads. They know that we have a railroad, that we have buildings, that we have infrastructure, we have an educational system, the real things are what our posterity sees, the rest of it becomes interesting history, perhaps. But our posterity is not going to have less nominal wealth because we made a mistake.

Martin states that two goals should guide our policy today in financial matters. One is the segregation of the money supply function from the lending function. We can segregate it, but I don't know what that does for us. It would certainly make the bank system less volatile, but all the other forms of credit would then be pushed to the other credit institutions, whatever they are. This might be a benefit, I haven't given that enough thought to comment on, but it is simply a shifting of responsibilities from one sector to another.

Martin argues that the other goal should be a major readjustment of the capital requirements and risk ratings, to do their derivatives business through exchange-traded instruments. I could not agree more with that. In fact, we developed a swap contract, which is the largest market out there, the interest rate swap contract. It was picked up by the LIFFE, the London

International Financial Futures Exchange, except for the fact that they made a small change in it, to render it useless, or nearly useless. They changed it from what would look like a normal swap to one that expires every three months and you have to put a new one on, so that nobody could replace their ten year swap with a ten year future that was ongoing for ten years. The reason they did this, they told us, is because their members objected to it; they were concerned it would take away all the business from the cash market and that is where they were making their money.

So I am in favour of Martin's idea that moving to financial futures contracts from over the counter trading will increase much needed transparency and provide useful information. But it is going to have to come from the top down, because there are vested interests to overcome. For example, none of the large US government bond dealers wanted bond futures; they said they would not trade them. But once the contract opened the next day they were all trading it. And later, nobody wanted marked-to-market swaps. We were the first to do marked-to-market swaps in 1986. J.P. Morgan would not do marked-to-market swaps, because they were the best capitalised bank at the time and they and a couple of others got all the swap business. And then a few years later, after marked-to-market was introduced by the lesser firms and J.P. Morgan was at a competitive disadvantage by not offering it, they became the very best at marked-to-market. First those with high market share naturally try to avoid such change, but once it is in, they come in. The same thing goes for exchange-traded derivatives. The traders with vested interests in the current inefficient, more dangerous system, will object right to the end and once the new contracts are introduced these same people will be the biggest and best at it. That is the way the system is set up, those are the incentives. It is not a value or a moral judgement against the participants, it is just the reality of the world in 1999.

About Mayer's three Laws of Derivatives: I am going to give two exceptions. Maybe that doesn't prove a lot, I don't know. His first law is: when the whole is valued at a price less than the sum of the prices of its parts, some of the parts are overpriced. We had a security that had in it Treasury bills, IOs – which is an interest only strip – and a non-economic residual. Now, these were all in a package and they could not separate it. How do you value this security? People who buy Treasury bills did not want it; they pay a premium so they can use Treasury bills at the Fed or at the border trade for margins, so they don't want the rest of this and therefore had no bid for it. The people who bought non-economic residuals did not want any income, they just wanted tax ramification, so they would not touch it. And the people who bought IOs, of course all they wanted was the IO, they didn't want to combine it with the other two parts. So the bid for the

package was significantly below the price of all three. Well, this thing was illiquid until we went through several law firms to figure out a way to take it apart, to cut through the three pieces. Then each piece had the liquidity inherent in each piece and we were able to sell the Treasury bills in the bill market, the non-economic residual in the tax market and the IOs to the hedgers who hedge with IOs.

My next point relates to Martin's third law. What we are talking about is giving speculators easier ways to speculate. More casinos, easier access, taxis to the casinos, government lotteries, advertising lotteries. I agree that that is what we are doing and we have to rethink whether that is really what we want to do.

Dynamic hedging? Yes, but dynamic hedging is a big mystery. Jan Kregel informed me that most of Keynes' Treatise of Money deals with this problem. When the markets are going up, traders might buy a stock at 100. They like it at a 100 and if it goes to 80 they don't like it anymore because it is going down. So they want to sell it. If it goes to 70 now they really want to sell. On the other hand if it goes up to a 110, 120, they want to buy more; they want to buy it because it is going up, they want to sell it because it is going down. Now normal investing present value models would tell us if something becomes cheaper you want to buy more, but it does not work that way in the real world. Because people think that when something goes down, it has the chance of going down more, and often it does. The idea of selling it and buying it back cheaper is very enticing. It allows you to overperform the next guy and maybe it is a case of what is good for the individual does not work collectively, because the whole market cannot sell a stock. It can only change hands from one person to another, just like there is no such thing as a currency outflow. Dollar deposits stay at Citibank or J.P. Morgan, the name just changes and the exchange rate changes, but pesos don't go anywhere and dollars don't go anywhere. So the market cannot sell a stock, it is going to hold it at the end of the day, be it at a lower price. What do you do about something like this?

First we have to recognise that it is the case and Martin points out that it is definitely the case. It is definitely a problem that requires a lot of attention and it does not get very much attention. Keynes' response was, as Jan Kregel told me, that you have to create conditions where people feel comfortable holding the thing, where they think that there is value in holding it and that it might go up. Second, we have to decide whether we want to do anything about this kind of volatility in certain markets. If the answer is yes, then you come up with certain remedies, such as having the government as market maker, where of course you don't try, for example, to buy your own currency, we know that that doesn't work, but you buy the counterparty's currency. So when the yen got up 1.45, it was the US buying the

yen, not the Japanese doing it. When it got down to 1.20 it were the Japanese buying the dollars and this is the way interest rates go from exogenous to endogenous. It is just timed intervention, giving markets some reason to look at their positions. Equity markets are faced with this all the time. The commodity markets have circuit brakers and cooling off periods and position limits and daily limit moves and all kinds of things to try and temper this natural human tendency to sell when it is going down and buy when it is going up.

I want to illuminate the leverage problem with a story about the five dollar bill waiting on the sidewalk. What happens is that somebody comes in and says, "I give you five dollars, free, thirty days from now". You say, "OK, I'll take it". Half an hour later someone walks in and says, "I've got a ten dollar bill for you thirty days from now". Now, you've got a problem. With the first guy, now you have a five dollar loss in your first position on a marked-to-market basis. And that guy is knocking on your door and he wants a five dollar margin call, because the market is now ten dollars free money. And if the twenty dollar guy comes in to offer you twenty dollars, you are now out of business and you have to shut down. You now have a fifteen dollar margin call and you don't have adequate capital to accept the five dollars a month from now. And this is not an exaggeration, that is exactly much of the story with LTCM. This is how it works and these are exactly the dangers of many types of leverage.

Floor Discussion of "The Ways Financial Markets Work and the Implications for More Effective Supervision"

Reasons for Regulation in Source Countries

György Szapáry began the discussion by quoting two statements from Martin Mayer which, in his view, apply perfectly to recipient or, as Szapáry called them, "catching-up" economies: 'Diversification turns out to be a source of general instability, rather than stability' and 'Risk-shifting instruments ultimately shift risk onto those less able to bear them'. He then took issue with the notion that globalisation fosters efficient resource allocation and insures that capital goes where the productivity of capital is the highest. "That is only true in theory. In practice it does not work that way because there is a mismatch between the desire for higher return and the desire for liquidity. The highest return is on FDI, usually about 30 percent per year, but it is not liquid. Investors would rather sacrifice the high return to acquire something more liquid, so they are turning to portfolio investment, particularly fixed-rate investment. Thus, they risk investing in these catching-up economies with high interest rates. In itself, this is not bad for the catching-up economies because there is room for the inflow of this kind of capital. The problem arises when you get a much larger inflow of capital than you can actually use.

Let me give you an example which shows how the diversification and globalisation of investment is at the root of this problem. In the past when an average investor, let's say a doctor or a lawyer in the United States, walked into an investment bank to discuss portfolio investment, he would be advised to invest about 40 percent in fixed income and about 60 percent in stocks. But nowadays the bank will also suggest: 'Why don't you invest 5 percent in hedge funds? It is very risky of course, but the yields are substantial.' They usually convince the investor, and he agrees to invest 5 percent in derivatives and so forth. It is only 5 percent, which is very safe, or it appears relatively safe. But those 5 percents add up to all these millions of dollars moving around in those catching-up economies where they can create havoc.

Some time ago I was talking to fund managers who came to Hungary and one of them said that Hungary is not that interesting anymore because real interest rates are not that high. 'But you know what is interesting?', he said, 'Macedonia'. And this is a true story. These hedge fund managers really think very short-term. They boast of moving capital from one country to another, making them great hedge fund managers. But this is hot money moving around the world, and recipient countries have to learn to deal with it. In Hungary, we have now learned some of the tricks. For instance, we used the excess inflow of capital to build up reserves as a cushion for when the capital flows out. But I think one also has to deal with it more effectively in the source countries."

Stephany Griffith-Jones agreed with György Szapáry and explained why. "György's final point is very important. The wave of money that surges into these recipient countries is so large, in proportion to the size of their economies and their financial markets, that they need help from the source countries. It is not really fair to say, 'you just have to cope with these surges', because it is extremely difficult. Even those countries that have done all the things the textbooks tell them to do cannot be totally successful because of the scale of these flows in proportion to the size of their markets.

György is right for another reason and that is that if these things then go wrong, there will be bailouts and investors know this. In spite of all the denials, there have been a lot of bailouts and these bailouts have indirectly benefited the investors much more than the recipient countries. So there are good reasons for some kind of regulation which is accepted fully at the national level and should be accepted at the international level as well."

Bill White agreed that excessive capital inflows can be disruptive for recipient countries. "From the regulatory perspective, the banks themselves are generally not doing anything silly. The amount of money they are putting into the markets of the recipient economies is peanuts, it is nothing. And if they want to do that without any significant threat to the health of the institution, the first question one must ask is: 'Why shouldn't they be allowed to do it?'. The market failure is precisely what György says: If you add up all the small sums of money, it is devastating for these individual recipient countries, and I really have no answer to that. Maybe it would be possible to control on the lender side, but when you consider how far we have retreated from controls over domestic lending, I am sceptical. It is all market-based now, and it is all being liberalised. We can hardly say, 'For foreign loans, for some macro-related externality reason, we are going to prevent you from lending'. I am more inclined to say to the recipient, 'You have seen the damage these inflows can do, maybe you'd better use more capital controls and the like'. Sometimes disruptions are substantially more costly than the welfare effects of imposing some capital controls."

Griffith-Jones insisted, however, that industrial countries have good reasons to reconsider the regulation of capital flows to emerging markets by mutual funds or banks. "Recently, I had a conversation with a commissioner of the US Securities Exchange Commission. He was very sympathetic; he was talking about Mexico and unemployed Mexicans and so on. But then he said, 'Why should we regulate mutual funds that invest in Mexico? We think that investment in technology shares is crazy and the price of shares is high and unrealistic, but we don't regulate it in the US, so why should we do it for Mexico?' The answer is: 'Because the damage done to Mexico or to Indonesia in terms of the number of poor people who are suffering, is much greater'. If people lose money in the United States, it is a pity but it isn't going to be a tragedy. These economies are much more fragile. They are still in the transition phase, so the markets are not deep enough, the capital flows are more volatile, and the damage done to the real economy is more extensive.

During the Indonesian crisis, some of the figures revealed that poverty had increased from 20 million to 80 million. Those figures are being revised now, but we cannot deny that there was a huge increase in poverty. And why is that? Because there are so many people near the poverty line in Indonesia. Even if it did not go from 20 million to 80 million, but from 20 to 30 or 40, it is still a lot of additional poor people. The welfare costs are highly problematic and while it may be rational in the OECD countries to stand back from regulation, it is not rational from the point of view of the recipient countries."

Szapáry also disagreed with White's reluctance to regulate in the source countries. "Bill, maybe it is 'peanuts' for these banks and maybe one should tackle it using capital controls in recipient countries. But let me give you an example. I was at a conference organised by the Deutsche Bank about a year ago. During one of the panels, someone from the Deutsche Bank asked me, 'What did Hungary do to deal with the Russian crisis?' I threw the question back at him and said, 'What did you do to avoid the loss of 1.2 billion Deutsche mark that the Deutsche Bank had on GKOs by their own admission?' I said that I was absolutely flabbergasted that – by their own admission – they bought GKOs at the end of July or the beginning of August 1998. I told him that in March 1998, Hungary strongly tightened the exposure of its banks to Russia because we saw this coming. But they must have seen it coming too. Still, the appetite for yield pushed them in and they thought they would be faster getting out than anybody else.

As a US Deputy Treasury Secretary once said, 'A billion dollars here, a billion dollars there and we are beginning to talk serious money'. When you say it is too small, I am reminded of what Jacob Frenkel said: most crises are

started by saying 'it is too small to bother with'. I think one should try to do something from the source countries, but I'm not sure what."

Changes in the Incentive System for Traders

John Williamson suggested that excessive capital flows might be regulated in the source countries by changing the remuneration system for traders. "I find the remark in Martin Mayer's paper, that traders get paid to do business and penalised if they don't do enough business, rather terrifying. I've been thinking of this problem in the more general context of the herding behaviour of investors as being a big part of the problem. I asked myself, what sort of solution might there be in terms of changing the remuneration patterns of the people who are doing the business? Let me try this one out on you and see whether it reverberates. One solution might be that when the income of fund managers rises beyond say one or two hundred thousand dollars a year, that all of their incentive payments ought to be paid say five years in arrears. Moreover, it ought to be based on a judgement of how they traded – in sensible, long-term trades or simply by beating the index for the last three months. We need to focus their attention on the long-term, underlying fundamentals and offer them a direct personal incentive to break this type of herd behaviour that is so damaging.

And if you think that this makes sense, how do you persuade managers to behave this way? If they are working in a regulated, supervised institution, then it ought not be too difficult. And if they are working in a bank, then banks which implement remuneration practices of this type would be required to have a capital adequacy ratio of only 8 percent; while the ones that don't would be required to have 10 or 12 percent. That might be a fairly effective incentive for the bank to reform its remuneration practices. I haven't yet thought of what the equivalent would be in an institution other than a bank, but maybe I can get a little bit of help from this audience."

Zdeněk Drábek agreed with John Williamson and viewed his suggestion as an issue for regulators. "John has articulated in specific terms what I had on my mind when I asked my first question in the previous session, which was: 'Are there incentives in the financial sector system which drive the financial institutions, traders in particular, to take these excessive risks? Is there still, after our unfortunate experiences, a lack of control mechanisms within the institutions to stop these kinds of practices?' Apparently, the rewards for the traders are so enormous, that they are prepared to take these kinds of risks. The question is whether there is a way to deal with these situations. I am not sure that John's proposal is going to be embraced

by banks, but I think that it could be an issue for regulators."

Stephany Griffith-Jones agreed that some kind of regulation is needed. "We have been saying these things for quite a long time. It has come to the point of implementing them. John's idea is clever, yet if we tell the financial institutions to change the remuneration system and we do not impose it through some kind of regulation, then it just won't happen. The competitive pressures to attract these star traders are too great. They are the individuals provoking the largest disasters, but they are also the people who are most in demand. If they aren't offered these packages, they leave."

Bill White explained why changes in the remuneration pattern would have to be applied universally. He also stressed that the actual problem has to be clear before the changes are implemented. "This was very fashionable about two or three years ago. We were all worried about volatility and short-termism and said that traders should be remunerated differently. One of the big brokerage firms, Salomon, tried to do it and they lost two-thirds of their traders in no-time. So, you really must have some kind of regulation which is universally applied. But if you do that, you'd better first be clear about what problem you are trying to solve. Is it short-termism and volatility, or is it misalignment problems and excessive capital inflows? These are quite different things."

Martin Mayer pointed out additional difficulties with the current remuneration practice. "So long as the supervisor in a bank gets his bonus from the trader's profits, it is going to be very difficult to control the situation. If the trader is making 20 million dollars and his supervisor is making 750 thousand, the power relationships in a society such as the United States are very difficult to sustain. This is particularly valid if the chairman of the board becomes worried that this very profitable trader might go elsewhere. My son, who is a lawyer, said that the profession of law began to go to hell when lawyers decided that they should make as much money as their clients. And to some extent this is also true in banks and larger companies – and baseball teams."

Jack Boorman said that one should not only look at the incentives on the side of the investors, but also at the perverse incentives on the side of the recipient countries. "I think that we need to go back to the actions of the countries that got into difficulties. If the debt manager in an emerging market country can shave a few points and save what looks like the cost of borrowing by accepting a put in a medium-term instrument, by going short instead of going long and so forth, he gets patted on the back by the finance minister. He does not get penalised for the risks he is bringing into the debt profile structure of the country, which accumulate over time. In many instances, nobody is keeping track of what the accumulation of these risks really is.

Similarly, we can point to some very specific factors in each country that got into difficulty where something was done tragically wrong. In Korea, for example, it was how the capital markets were opened. They discouraged long-term capital flows and they encouraged short-term flows through the banking system. This was a fundamental mistake in terms of the accumulation of risk that is placed into the country's debt profile. In Thailand, while the BIBF was indeed constructed for the reasons mentioned by Jan Kregel earlier, it was also quite clear to the foreign banks that they would get tax advantages. With a wink and a nod, they were told that they would be treated favourably if they wanted to come into Bangkok as resident operators, as long as they did business through the BIBF. This was at the same moment that Thailand was already getting about 8 percent of GDP in FDI and medium- and long-term capital inflows, thus aggravating the situation."

Although György Szapáry agreed with Jack Boorman that one has to look at the countries that got into difficulties, he stressed that capital flows can also create problems for countries that are not crisis countries. "When you have excessive capital inflows, because you are doing things right, you have to sterilise the inflow at a cost to the budget and to the taxpayer. This creates problems and tensions in the financial institutions. Then, you have to consider capital controls. Based on Hungary's experience, I believe that you have to have temporary short-term capital controls in such a period."

Ariel Buira agreed with György Szapáry that crises can also occur in countries that did things right. He presented an outline of options for those countries. "Often countries have made mistakes, but even when they don't, expectations can change virtually overnight because of a confidence crisis. In a system where this type of crises can occur, you have to have some mechanism to protect yourself. These mechanisms consist of the following: you have either some kind of regulation of capital flows or you have compensatory financing facilities or contingency financing facilities. On top of this you probably have to have some kind of regulation that allows debtors to suspend payments, to establish some kind of rescheduling or bankruptcy type procedure to protect them from the immediate outflow of capital. While you also want to eliminate the protection of investors or the moral hazard, the parameters are essentially the mechanisms I just mentioned. You have to decide which combination of these you want. This combination will depend largely on the resources you have available and that, in turn, depends on the Group of Seven, the Group of Five, the Group of One, or whatever. It is as simple as that. I am encouraged by the move toward accepting the possibility of rescheduling, and perhaps the possibility of controls, and some degree of financial support for countries under attack. I am sure we have to go further on all of these."

Following up on the issue of contingency financing, Barry Herman suggested that emerging economies could be compensated for the volatility and devastating effects of excessive capital flows. "In the 1970s, when there was discussion about volatility, it was more about volatility of commodity prices. There were basically two approaches. The first was to try to reduce the volatility through commodity agreements. The second was to compensate for the volatility through compensatory financing by, for instance, the IMF. Now the focus is on financial volatility. There is some discussion about how you might stabilise the flows, but there is no clear consensus on whether you can do it and whether you want to do it. Even more so, there has been no discussion here about compensating for the volatility in the flows. In a sense, Argentina and Mexico have done something of this sort by arranging credit lines with the private sector. The IMF also has the Contingency Credit Line which is another way of approaching the problem."

Regulation by Rewriting Corporate Charters of Financial Institutions

Jan Kregel suggested that governments can also change the remuneration patterns of financial institutions or influence the behaviour of these institutions by rewriting corporate charters. "One of the issues that we might examine is the corporate structure in financial institutions. We talk about 'governance' and put 'corporate' in front of it, when in fact most non-bank financial institutions were not incorporated until recently. Most of these institutions fought incorporation on the grounds that it was not good for governance. Partnerships were looked upon as being more likely to encourage individual responsibility. The movement towards incorporation, which came much later in Europe than it did in the United States, created an environment in which governance structures were weakened rather than strengthened. People who were providing the capital got engaged in what we now call the 'Wall Street walk', which means that you exercise your influence over the company not by governing the company but by selling shares and influencing the share price. This reduces the shareholders' direct control. At the same time, it also reduces the managers' direct responsibility because under the corporate structure, they are protected from what they do in the name of the corporation and hence from any personal responsibility.

This is slightly different for banks. Originally in the United States, the equity owners of the bank were subject to 'double indemnity': they were subject to 200 percent capital contributions rather than 100 percent. This meant that if the bank got into trouble, the shareholders were called upon for another 100 percent of their existing equity share in the bank. Now,

governments could require banks to have a certain governance structure. They could write a regulation into a corporate charter of a financial institution on remuneration, for example. Germany requires banks to present a *prima facie* case that the bankers who are running the banks have banking experience. There is a great deal of leeway in rewriting the corporate structures. Unfortunately, in the United States, and in most other cases, we have gone through experiences of free chartering and we presume that we should not be writing corporate charters. But, if there is one place that governments have control, it is in writing these charters. A large proportion of global capital flows would be shut down easily and rapidly by simply rewriting the incorporation charters to financial institutions."

Regulation of Pension Funds

Stephany Griffith-Jones added another practical idea to the discussion of regulating capital flows in the source countries, particularly capital flows from pension funds. "A lot of this money that is moving around in very short-term operations is actually *our* money, in the sense that it is pension fund money. Depending on the maturity structure of the ages, it may be ten or twenty-year money, but the World Bank estimates that about half of pension fund money is managed through mutual funds or other fund managers on a short-term basis, with one or three-month benchmarks. One interesting point is that pension fund savings are rightly encouraged by governments through a tax relief when we save. But perhaps tax advantages could be tapered in a slightly different way, according to how long the investment is for. The UK already has some provision, as does France, I believe. So an additional mechanism for curbing volatility in the source countries might be some kind of tapering so the tax advantage would be greater if the pension fund money is invested more long-term."

Market-Based Lending Versus Relationship-Based Lending

Bill White elaborated on an important point in Martin Mayer's paper. "Martin points out that the financial world is increasingly driven by market-based transactional deals rather than traditional relationship-lending by banks. Relatively speaking, markets have become more important credit providers. The question then becomes, 'so what?'."

Martin Mayer responded that the transition is dangerous, and Bill White replied, "The transition is always dangerous. People don't really know what they are doing in a changing environment. But I am not sure whether a 'steady state' – where people are more accustomed to market transactions – would be a more or a less dangerous place."

Ariel Buira thought that a world with more market-based lending would be a much more dangerous place. "As Martin Mayer says, markets are ready to turn on a dime. The element of instability is very high."

Martin Mayer added that one of the reasons why markets are highly instable is that market information tends to be very shallow. Barry Herman pointed out that the decreasing role of banks is relevant for the issue of who has access to credit, because banks lend to some people that the markets won't lend to.

On the distinction between bank-based and market-based lending, Bill White observed that banks and investment dealers are moving more towards securitised operations. "Both in the United States and in Europe, there is much less money deposited in banks than the banks feel they could on-lend in the form of assets. In the United States, they securitise everything to lower the level of assets down to the level of liabilities. In Europe, they actively use the bond markets to borrow the money to raise the liabilities up to the level of assets they would like to have.

In the United States, they take the asset of the books, but the bank actually keeps most of the credit exposure – and they are not being charged for it under the Capital Accord. This is something that needs to be examined more carefully. The continued exposure of American banks is far greater than you would think and many times the supervisors judgementally adjust the capital ratios in order to deal with it."

Jack Boorman advised caution with both relationship-banking as well as securitised operations. "There is too much happy reminiscing about relationship-banking. Indonesia is a good example of what relationship-banking can do to you. It is not all positive by any means, if the relation happens to be your son rather than an arms-length credit relationship. At the same time though, if banks move toward more securitised operations, they need to learn to do a different kind of risk assessment than they did with a relationship borrower."

Differences in Capital Flows in Developed as Opposed to Developing Countries

Zdeněk Drábek questioned the difference between capital flows in developed countries as opposed to developing countries. "When we talk about crises, we are talking about emerging markets. Why aren't we referring to Holland or the United States? I asked John Williamson and he said, 'Well, the Americans are already having a crisis, but they don't know it yet'. It might be worthwhile to go over the taxonomy of the issues that are supposed to make the difference between these two situations?"

Ariel Buira responded that expectations play a large role. "It is a number of

things combined: their economies are much smaller, their financial markets are not as deep and large, and the expectations are different as well. If, for instance, Greece were not a member of the European Union – and if investors did not expect it to join the EMU and have access to various support facilities – I suspect it would have suffered as much as many of the countries in Latin America or Asia. The structural characteristics of its economy are quite similar to those countries, but the expectations were different."

György Szapáry underscored the point that expectations and risk assessments by investors are different for emerging economies. He distinguished two types of risk from the point of view of the source country, which require different types of regulation and supervision. "The first risk is present with foreign currency denominated bonds issued by the emerging economy. In this case, the risk is basically whether the country is going to pay it back. The other risk is the foreign exchange risk, for example when you buy GKOs or domestic currency denominated bonds. There is a higher real interest rate because you are also accepting an exchange risk. These two types of risk require two types of regulation and supervision.

The first type of risk – whether the country is paying back or not – is somewhat easier to handle since you can devise various guidelines. There are the Basle guidelines, but Hungary actually disagrees with these. As an OECD member Hungary currently has a zero rating, but we would lose that status with the Basle guidelines. Under the Basle guidelines, the rating agencies would have the capacity and the responsibility to determine the risks. Accordingly, Hungary would have a fifty rating because we are investment risk by triple B. So this would push up our spreads by fifty basis points. But, these rating agencies have not proven themselves to be very reliable because they did not foresee the recent crises. It is easy to downrate Korea after the fact, but they should have known it beforehand so that people would not have invested there. Rating agencies are not deep and thorough enough in their country analysis. They put too much weight on the current account and the debt-to-GDP ratio and the risks related to these, and too little weight on structural progress and the track record of paying back the debt."

While John Williamson also expressed discomfort with private risk-rating agencies, he thought there was some inconsistency with Szapáry's complaint about the higher real interest rate that emerging economies have to pay and his earlier remark that Hungary was getting too much capital inflow. Szapáry explained that his concern was with the extra risk premium. "We already pay a premium because the market gives us a higher risk. But, if the risk rating becomes higher because of these Basle guidelines, then we pay an additional premium."

Liberalisation of Capital Controls

Ariel Buira critiqued the hasty liberalisation of capital controls. "When Mexico joined the OECD, it removed the one major remaining restriction on short-term capital movements, thereby allowing foreign investors to hold Treasury bills. If this restriction had remained in place, the story would have been a different one. The OECD countries have removed all restrictions, but they have taken 30 or 40 years to do it. They maintained restrictions until the late 1980s. There are documents by the central banks of European countries and by the US Federal Reserve which explain the positive role played by these restrictions. I think we have a combination of ideology and commercial interest which pushed certain governments to push the Fund to press countries to liberalise quickly."

György Szapáry endorsed Buira's view by relating the experience of the Hungarian central bank. "Bankers lobbied the government to make them tell us to liberalise short-term capital flows and allow the foreign purchase of Treasury bills. We resisted it, but the interesting part is the following. Foreigners cannot buy government securities with less than one year maturity, but they circumvented this restriction by doing repos. They bought one year plus whatever, and they immediately made a repurchase agreement with the bank for one week, one month, three months, or whatever they wanted. So we had all that money coming in. We called in the banks and said, 'This is not against the letter of the law, but it is against the spirit'. The governor and I explained at length to the banks all of the problems that it had created for us. We said, 'Please do not do this, and if you do we will punish you'. Then we waited for about a month to do a surprise supervision. We caught a few banks and brokerage firms and punished them. We denied domestic banks access to our facilities, and we admonished the CEOs of foreign banks – it had some effect."

Ariel Buira then explained the strategy of the Mexican central bank which made it impossible for foreign banks to buy government securities. "The strategy was to prohibit foreign banks from opening a peso account in domestic banks. Without a peso account in a domestic bank, it was difficult for them to operate. Liberalisation essentially meant the removal of this restriction, because that was the bottleneck for foreign banks. It wasn't that they could not buy government securities, but if they could not hold the pesos, they did not know how to buy the securities."

Absorptive Capacity

Ricardo Ffrench-Davis turned the discussion to the issue of absorptive capacity. "György's remark that flows need to be consistent with the

capacity to absorb them is very relevant. There is growing evidence that flows from capital surges go to consumption or non-productive investment rather than productive investment. This appears to have happened in Chile and Argentina in the 1970s, in Mexico and Argentina in the early 1990s, and in Korea between 1993 and 1996. Capital inflows increased much faster than productive investment in all of these countries. So instead of the textbook process of investment flowing from capital-abundant to capital-scarce countries in order to *complement* domestic savings, the flows *substituted* domestic savings.

If there is a trend of capital surges, it is primarily short-run money rather than productive investment. This is because the long-term investor needs more time to adjust to the quantity of capital. He needs time to define the investment product, to choose the technology, to make the investment and to get the output. That is a long process. If we are dealing with short-term money that flows in a very liquid form, it tends to reach consumers more quickly, because they can respond faster. For example, you can increase the margins for credit cards in ten minutes through mechanical computation methods. Another example is that real estate can respond faster than long-term investment in agriculture, mining or technological innovation.

All these things tell us that if we want accountability, if we want to reach higher productive investment, then we must improve the performance of the various capital inflows. Evidence suggests that the composition of flows has substantial influence on the effect. One reason for this is the agent in the flow. The agent of FDI is different from the agent who is moving money in the short run. The first is more connected to the investment process, while the other hopes that what he does connects to the investment process through the price of the stock market, through the interest rate, etcetera. He indirectly encourages investment by affecting these variables. But that is a long-term process. Ideally, each of the agents should aim at providing a stable supply of funds."

Ariel Buira stressed the importance of recipient countries limiting inflows to amounts which are reasonably consistent with their absorptive capacity. "I raised this issue in Mexico in 1993 when there was a blind faith in the markets. Anybody who raised questions like this was assumed to be crazy and just did not understand economics. Markets know best, so why ask these questions?

There has been a lot of ideology behind all of this. I think the ideology was encouraged by some of the international financial institutions and the industrial country governments because it suited their interests. Now it seems that there is a certain amount of revisionism going on. I am not sure where we come out and what the bottom line will be, but at least we are moving toward a more pragmatic approach, and that is for the best."

Part III

National and Regional Responses to the Instability of Financial Markets

East Asian Response to the Instability of Financial Markets, with Special Reference to Malaysia

Mohamed Ariff and Ong Gaik Ean

I Introduction

The huge influx of capital into the East Asian markets was evident during the 1990s, as the Asian governments, encouraged by the International Monetary Fund and the World Bank, liberalised their financial systems, including their capital account, allowing firms and individuals to buy and sell financial assets more freely or engage in financial business in other countries. Concurrently, advances in information and telecommunications technology made international financial transactions much easier and faster. These trends, evident in the 1990s, have led to a rapid integration of global financial markets. The increase in international capital mobility and business exuberance along with the period of strong economic growth, had steadily eroded the role of traditional banks as the main intermediary of funds. Instead, investment funds grew rapidly in importance, operating under immense competitive pressure to earn high returns (Table 1). These capital flows, which amount to more than 70 times the volume of trade, were mostly short-term flows. The demand and supply for these funds seemed to be a win-win situation for both parties.

Inflows to East Asia came mainly from Japan, largely encouraged by the

Table 1 Gross Capital Formation per GDP

	Malaysia	Thailand	Indonesia	Korea
1990	32.4	40.4	36.1	37.1
1991	36.4	41.6	35.5	38.4
1992	34.3	39.3	35.8	36.6
1993	38.3	39.5	29.5	36.0
1994	40.1	40.0	31.1	35.7
1995	43.0	41.1	31.9	36.6
1996	42.2	41.1	30.8	36.9
1997	42.4	35.6	31.6	35.0

Sources:

IMF, International Financial Statistics; Bank Negara Malaysia, Monthly Statistical Bulletin.

imbalance between savings and investments in Japan in the 1990s, and from Europe, especially after the flight from Mexico due to the "tequila" effect in 1994-1995. On the other hand, the liberalisation of capital movement in East Asia attracted these inflows, given the Asian need to accommodate the excess of investments over savings (manifested in current account deficits). The proviso was that the East Asian currencies (with a notable exception of Korea) had been tied to the US dollar, precluding exchange rate risk. As a result, there was a tendency not to hedge foreign currency borrowings as market participants may have interpreted currency rigidity as implicit government guarantees against the risk of currency volatility (ADB, 1998). Most of these inflows went into a narrow range of sectors, including nontradable speculative ventures like property and land. Hence external borrowings have been largely directed not for consumption, but for investment. Other policy distortions include local government power to influence the allocation of investments.

It is not difficult to argue that the crisis in East Asia is essentially economic, not merely financial, as there are serious structural problems caused by overinvestments. This line of reasoning would suggest that the currency and financial crisis was simply a result of economic imbalances of different sorts in the East Asian economies. It is also equally easy to argue that macroeconomic fundamentals in the East Asian economies were fairly strong and that it were currency speculators that caused the financial crisis which then spilled over to the real sector. It is not easy, however, to establish causality between financial crisis and economic crisis and it would be hazardous to make sweeping generalisations as conditions do vary among crisis-hit countries. The main focus of this paper, however, is financial instability, not economic crisis per se.

II Roots of the East Asian Crisis

How could a region, whose economic fundamentals were marveled at, be so vulnerable to the crisis? Policies pursued by the respective governments indeed produced good results. Inflation had been kept low despite robust growth rates. Governments have been posting budget surpluses, not wholly due to fiscal discipline as they were also partly a result of rising government revenues during the boom times. Obviously, sound fundamentals were insufficient to prevent a crisis.

The strong surge in international capital mobility and escalating speculative content of the long boom had helped to conceal flaws in the macroeconomic management, primarily in the exchange rate management. Together with high interest rates, these helped to sustain the growing

Table 2 External Financing in 5 Asian Economies¹ (in billions of dollars)

	1994	1995	1996	1997	1998
Current Account Balance	-24.5	-41.4	-55.2	-27.1	30.6
External Financing (net)	45.2	84.6	95.2	18.1	25.9
Private Flows (net)	37.9	79.2	97.1	-11.9	-0.3
Equity Investment	12.1	15.4	18.7	2.1	16.4
Direct Equity	4.7	4.9	6.3	6.4	6.9
Portfolio Equity	7.4	10.5	12.4	-4.3	9.5
Private Creditors	25.8	63.8	78.4	-14.0	-16.8
Commercial Banks	23.4	49.9	55.7	-26.9	-19.8
Non-bank Private Credit	2.4	13.8	22.7	12.9	3.0
Official Flows (net)	7.3	5.4	-1.9	30.0	26.2
Residential Lending / Other (net) ²	-15.2	-29.2	-21.6	-30.5	-4.6
Change in reserves, excluding gold	-5.4	-14.0	-18.4	39.5	-51.9
Memo: short term credits (net)	7.3	40.4	38.5	-41.7	42.8

Notes:

Source:

Institute of International Finance, April 30, 1998.

appreciation in the East Asian currencies. Real exchange rates appreciated by more than 25% in Thailand, Indonesia, Philippines and Malaysia. These countries also maintained large current account deficits, which had been increasingly financed by short-term capital inflows (Table 2). With the regional currencies steadily appreciating against the yen from as early as 1995, there had been a gradual reduction in export competitiveness. In Thailand, exports actually fell in nominal US dollars in 1996, while in Korea, export registered a mere increase of 3.7%. This substantially reduced the earnings of the East Asian exporters, and accordingly, their ability to service their debt.

Meanwhile, these countries were experiencing the bursting of their own financial markets bubbles. Capital flows channeled into real estate, property and equity funds, resulted in the escalation of asset prices. Lendings to these sectors increased the financial institutions' vulnerability to a reversal in capital flows (Radelet and Sachs, 1998). Nevertheless, lendings continued to expand rapidly throughout the region. In Thailand, Korea and Malaysia, banking claims on the private sector increased by more than 50% relative to GDP in seven years, reaching 140% of GDP in 1996. Loans by these banks were largely financed by short-term external borrowings, indicating the relatively high ratio of short-term debt to foreign exchange reserves. In Thailand, Korea and Indonesia – the three countries

¹ All 5 countries are Indonesia, Malaysia, Philippines, South Korea and Thailand.

² Including resident net lending, monetary gold, and errors and omissions.

hit hardest by the crisis – the ratio exceeded unity after 1994. As stated by Radelet and Sachs (1998), while a ratio greater than one is not by itself sufficient to spark a crisis, it does indicate a vulnerability to a crisis. Once something sparks a withdrawal of foreign capital, each foreign creditor has the incentive to demand repayment quickly, since they each know there is not enough foreign exchange available to repay everyone.

The Trigger-Panic and Withdrawal

Evidence of fragility in the property sector and financial institutions grew in early 1997. In Korea, for instance, Hanbo Steel declared bankruptcy in early 1997, followed by Sammi Steel and Kia Motors. This in turn, placed pressures on merchant banks, which had extended lendings to these companies, financed largely from abroad. In Thailand, Somprasong Land was unable to meet a foreign debt payment at the due time, which was a first clear indication that financing companies heavily exposed to the Bangkok property markets were in trouble. Foreign banks later realised that they had large short-term foreign exchange loans to Thai borrowers that were unhedged and uncovered by Thai reserves. Speculation mounted that the foreign exchange reserves were dwindling and that the Thai government would have to float the baht. The growing suspicion that such a move might be in prospect, despite government insistence that it was not, led to a widening of interest premiums; these in turn increased the pressure, both by adding deflationary impetus and by creating cash flow problems for financially stressed business. Speculators continued to attack the baht, in which the Thai authorities desperately tried to defend the currency by selling foreign exchange (only to lose \$8.7 billion in reserves) which proved to be futile. On July 2, 1997, Thailand finally gave in to the pressures and floated the baht.

Reversals in Capital Flows and Financial Instability

The Thai meltdown immediately led to speculation and hence withdrawal of capital from around the region, causing currency devaluations in Malaysia, Indonesia and the Philippines. Net private inflow of private capital to the five East Asian countries plunged from \$97.1 billion to a deficit of \$11.9 billion (Table 2). The sudden reversal of capital flows of a magnitude hitherto unseen had a strong contractionary impact on these East Asian countries by seriously restricting domestic bank lending. In the early stages, investors made little effort to distinguish amongst the East Asian countries and therefore acted on a herd mentality. Continuous attacks on these currencies resulted in desperate attempts by the East Asian govern-

ments to defend their currencies by drawing down on international reserves, which in turn added further uncertainty as to the ability of maintaining the peg. By the end of 1997, currencies in each of these countries fell by more than 50%.

Pressures for capital withdrawals increased with the belated downgrading of these countries by major rating agencies. Domestic debtors, many of whom had debt denominated in foreign currencies without hedging their exposure, began purchasing foreign currency, thereby selling their local currency. This inevitably caused their local currency to further deteriorate.

Many were unsure of the contagion at the time of the crisis. Among the hardest-hit economies, South Korea has had few linkages to the Southeast Asian countries, yet it had serious internal financial problems and a massive current account deficit. In Hong Kong, on the other hand, after much probing, the financial markets seem to have decided that the Hong Kong dollar is not at risk with the currency board in place and is pegged to the US dollar, and what is now the Special Administration Region. This has insulated Hong Kong somewhat from the adversity of the crisis.

Frustrated by the attacks, yet desperate to defend their currencies, Malaysian Prime Minister Mahathir Mohamad made vicious attacks on currency speculators, including threats to ban foreign currency trading. He argued that "currency trading is unnecessary, unproductive and immoral" and that it should be "stopped" and "made illegal". While this has been perceived by some scholars as that of denial, Jomo (1998) suggests that the government was not exactly in denial, but that it did not respond in the manner desired by the "market", i.e. mainly the Western financial community. This led to further selling of the ringgit to record low levels, drawn mainly from market sentiments rather than any serious reference to economic fundamentals.

III Diagnosing the Malaise

The Role of the IMF

The IMF has required Indonesia, Korea and Thailand to undertake deeprooted structural reforms where the underlying problem was the imbalances reflecting inappropriate macroeconomic policies. The centrepiece of these programmes has been the comprehensive reforms of financial systems. These conditional reforms are established out of the massive bailout packages totalling more than \$100 billion to the three countries. The basic characteristics of the three loan agreements were similar. In all cases, the programme has called for the closure of unviable financial institutions, the

recapitalisation of undercapitalised institutions, close supervision of weak institutions and the greater foreign participation in domestic financial systems (IMF, 1999). Steps have also been taken by the IMF to address the issue of corporate governance. Reforms in the financial systems is being buttressed by measures designed to improve the efficiency of markets, break the close link between businesses and governments and, ensure that the integration of national economy and the international financial markets is property segmented.

The stipulated programmes were aimed at diagnosing the crisis as a macroeconomic balance of payments problem and a crisis of excess consumption. Large increases in real interest rates were justified on grounds that they would create incentives for domestic capital to remain at home and for foreign lenders to resume lending. As such, the volatility of the currency would be reduced and eventually the currency would be stabilised. The programme also embarked on a fiscal austerity drive (mainly through cuts in government expenditure) and immediate closure of all insolvent financial institutions.

Initial Proposals and Reactions

By insisting on structural reforms without tackling the immediate problem, investors got the impression that these economies were basically unsound and therefore needed a complete overhaul – despite their sustained growth over the last three decades. High interest rates also gave investors the idea of an uncertain future which discouraged foreign investment into the region. This further fueled capital withdrawals, despite the pledge of more than \$100 billion to the region.

The tight monetary policy forced companies to cut-back production level, sell inventories and reduce workforce. Many were on the brink of insolvency or completely insolvent and were therefore unable to repay their debt. This snow-balled into the increase of bad loans in the banking system, requiring a sharp rise in bank capital adequacy standards. In the midst of a crisis, this caused a cut in credit with a further escalation in non-performing loans and bankruptcies.

Notably, the IMF recommendations were not justified as the regional currencies continued to be highly volatile while investors' confidence and the resultant foreign capital flows did not return. Instead, the high interest rates strangled the real sector, resulting in a sharper than expected contraction, and increased the vulnerability of the financial sector.

During the period August-December 1997, the IMF programmes failed dramatically to meet the objective of restoring market confidence. Currencies of these countries failed to stabilise; instead they actually

worsened despite a very sharp increase in interest rates. Official reserves fell more rapidly than predicted by the IMF. In all the affected countries, economic contractions were greater than expected. Undoubtedly, the IMF programme led to painful adjustments in each of the countries with apparent adverse effects on output and employment. On December 22, Moody's downgraded the sovereign debts of all three bailout countries to "junk bond" status.

The Shift to Capital Controls

With painfully high interest rates contracting an already depressed economy, there seemed to be limited opportunities available to policymakers. What the IMF had hoped would induce foreign and domestic capital to bring their money back did not happen. In the past decade, the prevailing view among the world's economic policymakers had been that money should move freely around the globe, allowing capital to find the most profitable and productive investments. Until mid-1997, emerging market economies thrived under this arrangement, attracting hundreds of billions of dollars in foreign investments that caused an impressive lead in the standards of living in these countries.

Yet, as the crisis has clearly shown, relying on foreign money has its costs. Interestingly, some of the holdout nations that refused to adopt the free-flow-of-money orthodoxy of the 1990s now stand out as countries least affected by the financial meltdown. Declaring that "the free market has failed disastrously", Malaysian Prime Minister Mahathir Mohamad announced on September 1, 1998 that Malaysia would no longer allow its currency to be traded outside its borders. In fact, only a week before, MIT economist Paul Krugman made the case for capital controls in an article in Fortune magazine. In the interview, Krugman said that the best alternative to provide troubled economies temporary relief from the pressures of the global economy is to impose capital controls on currency trading. He later laid out four principles for employing capital controls. Accordingly, the controls should disrupt ordinary business as little as possible, clearly be temporary, be accompanied by a "highly competitive" exchange rate, and be used "as an aid to reform, not an alternative".

The Malaysian Example

Although Malaysia did not seek aid from the IMF, it was theoretically pursuing a "virtual" IMF strategy. The high interest rate policy instituted to deter speculative attacks on the ringgit was choking businesses. In fact, the attacks became more pronounced resulting in increased capital outflows

from the country. Efforts made by the government to raise some \$2 billion in the international capital market for the banking sector restructuring programme had to be abandoned following the unanticipated downgrading of credit ratings by international rating agencies. This had essentially made it more expensive for Malaysia to tap the international capital markets for funds. After announcing that the economy had a worse-than-expected contraction in the second quarter in 1998, the government imposed selective capital controls on September 2, 1998.

The move, meant to provide the economy with a temporary respite from external volatility, effectively withdrew the ringgit from the international trading system. The ringgit was thus non-convertible on the capital account (but not on the current account) and this essentially prevented buying foreign exchange for speculative purposes. This made the ringgit a non-legal tender outside the country and thereby encouraged the remittance of the ringgit back into the country. Initially, all receipts from the capital account transactions were required to be held in the country for at least a year from the date of purchase of ringgit-denominated assets or securities before they were eligible for repatriation. These would take place under a fixed ringgit of RM3.80 vis-à-vis the US dollar.

The controls were aimed at curbing short-term capital flows and have thus not been a retreat from the country's long standing commitment to an open trade and investment policy. In other words, international trade was unaffected by the controls and foreign investors in the country were free to repatriate dividends and equity arising from their direct investment in the country.

Traders reacted favourably towards the controls and were of the opinion that the peg made their products more competitive in the export market. A survey conducted by MIER among companies in the manufacturing sector to determine the impact of the currency control measures revealed that 81% of the respondents said that their products for the export market are competitive with the ringgit at RM3.80 against the US dollar. The control measures in turn brought a stabilising effect, which freed the manufacturers from having to wrestle with exchange rate risks. This subsequently allows them to concentrate on production and marketing.

Nevertheless, critics have pointed out that the controls may have hampered economic recovery by adversely affecting foreign direct investments in the country. Investor confidence was dampened since other markets in the region did not impose control requirements (Haflah and Tan, 1999). It was feared that long-term overall investment activity would be affected as well, which is detrimental to a country that is highly dependent on external trade and foreign investments. Moreover, since the onset of the crisis, there had been a massive capital outflow from the country. There was thus

an urgent need for capital infusion from external sources.

Capital controls were therefore significantly relaxed with effect on February 15, 1999, allowing foreign short-term capital to leave the country after paying a graduated exit tax ranging from 10-30%. For capital brought in after February 15, 1999, the exit tax has been replaced by a 10-30% graduated tax on profits repatriated.

It appears that the controversial currency and capital controls have been vindicated by subsequent positive developments. Net international reserves have increased significantly to \$28.6 billion in March 1999 from \$19.5 billion in August 1998. Exports, which have been declining in US dollar terms since the beginning of the crisis, started to rise since September 1998. What's more, the stock market perked up remarkably with the KLSE indices more than doubling from 300 prior to the control measures to more than 600 in February 1999. These positive developments took place in a situation of low interest rates, with the base lending rate of commercial banks at 8.04% in March 1999, compared with a much higher rate of 13.1% in August 1998.

Business and consumer sentiments have also improved following the imposition of capital controls. The MIER Business Conditions Index (BCI) registered upward increases following the third quarter of 1998 after falling to an all-time low of 41 points in the first quarter of 1998. The index stood at 48.2 points in the first quarter of 1999. The Consumer Sentiments Index (CSI) had also shown some improvement, albeit marginally, after the third quarter of 1998. Sentiments were at the lowest in the second quarter of 1998, with the CSI at 79.1 points. Better sentiments were seen in the first quarter of 1999 with the index recording 84 points. Sentiments were largely boosted through better expectations for the second half of 1999, although the present financial income position and job market outlook still appear weak.

Forex controls have helped the economy in the short term by forcing some RM12 billion deposits parked abroad to come back and by preventing foreign portfolio funds, estimated at 23% of KLSE capitalisation, from leaving the country. Currently, the large current account surplus and international reserves have helped alleviate the short-term concerns on capital needs but the longer the controls and the peg remain in place, the greater the distortion in competitiveness and capital flows into the country will be (Haflah and Tan, 1999). It has also been projected that once the economy picks up, the increase in demand for imports will put pressure on the external liquidity sector.

Nevertheless, the unorthodox measures imposed by the Malaysian government have helped to end what may be termed "confidence crisis". Prior to these controls, the perception was that the government did not under-

stand the problem, let alone find the solutions. The control measures thus conveyed a strong message in that the government could come to terms with the new realities and act in an assertive fashion. Malaysia's sovereign rating outlook has also improved since the last downgrade in August 1998. In April 1999, Moody's revised the country's sovereign rating outlook from "negative" to "stable".

Are Capital Controls Necessary?

At present, the possibility of sudden reversals of capital flows is a major policy concern for many East Asian countries that rely heavily on foreign capital to finance large current account deficits. As the East Asian crisis clearly had shown, large-scale capital inflows lead to an overheated economy, an appreciated real exchange rate and unsustainable current account deficit. On the other hand, large outflows could produce a recession and a decline in investment thereby reducing medium-term growth prospects. Moreover, as the East Asian crisis so vividly illustrated, the abrupt reversal of capital flows threatens the stability of the banking sector. Indeed, free cross-border movement of capital could prove destabilising and there is a growing consensus on the need to curb these capital flows.

Realising the potential disrupting effects of free capital movement, several countries currently seek to promote long-term capital inflows, while discriminating against short-term flows. It is assumed that long-term capital flows take longer to withdraw from the economy, so the sudden reversal brought about by the short-term flows can be mitigated. Furthermore, long-term flows (e.g. foreign direct investment) are less sensitive to fluctuations in domestic and international interest rates and as such, tend to provide more support to medium-term fundamentals.

It must be noted that it is difficult to distinguish between short- and long-term flows, which makes it difficult to design capital controls targeted at short-term flows. Standard balance of payments classifications – direct investment, portfolio flows, short-term flows, etc. – are not neatly categorised in terms of the volatility and liquidity of the flows. As argued by Reinhart and Smith (1997), even if a set of controls is effective in limiting "short-term" foreign financing, if incentives are not enough, even flows that are perceived by policymakers to be "long-term" may in fact be considerably liquid. In fact, the very presence of capital controls would be discouraging to capital flows as a whole, regardless of their "targets".

If the ultimate objective of capital controls is to attain sustainable growth, where large external disturbances become a major hindrance, then the effectiveness of such a measure relies on several conditions. Prime consideration must be given to the prevailing degree of openness and size of

trade flows in determining the scope and extent of its enforcement. China, for example, has been relatively successful in its measures simply because it had started from a relatively closed base. It is also important to consider the misalignment that gave rise to the outflows in the first place. Did the outrage arise due to structural weaknesses and improper incentives in the domestic financial system, or to the inherent instability in the international capital market? Equally important is the availability of the resources to enforce these regulations. Capital controls must, however, remain a temporary measure. Otherwise, they may prove to be detrimental to the country's economic health. It must be remembered that "insulation through capital control may lead to isolation by default" (Ariff, et al., 1999).

IV Reforms in the Financial Sector

Miscalculated Moves

The initial reforms undertaken in the banking sector had done little to instill public confidence. Reforms initiated by the IMF programme were designed to remedy the structural weaknesses in the economy. These, they presumed, were the root of the economic difficulties faced. In restoring macroeconomic stability and addressing the structural problems of the financial sector, weak financial institutions were shut down, while distorting links between the government, financial sector and corporations were rectified. In addition, the new role of the government would be defined. Above all, there was a call for greater transparency in information flows.

The financial reforms stipulated by the IMF brought severe pressure onto the real sector. Following the stock market crash in East Asia, the collateral and equity capitalisation capacity of firms dwindled sharply. This, in turn, sent signals that the waning economy was worse than it actually was. Comprehensive reforms and restructuring in the banking sector were introduced. Insolvent banks and finance companies were closed, while weak but viable ones were rehabilitated through recapitalisation or mergers. The closure of several financial institutions in Thailand and later Indonesia precipitated bank rush, panic buying and capital flight that led to both internal and external liquidity crunch. In Thailand, all but two of the 58 finance companies suspended earlier would be closed down. Similarly, the IMF made a recommendation to close 16 non-viable banks in Indonesia at the end of 1997 without adequate preparation to support the viable ones.

Despite inferences by many, the initial reform package by the Malaysian government was not totally comparable to the IMF programme. For one,

there was no commitment to raise domestic interest rates to support the currency or to control inflationary pressures. Neither was there any concrete strategy proposed for restructuring the financial system. At the very onset of the crisis, policies introduced were intended to strengthen the resilience of the financial sector so as to avoid systemic risks. On December 5, 1997, several austerity measures were unveiled by the finance minister. Among those introduced were the tightening of credit growth and allocation of credit to priority sectors. New company listings, right issues and corporate restructuring were frozen to ensure that liquidity would not be drained from the system. Further announcements were made by the central bank for strengthening the financial system. This included the reclassification of non-performing loans as loans that had been in arrears for six instead of three months. The central bank also pushed for consolidation of finance companies through mergers.

However, it soon became apparent that there were sharp differences of opinion within the government itself as to how the economy should be steered out of the crisis. This had resulted in many policy changes, and on occasion, even policy reversals (Ariff and Syarisa, 1998). The combination of fiscal and monetary austerity was stifling the Malaysian economy. Businesses were forced to declare bankruptcy due to escalating debt repayment and high cost of borrowing. Meanwhile, depressed consumer spending from nationwide layoffs, with many maintaining a cautious stance, dragged down the economy further. Amidst the panic, the ringgit continued to slide downwards while the stock market was in the verge of collapse.

Initiatives to liquidate debt-ridden banks and squeeze credit outlays drove shock waves across Southeast Asia that local banks would either be closed or forced to merge and accept painful reforms. This led to a massive capital flight from local banks to foreign banks. Sadly, this move blanketed across all banks alike, regardless of their financial sounding, thereby creating a severe liquidity crunch in the country.

The Malaysian Experience

Only much later did the Malaysian government embark on concrete measures to recapitalise and restructure the banking system. In May 1998, an Asset Management Company (Danaharta) was established to manage nonperforming loans and assets in the banking system. This is akin to AMC implemented by the Central Bank of Thailand in October 1997. Another special purpose vehicle (Danamodal) was also introduced to spearhead the recapitalisation of the banking sector. However, difficulties in obtaining the required funds by the Malaysian government precluded concrete policy initiatives. At the same time, there had been an apparent conflict between

Prime Minister Mahathir and his deputy and Finance Minister on how to best manage the economy, causing ambiguity about who was in charge. The situation worsened with the establishment of the National Economic Action Council (NEAC), which was seen as an attempt to override the finance minister (Jomo, 1998). Many observers were of the view that this high-level conflict contributed to policy indecisiveness and ineffectiveness in tackling the crisis thereby increasing the "political risk premium".

With limited degree of freedom in place to revive the waning economy and subsequent downgradings by the international rating agencies, selective capital controls were introduced. A day after these controls were imposed, Finance Minister Anwar Ibrahim was dismissed. With these "distractions" put aside, the government was able to embark on a monetary and fiscal stimulus package to prevent further contraction of the economy and to concentrate on reflating and restructuring both the financial and corporate sector.

Almost immediately, the three-month intervention rate was lowered from 9.5 to 8%. This was later followed by the two reductions made in the statutory reserve requirement (SRR). From 8% on September 1, 1998, the SRR was reduced to 6 and later 4% in less than three weeks. Consequently, RM16 billion was released into the banking system. To reduce lending rates, the central bank also imposed a maximum limit of 2.5% on credit margins (from about 4% earlier) and revised the Base Lending Rate formula. It then acted to reverse the decline in loan growth by announcing a minimum 8% loan growth for financial institutions to be achieved by year-end 1998.

Rescue Operations

The rise in non-performing loans (NPLs) has been a cause of concern. Given the increasing rate of default in lendings, banks became more cautious of new loans. Apart from providing these banks a "breathing space" through the relaxation of interest rates, the government also reverted the definition of NPLs from three months in arrears to six-month in arrears in an attempt to downside it on paper. As at end-December 1998, the ratio of NPLs to total loans stood at 9%, based on the six-month definition, or 14.9% using the three-month definition.

Attention was then steered towards freeing the banks from the management of the mounting NPLs and recapitalising them to maintain the soundness of the financial system. Danaharta, which had been set up earlier, began to buy over the assets and NPLs from the banks, enabling the banks to write-off these loans, hence, ensuring their continued liquidity to fund other viable projects. Danamodal then began to undertake recapitali-

sation of the banking system. The exercise would require an estimated funding of RM41 billion (RM16 billion for Danamodal and RM25 billion for Danaharta).

The central bank has identified 14 commercial banks, 7 finance companies and 4 merchant banks as potential candidates for recapitalisation. Of these, eight banks, five finance companies and two merchant banks have NPLs exceeding 15% based on the six-month definition. Using the yard-stick of the BIS, NPL of over 15% is an indicator of a troubled bank. A stress test carried out by the central bank has shown that RM16 billion is adequate for the recapitalisation of financial institutions giving them a capital adequacy ratio of over 8%, the critical minimum by BIS standards.

Consolidation in the financial institutions is necessary given the small market in Malaysia. The banking sector in the country is overcrowded due to the large number of players jostling for market share. For example, with as few as four or five big banks serving larger markets compared to that in Malaysia, the existence of 36 commercial banks in the country along with other financial institutions such as finance companies, merchant banks and discount houses has resulted in a highly fragmented market with even bigger banks finding it difficult to reap economies of scale. Also with the increasing need to make huge investments in Information Technology to keep abreast with international banking developments, many of the smaller banks will be unable to make the necessary IT investments.

Mergers in the financial institutions are seen as a solution. The central bank aims to reduce the number of local banks from 22 to 16, although forced mergers are clearly out of the equation. There are also plans to reduce the number of finance companies to eight. Thus far, seven finance companies have been absorbed by their parent companies. However, there has not been much progress in the consolidation of commercial banks, which form the backbone of the banking system and make up some 70% of total bank assets (MIER, 1998). There is scope to reduce the number of commercial banks in Malaysia, which is 36 currently. With the exemption of one or two banks, most are too small to compete at the international level. Consolidation of the banking sector will need to pick up.

Financing the Recovery

The Malaysian government has estimated that a total of RM62 billion is needed to finance the economic recovery plan. In addition to the sum of RM41 billion needed for Danaharta and Danamodal, RM31 billion is needed to finance the Infrastructure Development Fund (RM5 billion) and the Seventh Malaysian Plan (RM26 billion). The sources of funding have also been identified (Table 3). More than two-thirds of the total funding

Table 3 Sources of Funds, 1999-2000 (in billions of Malaysian ringgits)

Source	Amount
Foreign sources	
Bilateral	10.0
Multilateral	3.0
Sovereign bonds/loans	8.0
Total foreign sources	21.0
Local sources	
Outstanding cash balances:	
Provident, pension and insurance funds	42.0
Annual inflows:	
Provident, pension and insurance funds	30.0
Oil revenue	9.0
Total local sources	81.0
Grand Total	102.0

Source:

White Paper, Status of the Malaysian Economy.

required would be derived from domestic sources. Prior plans to raise funds abroad were aborted when both Moody's and Standard & Poor's downgraded Malaysia's sovereign rating from A2 to BAA2, and from A- to BBB+, respectively. Subsequent rating downgrades for both Malaysia and local corporations to just investment grade or below have made it very costly to secure external funds.

The IMF Programme

From the very beginning, the IMF took great strides to overcome the structural imbalances which impinged on the three worst-hit countries of Thailand, Indonesia and South Korea. The typical IMF programme seeks to restore macroeconomic stability and hence lays the foundation for sustainable growth. Funds would be disbursed upon the strength of each country's implementation. However, the support of the international community comes with a cost. This includes the loss of community control over natural resources and growth without economic democracy or expansion of political participation.

Country Experiences

Among the three countries, Thailand had moved the fastest in the pace of financial liberalisation. What was perhaps the most significant step taken

by the Thai government to deregulate its financial system was the establishment of the Bangkok International Banking Facility (BIBF) in 1993. With the BIBF, both local and foreign banks were able to engage in both offshore and onshore lending activities. Soon, most foreign capital flows into Bangkok were in the form of BIBF loans, reaching about \$50 billion over the three-year period. This made the baht more vulnerable to attacks, which happened as early as February 1997 by foreign speculators known as hedge funds. By July, official reserves, that were used to defend the baht, declined significantly, thereby forcing the Thai government to seek IMF aid.

The IMF policy conditionalities highlighted, amongst others, the development of the institutional framework for the systematic financial restructuring, to better withstand international competition. As a first step, the IMF took charge to oversee the screening of rehabilitation plans submitted by the 58 finance companies, which had earlier been suspended by the Bank of Thailand. In fact, the Financial Restructuring Authority (FRA), which had initially been assigned to undertake the screening had been side-stepped. It was later announced that 56 out of 58 finance companies were subjected to liquidation. Reportedly, the subsequent disbursement of loans by the IMF was dependent on the government's announcement. Supervision of the commercial banks also tightened, upgrading loan classification and provisioning and recapitalisation to international standards. To foster recapitalisation, restriction on foreign ownership was relaxed, allowing foreign investors to acquire majority shareholding in financial institutions for up to 10 years.

In Indonesia, the structural reforms, aimed at establishing international standards, had largely depleted public confidence. The various measures introduced to stabilise the Indonesian economy involved tremendous social costs. Like in Thailand, the closure of 16 insolvent banks under IMF pressure came at the time the market had already turned jittery. The situation nevertheless deteriorated to a near breakdown of intermediary functions of banks. On January 27, 1998, a programme for reforming banks and solving the problem of private foreign debts was announced. It included a temporary freeze on corporate debt servicing by Indonesian companies, along with a new government agency to oversee bank reforms, including closing down non-viable banks and selling assets. This caused a capital flight out of the country with the financial sector close to jeopardy. Since the Indonesian banking sector as a whole lost its credibility, foreign exporters began to refuse the letters of credit issued by Indonesian banks. The situation was aggravated with the political uncertainty and social unrest in May which disrupted productive and distribution activities. As a result, the country was unable to import raw materials needed for re-exports. This

sent the economy into severe recession with hyperinflation and continued downward pressure on the rupiah. The chaos continued even until the resignation of President Suharto on May 21. On October 19, the IMF and the Indonesian government signed a new letter of intent, clearing way for the further release of assistance funds for the country.

Reform of South Korea's long-troubled financial sector also began through the external pressure of the IMF funding. This began with the nationalisation and closure of several banking institutions, which had invested heavily in closely connected companies. On May 20, 1998, the scope of funding for revival of the financial sector was set at 64 trillion won, including 14 trillion won already paid out. Of the new 50 trillion won, there was 25 trillion won of debt purchases by the Korea Asset Management Corporation. Reportedly, the government, through the Asset Management Corporation, purchased about half of the impaired loans discounted to face value. It also subscribed to subordinated debt issued by commercial banks (sufficient to raise the capital adequacy ratio by 1-2 percentage points).

It was apparent that policy responses from the three countries had resulted in an overadjustment in the real sector and credit crunch wherein viable but liquid companies faced the same difficulties as the unviable ones. Emphasising the removal of structural rigidities, the IMF programme had failed to tackle the more pressing issues, like the private debt problem. These various policy mistakes help to explain why the slump has been so protracted. Moreover, the policy conditions imposed have involved farreaching structural changes that do not relate in any direct way to resolving the financial crisis at hand. They touched on the governance of the economy, including politically sensitive issues that lie beyond the mandate and competence of the IMF.

Foreign Buyout

All three countries were forced to lift restrictions on ownerships in their financial institutions, to allow for greater foreign participation. In Thailand, the FRA was given sweeping authority in that it could ease restrictions on foreign ownership of financial institutions and nominate directors, as well as liquidate the assets of troubled financial institutions by offering them for sale through general bidding. Presently, over 49% of shares in financial institutions can be acquired by foreign nationals, though shareholding must be reduced to 49% or lower in ten years time.

Economic reforms in South Korea were closely followed by the opening up of both domestic financial and industrial markets. Critics noted that the slow disbursement of the IMF funds was partly because the US in particu-

lar was keen to extract additional concessions from South Korea in return for the tranche of cash. Financial liberalisation included liberalisation of the bond market by end-1997, allowing foreign banks and financial institutions to set-up wholly owned branches ahead of schedule and closing merchant banks and reducing risky assets to make them more attractive for foreign takeover. In addition, South Korea had to agree to open domestic markets to cars and other key Japanese industrial goods by mid-1999.

Is Recovery Taking Root?

In hindsight, the financial crisis came as a blessing in disguise for the East Asian economy. It has precipitated and accelerated economic reforms that ought to lead to more stability in the future. Glimpses of turnaround can be seen for most countries. At the very least, major economic indicators show a more stable situation when compared to a year ago. The exchange rates for the three hardest hit countries have been somewhat less volatile in recent months. Interest rates have dropped to levels needed to stimulate domestic demand and governments are running budget deficits to spearhead the recovery. Most importantly, consumers around the region have shown some return of confidence. An increase in confidence is necessary to precipitate a rebound in domestic consumption, which at the moment is crucial for economic recovery.

The IMF has indicated that it expects Thailand to be the first Asian economy to pull out of the crisis. The Thai government has forecast economic growth of 1% for 1999, following a 8% economic contraction in the year before. After contracting more than 5% in 1998, South Korea posted a higher than expected growth of 4.6% in the first quarter 1999. In Malaysia, the economy apparently stabilised with the imposition of capital controls and was seen bottoming-out in recent months. MIER projected some growth of 1.3% 1999, stemming from a sharp contraction of 6.7% in 1998 (Table 4).

With seemingly positive indicators, it is perhaps pertinent to reflect upon what went wrong in 1998 and whether these problems have been rectified. At the upfront, currency speculation rampant over the previous months has eased tremendously. In Malaysia, the imposition of capital controls and the pegging of the ringgit to the US dollar did immediately fend off all speculators of the ringgit. Coincidentally, the attacks on the other regional currencies had subdued and although their levels are far from those seen in the pre-crisis level, these regional currencies had in fact regained strength. Nevertheless, with the ringgit now pegged to the US dollar, the Malaysian authorities are able to ease monetary policy somewhat without putting undue pressure on the ringgit. The detached link

Table 4 Growth of Real Domestic Product, 1997-1999

GDP (percentage)

	1997	1998	1999
Malaysia	7.7	-6.7	1.3*
Indonesia	4.9	-13.7	-4.0-0.0
Philippines	5.2	- 0.5	2.5-3.2
Singapore	8.0	1.5	-1.0-1.0
Thailand	-0.4	-8.0	1.0
South Korea	5.5	-5.4	3.2
China	8.8	7.8	7.0
Hong Kong	5.3	-5.1	0.5
Taiwan	6.8	4.8	4.7

Inflation (percentage)

	1997	1998	1999
Malaysia	2.7	5.3	4.0
Indonesia	10.3	77.6	12.0-17.0
Philippines	6.0	9.7	8.0-9.0
Singapore	2.0	-0.3	-1.0-0.0
Thailand	5.6	8.1	3.0
South Korea	4.5	7.5	3.0
China	0.8	-2.6	2.0
Hong Kong	5.7	2.6	-2.0
Taiwan	0.9	1.7	1.6

Current Account Balance (as percentage of GDP)

1997	1998	1999
-5.1	12.9	10.4
-2.3	4.4	2.5
-5.3	1.1**	0.6**
15.8	20.9	_
-2.0	12.3	8.5
-1.9	_	7.0
3.3	2.4	1.8
-3.5	_	_
2.7	1.3	_
	-5.1 -2.3 -5.3 15.8 -2.0 -1.9 3.3 -3.5	-5.1 12.9 -2.3 4.4 -5.3 1.1** 15.8 20.9 -2.0 12.3 -1.9 - 3.3 2.4 -3.5 -

Notes:

* MIER

** as percentage of GNP

Source:

IMF, World Economic Outlook, December 1998.

between the exchange rate and interest rates, allowed the central bank to reduce the cost of borrowing, which were until then, suffocating businesses

and increasing the probability of loan defaults. Insulating its economy from the uncertainties of the external sector, allows the government to fully concentrate on revitalising and restructuring the stricken economy. Adjustment in the interest rates, for instance, is solely to add boost to the economy. Elsewhere, fine-tuning interest rates is necessary in order to both stabilise the currency and to stimulate the economy.

Various measures had been implemented to address the deficiencies and inadequacies in the banking sector. In all countries under the IMF umbrella, banking restructuring precipitated in the sale of assets, bankruptcies and a rising unemployment rate (FEER, April 8, 1999). These are consequences of massive overcapacity in a lot of areas. Even Singapore, with the healthiest of financial sector, has embarked on an aggressive plan to ensure the country's competitiveness in banking systems. The Singaporean authorities recently announced the relaxation of the 40% cap on foreign stake in local banks and allowed six foreign banks to open up more branches. In Korea, the crisis had forced many *chaebols* to downsize. The Daewoo group, for instance, announced plans to sell many of its assets, including one of the world's biggest shipyards, hotels, telecom companies and units making trucks and engines, to repay its debts. President Kim Dae Jung is honouring its pledge to sell weak or failed banks to foreigners. According to an official in the Finance Ministry, "The crisis has taught us that we can't prevent exposure from the global economy" (Business Week, May 3, 1999).

Undeniably, Malaysia has been successful in putting in place a credible framework to deal with non-performing loans and to recapitalise the banking sector. In 1998, RM19.2 billion in NPLs from the financial system has been acquired and managed by Danaharta. This had led to a decline in the NPL ratio of the banking system to 8% and 13.6% under the six-month and three-month classifications respectively. NPLs was at the highest in August 1998, at 11.4% based on the three-month classification. As in January 1999, the risk-weighted capital ratio of the banking system stood at 11.9%, way above the minimum of 8% recommended by the BIS. The question, however, remains whether there is sufficient funding requirements for both Danaharta and Danamodal to carry out their tasks. Together with the higher budget deficit (resulting from the fiscal stimulus package to boost economic growth) requiring financing, this places increasing pressure on securing external financing (MIER, April 1999).

Given the closed capital market that Malaysia is currently experiencing, attracting foreign investments into the country could prove to be challenging, especially when regional countries are also steadily recovering. As these countries chart path for recovery, foreign investors will start to trickle in. As it is, there had been an increase in foreign capital inflows into Thailand and South Korea in the third quarter of 1998. Gradual increases

in the percentage of foreign participation is in the medium to longer term interest of the country from a competitive viewpoint. If Malaysia is slow to opening up to greater foreign participation, the risk is that the best foreign investors will flock into neighbouring countries in the region. This would be disadvantageous for the country in the longer term.

V Policy Implications for Preventing Future Crises

The need to prevent the occurrence of a crisis is obvious. As the East Asian experience so clearly demonstrates, such crises enormously disrupt people's lives and, economic and social development. Besides, the huge cost of economic and financial restructuring would be borne by respective governments and citizens in the affected countries. With this in mind, a number of interesting proposals for crisis prevention are currently being discussed. While each of them has a role to play in strengthening the international financial system, it is unlikely that these measures alone could prevent future crises.

Reconciling Greater Competition with Tighter Regulations

Beneath the irrationality of international investors which had caused widespread skepticism in the workings of the international capital market, there is a large number of weak financial institutions with inadequate supervision and regulation. As asserted by the Asian Development Bank, the most important aspect of promoting competition in a financial industry is to ensure that the industry is "contestable". What this essentially means is that barriers to entry must be reduced or eliminated. Although the East Asian countries have begun liberalising their financial system since the 1990s, this was not in terms of a more competitive and open system, but rather it meant that banks owned by domestic players had an easier time in obtaining licenses and were allowed to seek deposits from the public without much capital or scrutiny of their lending practices (Ichimura, 1998). Often, the easier access is due to close relations between the governments, banks and corporations.

The implicit protection of local financial institutions by the governments has led to the problem of moral hazard which is closely associated with reckless borrowing and lending by these institutions. Poor and inadequate banking supervision was a major reason for the imprudent lending. Lending went into adverse investment selections. In the case of Korea, most of the borrowings of the *chaebols* were for reckless expansions and diversifications of business empires. Hence, not only a clear and rational set of financial disclosure requirements need to be drawn up, but also

disclosure requirements should be transparent to allow participants in the financial markets to put pressure on financial institutions to engage in prudent lending practices.

Proper Timing and Sequencing of Financial Liberalisation and Deregulation

The East Asian crisis proved that the costs of liberalisation would overwhelm the benefits if the financial system is weak. In the IMF analysis, capital account liberalisation is problematic when macroeconomic conditions are not adequate, or when not accompanied by reforms in the domestic financial system. Accordingly, the liberalisation of trade and the real economy should precede the liberalisation of the financial sector in order to prevent perverse investment selection. In addition, the sequence of financial sector reform should initially emphasise domestic financial markets and only later should external account transactions be fully liberalised.

While the liberalisation of the financial sector, trade sector, and capital markets proceeded rapidly in many countries, the development of an adequate supervisory and regulatory system in the financial sector lagged behind. In Thailand, the establishment of the BIBF in 1993 encouraged local firms to borrow abroad at low interest rates and thereafter allowed these firms to redeposit those borrowings on shore at higher rates. The liberalisation in financial flows took place in an environment of fixed exchange rates, and even with the persistence of large current account deficits, the Thai authority insisted in maintaining the peg to the US dollar. This eventually drove the economy to the brink of default.

Proper Supervision at the International Level

The destabilising effects of short-term capital flows on the economy (even where the fundamentals are strong) has received widespread concern. It is now an accepted fact that short-term capital flows have played an important role in undermining the stability of the world capital and financial markets. As the frequency and magnitude of the financial crises intensify, they should no longer be accepted as mere aberrations in the world capital market. Supervision and governance should be stepped up and improved. Since international official funding has played and probably will continue playing a large role in providing finance during crisis periods, to avoid moral hazard, there is a clear need for international and source country regulation that will discourage short-term capital inflows that may contribute to a costly crisis. If such international and source country regulation is not developed, international private creditors will continue to

assume excessive risks, in the knowledge that they will be bailed out if the situation becomes critical.

Calls for the need to improve supervision and regulation of international capital flows to emerging markets began to be heard after the Asian crisis. ASEAN leaders have also called for a monitoring mechanism to be implemented as an early warning defense system against any future crisis. It was reported that the ASEAN Surveillance Mechanism would be established within the general framework of the IMF with the assistance of the Asian Development Bank following the Manila Framework agreed upon in November 1997. The ASEAN Surveillance Mechanism would also provide the channel by which countries in Southeast Asia could discuss and coordinate their economic development policies with each other. It was stressed that the measure was in no way an attempt to undermine the sovereignty of the individual countries, but instead it is a way to integrate individual country policies so that there will be a single, clear policy of recovery for Asia.

Lately, there has been increasing support for better regulation in the global markets. The Asian and Russian crises are forcing rules on the global market. It is now openly recognised that lenders and borrowers must be regulated, and negotiations have begun over what strictures to impose on them. There have been talks among the officials of the World Bank and the IMF on raising reserve requirements on short-term loans, and of requiring bondholders to postpone repayment in the event of a crisis. The Chilean approach in curbing short-term borrowing has been given due attention. Chile was the first country to introduce central bank "reserve requirement" on all foreign borrowing, at the rate of 20% (which was later increased to 30%) for loans up to a year. All foreign borrowings and investments are taxed, but its incidence on short-term borrowing is particularly high.

These issues are no doubt complicated and the policy debate needs to be underpinned by improved knowledge. However, they need to be urgently addressed, so as to avoid costly financial crises from happening again and/or to better manage them if they unfortunately should happen.

VI Concluding Remarks

Signs of recovery for the region have already emerged in the first quarter of 1999. Leading the recovery process is South Korea, which registered a positive GDP growth of 4.6% in the first quarter of 1999. After contracting by 8% in 1998, Thailand showed some growth of 1.5% in the first quarter. Even Indonesia, at times described as a basket-case, has posted a positive 1.3% growth in the same quarter.

The recovery in Malaysia, which had opted to impose exchange and capital controls may seem slow in comparison with those in South Korea, Thailand or even Indonesia. While these countries are reporting positive growth in the first quarter of 1999, Malaysia appears to have registered a small negative growth in that period. The recent sovereign bond issue was a bold attempt by Malaysia to test the water after the downgrading in its sovereign ratings in August 1998. Malaysia's bond were sold at 330 basis points above the US Treasury equivalent, which is quite high compared with South Korea's 240 basis points or Thailand's 230 points, but marginally lower than the Philippines' 350 basis points. It is certainly not advisable to seek external funds at 8.86% yield rate, as the high premium will exacerbate the country's external debt burden. Besides, foreign funds are no substitute for foreign equity capital. As Malaysia's recovery gets stronger and investors' confidence continues to improve in the next few quarters, there will not only be an increase in the inflow of foreign equity capital but also a greater offer of external funds at reasonable rates.

Yet, it appears that conventional measures have worked quite well in Indonesia, South Korea and Thailand, just as unorthodox measures have in Malaysia. Nevertheless, it would be too premature to jump into any conclusion about the efficacy and effectiveness of such policy measures. The turnaround that we now detect in the crisis-hit countries may or may not have much to do with specific policy measures after all. Arguably, the recovery may be largely due to anonymous market forces adjusting themselves rationally and getting their bearings right at last after the irrational overshooting that led to the crisis.

Ironically as it may sound, a quick recovery may not be in the interest of East Asia, as it would ease the pressure on East Asian economies to undertake serious economic reforms. The danger is that too fast a recovery would lock-in inefficiencies, sowing the seeds for the next crisis, as it would amount to going back to business as usual. Should we fail to learn lessons from history, history may only repeat itself.

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Comment on "East Asian Response to the Instability of Financial Markets, with special reference to Malaysia," by Mohamed Ariff

György Szapáry¹

Central European Reaction to the Financial Crises

The paper by Mohamed Ariff and Ong Gaik Ean gives an interesting description and analysis of the origin of the financial crises in East Asia and the policy responses of the countries involved. It points out the role of short-term speculative capital movements in triggering the crises and draws some important policy implications for preventing future crises, such as the proper sequencing of financial liberalisation, better supervision and regulation coupled with adequate disclosure requirements, and more flexible exchange rate regimes when the fundamentals do not support a fixed rate.

In my comments, I would like to complement the experience of the East Asian countries with that of the Czech Republic, Hungary and Poland, three countries which were not involved in causing any of the recent international financial crises, but were more or less seriously affected by them. There were three international crises in the past three years: the East Asian crisis of 1997,² the Russian crisis of August 1998 and the Brazilian devaluation of January 1999. By far the most serious impact on the economies of the three Central European countries was caused by the Russian crisis. This is not surprising given the geographic closeness of Russia to these countries. The important point to note is that "contagion" occurred even though these countries' trade with Russia is much less significant than they used to be. In 1996, exports to Russia accounted for 3%, 6% and 7% of the

therefore, the East Asian crisis is pinpointed with the date of October 23, 1997.

¹ These comments are based on the findings and analysis of a study to be published later on the impact of the financial crises on five small open European economies (the Czech Republic, Hungary, Greece, Israel, Poland) prepared by Zsolt Darvas and Gyögy Szapáry.

² The contagion effects of the East Asian crises on the international financial markets started with the sharp drop of the Hong Kong stock prices in October 20-23, 1997. In the Charts,

total exports of the Czech Republic, Hungary and Poland, respectively. Over 70% of the exports of Hungary and Poland and over 60% of the exports the Czech Republic go to the industrial countries. Clearly the fact that the three Central European countries were regarded as "emerging markets" and "transition economies" geographically close to Russia was the dominant factor leading to the contagion.

The main spill-over effects of the financial crises on the three countries under consideration were capital outflows accompanied by pressures on the exchange rates, fall in equity prices, and upward movements in interest rates. However, the magnitude and the duration of these effects varied among the countries. The three countries share similarities, but there are also significant differences between them. All three countries are small open economies with weak links to East Asia and Brazil and somewhat more important but nevertheless weak economic links to Russia. They are closer to the developed world than countries usually classified as emerging markets because of the important trade links and financial integration with Western Europe. All three countries are at an advanced stage of accession negotiations with the European Union and are among those transition countries which have made the most progress in reforms toward fullfledged market economies. However, they still have a long way to go to catch up with the developed world in terms of modernisation and standard of livings.

On the other hand, these countries exhibit diversity in the areas of macroeconomic situation, progress with structural reforms, and the monetary and exchange rate regimes adopted. Since the impact of the financial crises on the real economies of the Central European countries under review were far less dramatic than those on the East Asian economies, I will focus my remarks on the possible links between the different exchange rate regimes adopted and the effects of the crises. In the Czech Republic, the central bank has allowed the currency to float freely and has adopted inflation targeting since the fixed exchange rate regime was abandoned in May 1997. Hungary has adopted a preannounced crawling peg, with a narrow band of 2.25% since March 1995. Poland has had a preannounced crawling peg first with no band which was widened in steps to 15% currently.

Impact on Exchange Rates

Following each of the three financial crises, the nominal exchange rates depreciated in all three countries under review due to an outflow of capital (Chart 1). As expected, the depreciations were larger in the more flexible exchange rate regimes of the Czech Republic and Poland than in the

narrow band regime of Hungary. However, the depreciations proved to be temporary as all currencies strengthened after the crises. The East Asian crisis brought less depreciation than the Russian crisis, which underlines the significance of the regional aspect of market reactions. Following the Brazilian crisis, the Czech and Polish currencies depreciated almost as much as after the Russian events and the subsequent recovery was also much weaker. This coincided with a weakening of growth performance and the external positions of the Czech Republic and Poland and hence the depreciation of their currencies probably also reflects a change in market sentiment about the fundamentals of these economies.

In Hungary, with the exception of a couple of months following the East Asian crisis when the forint was slightly below the strong edge of the band, the forint remained at the strong edge almost throughout the entire period from the adoption of the crawling peg in March 1995 until the Russian events (Chart 2). During this period, the National Bank of Hungary engaged in sterilised intervention. Following the collapse of the ruble, the NBH had to intervene for a few weeks to defend the forint, but the net loss of reserves was relatively limited: reserves fell by \$1.5 billion to \$8.2 billion (4.3 months of imports) between end-July and end-October 1999. Subsequently, confidence gradually returned and the forint moved back to the strong edge of the band by the end of 1998. It weakened again after the Brazilian events and returned close to the strong edge of the band in May 1999.

The above movements in the exchange rate of the forint can be well traced through the movements in non-resident holdings of Hungarian government securities (Chart 3). After the East Asian crisis, these holdings fell by about \$300 million, from a level just over \$600 million. In the subsequent 10 months, these holdings jumped to almost \$2 billion only to fall back to about \$700 million after the Russian crisis. Then again they rose to reach \$1.6 billion by early 1999, fell by \$300 million in the wake of the Brazilian events and increased again to reach about \$1.4 billion in June, 1999. These movements show that holdings of government securities constituted one of the main vehicles for speculative capital flows which triggered the fluctuations in the exchange rate. Large withdrawals from the equity markets and winding down of speculative open currency positions were the other main sources of the pressure on the exchange rate in the wake of the Russian crisis. The Hungarian authorities were aware that some of the capital inflows represented fickle capital and therefore engaged in sterilised intervention to mop up excess liquidity and build up reserves to cushion any sudden outflow of capital that could occur in response to international events.

Developments in the real exchange rates show the impact on competi-

tiveness of the different exchange rate regimes adopted (Chart 4). In the more flexible regimes of the Czech Republic and Poland, the real exchange rates were allowed to appreciate significantly in response to the capital inflows. In Hungary, the authorities have limited the appreciation through sterilised intervention. The Hungarian authorities placed special emphasis on maintaining competitiveness, due in part to the relatively high external indebtedness of the country, and therefore accepted a less rapid disinflation than would have been the case if they had let the currency to appreciate. Nevertheless, disinflation in Hungary has been approximately as fast as in Poland where the real exchange rate appreciated significantly. The crisis-induced depreciations of the real exchange rates were also more pronounced in the Czech Republic and Poland than in Hungary. Thus, the volatility of the real exchange rate has been less pronounced in Hungary than in the two other countries. Sterilisation in Hungary, of course, involved a budgetary cost, but that cost was relatively limited (estimated at 0.16% of GDP per year from March 1995 to end-1997)³ compared to the benefits provided by the maintenance of competitiveness and the credibility of the exchange rate.

Impact on Interest Rates

The East Asian and Brazilian events had little or no effect on short-term nominal interest rates in the countries under consideration (Chart 5). The Russian crisis did not affect the nominal interest rates in the Czech Republic and Poland, but increased the nominal rates by about 5 percentage points (to 21%) in Hungary. Thus, one could argue that the less flexible exchange rate regime led to a jump in interest rates in Hungary; had the exchange rate been let to depreciate further, interest rates would not have increased. However, a more nuanced conclusion emerges if one looks at the evolution of interest rate premia (Chart 6), calculated as the difference between domestic and foreign interest rates adjusted for the preannounced exchange rate depreciation in Hungary and Poland (no such adjustment is made in the Czech Republic where a free float is in effect). From mid-1997 until the Russian crisis, the interest rate premium in Hungary was much lower than in the other two countries. This probably reflected the good fundamentals of the Hungarian economy (accelerating growth rate, falling inflation and declining fiscal and current account deficits), which strengthened the credibility of the narrow band exchange

³ See György Szapáry and Zoltán M. Jakab (1998), "Exchange Rate Policy in Transition Economies: The Case of Hungary", In: *Journal of Comparative Economics*, December, pp. 691-717.

rate regime. However, following the Russian crisis, the fear of contagion generated more uncertainty regarding the Hungarian exchange rate regime, which caused the interest premium to increase, but only to the level of that of the Czech Republic and Poland. Therefore, a more valid argument is that a certain level of risk commands a certain level of premium and that following the Russian crisis, the risk of Hungary perceived by the markets increased to the level which had prevailed in the two other countries. As tensions in the international financial markets eased, the premia in all three countries declined, but the premium in Hungary remained at roughly the same level as in the other two countries. In other words, the regional effect became dominant and Hungary was no longer able to benefit from lower risk premium by distinguishing itself from the other countries by its economic performance. Developments in real interest rates show a similar picture: real interest rates in Hungary were lower prior to the Russian crisis, but after the crisis they rose approximately to the levels prevailing in the other two countries (Chart 7).

It is important to point out the regional effect, as it shows that at a time of a financial crisis in a region, markets suddenly reassess the risks attributed to those countries of that region which are regarded as emerging markets. That said, the deterioration of the Hungarian current account position, even though fully financed by non-debt creating capital inflows, has probably contributed to the perduring of the higher level of interest rate premium.

Stock Market Reactions

From end-1995 to the East Asian crisis, Hungarian stock prices tripled in dollar terms, while in the Czech Republic it rose by about 70% and in Poland it remained approximately unchanged (Chart 8). Several factors explain the Hungarian performance: the credibility of policies buttressed by the inflow of the FDI and the progress in privatisation and structural reforms, and the consequent good growth prospects; tax incentives for investments in equities; and the liquidity of the stock market. In addition, stock index futures and lombard stock buying reached relatively high levels in Hungary, while they were negligible in the two other countries. It is estimated that about half of the capitalisation of the Budapest Stock Exchange is on account of foreign investors. As a result, the Hungarian stock prices were much more affected by the financial crises than those in the Czech Republic and Poland. Following the Russian events, the Budapest Stock Exchange index fell by half and has only partly recovered since then. Nevertheless, it still is the double of its level of end-1995, while in the two other countries stock prices stand at about their 1995 levels in dollar terms.

The sharp fall in equity prices following the Russian crisis caused losses in the financial sector in Hungary. Several banks had to infuse capital to their brokerage firms to cover losses due to the stock market crash, as well as due to the depreciation of the currency. The infusion of capital was relatively small, estimated at \$30 million. Out of 87 brokerages firms, 12 firms not backed by banks went bankrupt. Before tax profits of commercial banks declined substantially in the second half of 1998, largely as a result of the above mentioned factors. However, no bank went down because of the crisis and the banking system as a whole has remained sound, with the average capital adequacy ratio staying at 17% at end-1998, the same as at end-1997.

Concluding Remarks

The most immediate impact of the international financial crises on the three Central European countries considered were capital outflows which led to depreciations of the currencies. These depreciations turned out to be mostly temporary and the exchange rates strengthened afterwards, although following the depreciations in the wake of the Brazilian crisis the Czech and Polish currencies did not recover. The crises had little lasting impact on real interest rates except in Hungary, where following the Russian events real interest rates rose to the higher level prevailing in the Czech Republic and Poland. The fall in equity prices was the sharpest in Hungary where they had increased the fastest earlier. GDP growth was not directly affected due to the weak trade links with the crisis areas. The most important effect on growth would be indirectly via slower growth in the EU to the extent that the crises have negatively impacted growth in that region. In addition, in Hungary growth would be affected, ceteris paribus, by the higher real interest rates and the sharp fall in equity prices to the extent that the latter affects the investment activity of firms. One conclusion that emerges from this experience is that Hungary, which was able to benefit from its good economic performance and progress in structural reforms prior to the Russian crisis, a benefit that manifested itself in lower interest rate premium and buoyant equity prices, seems to have lost at least part of this benefit after the Russian crisis as a result of the "regionalisation" of the risks perceived by the markets. It is difficult to assess at this point to what extent the weakening growth performance and external position of Hungary also played a role, since the same weakening has also occurred in the Czech Republic and Poland.

It is noteworthy that the more rigid exchange rate regime in place in Hungary performed well during the crises, without causing excessive loss of reserves. At the same time, it protected competitiveness better than the more flexible exchange regimes in the two other countries, allowed as rapid disinflation as in Poland, and ensured for a non-negligible period of time lower interest rate premium. Of course, one cannot attribute these benefits to the exchange system *per se*, since that system could be maintained only with the support of other policies, namely the substantial fiscal adjustment that took place in Hungary during this period and the significant progress with structural reforms, including consolidation of the banking system and privatisation. A narrow-band exchange rate regime is sustainable only if other policies adequately support it. When this is the case, it can provide appreciable benefits and can perform well even under stress, but that also depends on the severity of the external shocks.

Chart 1 Exchange Rate Movements 1997-99 (July 31, 1998 = 100)

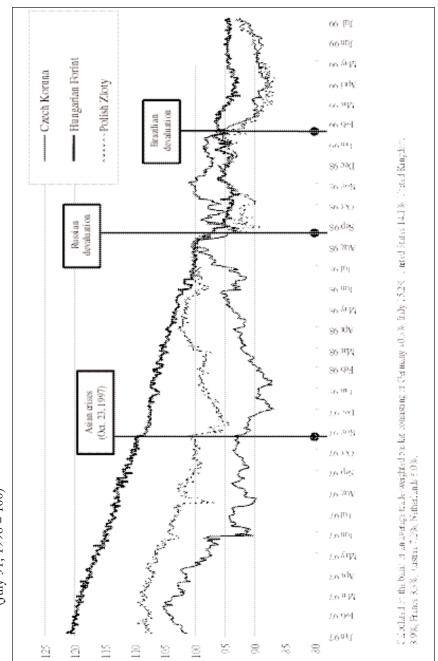


Chart 2 Exchange Rate of the Hungarian Forint within the Preannounced Crawling Band, 1997-1999

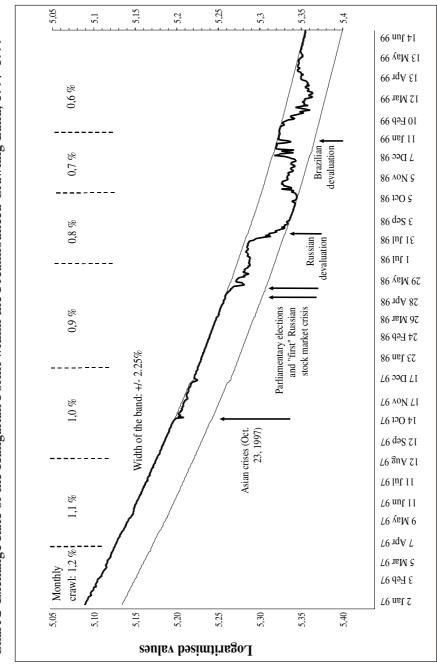
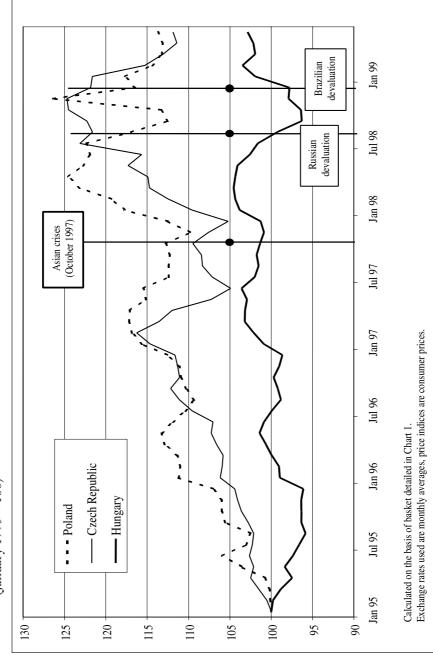


Chart 4 Real Exchange Rate Movements, 1995-99 (January 1995 = 100)



22 Med 30 devaluation ---- Czech Republic Brazilian 2 K 2 8 Hungary · · · · Poland devaluation Russian Ş S 9 慧 Oct. 23, 1997) Asian crises Sep 9. 21 4/8 12 'zech devaluation ð: 21.8 31 13 13 10 Ŷ \widetilde{Z} äi D. William or 9 2 12. 8 \subseteq 3 E 8 S w,

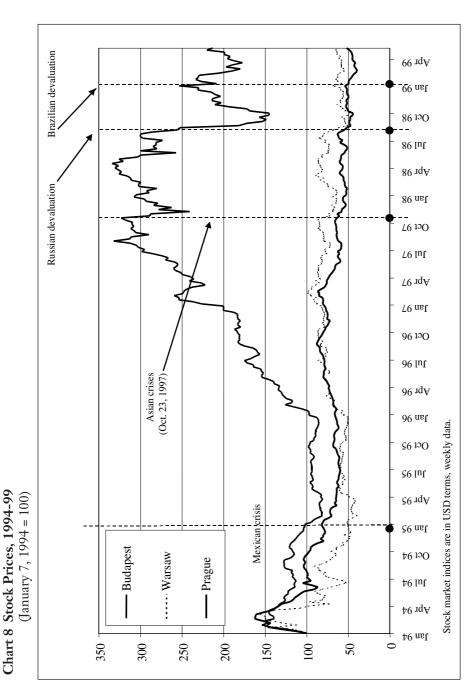
Chart 5 Short-Term (3-Months) Interest Rates, 1995-99

153

18% %91 14% 12% 10% 8% %9 4% 2% 0%19 May 99 18 Mar 99 devaluation Brazil 15 Jan 99 86 von 91 interest premium calculated on the basis of domestic 3-months interbank rates and 3-months forward looking preannounced devaluation 89 qs2 č1 Russian 86 Iul 21 14 May 98 13 Mar 98 (Oct. 23, 1997) Asian crises 12 Jan 98 76 von 11 76 qs2 01 3° 76 Iul 01 Czech devaluation 9 May 97 Foreign Interest rates are averages of countries detailed in Chart 1. 10 Mar 97 79 nst 7 96 AON 9 crawling depreciation (= zero in Czech Republic). 96 dəS S 96 Int s - Czech Republic 6 May 96 - Hungary 5 Mar 96 ----- Poland 3 Jan 96 26 von 2 26 dəS I 39 Inl 8 %9 %0 8% %91 14% 12% %01 8% 4% 2%

Chart 6 Interest Premia, 1995-99

necalitation Brazilian Jan 99 Russi an devaluati on 98 IN Chart 7 Real 3-Months Interest Rates (Calculated with Past Inflation), 1995-99 Jan 98 As an eases 74 Jul Orch más Jan 97 M196 - Czech Republic --- Hungary Jan 96 ----- Poland 741 95 Jan 95 0 ķς, 으



The Role of Domestic Policies in Stabilising Capital Flows in Latin America

Ricardo Ffrench-Davis¹

I Introduction

Latin American countries (LACs) have been strongly affected by the changes that have occurred in capital flows over the last quarter of a century. During the 1970s, a large supply of funds was made available to the region; then, during the 1980s, there was a generalised severe binding shortage of financing, and the region became a net exporter of funds. Between 1991 and 1994, it received a large capital surge again, only to experience another sharp reduction focused in Mexico and Argentina, and a generalised drop of portfolio flows in late 1994 and early 1995. The so-called "tequila" crisis was followed by a renewed access in 1996-97. In 1998-99, Latin America has been experiencing a new shortage of external financing, aggravated by a worsening of the terms of trade. The crisis centred in Asian countries has now been the origin of a new recessive macroeconomic adjustment in the region. It appears impossible to hide the significant financial instability. Another matter is where the instability originates and what are the effects and dynamics involved.

On all occasions, the changes that were first expansive and then contractionary, began on the international markets and had a strong impact on the national economies. Up to 1996, the successful emerging economies of Asia appeared to be immune to the instability associated with capital surges. The recent events, however, have shown that this is not so anymore. Some of the causes are common with those of Latin America. The new crisis provides a renewed opportunity to significantly reform the architecture of the international financial system, and to improve the domestic response so as to achieve sustainable macroeconomic equilibrium and growth. Here we concentrate on some features of policies in emerging economies and suggest reforms needed.

¹ The author is Principal Regional Adviser of ECLAC. The views expressed herein are the sole responsibility of the author.

In Section II we sketch the three capital surges experienced by LACs, since the 1970s, focusing on the 1990s. In Section III we review main macroeconomic effects generated by capital inflows, emphasising the analytical bases. In Section IV we compare the contrasting experiences of Mexico and Chile in the 1990s. In Section V we outline features of Asian emerging economies common with Latin American previous crises. Section VI summarises some policy lessons.

II Capital Flows to Latin America

Although the growth of international capital markets since the mid-1960s is partly a reflection of the growth of the world economy, including international trade, and the globalisation of production, it is also associated with purely financial factors, in which changes have occurred at a much faster pace. During the 1970s and the 1980s, many countries began to liberalise their financial sectors and to relax or eliminate foreign exchange regulations (Díaz-Alejandro, 1985; Devlin, 1989). This, together with the revolutionary advances that have taken place in data management and telecommunications technology, and the emergence of increasingly sophisticated financial techniques, contributed to a boom of national and international financial flows.

Table 1 Indices of Stock Exchange Prices, 1990-981

	Dec. A	ug-Oct. 1994	Dec. 1994	March 1995	Dec. 1995	Dec. 1996	June 1997	Dec. 1997	Dec. 1998
Argentina	17.3	100.0	77.5	63.4	84.2	100.1	121.9	117.3	84.0
Brazil	11.7	100.0	91.6	67.4	71.3	93.1	143.2	112.1	64.3
Chile	25.9	100.0	100.8	94.9	97.9	81.0	105.3	83.8	58.6
Colombia	15.0	100.0	93.4	88.6	69.6	72.7	90.3	90.2	50.9
Mexico	30.0	100.0	62.6	32.7	45.7	53.7	68.7	78.4	47.8
Peru	_	100.0	104.8	87.4	114.6	115.4	156.8	131.4	79.2
Venezuela	170.8	100.0	91.6	75.0	62.6	145.2	191.8	179.0	86.2
Latin Ameri	ca ² 24.1	100.0	80.9	58.6	66.4	76.9	106.2	96.2	59.4

Notes:

Source:

Indices based on series in International Finance Corporation, *Monthly Review of Emerging Stock Markets*, several issues.

¹ Values at end of each period, expressed in current US dollars.

² Average of the seven countries considered, weighted by amount of transactions. These countries include the overwhelming majority of transactions.

Table 2 Real Exchange Rate Indices, 1983-98¹ (percentages, 1987-90 = 100)

19	983-86	1987-90	1991	1992	1993	1994	1995	1996	1997	1998
Argentina	78.5	100.0	66.1	61.5	58.1	60.3	66.5	67.9	65.4	63.6
Brazil	117.2	100.0	97.2	104.8	96.8	85.5	69.5	64.6	63.2	64.5
Chile	68.8	100.0	100.1	96.5	98.1	97.2	92.7	88.0	80.7	81.3
Colombia	65.1	100.0	111.6	98.8	95.6	82.5	82.6	78.3	73.5	76.8
Mexico	96.0	100.0	81.0	74.6	70.9	72.7	107.2	96.7	84.2	83.4
Peru	136.4	100.0	55.4	55.4	57.3	56.6	57.0	55.0	53.7	53.4
LACs average (1	8) 97.4	100.0	88.5	87.9	83.3	79.2	82.5	79.2	74.7	74.5
Weighted Simpl	e 85.8	100.0	97.5	96.4	95.0	93.4	95.0	93.4	88.1	87.0

Note:

Source:

Calculations by the author, based on official figures processed by ECLAC for 18 countries.

Net capital inflows to Latin America averaged nearly 5% of GDP in both 1977-81, 1991-94, and 1996-97. In all three periods, the deficit on current account rose sharply, and exchange rates appreciated (see Tables 1 and 2; and ECLAC, 1995; 1998); naturally, imports grew more rapidly than exports, and external liabilities rose steadily. Indeed, all these variables reflected a growing macroeconomic imbalance after a while,² in many cases anchored to one dominant "balance"; that of a falling CPI associated to real exchange rate appreciation and climbing external deficits. Those recipient countries which had larger deficits on current account, heavily financed with short-term liabilities, and exhibiting stronger appreciating exchange rates, tended to become increasingly more vulnerable to external creditors;³ the outstanding case was that of Mexico in 1991-94. Creditors, given the high exposure of financial assets placed in the region, subsequently became more sensitive to any "bad news".

The dramatic increase of the flow of international financial resources in recent years has been more diversified during the current decade than it was during the 1970s. But the situation is potentially more unstable, inas-

¹ Annual averages of real exchange rate indices (main official) for each country with respect to the currencies of their main trading partners, weighted by the share of exports to those countries; inflated by external CPI and deflated by domestic CPI; for Brazil we weighted the Rio CPI index (2/₂) and the new official series of inflation (1/₃).

² The presence of significant disequilibria, in a framework of repeated statements regarding the need to maintain macroeconomic equilibria, reveals either a too narrow definition or an inadequate understanding of how to achieve those equilibria in order to make them sustainable and consistent with development. See Ffrench-Davis (1999, ch. VI).

³ See our advise, as early as in mid-1992, published in Teunissen (1992).

much as the trend has been to move from medium-term bank credit to investments in liquid stocks, bonds and deposits; a very high percentage of this supply of financing is of a short-term and highly liquid nature. Paradoxically, there has been a diversification toward volatility in the 1990s; the relative improvement after the "tequila crisis", with a rising share of FDI, still included a significant proportion of volatile flows.

There is well-documented evidence showing that these changes have originated, to a large extent, in the sources of supply. The boom of the early 1990s occurred mainly in the US (see Calvo, Leiderman and Reinhart, 1993; Culpeper, 1995; Griffith-Jones, 1995). Institutional changes allowed and encouraged outflows; domestic recession in the US, a limited demand for funds, and very low interest rates pushed US investors to seek other markets. Then followed the long process of building a market for portfolio investment in emerging economies, with large flows in the process. Latin America was a receptive destination, and offered the expectation of high rates of return.

Why the high rates of return? Naturally the rate should tend to be higher in the "productive" economy of capital-scarce regions, like Latin America. But that was reinforced by several conjunctural factors. Initially, prices of stocks and real estate were highly depressed. That allowed a 300% average rate of return (in current US dollars) in the stock markets of Latin America between late 1990 and September 1994 (see Table 1), with fast rising price/earnings ratios. After a sharp drop around the tequila crisis, with contagion to all Latin American stock markets, between March 1995 and June 1997 average prices nearly duplicated, being pushed up directly by portfolio inflows. Domestic interest rates were high as well, reflecting the binding external restriction predominating in 1990 and the repressive monetary policy in place (plus the nature of financial reform implemented). Finally, in a non-exhaustive list, the recovered supply of external financing generated a gradual exchange rate appreciation (see Table 2) that encouraged short-term or liquid inflows; that is, for dealers operating with maturity terms within the horizon of expected continued appreciation of the domestic currency.

The yearly deficits on current account rose, as shown in Table 3, but also accumulated through time. By 1994 Mexico and the region had accumulated 4 years of large flows of external liabilities. While in 1991 the actual stock of assets of the new investors in Latin America was evidently below the "desired" stock, in 1994 it was notably large. We had entered a

⁴ Between 1989 and 1993, the LIBOR rate in dollars, at 180 days, fell from 9.3% to 3.4%; rates for the same term on the US monetary market fell from 9.2% to 3% (IMF, *International Financial Statistics*, Washington, DC, various issues). Background on interest rates in Latin America can be found in ECLAC (1995, ch. IX).

Table 3 Deficit on Current Account, 1983-98 (in millions of dollars)

	1983-90	1991	1992	1993	1994	1995	1996	1997	1998
Argentina	1,413	647	5,462	7,672	10,118	2,768	3,787	9,454	12,200
Brazil	1,564	1,450	-6,089	-20	1,153	17,972	24,347	33,484	32,450
Chile	999	99	958	2,554	1,585	1,398	3,744	4,058	5,160
Colombia	671	-2,347	-876	2,219	3,113	4,366	4,946	5,683	6,060
Mexico	241	14,888	24,442	23,400	29,418	1,576	2,330	7,449	15,500
Peru	1,030	1,509	2,101	2,302	2,662	4,298	3,619	3,408	4,120
Latin America (19)	6,967	17,426	34,350	44,920	49,566	34,449	36,659	63,669	83,905
L.AVenezuela (18)	8,642	19,162	30,601	42,927	52,107	36,463	45,573	68,353	82,345

Source

Calculations by the author, on the basis of official figures processed by ECLAC. The balance on current account includes private and public unrequited transfers as current income. In 1994, private transfers amounted to \$9.5 billion and public transfers totaled \$2.5 billion.

vulnerability zone (Ffrench-Davis, Ocampo and Tovar, 1999), with the economy growingly sensitive to bad political or economic news.

III The Effects of Inflows

During the 1990s, capital inflows contributed to a recovery of economic activity, after the recession that still prevailed around 1990 in most LACs. Argentina and Peru were two outstanding cases of underutilisation of capacity; Chile and Mexico were the exceptions in the other corner.

Table 4 Gross Domestic Product, 1970-98 (percentage of annual growth rates)

	1970-80	1981-90	1991-94	1995	1996	1997	1998
Argentina	2.8	-0.7	8.2	-5.0	3.6	8.4	4.2
Brazil	8.6	1.6	2.8	4.2	2.8	3.0	0.2
Chile	2.5	3.0	7.9	10.1	7.3	6.9	3.4
Colombia	5.4	3.7	4.3	6.2	2.2	3.2	0.6
Mexico	6.7	1.9	3.7	-6.6	5.3	7.3	4.8
Peru	3.9	-1.2	5.3	7.7	2.4	7.7	0.7
Uruguay	3.0	0.0	5.2	-2.1	5.3	5.1	4.5
Latin America (19)	5.6	1.2	4.1	0.4	3.5	5.3	2.3

Source:

Calculations by the author, based on official figures for 19 countries processed by ECLAC; figures expressed in 1980 US dollars for 1970-80, in 1990 US dollars for 1980-97 and in 1995 US dollars for 1998.

Annual GDP growth rose from 1.2% in the 1980s, to 4.1% between 1991 and 1994 and to 2.9% in 1995-98 (Table 4). This growth was meagre, however. On the one hand, the comparison with the previous golden age is shocking. Along the three decades spanning between 1950 and 1980, Latin America had averaged a GDP growth of 5.5% per annum; domestic investment had been rising fast, as a source of that vigorous growth. Subsequently, in the 1980s there was a sharp drop of the investment ratio, of 7 points of GDP, with only a mild recovery in the 1990s. In fact, investment grew much less during this decade than did capital inflows; thus, a significant part of the external flows financed increased consumption, and consequently crowded-out domestic savings.

Actually, the new supply of financial flows initially had a positive effect on Latin America: thanks to a larger utilisation of installed capacity, production increased, beyond the expansion of the production frontier by some \$70 billion in 1994 in comparison with 1990 (Ffrench-Davis and Reisen, 1998). That is, about one third of the 4% rate of annual growth in GDP in 1991-94 corresponded to an increased use of installed capacity. The phenomenon was particularly intense in countries such as Argentina and Peru. Subsequently, the strong recovery of Argentina and Mexico in 1996-97 rested to a significant degree on the underutilisation created in 1995. And, again, recovery was short-lived, giving way to slower growth since mid-1998, and open recession in Argentina in 1999. Any serious research should control for the huge swings in the rate of utilisation of capacity, when measuring performance of policies, reform or productivity.

The increased availability of external financing removed the binding external constraints that had been responsible for the one-decade recession of the region. However, beyond contributing to overcome that constraint and to move toward macroeconomic equilibria, after a while it led to an overshooting. Gradually, effective output approached the production frontier; depreciated exchange rates rose and at some point started to become "appreciated".

In fact, the renewed access to external capital posed challenges in regard to the stability and sustainability of macroeconomic equilibria. Indeed, the affluence of capital had an adverse effect on the evolution of exchange rates,⁵ the money supply and domestic credit, the accumulation of external liabilities (mostly with short-term maturities), and thus made the economy more vulnerable to future negative external shocks.⁶ Tables 1 to 3 show a

⁵ It should be recalled that several LACs were implementing sharp liberalisation of import regimes *pari passu* with exchange rate appreciation. See Ffrench-Davis (1999, ch. III) and ECLAC (1995, ch. V).

⁶ The process has been similar to that in East Asia, with a capital surge and financial liberalisation since early 1990s. See Ariff and Ean (1999).

similar story in 1991-94 and 1995-97, reproducing the desequilibrating macroeconomic adjustments of 1976-81 (Devlin and Ffrench-Davis, 1995).

What happens? Why do debtors not stop inflows before a crisis? Why don't creditors take up that task if debtors fail?

Among debtor countries we will distinguish three cases. The first are those with nominal pegs, the outstanding case being Argentina since 1991 with a currency board system. Macroeconomic policy is passive and the conjuncture is determined by the external supply of finance. In an economy with huge underutilisation of capacity and a capital surge, as was the case in 1991, passivity works well, until capacity approaches exhaustion or the surge softens or reverts; both did coincide in late 1994. The outcome tends to be intrinsically pro-cyclical.

A second case is that of a flexible exchange rate. Mexico had flexibility within an asymmetric band, and allowed all the flexibility to operate under the capital surge. The actual rate remained at the most appreciated extreme of the band.⁷ The outcome of Mexico shared with Argentina a significant real appreciation, but Mexico had no underutilisation of capacity, so the capital surge leaked to a much larger degree to imports and deficit on current account (Ros, 1999). The outcome is again pro-cyclical. The standard assertion that "flexibility" can avoid disequilibria is at least misleading.

The third case corresponds to comprehensively active macroeconomic policies, of which Chile was the paradigmatic case in the first half of the 1990s (Section IV, and Agosin and Ffrench-Davis, 1999), with an anticyclical outcome.

In the majority of cases, authorities allowed the capital surges to move into their domestic economies, as illustrated by the data in Tables 1 to 3.8 Most of them thought they should do nothing or could do nothing, or preferred to "benefit a little longer" from the anchoring of the domestic CPI to international inflation.

Ex post, the consensus of observers tended to be that disequilibria had been built. For a voluntary flow to take place there is need of willingness on both debtors and creditors. Then, why did creditors not act in due time to curb flows? The specific nature of agents prevailing in the creditor side is crucial. The conflictive segment of flows, that was predominant in the surges and busts, naturally works with short horizons.

 $^{^{7}}$ The higher border of the band was constant in nominal terms while the lower border was partially indexed to net inflation.

⁸ Lax or poor prudential supervision of banks obviously feeds disequilibria. But a strong supervision does not avoid *per se* the problem. Actually, a significant share of inflows is usually not intermediated by banks. As well, in the booms, prices of guarantees are biased upward.

When creditors discover an emerging market, they start out with non-existent exposure. Then they generate a series of consecutive flows which accumulate in rapidly increasing stocks. As said, the creditor's sensitivity with regard to bad news increases remarkably with the level of stocks placed in a country (or region), and with the degree of dependence of the debtor on additional flows (current account deficit plus refinancing of maturing liabilities). Additionally, the most relevant feature is that after a significant increase in asset prices and exchange rates, accompanied with rising stocks of external liabilities, the probability of reversal of expectations grows steeply.

The accumulation of stocks and a subsequent reversal of flows can be considered to be a "rational" behaviour, given the nature of predominant agents. Investors with short horizons are not concerned whether (long-term) fundamentals are being worsened with capital surges while they continue to bring inflows. What is relevant for them is that the crucial indicators – real estate prices and stock, exchange rates – can continue providing profits in the near term; thus, they will continue pouring money until expectations of near reversal start to build.

The most relevant issue is that myopic agents in microfinance have become to determine the macroeconomy. The outcome, unsurprisingly, is unsustainable macroeconomic imbalances, "wrong" or outlier macroprices, and undermined environment for productive investment. Then what appears to be "irrational" is that the domestic macroeconomy has been increasingly influenced by experts in microfinance. There is a need for macroeconomic authorities to take over their responsibility of making fundamentals to prevail so as to achieve macroeconomic balances both sustainable and suitable for growth. That requires that they avoid entering vulnerability zones during economic booms accompanied by capital surges.

IV The Contrasting Cases of Mexico and Chile in 1990-95

External financing is obviously a vital ingredient of development; however, it also tends to be very volatile, and to fluctuate between excessive surpluses and shortages. Consequently, it is important to design economic policies that will attract resources, but which will ensure that they flow in a fashion and quantities that are sustainable and are directed more towards long-term investment rather than to consumption.

The Tequila Crisis9

The Mexican crisis which exploded in 1994 is a good example of the harm that can be caused when a country absorbs an excessive volume of capital inflows, giving way to a large stock of external liabilities, especially when the composition of such financing makes it volatile. Producers and consumers adjusted to a level of overall expenditure that was much higher than potential GDP, and after a while the amounts involved became unsustainable. Recessive adjustment inevitably followed. A 6.6% drop in GDP and a nearly 30% drop in capital formation occurred in Mexico in 1995. They were closely associated, first, with a persistent appreciation in the exchange rate and a growing deficit on current account, and subsequently with a sharp cutback in financing on the part of creditors. Then the country was forced into a highly recessive adjustment and a huge devaluation, despite the large package of international support it received in 1995 (Lustig, 1997).

It is wrong to say, as it is said surprisingly often, that the Mexican crisis of 1994 could not have been foreseen because of the concealment of information. While it is true that official information on international reserves was provided only sporadically, the key data concerning the exchange rate appreciation, the high current account deficit, and the fact that it was financed with volatile resources, were available on a regular basis. Notwithstanding this, by 1993 praise of Mexican policies was generalised in financial institutions and media.

As said, the seeds of the crisis date back to the period between 1992 and 1994, when there was a massive capital inflow, mostly short-term. Aggregate demand grew rapidly, leaving far behind the potential GDP; it leaned increasingly towards tradables, especially encouraged by exchange rate appreciation. Thus, in those years, there was a maladjustment that would most likely have to be reversed in the future. What is extremely important is that disequilibrium was led and encouraged by capital inflows. Since the public sector was balanced, the disequilibrium was located in the private sector. Money expansion was associated to foreign exchange operations and *ex post* multiplication.

However, the crucial problem was that neither those on the supply side nor those on the demand side paid enough attention to the available infor-

⁹ There is a mounting literature on the tequila crisis. For a recent comprehensive analysis, see Ros (1999).

¹⁰ Despite the fact that expenditure exceeded GDP, production capacity was probably larger than actual GDP, with an underutilisation of the production capacity of importables and of potentially exportable goods under a less appreciated exchange rate. This might explain the subsequent sizeable response of the output of tradables to the real devaluation in 1995.

mation until after the crisis erupted. Indeed, we must emphasise, the most influential financial operators usually act with a very limited (though now becoming more comprehensive) set of data, particularly dealing with a short horizon. Their more relevant variables are not related to the (long-term) fundamentals but to short-term profitability. This explains why they may suddenly change their minds radically about the economic situation of a country or of a firm.

In 1995, the Mexican crisis did not have a widespread effect throughout the region, as it had in 1982. The Argentine economy, however, was seriously affected by the contagion. Although this did not lead to a currency crisis in the sense of a sharp exchange rate devaluation, as many operators had feared in 1995, Argentinean GDP fell by 5% and investment diminished by 16%. The overall growth rate of Latin America went down sharply, to a figure below the population increase, while the regional investment ratio also fell substantially. During 1995, in various countries, negative flows had been observed in several segments of the supply of funds (especially bonds, deposits and to stock markets). By early 1996, given a lag in the response of the real economy, several countries showed GDP drops in various quarters. In fact, average growth in Latin America was negative in the four quarters included between March 1995 and 1996.

Subsequently, the flow of funds was reactivated once again, exceeding \$80 billion in 1997. The resulting economic reactivation was particularly significant that year. However, some of the same problems displayed in the 1991-94 recovery reappeared in 1996-97, and actually collected a bill in 1998-99. Nevertheless, the bill has been moderate for the following reasons. First, the new financial boom period was short-lived; it lasted only a couple of years. Second, there was a tendency to increment the share of FDI inflows, which are most steadfast than flows to the stock market or short-term credits. Third, owing to a sharp reduction in 1995 of the current account deficits (and a significant exchange rate depreciation, particularly in the case of Mexico), a high deficit was recorded only in one year (1997). Fourth, taking into consideration the banking crisis of Mexico and Argentina, following the "tequilazo", these and other countries introduced reforms to their financial reforms which strengthened the prudential regulation and supervision of their banking systems.

Consequently, the required adjustment in 1998 took place in economies with a more moderate stock of external liabilities than in 1995, with healthier banking portfolios, and with less overheated economies. However, in all, the Asian crisis caught Latin America after most LACs had appreciated their exchange rates (see Table 2) and their deficit on current account had risen sharply. The same old story was returning to the

scene, in circumstances that the international scenario was recessive, with worsened terms of trade, declining trade and access to finance, and rising spreads.

Reducing Vulnerability in Chile

Chile displayed a performance opposite to that of Mexico in 1995-96, regardless of numerous similarities during the years prior to 1994. However, there was a most pronounced divergence in macroeconomic policies, related to the external sector. In 1991-94, Chile and Mexico chose divergent roads with respect to capital movements regulation, exchange rate policy, and prudential supervision of the financial system.

Both the Mexican crisis and Chile's strength were built up over time. Towards the end of the 1980s, both countries had already opened up their trade considerably, their budgets had improved substantially, privatisation was well under way, annual inflation was around 20%, and the two countries had similar domestic savings rates. The reason why Chile performed better in 1995 is that, faced with an abundance of external funds in 1990-94, it deliberately followed a cautious policy (Agosin and Ffrench-Davis, 1999; Stiglitz, 1998). Instead of taking and spending all the large supply of external resources available, which would have led to a significant appreciation of the peso and to a rising deficit on the current account, it chose to discourage short-term capital inflows. In 1991 a tax was imposed, and substantial non-interest-bearing reserves for external credit were required; the reserve requirement was subsequently extended to deposits in foreign currencies and investment in second-hand stocks, while primary issues and venture FDI capital were exempted;¹¹ FDI had to be held in Chile for one year at least; the financial system was subject to relatively strict prudential regulation, including a selective supervision of assets and required provisioning, as well as restrictions and drastic penalties on operations with related parties. The set of measures adopted effectively discouraged speculative capital inflows (Agosin, 1998; Agosin and Ffrench-Davis, 1999; Larraín, Labán and Chumacero, 1997).

This is one of the main reasons why, in late 1994, Chile had a moderate external deficit, high international reserves, a modest and manageable short-term debt, a domestic savings rate that was rising instead of falling (the latter being the case in Mexico and Argentina), a level of domestic investment that since 1993 has been the highest recorded in history, and

¹¹ The rate of the reserve requirement, that had to be kept at the Central Bank for one full year, was reduced from 30% to 10% by the end of June 1998 and to zero in September, in order to accommodate to the new shortage of external financing associated to the Asian crisis.

the exchange rate in 1990-94 was comparatively closer to equilibrium (see Table 2) than that of most of the countries of the continent, as reflected by a moderate deficit on current account (Table 3).

Policy has been effective in achieving its targets in most part of the 1990s. However, in 1996-97 this policy mix and the intensity with which it was applied remained unchanged, in spite of a new vigorous surge in capital flows to most countries in the region, but particularly to Chile, a country immune to the tequila contagion. This surge should have been met with increased restrictions on rising inflows. Being a market-based mechanism, that alters relative prices of capital flows. What happened was that inflows came in paying the cost of the reserve requirement, with no evidence of significant fading power. The fact is that, in general, the intensity of policy was kept rather unchanged in face of a stronger capital surge.

As a consequence of such lack of action on capital inflows during 1996-97, despite heavy intervention in foreign exchange markets, the Central Bank was unable to prevent a sharp real exchange rate appreciation and rise of the deficit on current account. Evidently, as said, the new surge should have been met with an increased reserve requirement or other equivalent measures. Nonetheless, the benefits of the active regulation implemented in previous years, had left large international reserves, a low stock of foreign liabilities and a small share of volatile flows. Unfortunately, those strengths were partially undermined by the excessive exchange rate appreciation and high deficit on current account recorded in 1997.

The Asian crisis has been felt principally through trade. The fact is that the terms of trade of Chile worsened in the equivalent to 5% of GDP, with reduced access to external markets, in a country that was selling one-third of its highly commodity-intensive exports in Asia.

V Emerging Asia: the New Casualty of Financial Instability

During 1995 there were negligible effects of the Mexican crisis over the Asian region. This was so even in economies with large deficits on current account. As a consequence, the year 1996 saw many outstanding researchers and observers asserting that those deficits were not relevant if investment ratios and economic growth were high. Thailand and Malaysia were two of those cases.

A few Asian countries had rather free capital flows, but several of them had regulated capital inflows and exchange markets successfully for long periods (Helleiner, 1997; see the cases of Malaysia, Indonesia and Thailand, in Sachs, Tornell and Velasco, 1996; Korea and Taiwan, in

Agosin, 1999). Growth was actually sustained and extremely high. In 1980-95 GDP yearly growth averaged between 6% and 8% in Korea, Indonesia, Malaysia and Thailand; the investment ratio exceeded 33%, with domestic savings ratios close to that notable level; inflation was low (in the 5% annual range) and fiscal budgets were generally balanced or in surplus. In the meantime, the average GDP growth in Latin America was 2% and the investment ratio fluctuated around 20%.

What explains the sudden inverted comparative perceptions of Asia and Latin America in 1997?

First, what works for some time might see its efficacy reduced after a while. A relevant feature relates to exports performance. In fact, recently the exports of several Asian economies were experiencing problems. What until then had been products with a notably dynamic demand appeared to be reaching maturity, facing tightening markets (Sachs and Radelet, 1998).

Second, even if exports perform well, a disequilibrium can emerge if imports experience a boom. In both Korea and Thailand imports rose sharply in 1995-96. This boom was related to expanded aggregate demand and to cheaper imports (due to some import liberalisation together with relaxation of liquidity constraints to consumers and exchange rate appreciation, a recent Latin Americanisation of some Asian economies). Rising capital inflows were behind those factors.

Third, good sustained policies can be reversed under exogenous pressures. The strong drive towards financial liberalisation prevailing in the world today had also permeated several Asian economies in the 1990s (Agosin, 1999; Ariff and Ean, 1999; Jomo, 1998); China and Taiwan were two outstanding exceptions. Actually the deficits on current account increased substantially in Korea and Thailand since 1993. Data shows that they were not led by public deficits and did not imply losses of international reserves. Neither were they due to an exogenous increase of private expenditure. On the contrary, the cause was a private expenditure rise led by mostly short-term capital inflows (IMF, 1998; Sachs and Radelet, 1998). In Korea, Indonesia, Malaysia and Thailand international reserves were accumulating persistently between 1992 and early 1997, fed by capital inflows, pressing local authorities to purchase foreign currency. Consequently, international reserves more than doubled in those countries in that period.

Inflows contributed to a domestic lending boom, with bubbles in real estate and stock market prices. Weaknesses in prudential supervision of the financial system, not so relevant in the previously repressed domestic markets, became evident. But it is also evident that poor supervision was not the main cause, but just a reinforcing factor in the macroeconomic disequilibria which were built in just three years, in a region that had exhibited a

spectacular performance for a long time.¹²

It was a phenomenon of worsening macroeconomic fundamentals, led by capital inflows, which sustained appreciating exchange rates (though a moderate trend) and a strongly increased aggregate demand (with a significant enlargement of the deficit in current account of 5 points of GDP in Korea, 2 points in Indonesia and 3 points in Thailand). The disequilibrium was only recognised by financial markets in 1997 and charged a high bill in 1998. The policy failure was an error shared with the rather similar financial reforms of Chile in the 1970s and of Mexico in the 1990s.

The East and Southeast Asian countries experienced deep recessions in 1998. Subsequent to two or three decades of a solid annual growth of 6 to 8%, many of them experienced in 1998 significant drops. Indonesia presented a 14% contraction in 1998, similar to the spectacular drop of Chile in 1982. For Korea, Malaysia and Thailand reductions of 5 to 8% were recorded. Korea has been recovering during 1999 faster than the other countries of the region. Notwithstanding that Korea exhibits an impressive external surplus and a GDP growth in 1999, the costs have been significant: in 1998 a GDP nearly 14% below the historical trend and a drop of 10 points in the investment ratio. These recessions are comparable to those of Latin America in 1982-83, with drops in productive investment, banking crises and social decline.¹³

VI Policy Lessons

Optimism regarding Latin America returned to the international financial markets in 1996-97. The current net capital inflow climbed to the precrisis levels. Composition improved, with a larger share of FDI. GDP decline in various LACs was reversed. In fact, a dynamic growth for the region as a whole was observed since mid-1996 until mid-1998.

Nevertheless, it should be noted that GDP increase comprised a large recovery share; that is, effective GDP was once again close to the production frontier. However, the frontier moved upward slowly, because productive investment was still low, while real exchange rates were retaking an appreciation path. Consequently, as long as productive investment does not increase substantially, that rate of growth was not sustainable. In effect,

¹² Actually, a significant share of inflows was not intermediated directly by financial firms. In the 1970s also about half of bank loans had arrived to Chile to non-financial firms, notwithstanding the lax regulation of domestic banks.

¹³ See various interpretations of the Asian crisis in Krugman (1998); Perry and Lederman (1998); Sachs and Radelet (1998); Stiglitz (1998); Wyplosz (1998).

at the beginning of 1998 it was foreseen that the 5.3% growth of 1997 would moderate to around 4%. With the intensification of the Asian crisis and its contagious effects, the effective growth contracted to 2.3% in 1998 (ECLAC, 1999b) and is expected to close near or below zero in 1999.

Additionally, the Asian crisis worsened the terms of trade and the access of Latin American exports. Then the region is experiencing a new significant adjustment. The future will depend on whether the region and the most influential people (i.e. the IFIs and the US) have learned the lesson. There are very mixed signals.

GDP recovery in Argentina and Mexico was particularly vigorous, although after the sharp decline in both countries with the "tequila" effect in 1995, there was a large gap between effective GDP and productive capacity. This enabled a significant reactivation to take place. Nevertheless, in both countries GDP per capita was approaching the levels achieved in 1994 only during 1997, while average wages were still lower in 1998, with Mexico 22% lower than in 1994. Rather than being a consequence of policies adopted in 1995-96, this is the result mostly of policies implemented before the crisis. The following lessons can be derived from them.

1. Level, Composition and Sustainable Uses of Capital Flows

It is important to ensure that inflows are directed to productive investment; allowing too much to drain off into "investment" on the stock exchange and consumption of imported goods will create bubbles and imbalances that would be unsustainable. Additionally, fast rising stocks of external financial liabilities tend to be increasingly dangerous.

Opening up the capital account indiscriminately can be very detrimental to productive development and to the welfare of the majority of people and firms, inasmuch as externalities and other imperfections of international capital markets give rise to frequent cycles of abundance and shortage of external financing (Rodrik, 1998; Wyplosz, 1998). The instability of real interest and exchange rates and of other macroeconomic indicators, that is usually associated with unrestricted openness and capital surges, is always very costly in terms of production and equity. Effective, efficient regulation is possible. By efficient we mean that the allocation of resources via enlarged volume of productive investment and enhanced quality contributes to higher and sustained GDP growth; Chile proved this from 1991 onwards, and Colombia did so during the 1970s as well as in recent years (Urrutia, 1996; Ffrench-Davis and Reisen, 1998).

2. Avoiding Outlier Prices and Ratios

Governments must ensure that capital flows do not generate atypical (outlier) prices or significant distortions of basic macroeconomic indicators, such as interest rates and real exchange rates, the composition of expenditure in terms of consumption and investment, and the production of tradables.

Capital inflows should not be used for achieving an extreme objective related to a single domestic economic variable, such as to anchor inflation, by appreciating the real exchange rate. This tends to throw other major variables off balance. It is risky to remain bound to a fixed nominal rate, and worst to fully dollarise except if our economy is an optimum currency area with the US. Is there anyone in the region? The methods of regulating the exchange rate can be extremely diverse; several of them involve some form of a crawling-band, with some type of intra-marginal intervention (Williamson, 1996).

The recent experience of Latin America has shown dramatically that allowing the market, dominated by agents with short horizons, to determine the volume and composition of capital flows can have a very high cost for the recipient country. This is why the use of regulations on capital inflows should not be neglected *a priori*. On the contrary, the microeconomic costs associated with the use of such instruments should be balanced against the social benefits in terms of macroeconomic stability, investment and growth (Ffrench-Davis and Reisen, 1998; Williamson, 1993; Zahler, 1998).

3. Consistent Sequencing

It is generally agreed that across-the-board opening-up of the capital account has been premature and should have been postponed, moving only in a selective way, until a long-term process in which other major reforms had been consolidated and new equilibrium prices had been established. The lesson to be learned from this experience is that during structural adjustment, with open capital accounts (especially when international financing is abundant), the capital flows can increase too fast and have destabilising macroeconomic and sectoral effects (Edwards, 1989; McKinnon, 1991; Williamson, 1993; Wyplosz, 1998).

In the first place, in the particular case of Latin America, many countries conducted deep trade reforms in the 1990s pari passu with exchange rate appreciation. Second, if productive investment capacity reacts slowly and/or with a lag and domestic financial markets remain incomplete and poorly supervised, additional external resources cannot be absorbed effi-

ciently in the domestic economy, and thus they threaten the future stability of the flows themselves. In the third place, fiscal parameters need to be consolidated, since in the absence of a sound tax base and flexible fiscal mechanisms the authorities will have to depend excessively on monetary policy to regulate aggregate demand. Finally, since part of the aggregate demand generated by capital flows is inevitably spent on non-tradable goods, when actual demand comes close to the production frontier, the relative price of non-tradables tends to rise. This in turn is reflected in a higher current account deficit. A real revaluation of the currency can obviously distort the allocation of resources and investment, seriously weakening the structural mid-term objective of penetrating external markets with new exports (ECLAC, 1995; Ffrench-Davis, 1999, ch. III; World Bank, 1998).

4. Flexible Selective Regulation

It is not wise to make an inflexible commitment to indiscriminately keeping the capital account open, particularly in light of the crucial importance of macroeconomic stability, along with the disproportionate volume of the international capital markets compared with the small size of LACs markets, and the serious shortcomings of both markets. As long as market movements depend to a significant extent on short-term transactions and domestic securities markets remain shallow, there will be a risk of great instability in this new modality of linkages with the international economy. In fact, Mexico's, Korea's and Thailand's recent critical experiences attest to the wisdom of discouraging both large financial inflows and the accumulation of short-term external liabilities. There is growing evidence that the greater the instability of flows (or deviation from the trend), the lesser the share directed to productive investment (Uthoff and Titelman, 1998).

Understanding better the working of domestic and international financial markets is at the core of the future of the world economy. More pragmatism and more systematic efforts should be at work.

5. The International Environment

A common factor in recent crises has been the great volatility of the most rapidly growing segment of international financial markets: short-term and speculative funds. Successive waves of over-expansion, followed by financial panic, indicate that the market tends first to overshoot and then to contract more than is justified by the economic fundamentals. These deficiencies are inconsistent with a balanced and efficient globalisation process. More energy is being spent on resolving crises than on avoiding them. It is

to be stressed that while there has been an obvious lack of appropriate prudential regulation of domestic financial markets in most of the Asian and Latin American countries affected by the crises, there has been an even more notorious lack of appropriate international institutions to monitor such a sophisticated, but unstable, financial market.

In times of booming flows, it has been the predominant practice for recipient countries to be encouraged and praised by the international financial institutions and financial specialists to accept all the resources offered. Even, the typical situation has been that gradually the cost of financing has fallen during the boom period; then, actually, the market has operated with a negative sloping mid-term supply of funding. The recriminations concerning the resulting excessive indebtedness have come later, partly from these same sources of praise, in the periods of massive outflows. There is an obvious contradiction between these two attitudes.

The financial operators evidently fulfil a useful microeconomic function as intermediaries between savers and users of funds, as hedgers of risk, and as providers of liquidity. However, in practice, and perhaps without wishing to do so, they have come to play a role that has significant macroeconomic implications. With their ratings (in the case of the agencies) and their expectations made widely known in the economic press (in the case of financial operators), they have contributed to intensify the financial flows towards "successful" countries, thus facilitating continuous rises in financial assets and real estate prices, and sharp exchange rate appreciation in the recipient markets. Apart from the quality exhibited by prudential supervision in these markets, these macroeconomic signals contribute to prolonging a process that appears, wrongly, to be very efficient and sustainable (with good profits and loan guarantees supported by high prices on stock exchanges and low value in domestic currency of debt denominated in dollars). But in reality bubbles are being generated, which sooner or later must burst. When that happens all these signals and the risk ratings are reversed, in a sharp pro-cyclical fashion.

It is a good time to reconsider the international financial order. Contrariwise, it is a bad time to impose additional liberalisation on financial markets, an issue that was being debated in the context of changing the IMF statutes to grant it a mandate in the area of capital account convertibility and of approving a Multilateral Agreement on Investment at the OECD. This would be a grave error. How quickly the harsh lessons of the Mexican crisis were being overlooked and the costly adjustments in the wake of financial upsets viewed with complacency.

In closing this paper, we would like to emphasise that the focus of attention should be the management of booms, rather than the crises, since the latter are, in many respects, the inevitable consequence of badly managed

booms (ECLAC, 1999a). This approach is of the utmost importance, given that the existing institutions and instruments have not been effective in warning of impending turbulence and rather have tended to encourage unsustainable booms. In that framework it becomes particularly relevant to design an appropriate regulatory framework at the domestic level and to adopt national measures aimed at controlling booms before they become unsustainable. Noteworthy among such measures are the reserve requirements on financial inflows that Chile has been using with success in times of capital surges.

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Comment on "The Role of Domestic Policies in Stabilising Capital Flows in Latin America," by Ricardo Ffrench-Davis

Zdeněk Drábek

Let me start with a small observation on Ricardo's paper, which is that neither in the paper nor in his presentation he mentions anything about the recent measures adopted by Chile. I am talking about the lifting of the restrictions on short-term capital movements and certain fiscal policy measures. These measures in fact might be interpreted as measures going very much against the spirit of what has happened in Chile before. So I wonder what your reaction to that is.

My comments concern Ricardo's policy recommendations at the end of the paper, which are rather interesting. Although I am not an expert on Latin America, I am very sympathetic to all of the recommendations with the exception of one: his suggestion that countries should not make inflexible commitments to indiscriminately keeping the capital account open. In other words, the country should be free to move to capital inflow restrictions, if necessary. I have a problem, because conventional wisdom tells us that this is one thing you must avoid in situations where you have already liberalised the capital account, because of the credibility issue. I would therefore only consider the situation of countries that are in the early phases of reform and are considering the liberalisation of the capital account. That I think is the issue for us. And here I come to the basic question: how are countries positioned to do that kind of liberalisation of the capital account? My argument would be that the emerging economies are vulnerable to short-term capital movements and must pay attention to the dangers and risks that emerge in this process. There are at least four risks.

First of all there is a risk of growing a strong debt exposure, which could become excessive, for various reasons. The first reason is that if you have an open capital account there are strong incentives to borrow externally, as we have seen in the Czech Republic. This is because you are normally starting from a situation of higher inflation, which means higher interest rates. Therefore companies are motivated to borrow abroad. The second reason that this risk becomes particularly strong in emerging economies is

that in the context of stabilisation programmes we normally recommend pegging or some kind of fixing of the exchange rate, which means that the foreign exchange risk to companies becomes very limited. I think the mistake that was committed in the Czech Republic was that the pegging remained just a little bit too long. The third reason is that the emerging countries often find themselves in a situation of competitiveness problems, requiring structural reforms, which take time to implement, whereas capital often doesn't think long-term. If it doesn't see that things are being done, there are strong incentives for capital flight and we have seen that in Russia. The fourth argument why the external debt exposure can increase excessively is, obviously, that there are real needs. Ricardo talked about imports that grow faster than exports; the resulting current account deficits are a normal feature in the case of transition countries.

The second risk is contagion. We have seen that the emerging economies are more vulnerable to problems of contagion. Why does this happen? One factor is the herd instinct of bankers, which means that the Czech Republic is put in the same basket of countries as Hungary and Poland. Another factor is the question of timing. I again take the example of the Czech Republic. The Czech Republic was running into serious difficulties on the external account, starting from 1994, but obviously the investors did not react until 1996, 1997, at a time when other things already happened elsewhere. So in my view, it was again an issue of contagion: a reaction to external events.

A third risk, which is quite self-evident, is that many emerging market economies are macroeconomically more unstable. In many of these countries inflation rates have been higher, balance of payment positions have been weaker, there have been jumps up and down in inflation and there is this question of external debt that should not be forgotten.

The fourth risk which needs attention when countries are considering to open up the capital account is the issue of how it constrains governments to pursue their own macroeconomic policies. For example, some observers are making comments concerning the policies in the Czech Republic and in Hungary, arguing that the convergence towards the European Union is going faster than it should. That is something that policymakers may want to consider as well.

One of Ricardo's recommendations concerns the sequencing of policy items. Proper sequencing is a very important issue which, in my view, has not been adequately considered at a time when many countries were opening capital accounts. Ricardo makes the point that the liberalisation of the capital account should be preceded by a number of policy measures and by institution building. He argues that these are vital requirements for sustainable liberal capital account policies, and I agree. There is a list in

Ricardo's paper that deserves strong consideration by policymakers. I remember that in the 1980s there was a study at the World Bank on trade liberalisation and one conclusion that came out very strongly was that the capital account liberalisation, judging from the experience of other countries, should come last in the sequence of liberalisation. Unfortunately, this recommendation was largely bypassed.

Let me just conclude by making a footnote. I very much agree with the thrust of Ricardo's policy recommendations, but they concern countries that are already subject to strong pressures of foreign capital inflows. When I talk to officials from Tanzania or anywhere in Africa, their first question always is: 'How do we protect ourselves against excessive capital inflows?'. To me, quite frankly, I find it almost bizarre that African countries and other developing countries are talking about how to control the surges of capital inflows when they hardly have access to foreign capital. It seems to me that the policies suggested in Ricardo's paper are specific to a particular set of circumstances and it would be interesting to know exactly what these circumstances are.

In my view, privatisation in the Czech Republic would never have taken place on the scale that it has without opening of the capital account. Probably in Russia the officials would argue the same. So there are also these circumstances that need to be taken into account. What are the safeguards under those circumstances? I don't know. Similarly, and again somebody already made this point, it may be that foreign direct investments are tied to portfolio investment in some form. Either in the form of confidence building or that portfolio investments become foreign direct investments if investors take larger and longer-term positions.

Floor Discussion of "National and Regional Responses to the Instability of Financial Markets"

Malaysian Capital Controls

Age Bakker wondered whether Malaysia had taken the necessary reform measures during the period of capital controls. "We have had considerable experience with capital controls in Europe. The argument for these restrictive policies was that they could provide breathing space to implement the necessary reforms. Our experience showed that if you were successful in reforming, the capital inflows increased again when you lifted the controls, because the lifting of controls was viewed as a sign of strength. But when Malaysia lifted capital controls, the outside world did not view it as a sign of strength. Why not?"

Mohamed Ariff responded that Malaysia did not effectively use the period of capital controls to reform. "Unfortunately, the capital controls were seen as an alternative rather than as an opportunity to reform. Some changes have been made, but they were insufficient. Countries under IMF surveillance have done much more in this regard than Malaysia has."

Age Bakker thought it curious that foreign direct investment more or less ceased in Malaysia during the capital controls. "The short-term controls should not affect long-term investments, because the remittance of dividends and equity was still permitted. Does the fact that FDI flows essentially stopped mean that foreign direct investment needs free short-term – as well as long-term – flows, or was the imposition of capital controls seen as a sign of an unattractive investment climate?"

Mohamed Ariff responded that it was not yet clear whether the short-term capital controls had had any effect on long-term investments. "We are not absolutely sure whether short-term capital controls and FDI inflows are totally unrelated. Foreign direct investors said that exchange controls were effective because prior to the exchange controls, they were faced with exchange rate risks. Furthermore, the peg made their products more competitive in the export market. Nonetheless, manufacturing has declined in Malaysia. Manufacturing has also declined in other countries in the region while FDI has gone up. FDI has expanded in Thailand, Indonesia and Korea because certain sectors that used to be closed have been opened, especially the banking sector. So, we are not yet in a position to disentangle the implications of short-term capital controls for long-term

investments – even though the government says that these two things are very different, and that short-term controls should not affect long-term investments. It will probably take some time before we find some meaningful answers to this."

Export-Led Growth

Mohamed Ariff reacted to Warren Mosler's observation that a discrepancy between a 'good' financial situation and a 'bad' real economy forces us to redefine the performance of the finance. "In Malaysia, there seemed to be virtually no relationship between developments in the real and the financial sphere. The financial sector is doing well and the real sector is not, so something is wrong. For example, stock market performance bears little relation to the behaviour in the real sector. In the second half of 1997, after the crisis, the stock market collapsed by 60 percent while the real sector expanded by 7 percent. Likewise, in the first quarter of 1999, the stock market has appreciated more than threefold, yet the real sector continues to contract. So we need to use caution in interpreting these financial sector indicators as a parameter of the health of the real sector of the economy."

Warren Mosler was critical of Mohammed Ariff's statement that Malaysia needs foreign capital and FDI. "Why do you need these nominal transfers if you are a net exporter of a country, unless you need real imports in order to make your country work? Perhaps you have everything you need internally and it can be organised internally through domestic policy, through local currency policy. Perhaps the need for dollars really is not there. When you borrow external currency, it doesn't matter who the lender country is, you are setting up a short position in that currency. So when Malaysia borrows dollars, it is placing itself in a position of risk because it is getting short of dollars. You have to be sure you have a good reason to do this."

Mosler also criticised the idea that a country should export its way out of a recession. "Recession means a reduction of growth. Exporting your way out of a recession means all of your people are creating products to give to somebody else, while getting nothing in return in terms of the real standard of living. In the case of Malaysia as an exporter of resources, it means that your own resources are being transformed into a product that is sent to foreigners for their material benefit. So when you export your way out of a recession, you have decided to put your people to work for someone else. In a sense, you have become the world's slaves and this is a serious condition."

Mohamed Ariff disagreed and explained why it makes sense for Malaysia to export its way out of the recession. "We need to do this because there is an excess capacity of about 30 percent in the manufacturing sector. Most of the industries are producing at 70 percent of their capacity. The domestic economy cannot absorb this excess capacity in the system without additional demand. In fact, in case of the domestic sector, we found that all the sales have picked up in the first quarter, but production is not rising, because they are simply running down the inventories. We must use this excess capacity, and we can do that with an increase in external demand."

John Williamson basically agreed with Warren Mosler's critique of the idea to export your way out of a recession and gave the example of China. "Exporting your way out of a recession depends on the strength of your foreign position. If sending all of your resources abroad is not bringing the necessary liquidity to the country, then it is better to expand at home. China still has a large current account surplus, which does not seem to be eroding, and its exports continue to expand. It has a high level of reserves which yield a modest level of interest income, so why on earth would they pile up more reserves in order to get out of a recession when they appear to have policy instruments that enable them to expand domestic demand?"

Zdeněk Drábek, on the other hand, agreed with Mohamed Ariff that export-led growth would be a sensible policy to follow for both Malaysia and China. "John Williamson made me think about Warren Mosler's earlier comment that free trade is bad under certain circumstances. John, you now seem to argue along with Warren that export-led growth is not good. In the context of Malaysia, it seems to me export-led growth is sensible. I agree that since China is building up current account surpluses, it might make more sense for them to stimulate domestic demand. But this is not a wise policy given the major agenda for economic policy reforms, particularly in the state-enterprise sector. I am not sure that inducing growth of domestic demand would be that helpful in China, and perhaps export-led growth remains a good strategy."

The Asian Miracle

András Hernádi suggested that the high growth rates would not return to the Asian region. "Part of the cause of the crisis was the bubble effect which was closely tied to the bad debts, real estate speculation and other related issues. And since these should be avoided in the future, I believe that prospective growth rates will be lower."

Ariff responded that high growth might return but that double-digit growth figures was neither desirable nor feasible. "Krugman was correct in stating that the high growth was made possible because of an increase of input and not because of productivity improvement, especially in Malaysia. Whenever we were short on capital, we imported capital and the same goes

for labour. We had two million foreign workers in the country working side by side with nine million domestic workers. We simply added more input, and productivity actually declined. In 1997, the total factor productivity was negative, just as it was in 1985. At the Malaysian Institute of Economic Research, we estimated that the optimal growth rate, without straining the balance of payments and resources and without bringing in foreign workers, is about 6 percent. That is a growth that is sustainable in the long run. The nine or ten percent growth that we had in 1995 is probably neither desirable nor feasible."

Barry Herman wondered how to explain the fact that East Asia is a high saving region and nevertheless has a debt problem. "In 1997, gross domestic savings in East Asia were 32 percent of GDP. It appears that the savings go out and then return as capital inflows because the net transfer is not all that large. They go out and then in, rather than being intermediated domestically or within the region."

Ariff explained that the East Asian countries not only have high savings – up to 40 percent of GNP – but even higher investments, reaching 45 percent of GNP. "There is a lot of over-investment going on in the region and the incremental capital output ratio has increased enormously which means that there is a lot of capital inefficiency in the system. This is true for all countries including Korea but especially Malaysia. This is why they borrow. There are additional reasons why Korea borrowed: they preferred to borrow rather than have foreign equity."

Stephany Griffith-Jones said she was somewhat shocked at Mohamed Ariff's comment that the financial crisis came as a blessing in disguise to East Asia. "It sounds a bit Darwinian. Why not do it the Hungarian way, why not have good policies and restructure as György has just told us and implement any changes that may be necessary? These Asian countries had dramatically good performance, particularly South Korea but the others as well, for thirty years. When they did open up, and obviously they did not open the capital account up very well, the problems started. We should be more cautious in suggesting that financial crises are good.

There seems to be a link between the limits that Malaysia placed on outflows and decreases in FDI. In Chile, short-term flows were discouraged on the inflow side, and it has not negatively affected FDI. In fact, FDI has increased in Chile quite significantly – also for other reasons. So maybe it matters whether you control inflows or outflows."

Martin Mayer believed a strong case could be made that the three Asian crises were unrelated. "In Thailand, there was a classic real estate boom plus a lot of banking problems because of the BIBF, which was an undesirable institution in many ways. The Korean crisis was the result of leveraging by the *chaebol* system. The *chaebols* were in fact losing money, but they

did not go bankrupt until everything rapidly deteriorated. In Indonesia there was a heavy element of just plain crookedness. I know of a couple of energy contracts in which there was a take-or-pay provision that was three or four times as much as the market was paying for energy. To the extent that these contracts were spread throughout the society for the benefit of very rich individuals, that country was going to fall of its own weight. Finally, we have Paul Krugman's argument that there was no Asian miracle; it was all a matter of increasing labour inputs and it looked more impressive than it really was."

Mohamed Ariff agreed that the crisis presented itself in different forms. "One had real estate problems, another one had *chaebols* and in the other it was corruption. But all of these point to one thing and that is poor governance: poor corporate governance and poor economic governance."

Hungarian Policies and Contagion

Warren Mosler shifted the discussion to György Szapáry's comment. "When you talk about short-term interest rates jumping in Hungary, it is more a technical than a political question. When you are floating within the band, the interest rate is something that the central bank has to decide on in all cases. For example, when you have excess clearing balances in the banking system, which is a somewhat normal situation, the clearing balances have nowhere to go. Sitting with excess clearing balances is a zerointerest condition in the interbank market, so the central bank will act to offset the operating factors that have led to the excess clearing balances. In the process, an interest rate for money market intervention has to be determined, whatever form that takes. Once you hit the lower band – and if you look at the chart, the jumping of the rates is coincident with hitting the lower band – the clearing balances have a second alternative. The Treasury securities have to compete with the option to convert at the central bank, and the interest rate goes from being determined exogenously by individuals making a decision, to becoming an endogenous function of the market. The spot rate and forward rate differential become the interest rate and a market-driven interest rate results, based on the notion that the market wanted the currency to go down a little further - which is impossible because of the band. So the forward rate goes down to where the market wants it. I am not criticising the policy, my point is that the jump in interest rates was a purely technical issue.

You also talked about 'sterilised intervention'. On the same technical level, I want to oppose this to 'unsterilised intervention', of which I am not sure whether it actually exists. When you are in a floating situation and want to intervene, you might buy a certain quantity of foreign currency in

the market, which I know is not Hungary's policy now. When you buy the foreign currency, you add clearing balances to your member banks' accounts, and if you don't offer some alternative to clearing balances, the interest rate would go to zero. So *unsterilised* intervention would be effectively a zero-interest rate in the money market. If you want to support your interest rate target, be it 15 percent or whatever, any intervention implies sterilisation. So I would suggest that because you don't generally want a zero-interest rate, all intervention is going to be *sterilised* intervention. There really is no distinction between sterilised and unsterilised intervention, apart from the zero-interest rate condition which was obviously not what you were trying to do.

You also argued that the sterilised intervention was to keep the excess liquidity from creating inflation. Again, I think the situation here is a technical and not an economic event. The difference in liquidity is the point. You have given the clearing balance an alternative, by offering a repo or a government security or some place to park a separate account. A repo is a interest bearing separate account at the central bank rather than a clearing balance which is not interest bearing. The asset remains, the agent that had the clearing balance now has a clearing balance that pays interest, which you can call a repo or a Treasury bill or whatever you want to call it. His net worth has not changed, his ability to spend has not changed, so there is no economic effect."

Bill White strongly disagreed with Warren Mosler. "When you get capital inflows of this sort, and the central bank intervenes and builds up excess reserves in the domestic banking system, the interest rate does not automatically go to zero. There is an increase in the supply function and there is a demand function for excess reserves. That demand function for excess reserves may or may not be interest elastic. The real worry that we face at that moment, if we go back to a Keynesian view of the world, is that the demand function for excess reserves may be highly inelastic and you cannot get the interest rates down at all. This is essentially what is going on in Japan where they continue to pump reserves into the system and the banks are prepared to sit on them. When the interest rate does go down, it makes them even more willing to sit on them because the opportunity costs are very low."

John Williamson said he was delighted about the good performance of the Hungarian crawling peg. "It is interesting to hear that the crawling peg resulted in lower interest rates for a long period of time, while the movement towards a floating rate resulted in interest rates getting higher and higher. This is not what the conventional wisdom is at the moment. But the qualifications György sets are absolutely right. This system is fairly demanding in terms of the policy decisions that go along with it. Simply adopting an exchange rate regime of this type, without doing the other things, gets you nowhere at all.

I also found the examples of contagion quite striking. Anyone who thinks that there is no such thing as contagion should try to explain what caused the Hungarian stock market to fall by 40 percent when Russia got into trouble, when there is only six percent of trade with Russia. What is that if not contagion! However, I would be interested to hear your insights on the domestic causes of the decline in the stock market. If there was no domestic cause, one might have expected it to have recovered, which it has not done."

Elemér Terták related that before the Russian crisis, he and other Hungarian bankers believed that fundamentals would have a much larger impact on price development in the stock exchange than actually occurred. "But the figures that Mr. Szapáry presented clearly show that outside effects were more influential than we thought. The Russian shock made some feel that Hungary could be harmed much more than it was in reality.

Another reason why Hungarian stock market prices fell is that the Hungarian stock exchange was much more liquid than the Czech and the Polish markets. In the Czech Republic and Poland, it was more difficult to close the position and sell the shares. This is why price fluctuations in the stock exchanges of these two countries were not so great."

In his reply, György Szapáry agreed with Warren Mosler that sterilised intervention kept interest rates higher - "that was the policy because we did not want domestic demand to increase" - but stressed that it was interesting that after the Russian crisis, interest rates went up to the level of Poland and Czech Republic and remained there. "And that brings in John's question which is that it is not like conventional wisdom that you have a fixed exchange rate together with lower interest rates, and a floating exchange rate together with higher real interest rates. Well, this is the nature, I believe, of fickle capital. Such capital comes in for a short period of time, even if investors buy long-term paper, because with the repos it is short-term from one week to maybe nine months or so. And since there is less risk that the exchange rate would depreciate with a fixed rate or narrow band than with free floating, a smaller risk premium is required. So this fickle capital came in. Now, why did it then go back to Poland and remain there after the Russian crisis? It is like the Kosovo crisis and tourism in Hungary. The war is in Kosovo and thousands of Western tourists cancel their tours to Hungary. It's contagion.

On the stock exchanges, Mr. Terták mentioned that large price fluctuations arose because Hungary was more liquid, it was easier to sell. But after the Russian crisis there were withdrawals all over the world. In the United States, fund managers told me that their final investors wanted cash and that when they started to sell, they first sold in the more dangerous markets, like Hungary. Also, the Hungarian investors had become more cautious. They only had seen stock prices going up and they suddenly realised that they could also go down. So some of that money did not return, and we saw deposits in the banking system rise very sharply. Some of these people went back to more conservative forms of saving.

The interesting thing that emerges from this experience is that contagion exists. In other words, you are far away from all these crisis countries, or you have weak trade links, like Hungary has with Russia, but you still get all of these ups and downs. We even had the same impact when Brazil depreciated – it was not as strong as in the Russian case, but it happened all the same."

Chilean Capital Controls

Discussing Ricardo Ffrench-Davis' paper, Stephany Griffith-Jones wondered why short-term capital flows were more successfully discouraged in Chile than in Hungary and the Czech Republic. "They have tried to discourage short-term flows, but the central banks say that they are not very successful because these flows feed upon each other. This does not seem to happen in Chile and I wonder why. Is it because the mechanisms were applied better in Chile, or were there certain peculiarities that made it possible?"

Roger Nord questioned the success of Chilean capital controls and referred to econometric studies claiming that these controls were not effective. "There has been a growing body of literature suggesting that the Chilean controls were ineffective in doing what they were set out to do. If you submit the impact on the size of capital flows, the impact on interest rates and the impact on the current account to rigorous econometrics, you find very little support for their effectiveness.

Since Chile didn't have a crisis while the rest of Latin America did, you start to look at what was different in Chile. When you find that they had controls on short-term capital, *ergo* they must have been effective. But in fact, it is quite possible that there are many other reasons why Chile did not have a crisis, and the strength of the banking system is certainly one of them. The clean-up that they were able to undertake in the 1980s in the banking system gave Chile a very strong starting position. So were the capital controls in Chile as effective as they are often touted to be? It is rather interesting that Chile actually abandoned these controls last year by setting them to zero."

John Williamson was unimpressed by research claiming that the Chilean controls were ineffective. "So far I have only seen one of these papers claiming that Chilean capital controls didn't work, and it was one of the worst papers I have read for a long time. The authors made three fundamental errors. One was that capital controls don't work because Chile has had a higher interest rate because of its capital controls. This is preposterous since that was the purpose of those controls. The second was that because Chile did not have a lower interest rate, it did not get more investment, so it had lower growth. The authors never faced the question of where these resources were supposed to come from to permit this extra investment. They suggested that Chile would have had extra growth if only it had not choked off this investment. This is nonsense because they did not look at the macroeconomic situation. The third error is that there was no determined impact of the capital controls on the capital inflow because there was no capital inflow in the earlier period, and as a result the Chileans were paying less debt service. This tended to strengthen their current account through a lower stock of foreign investment and so they argued that the impact was theoretically undetermined. But even if this is true, it is not really relevant because the question is: can you keep the exchange rate depreciated relative to its fundamental equilibrium level? To say that the fundamental level may be a bit more appreciated because of this stock accumulation effect seems to me irrelevant. In short, I was profoundly unimpressed by this paper from a recent World Bank, IMF, WTO conference."

Ricardo Ffrench-Davis stressed that a policy tool like the regulation of short-term capital flows should be used in a flexible manner. "It is a bad signal to say, 'Now everything is free', and after two or three years to reintroduce restrictions. It is better to tell the market, 'We will reintroduce them when it is necessary'. The management of capital flows in Chile has been effective because it has been clear and friendly for the markets."

Jack Boorman shared John Williamson's position on the Chilean capital controls. "There seems to be some body of evidence that it reduced the short end and lengthened the maturity overall of a flow of resources. Maybe that wasn't any different than it would have been otherwise, but it was more stable."

John Williamson asked Jack Boorman whether the Fund would be likely to use its power to encourage other countries to adopt the same kind of controls that Chile has adopted.

Boorman responded that attitudes on capital controls are changing, also within the Fund. "The community broadly has learned an awful lot over the last five years about what is sensible in capital controls. But most importantly the policy community, and perhaps the economic profession,

is learning what was unlearned in the 1950s and 1960s when historians and institutional social scientists got relegated down to the small offices at the end of the hallway in universities, and the mathematicians and the econometricians, which I confess I was one, took over. We are currently witnessing a reassessment of the institutional requirements of a capitalist market economy, and that is really to the good. That is what this work on standards is about. The conclusion is that if you are going to liberalise your financial markets, you had better have a domestic financial system that is up to the confrontation with those international markets. Because if you don't, you are going to have problems similar to those of Asia. The combination of Chile's experience with capital controls, and just as important, the need for an absolutely robust domestic financial system, suggests that individuals pressing for liberalisation in a country's capital markets are under some burden to prove that these institutional prerequisites are in place. The Fund is a good place to do that under a jurisdictional authority with an amendment to its Articles."

Peru, Mexico and the Lessons from Asia's Crisis

John Williamson wondered why the performances of Chile and Peru were so different. "Ricardo set himself an easy task in contrasting Chile with Mexico because we know that Mexico made big mistakes and performed terribly. A much more interesting comparison that I would like to see him make in his next paper is between Chile and its neighbour Peru. They are quite similar economies: dependence on mineral exports, contiguous, similar in size. And in the developing world, it is perhaps the best example of a country which has now been operating a floating exchange rate for long enough to start drawing some conclusions.

Around 1995-96 I remember hearing that Peru was guaranteed a ten percent growth rate for the rest of the decade and it has not happened. Is it because its tradable sector didn't get the investment it needed in order to sustain a balanced growth rate? If so, that would be a story worth telling. And if not, let us know about it. If it turns out after all that a floating exchange rate is just as good and that all my worries about the impossibility of sustaining a high growth rate with a floating exchange rate for a long period are wrong, than I'd better know it."

Ricardo Ffrench-Davis agreed that Peru would be interesting. "Peru hasn't been examined much. Stephany has taken an initial look at capital flows in Peru. Capital formation is intensive in real estate and low in the non-real estate, non-building component. It is not a capital goods producing country and the import of capital goods is notably small. If it is true that productivity changes are associated with the import of capital goods,

there is no basis for sustainable economic growth. Over the last twelve years, actual economic growth in Peru has shown ups and downs with a moderate average. But Peru's exchange rate experience is indeed interesting. It is important to manage flexibility and they have moved in that direction in Peru."

Ariel Buira agreed with the thrust of the recommendations made by Ricardo Ffrench-Davis in his paper and added a footnote on the Mexican case. "It is not my intention to defend the Mexican policies. It was a risky bet, we put ourselves into what Ricardo calls a 'vulnerability zone', and it went wrong. But, it went wrong mostly for non-economic reasons, and the mistake was making ourselves vulnerable. Now, on the obvious mistake that appears from the paper, I would make a little qualification. There is absolutely no question that there was a very significant appreciation of the exchange rate in the early 1990s. In the paper it is compared with the period 1987-90 and that gives an appreciation of thirty percent or so in the nominal exchange rate. But I would like to point out one or two things about the 1987-90 period.

In 1986 we had an oil shock and we lost about 5 or 6 percent of GDP and the government lost something like 40 percent of its tax revenues. This led the central bank to devalue so fast that despite the loss in terms of trade, we ended the year with higher reserves than we started with – we over-devalued. The following year, there was a stock market crash and we devalued again, having a surplus on the current account. So we started with a very substantially over-depreciated currency. The reference point is such that the labour costs in the following years lagged behind because there was a period of inflation and unit labour costs rose marginally. So I don't think this was a very clear case of overvaluation. All kinds of other things went wrong, but I don't think this was the main one.

If the currency appreciates and you have a large current account deficit, there is a tendency to say that you are overvalued. But I don't think it is that simple. You can have a large current account deficit without being overvalued. This is the case in the US for instance. If you look at relative prices, by and large the prices in the US are lower than in Western Europe. But this basically reflects an imbalance between savings and investment. As a first approximation it is best to look at it in these terms, though you can elaborate it and go beyond this.

In Mexico, we clearly ran into all kinds of other problems. By all accounts, the restructuring of the foreign debt in 1989 was – in arithmetic terms – insufficient to provide the required debt relief, but the psychological impact generated huge inflows. Confidence was the name of the game, also with NAFTA. And this game of confidence was expected to insure the soft landing. We had an administration that made several high risk bets

and succeeded. In the end, confidence burst as a result of a number of political shocks. Of course, in retrospect it is clear that you should not have taken such risks, because they were devastating ."

Ricardo Ffrench-Davis observed that in 1997, with the outbreak of crisis in Asia, the world was in a very dangerous position. "The world was being pushed in what we now believe to be the wrong direction. The events in Asia at least have one positive by-product, which is that they introduced pragmatism. Or as Jack Boorman says, there has been a lot of learning about proper economic policies, so that the world now moves more cautiously in these very sensitive areas which can lead to crises."

Part IV

Gaps in the International Institutional Framework

Towards a Better Financial Architecture

Stephany Griffith-Jones

I Introduction

The deep integration of developing countries into the global economy has many advantages and positive effects. In particular, capital flows to developing countries have clear and important benefits. The benefits are especially clear for foreign direct investment, which is not only more stable but also brings technological know-how and access to markets. Other external flows also have important positive microeconomic 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; this latter positive macroeconomic effect is very valuable for low-savings economies, but may be less clear for high-savings economies like those of East Asia.

However, large surges of short-term and potentially reversible capital flows to developing countries can also have very negative effects. Firstly, these surges pose complex policy dilemmas for macroeconomic management, as they can initially push key macroeconomic variables, such as exchange rates and prices of assets like property and shares, away from what could be considered their long-term equilibrium. Secondly, and more important, these flows pose the risk of very sharp reversals. These reversals – particularly if they lead to currency and financial crises – can result in very serious losses of output, investment and employment, as well as dramatic increases in poverty. This has been dramatically illustrated by the impact of the current crisis in Asia, which has spread to many other countries, including most recently Brazil.

Asian-style currency crises – and their extremely high development costs – raise a very serious concern about the net development benefits for developing countries of large flows of potentially reversible short-term international capital. While the high costs of reversals of those flows are evident, the benefits are less clear. This is in sharp contrast with foreign direct investment (FDI) and trade flows, where the very large developmen-

¹ This paper draws partly on joint work with José Antonio Ocampo, to which Jacques Cailloux contributed. I thank officials in the UK and US Treasury, Bank of England and Federal Reserve Board, as well as colleagues in private institutions for valuable insights. The responsibility is, as always, my own.

tal benefits clearly outweigh the costs. As a result, volatile short-term capital flows emerge as a potential Achilles' heel for the globalised economy and for the market economy in developing countries. If the international community and national authorities do not learn to manage these flows better, there is a serious risk that such volatile flows could undermine the tremendous benefits that globalisation and free markets can otherwise bring.

The current functioning of the international financial system is clearly unsatisfactory, particularly because it leads to recurrent financial crisis, with very high development costs especially implying increases in poverty for developing countries. It thus risks undermining the development achievements of the otherwise broadly successful market reforms.

As a result of the Asian crisis – which spread to other emerging markets – a broad consensus has emerged on the need and the urgency for reforming the international financial system. Though quite important progress has been made, there is however lack of agreement and precision in proposals on the exact nature of the changes required. This paper aims to contribute to the discussion, by making more precise and comprehensive proposals, both for crisis prevention and for better crisis management.

Section II looks at improved transparency and information on developing countries, as one way to deal with currency crises; however, the limits of this approach are also analysed, as well as the need for improved transparency on international financial markets. Section III deals with better regulation. It examines the need to fill global regulatory gaps, as well as discussing the recently created Forum for Financial Stability. Section IV deals with the appropriate scale, timeliness, modalities and conditionality in the provision of official liquidity in times of crisis, including a discussion of the recently created Contingency Credit Line. Section V deals with involving the private sector, both in crisis prevention – for example via private contingency credit – as well as in crisis management, for example via amendment of bond clauses or via standstill arrangements. Section VI concludes.

II Improved Transparency and Information

Actions Taken

One of the areas defined initially by the G-7 countries and the IMF as central for future crisis avoidance was enhancing transparency and disclosure of timely and reliable information, basically on developing countries, so as to make it available to market actors. The assumption was that insufficient

information had contributed significantly to the Asian crisis (for a critique of this assumption see below).

A flurry of activity in improving information followed, as reflected in the fact that the first of the three working groups of the G-22 (which included G-7 countries and a range of emerging economies) was devoted to Enhancing Transparency and Disclosure of Information. Amongst some of the key significant data gaps and deficiencies identified were: (i) information on foreign exchange reserves, including undisclosed forward positions, and any other claims against them; (ii) maturity and currency exposures of the public and private sectors; and (iii) the health of the financial system, including information on non-performing loans.

A number of steps have already been taken, of which the main ones are Public Information Notices (PINs) by countries and strengthening by the IMF of the Special Data Dissemination Standard (SDSS).² The PINs are prepared yearly by all countries after their Article IV consultation with the IMF, and countries are encouraged to release them speedily. The IMF has also started a pilot programme for voluntary release of Article IV staff reports. Of particular importance has been the strengthening, in the areas of international reserves and external debt, of the SDSS, the information standard that the IMF had already established in 1996, after the Mexican peso crisis. Particularly significant is that these will incorporate full details on reserves, and any claims against them (for all countries), from April 1999.

Besides information standards, a number of other standards are being defined (by the IMF and the BIS, in collaboration with institutions like the World Bank and the OECD) which are meant to provide codes of good practice for economic, financial and business activities. The IMF will help in the dissemination of these standards and the monitoring of their implementation, by different measures including having them as conditions for IMF lending. These standards will include creating Codes of Good Practices on Fiscal Transparency, and in monetary and financial policies, improving the quality of banking supervision, as well as developing standards relevant for the functioning of financial systems, including on accounting and auditing, bankruptcy, corporate governance, insurance regulations, payment and settlement systems, and securities market regulations.

Though many of these standards and their implementation may have very positive effects – e.g. on strengthening financial systems – three rather serious concerns need to be raised and addressed. Firstly, is the definition

² For details of these and some of the other main measures of progress on transparency and standards, see IMF website: http://dsbb.imf.org/

of "desirable standards" sufficiently participatory, that is, do developing countries which will be asked to implement these standards in their own economies have enough participation in the definition of these standards? Should developing countries just be encouraged to adopt these standards, rather than them being part of IMF conditionality? These concerns could be summarised in the phrase "No standardisation without participation".³ Secondly, will implementing these standards be really effective in significantly improving the resilience of developing countries for avoiding crises, and making them less acute if they do happen? Thirdly, will implementing these standards not impose excessive administrative and other burdens on developing country governments, especially the poorer ones, which have more limited resources and expertise? To help deal with the third problem, appropriate technical assistance – particularly for the poorer countries – is essential.

Limits of this Approach, Due to Inherent Problems of Asymmetries of Information

Clearly, improved information, along the lines of the changes described above, will be welcome and useful, contributing to a better market performance. However, improved information on developing countries will not by itself avert crises. First, information available to financial markets will never be perfect and information asymmetries will always exist. Second, it is not clear that better information will be sufficient for financial markets to function well, as the key issue is how information is processed and acted upon. Phenomena such as euphoria and herding imply that "bad news" is ignored in periods of "boom" and magnified in periods of "bust", with the reverse being true for "good news". Third, better information on developing countries has to be complemented by equally important improved information on international financial markets.

As regards the first point, there is both clear theoretical analysis and practical experience which shows that information will always be imperfect, and that this may cause or contribute to financial crises. A clear fore-runner of much of the imperfect information literature was Keynes, who in Chapter 12 of the General Theory stressed "the extreme precariousness of the basis of knowledge on which our estimates of prospective yields have to be made". The seminal contributions in modern analysis of asymmetries of information and their particular significance for financial markets, have come from Stiglitz.⁴ Most recently, Eichengreen (1999) has rather strongly

³ I thank Gerry Helleiner for this point.

⁴ See, for instance, the classic paper by Stiglitz and Weitz (1981).

summarised the limits of improved information for crises prevention: relying excessively on improved transparency "underestimates the extent to which information asymmetries are intrinsic to financial markets It is unavoidable that borrowers should know more than lenders about how they plan to use borrowed funds. This reality is a key reason why banks exist in market economies Bank fragility is inevitable. The advocates of information-related initiatives mislead when they assume the problem away".

Indeed, sophisticated and increasingly informed financial markets have continued to be extremely (and even increasingly) volatile. This has occurred also in some of the most developed economies in the world, where serious problems and crises have occurred in their banking systems, even though they had the highest ratings on transparency, as illustrated by the banking crises in Scandinavian countries (Bhattacharya and Miller, 1999; Stiglitz and Bhattacharya, 1999).

One very important reason for imperfect information is the fact that much of the relevant information to which the market reacts comes only with a lag, and depends on macroeconomic conditions not entirely known in advance (even though the changes in macroeconomic conditions may be partly or largely determined by the aggregate effects of the behaviour of financial agents). For example, some of the lending or investment decisions made in East Asia before the 1997 crisis may have been unsound, but the magnitude of the losses associated to them were even more determined by the major macroeconomic shocks that these regions experienced, whose large magnitude was probably unpredictable and indeed these shocks were largely unpredicted. Increasing information that may thus be relevant to improve microeconomic market efficiency may do little to reduce macroeconomic volatility (Ocampo, 1999). Particularly as regards macroeconomic information, markets are necessarily imperfect when time is involved, as the information necessary to correct such "market imperfections" will never be fully available.

Secondly, there are problems as regards the processing of information. As pointed out above, the key issue is that increasingly investors (and lenders) are concerned, not with what an investment is really worth to a person who buys it for keeps, but with what the market will value it at in a few hours or days. The concept behind this was perhaps best captured by Keynes' "beauty contest", in which each actor tries to interpret what the average opinion in the market is. To the extent that this is true, available information on developing countries will be less important than how the average of the market is likely to perceive it. The interrelation of the "information" that financial actors manage at any particular time – or rather, of the opinions and expectations that are formed from such information – is central to the rich contemporary literature on self-fulfilling

booms and busts.

Microeconomic factors, on how financial firms and banks operate, reinforce such problems. This may be related both to costs and to firm organisation. A board of a financial institution deciding to invest or lend to a particular country may not be able (or willing) to take account of the rich information available in the research departments of that institution. Smaller banks, with small research departments, tend to rely even less on their internal expertise, and follow even more decisions of other banks. As a result, changes in the opinions of those investors that are considered to be "informed" may lead to overreactions by non-informed ones, who rely on the formers' lead to make their decisions (Calvo, 1998).

A key problem is that changes in opinion can occur without any significant change of underlying fundamentals; this occurs because basically the same information about a country may be interpreted totally differently at different times, due to factors such as the "mood of the markets", events in other economies, etc. Also, "small news" that does not alter fundamentals, may affect market perceptions dramatically in a world of instant communications and 24-hour trading.

Some concern has even been expressed that, in some cases, information disclosure could lead to more, and not less, variability in the price of an asset (Stiglitz and Bhattacharya, 1999). Lack of information may serve to "average" good and bad news; as a consequence, it could even be the case that improved capabilities of processing and transmitting certain information could increase volatility. However, empirical evidence on this is inconclusive, and further research is required.

Overall, we can conclude that, though on the whole very helpful and important, improved information on developing countries will clearly not be sufficient to prevent future crises, and that far stronger actions are required. This is increasingly – though slowly – being recognised by the international community. A third problem is that, as pointed out above, better information on developing countries has to be complemented by better information on international financial markets available to policy-makers.

Providing Additional Information on Markets to Developing Countries

Indeed, particularly during the crisis that started in Asia, emerging country policymakers (and specifically emerging country central banks) have found

⁵ A recent survey of banks by the Bank for International Settlements showed that most of them took decisions without taking much notice of information available in research and other departments even within their own bank.

important limitations in the essential information available on the functioning of international capital and banking markets.⁶ The type of information required is both on more long-term structural changes in these markets, but particularly on almost day to day changes in the functioning of markets – and their key actors – globally and regionally.

In the same way that the IMF has led the way in improving information - and its dissemination - on emerging market economies, particularly useful to markets, a parallel symmetric effort needs to be done to gather and provide timely information on market evolution to emerging market policymakers. This task should perhaps be led by the BIS, and coordinated by the newly created Forum for Financial Stability, though inputs from other institutions, e.g. the IMF, the private sector (e.g. Institute of International Finance), would be very valuable. Though possibly not giving it sufficient emphasis, suggestions in the October 1998 G-22 Report of the Working Group on Transparency and Accountability did provide important elements for this task. These suggestions relate not just to better statistics on international banks' exposures, but also on "compiling data on international exposures of investment banks, hedge funds and other institutional investors"; the latter would include presumably pension funds and mutual funds. Furthermore, the growth of financial innovations, such as over-thecounter derivatives, while designed to facilitate the transfer of market risk and therefore enhance financial stability, have also made financial markets more complex and opaque. This has created difficulties in monitoring patterns of activity in these markets and the distribution of risks in the global financial system for regulators, central banks, market participants and other authorities, including particularly in developing countries.

In response to this situation, the Euro-currency Standing Committee at the BIS has drawn up a framework for the regular collection of statistics on over-the-counter derivatives markets on the basis of reporting by leading market participants. Such efforts to improve transparency, particularly in relation to derivatives, and on highly leveraged institutions (such as hedge funds), are widely welcomed. However, this sector is constantly evolving and there is a concern that regulatory reporting will never be able to keep pace with this complex and dynamic markets. Difficulties are made greater by the fact that there are already many gaps in reporting derivatives and activities of institutions like hedge funds; it would seem appropriate for major central banks and the BIS to attempt to improve registration of derivatives and institutions like hedge funds, by making it obligatory.⁷ It

⁶ Interview material; own experience.

⁷ Interview material.

seems essential that developing countries – including representatives from the poorer countries – should participate in the relevant Working Groups where information needs are discussed and decided, so that their information needs on markets are also fully considered.

Given the speed with which markets move, it seems particularly important that the frequency with which relevant data is produced is very high (and possibly higher in times of market turbulence, when it becomes particularly crucial), and that dissemination is instant to all countries' central banks. Indeed, a special additional service could be provided by the BIS, in which it would play the role of clearing house of information. For this purpose, it could draw not just on information it can gather directly from markets, but by collecting and centralising information on their markets that individual central banks have, and where the aggregate picture is not easily available to any individual central bank. This could possibly include both quantitative and qualitative information. Via the Internet, the BIS could standardise the information requirements, collect the information, aggregate it, and disseminate it rapidly to all central banks, as well as to other relevant institutions. Such a service would be of the greatest usefulness to developing country policymakers, especially immediately before and during crises; however, it would naturally also be very valuable to developed country policymakers and international institutions (including the BIS itself) in handling crisis prevention and management.

To summarise, crucial information on capital and banking markets available to policymakers, especially in LDCs is clearly insufficient, especially just before and during currency crises.

The BIS (and the Forum for Financial Stability) seem well placed to build on the useful information they already provide, and their network of links with central banks, securities' regulators and markets by expanding it in two directions: (i) broadening coverage, for example to include more information on institutional investors and in rapidly growing instruments, such as derivatives; and (ii) increasing significantly frequency of information, to provide timely inputs to policymakers on rapid changes in banking and financial markets' trends.

This exercise would be in some ways symmetrical to the efforts being led by the IMF to improve information available on developing countries, mainly of use to markets; the proposed activity would improve information on markets, mainly for the use of country and international policymakers.

If approved, a meeting or a set of meetings, including representatives from LDCs, working with BIS staff or the relevant BIS Committees, seems appropriate for effective implementation. Representatives of LDCs' central banks could for example present initial ideas on desirable additional information, especially from a developing country perspective, that the BIS (or

more broadly the Forum for Financial Stability) could provide, its frequency, etc. The feasibility and value of such additional information could then be explored.

III Better Regulations, Nationally and Internationally

National Regulations⁸

The experience of developing countries at different levels of development indicate that the management of capital account volatility requires: (a) consistent and flexible macroeconomic management; (b) strong prudential regulation and supervision of domestic financial systems; and (c) equally strong "liability policies", aimed at inducing good debt profiles, public and private, domestic and external. Moreover, despite the traditional emphasis on crisis management, the focus of authorities should rather be the management of booms, since it is in the periods of euphoria from capital inflows and trade expansion and terms of trade improvement that crises are incubated. Crisis prevention is thus, essentially, an issue of adequate management of boom periods.

Regulation of capital inflows may also be essential to avoid unsustainable exchange rate appreciation during booms, particularly in the face of improved terms of trade in commodity-exporting countries. Some appreciation may be inevitable and even an efficient way to absorb the increased supply of foreign exchange, but an excessive revaluation may also generate irreversible "Dutch disease" effects. Regulations of capital inflows thus play an essential role in open developing economies as a mechanism to allow monetary and domestic credit restraint, as well as to avoid unsustainable exchange rate appreciation during booms. The macroeconomic role of regulation of inflows has, unfortunately, received much less attention in discussions than the issue of regulation on outflows during crises; they are, however, more important, as they are associated to the essential issue of crisis prevention.

The experience of many countries indicates that strong domestic prudential regulation and supervision are essential to avoid costly financial crises. The experience of both developing and industrialised countries indicates that financial crises are very costly, both fiscally and in terms of

⁸ The literature on national regulations is extensive. See in particular, among recent contributions, World Bank (1998a), ch. 3, ECLAC (1998a and 1998b), Ffrench-Davis (1999), Helleiner (1997a) and Ocampo (1999).

economic activity, particularly if they are mixed with currency crises (the so-called "twin" crises). Given the role of the domestic financial system in the intermediation of external lending, prudential regulation and supervision also play an essential role in managing the risks associated to capital account booms.

The essential role of domestic financial regulation and supervision is to guarantee the solvency of domestic financial intermediaries, by guaranteeing capital requirements adequate to the risks that financial intermediaries face, avoiding excessive risk taking, including an excessive concentration of risks, and requiring that loan losses are adequately accounted for. However, it has become increasingly clear that in the face of financial volatility, domestic financial regulation and supervision should also guarantee an adequate liquidity of financial intermediaries, as the link between liquidity and solvency problems are stronger than traditionally perceived. Thus, avoiding significant mismatches between the term structure of assets and liabilities, and establishing higher reserve or liquidity requirements for the short-term liabilities of the domestic financial system also play an essential role in domestic financial management.

Prudential regulation and supervision must take into account not only the micro but also the macroeconomic risks typical of developing countries. In particular, due account should be taken of the links between domestic financial risk and changes in key macroeconomic policy instruments, notably exchange and interest rates. The risks associated to the rapid growth of domestic credit, to currency mismatches between assets and liabilities, to the accumulation of short-term liabilities in foreign currencies by financial intermediaries and to the valuation of fixed assets used as collateral during episodes of asset inflation must be adequately taken into account. Moreover, given these macroeconomic links, prudential regulations should be stricter in developing countries, and should be strengthened during years of financial euphoria or terms of trade improvements to take into account the increasing risks in which financial intermediaries are incurring. These links also imply that contractionary monetary or credit policies during booms, particularly higher reserve or liquidity requirements and ceilings on the growth of domestic credit, may be strongly complementary to stricter prudential regulation and supervision; indeed, this would imply that counter-cyclical elements in both monetary and regulatory policies are desirable for small economies, subject to large trade or capital account shocks.

In the case of the public sector, direct controls by the Ministry of Finance are the adequate instrument of a liability policy. More indirect

⁹ See, in particular, IMF (1998), ch. IV.

tools are necessary to induce a better private debt profile. Again, direct exchange controls may be the appropriate instrument. An interesting alternative are reserve requirements on capital inflows, such as those used by Chile and Colombia in the early 1990s; indeed, as in both countries reserve requirements can be substituted for a payment to central banks of the opportunity cost of the said requirement, they are in effect a tax on inflows. A flat tax has a positive effect on the debt profile, as it induces longer-term borrowing, for which the tax can be spread over a longer time frame. This has been generally recognised in recent controversies. The effects of this system on the magnitude of flows have been subject to a more heated controversy. In any case, to the extent that elusion is costly and that short and long-term borrowing are not perfect substitutes, the magnitude of flows is also affected. 10 If this is the case, the system operates both as a "liability" and a macroeconomic policy tool. A basic advantage of this instrument is also that it is targeted at capital inflows, and it is thus a preventive policy tool.

Simple rules such as the Chilean-Colombian system can also play a very positive role. Any such system must also meet an additional requirement: it must have the adequate institutional backing. A permanent dynamic system, which is strengthened or loosened throughout the business cycles is preferable to the alternation of free capital movements during booms and quantitative controls (e.g. prohibitions on outflows) during crises. Indeed, the latter system may be totally ineffective if improvised during a crisis, simply because the administrative machinery to make it effective is not operative and thus leads to massive evasion or elusion of controls. Such a system is also procyclical and leaves aside the most important lesson learnt on crisis prevention: avoid overborrowing during booms and thus target primarily capital inflows rather than outflows.

International Measures

Clearly an important part of the responsibility with discouraging excessive reversible inflows – as well as managing them – lies with the recipient countries. However, the large scale of international funds – compared to the small size of developing country markets – leads us to question whether measures to discourage excessive short-term capital inflows by recipient countries are enough to deal with capital surges and the risk of their reversal. Three strong reasons make complementary action by source countries and internationally necessary. Firstly, not all major recipient countries will be willing to discourage short-term capital inflows, and some may even

¹⁰ Agosin (1998), Agosin and Ffrench-Davis (1999) and Ocampo and Tovar (1998).

encourage them. Thus the tax and regulatory measures taken, for example, to encourage the Bangkok International Banking Facility, encouraged short-term borrowing. Secondly, even those recipient countries which have deployed a battery of measures to discourage short-term capital inflows have on occasions found these measures insufficient to stem very massive inflows. Thirdly, if major emerging countries experience attacks on their currencies, which also result in difficulties to service their debt, they will be forced to seek large official funding. As a consequence, there is a clear need for international and/or source country regulation that will discourage excessive reversible capital inflows. If this is not developed, international private investors and creditors might continue to assume excessive risks, in the knowledge that they will be bailed out if the situation becomes critical. This is the classical moral hazard problem.

The Asian crisis – and its repercussions worldwide – clearly demonstrated that it is necessary to strengthen source country regulations, coordinate them globally and fill important regulatory gaps.

The crisis also provoked a serious debate on how supervision and regulation of the international financial system could be strengthened in order to help prevent economic crises of this sort happening again in the future. The debate has partly focused on whether existing arrangements should be extended and improved, or whether there is now a need for new institutions to cope with the increasingly globalised financial system, so as to achieve better the necessary improvement of international financial regulation and supervision.

At the more institutionally radical end of the scale, there have been proposals for the creation of a new international body such as a World Financial Authority (Eatwell and Taylor, 1998) or a Board of Overseers of Major International Institutions and Markets (Kaufmann, 1992). Such a body would have wide-ranging powers for the oversight of regulation and supervision globally.

The other approach has been to develop and build on existing institutional arrangements. The virtue of this approach was the greater ease, both technically and especially politically, to move forward on this. Indeed, the Forum for Financial Stability, which is described below, has been created and has started to operate, with impressive speed; this seems one of the most positive steps towards a new international financial architecture.

Both the Canadian and the British government put forward proposals based on this approach in 1998. In the autumn of 1998, Chancellor Gordon Brown and Secretary of State Clare Short proposed a standing committee for global financial regulation to coordinate the multilateral surveillance of national financial systems, international capital flows and global systemic risk. It was proposed that the committee would bring

together the World Bank, the IMF, the Basle Committee of the BIS and other regulatory bodies on a monthly basis to develop and implement ways to ensure that international standards for financial regulation and supervision were put in place and properly coordinated.

The Financial Stability Forum

In October 1998, the G-7 finance ministers and central bank governors approved this idea in principle and asked Hans Tietmeyer, then president of the Bundesbank, to develop the UK proposal and more generally consider the cooperation and coordination between the various international regulatory and supervisory bodies and to make recommendations for any new arrangements. Tietmeyer's report, released in February 1999, outlined areas where improvements to current arrangements were necessary, but stated that "sweeping institutional changes are not needed to realise these improvements" (Tietmeyer, 1999). Instead it was proposed that a Financial Stability Forum, which would meet regularly to discuss issues affecting the global financial system and to identify actions needed to enhance stability, be convened. The Forum was formally endorsed by finance ministers and central bank governors from the G-7 at their February meeting in Bonn, and met for the first time in the spring of 1999.

The Tietmeyer report had correctly outlined three main areas for improvement to current arrangements which have been highlighted by recent events in international financial markets: (a) identify vulnerabilities in national and international financial systems and sources of systemic risk and identify effective policies to mitigate them; (b) ensure that international rules and standards of best practice are developed and implemented, and that gaps in standards are identified and filled; and (c) ensure consistent international rules and arrangements across all types of financial institutions.

The Financial Stability Forum will be limited in size to 35 members, in order to allow for an effective exchange of views and decisionmaking. Each G-7 country will have three representatives on the Forum, from the finance ministry, central bank and supervisory authority. The G-7 stated that while the Forum will initially be limited to G-7 countries, it is envisaged that other national authorities, including from emerging market countries, will join the process at some stage. The IMF and the World Bank will have two representatives each, as will the Basle Committee on Banking Supervision, the International Organisation of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS). The BIS, the OECD, and the two BIS Committees will all have one representative on the Forum.

The Forum will be chaired by Andrew Crockett, general manager of the BIS, for the first three years and it will have a very small secretariat in Basle. One of the key aims of the Forum will be to better coordinate the responsibilities of the main national and international authorities and supervisory bodies, and to pool the information held by these various bodies, in order to improve the functioning of markets and reduce systemic risk. The Forum has defined three ad hoc working groups, to tackle recommendations on three subjects defined as key:

- (a) to recommend actions to reduce the destabilising potential of institutions employing a high degree of leverage (HLIs) in the financial markets of developed and developing economies; this group is chaired by Howard Davies, Chairman of the UK Financial Services.
- (b) to evaluate measures in borrower and creditor countries that could reduce the volatility of capital flows and the risks to financial systems of excessive short-term external indebtedness; this group is chaired by Mario Draghi. Reportedly, amongst developing countries, Chile and Malaysia will participate.
- (c) to evaluate the impact on global financial stability of the uses made by market participants of financial offshore centres, and the progress made by such centres in enforcing international prudential standards and in complying with cross-border information exchange agreements. As regards offshore centres, reportedly an assessment will be made of the additional efforts required to avoid under-regulation or inappropriate disclosure in offshore centres contributing to global financial instability. This group is chaired by John Palmer, Superintendent of Financial Institutions.

It is important to stress that the working groups comprise officials of developed and developing market economies, international financial institutions and supervisory groupings, and will draw on work completed or under way in various public and private sector forums. It is interesting that senior officials from developing countries have been included, where their expertise is seen as particularly relevant. For example, the group that will study measures to study volatility of capital flows includes senior representatives from Chile and Malaysia, two countries that have implemented measures to curb inflows and outflows (Malaysia for both, and Chile for inflows).

The setting up of the Financial Stability Forum is clearly a very necessary, and valuable first step towards improving the coordination and cooperation of the various bodies which work towards improving the way markets work in order to improve global stability. The question lies, however, in whether the Forum, as it has been proposed, will be a representative enough and strong enough body to address all these complex issues.

First, the omission of any developing country authorities in the initial years of the Forum itself appears to be an important error. It has been increasingly accepted, especially since the Mexican peso crisis and the current international financial crisis, that international finance is more and more globalised, that developing countries are important actors in this globalised financial system, and that currency crises in LDCs pose both systemic threats to the international financial system and threats to their development prospects. The experiences of developing countries, will not be directly represented at the Forum itself. Representation of developing countries on the Forum would be desirable for both legitimacy reasons, and because it would provide the body with a wider range of expertise and perspectives. However, the representation of developing countries in the ad hoc Working Groups is clearly a positive development.

Ways could easily be found to include developing countries in the Forum without making it too large. If three developing countries representatives were included, the membership of the Forum would rise from 35 to 38, that is by less than 10%. Developing country representatives, from countries with large levels of private capital inflows or who have major financial centres could for example be chosen on a regional basis; there could be one Asian, one Latin American and one African. This would ensure also that the interests of poorer countries would also be represented. These representatives could be appointed for a fairly short period (e.g. 2 years) and then rotated. This type of representation by developing countries has been working rather well in other contexts, for example in the Boards of the Bretton Woods institutions. It has also been suggested that not all G-7 countries would need to be included if it was felt that size needed limiting. For example, all G-7 countries, which have large financial centres, could be included as permanent members; other G-7 countries could be rotated.

The Forum for Financial Stability is a very important initiative, that hopefully will reduce vulnerabilities in the international financial system, by promoting coordination and cooperation among G-7 regulators, central bankers and international financial institutions. Adding a small representation from developing countries to the Forum would increase those countries' commitment to its aims, as well as add valuable insights to its decisionmaking process. It would seem to be beneficial to all involved.

Second, doubts have been voiced over the institutional strength of the new Financial Stability Forum. With a very small secretariat in Basle (currently it has only three staff members), meeting only twice yearly, and no power of enforcement, will the Forum have the sufficient institutional muscle to deal with the tasks that have been identified? Can its response be speedy and agile enough to a rapidly changing international private sys-

tem? The setting up of the Forum represents a significant enhancement of the system of global regulation by agreement and peer pressure that has been shown to work reasonably well in the context of the Basle Committees of the BIS (Griffith-Jones, 1999). International cooperation at the BIS has always been based on home country control, where sovereignty remains at the level of the nation-state, and agreements are reached through negotiation and then implemented, where necessary, through national legislation or regulation. Countries which are not represented at the Basle Committee have also adopted some of their directives (most notably, the capital adequacy standards). However, in the medium term, in a world of open financial markets, an international body whose Board meets regularly and has the power to make and enforce policy may well be needed (Eatwell, 1999). This would point towards a body more akin to some kind of World Financial Authority, which would be endowed with executive powers along the lines of a WTO for finance.

In the meantime, however, the Financial Stability Forum is a very important step in the right direction. Time will tell whether this body is sufficient to promote international financial stability, and to fill the important gaps in financial regulation which undermine such stability.

Filling Regulatory Gaps

There are three categories of flows and institutions to emerging markets where additional international and/or source country regulation and supervision may be particularly necessary, as these flows seem insufficiently regulated and their surges, as well as outflows, have played a particularly prominent role in sparking off recent currency crisis; the latter would seem to occur particularly because they are reversible. One of these are short-term bank loans (particularly important in the Asian crisis); the second are easily reversible portfolio flows, made by institutional investors, such as mutual funds (especially important in the Mexican peso crisis but also important in East Asia); the third are activities by hedge funds and more generally highly leveraged institutions, relating in particular to different types of derivatives.

As discussed above, the Forum for Financial Stability (FSF) will examine in its Working Groups issues relating to short-term bank loans and to highly leveraged institutions. However, it would also be desirable for the FSF to examine issues relating to easily reversible portfolio flows made by institutional investors such as hedge funds.

Bank Loans. International bank loans (including short-term ones) are already regulated by industrial countries' central banks; these national reg-

ulations are coordinated by the Basle Committee. However, existing regulations were not enough to discourage excessive short-term bank lending to several of the East Asian countries, whose reversal played a major role in triggering of crises in those countries. A key reason for such high shortterm bank lending to East Asia was that till just before the crisis most of these East Asian countries (and particularly countries like South Korea) were seen by everybody including regulators as creditworthy. Another, important reason has been current regulatory practice, which has a bias in favour of short-term lending. For example, for non-OECD countries, loans of residual maturity of up to one year have a weighting of only 20 percent for capital adequacy purposes, whilst loans over one year have a weighting of 100 percent for capital adequacy purposes. This was done to reflect the fact that is easier for individual banks to pull out from renewing short-term loans. However, as a result of this rule, short-term lending is significantly more profitable for international banks. Therefore, to banks' economic preference for lending short term, especially in situations of perceived increased risk, is added a perverse regulatory bias that also encourages short-term lending. The initial intention was to protect banks, and their liquidity, by encouraging more short-term lending. An overall increase in short-term loans, however, makes countries more vulnerable to currency crises and therefore, paradoxically, banks more vulnerable as well, to risk of non-payment of short-term loans.

It is interesting that soon after the Asian crisis (around April 1998), clear proposals emerged (Greenspan, 1998, see also Griffith-Jones with Kimmis, 1998) to increase the capital charge through the assignment of a higher risk weight to short-term interbank credits than the 20 percent assigned under the Basle Capital Accord, so as to reduce the excessive incentive towards such short-term loans. However, even though this change seemed to have very broad support, progress was not made for a year on it as a stand-alone proposal (IMF, 1999; interview material). Instead, a review on this issue was placed within the context of a comprehensive reassessment of Basle treatment of credit risk, for which a special task force was created. Unfortunately, a totally separate issue (linked to the capital adequacy required for mortgages lent by German banks) delayed overall agreement for at least a year, on revision of capital adequacy rules (Financial Times, May 14, 1999). Questions need to be raised, therefore, not just on appropriate technical measures to build a new international financial architecture, but on mechanisms for speeding up the process through which decisions - especially those on which there is agreement - can be quickly taken. This should be particularly so for the case where clear institutional mechanisms already are in place (in this case the Basle Committee of Bank Supervisors) that should allow rapid decisionmaking to take place.

Portfolio Flows. As regards portfolio flows to emerging markets, there is an important regulatory gap, as at present there is no regulatory framework internationally, for taking account of market or credit risks on flows originating in institutional investors, such as mutual funds (and more broadly for flows originating in non-bank institutions). This important regulatory gap needs to be filled, both to protect retail investors in developed countries and developing countries from the negative effects of excessively large and potentially volatile portfolio flows.

The East Asian crisis confirms what was particularly clearly visible in the Mexican peso crisis (Borio, 1998; Griffith-Jones, 1998). Institutional investors, like mutual funds, given the very liquid nature of their investments can play an important role in contributing to developing country currency crises. It seems important, therefore, to introduce some regulation to discourage excessive surges of portfolio flows. This could perhaps best be achieved by a variable risk-weighted cash requirement for institutional investors, such as mutual funds. These cash requirements would be placed as interest-bearing deposits in commercial banks. Introducing a dynamic risk-weighted cash requirement for mutual funds (and perhaps other institutional investors) is in the mainstream of current regulatory thinking and would require that standards be provided by relevant regulatory authorities or agreed internationally. The guidelines for macroeconomic risk, which would determine the cash requirement, would take into account such vulnerability variables as the ratio of a country's current account deficit (or surplus) to GDP, the level of its short-term external liabilities to foreign exchange reserves, the fragility of the banking system, as well as other relevant country risk factors. It is important that quite sophisticated analysis is used, to avoid simplistic criteria stigmatising countries unnecessarily. The views of the national Central Bank and the Treasury in the source countries and of the IMF and the BIS should be helpful in this respect. The securities regulators in source countries would be the most appropriate institutions to implement such regulations, which could be coordinated internationally by IOSCO, probably best in the context of the Forum for Financial Stability.

The fact that the level of required cash reserves would vary with the level of countries' perceived "macroeconomic risk" would make it relatively more profitable to invest more in countries with good fundamentals and relatively less profitable to invest in countries with more problematic macro or financial sector fundamentals. If these fundamentals in a country would deteriorate, investment would decline gradually, which hopefully would force an *early correction* of policy, and, a resumption of flows. Though the requirement for cash reserves on mutual funds' assets invested

in emerging markets could increase somewhat the cost of raising foreign capital for them, this would be compensated by the benefit of a more stable supply of funds, at a more stable cost. Furthermore, this smoothing of flows would hopefully discourage the massive and sudden reversal of flows that sparked off both the Mexican and the Asian crises, making such developmentally costly crises less likely.

Given the dominant role and rapid growth of institutional investors in countries such as the US, the UK and France, this proposal – for a risk-weighted cash requirement on mutual funds – could possibly be adopted first in those countries, without creating significant competitive disadvantages soon after international harmonisation would have to be introduced. However, an alternative route would be for such measures to be studied and implemented internationally being discussed initially within IOSCO, and/or in the broader context of the Forum for Financial Stability. International coordination of such a measure would prevent investments by mutual funds being channelled through different countries, and especially offshore centres, that did not impose these cash requirements (the latter point draws on communication with the Federal Reserve Board).

Such IOSCO international guidelines would be formulated through international consultations similar to those employed by the Basle Committee in developing the "Core Principles for Effective Banking Supervision". The guidelines could be developed by a working group consisting of representatives of the national securities' regulatory authorities in source countries together with some representation from developing countries, in the context of IOSCO. Due account should be taken of relevant existing regulations, such as the European Commission's Capital Adequacy Directive.

Finally, it is important to stress that additional regulation of mutual funds should be consistent with regulation of other institutions (e.g. banks) and other potentially volatile flows.

Highly Leveraged Institutions. Further urgent study is required to detect and cover any other existing monitoring and/or regulatory gaps, e.g. as relates to instruments such as derivatives and institutions such as hedge funds. Careful analysis – both technical and institutional – is required on how hedge funds and other highly leveraged institutions can best be regulated to reduce their impact on magnifying volatility of capital flows, exchange rates and stock markets in developing countries, and the negative effect that this volatility has on development and on poverty. It is encouraging that there is a growing consensus, as reflected for example in the January 1999 Report by the Basle Committee on "Banking Supervision, on Banks' Interactions with highly leveraged institutions (HLIs)", that HLIs can pose

important risks both to direct creditors and, under certain market conditions, to the financial system as a whole.

An additional crucial concern – of the impact of HLIs on magnifying volatility in developing countries – has not yet been sufficiently studied and accepted, nor have measures designed to deal specifically with this issue been proposed internationally. However, policy responses to address risks posed by HLIs to creditors and the financial system as a whole will also help reduce negative impact on developing countries.

It is firstly important to stress that the problem does not just relate to hedge funds, but to other highly leveraged activities or institutions, such as proprietary desks of investment banks. HLIs can be defined as having three characteristics: (a) they are subject to little or no regulatory oversight, as a significant proportion operate through offshore centres; (b) they are subject to limited disclosure requirements, and often their operations are very opaque; (c) they take on significant leverage.

There are three sets of responses that can be used to address risks posed by the HLIs. Often, they are presented as alternatives. However, it would seem better to consider them as complementary.

The first response is indirect, through the major counterparties of HLIs (mainly banks and securities houses). This can be done by promoting sounder practices in the way banks and securities houses assess risks when they deal with hedge funds and other HLIs. However, further actions by supervisory authorities also seem desirable. In particular it seems desirable for supervisors to impose higher capital requirements on lending or other exposures of banks to HLIs, to reflect the higher risks involved in such exposures, due to HLIs opaqueness, high leverage and the fact they are not regulated. It may also be desirable for supervisors to, either formally or informally, prohibit banks from lending to a particular class of risky counterparty. Such measures may not only protect banks, but could also possibly stimulate HLIs to manage risks in a more responsible way.

A second avenue, which is clearly complementary with the first, is to increase transparency on total exposures to HLIs by all financial institutions. One possibility would be an extension of the concept of a credit register for bank loans (along the model of the French "central des risques", which provides banks access to the aggregate amount of bank lending to each company). Such a register would collect, in a centralised place total exposures (both on and off balance-sheet positions) of different financial intermediaries to single counterparties, such as major hedge funds. Counterparties, supervisors and central banks (both of developed and developing countries) could then get information about total indebtedness of such institutions, which would help them assess risks involved far more precisely. For this purpose, the information would have to be both timely

and meaningful (especially to take account of rapid shifts in HLIs positions). It would seem best if such a register would be based at the BIS itself or at the Basle Committee on the Global Financial System (formerly the Euro-currency Standing Committee) which already has experience in similar information gathering.

A third avenue is to directly regulate hedge funds and other highly leveraged institutions. Such direct regulation could take a number of forms, including licensing requirements, minimum capital standards and minimum standards for risk management and control. In its recent report, the Basle Committee on Banking Regulation has argued that such a regulatory regime should focus on the potential to generate systemic risk by HLI activities due to their excessive size and risk-taking, which could endanger financial stability. However, if as seems probable, HLIs also have additional negative effects on increasing volatility of exchange rates in developing countries, this concern should also be addressed in attempts at their regulation.

There is at present more support for the first two forms of dealing with HLIs and relatively less support for their direct regulation, even though the latter would deal with the problem in a more direct and straightforward manner.

The opposition to such direct regulation is presented as based on practical grounds. For example, it is argued that HLIs could restructure themselves so they escape any regulatory definition that may exist. However, this problem can be overcome by an appropriate system of monitoring and policing; its costs would surely outweigh the benefits of alleviating large potential systemic risks, as well as risks of currency instability in developing countries! The most frequent argument against direct regulation of hedge funds is that they would be able to circumvent such regulations, because these institutions either are or could move easily offshore.

This problem can either be tackled by accepting the absurd existing *status quo* (and incurring continued high costs of risk of major instability) or raising the issue of extending that and other regulation to offshore centres. Indeed, if global supervision and regulation is genuinely accepted as essential in today's world of globalised financial markets, there can be no justification for "no-go" areas, where such regulations could be evaded or undermined. Both as regards provision of information, and as regards global regulation of institutions such as hedge funds, it is essential that offshore centres comply with international standards. If the G-7 countries in particular backed this clearly, and if developing countries supported it, a political initiative in this respect should be both effective and useful.

More generally, further work is required to gain a better understanding of recent changes in global credit and capital markets, and – more specifi-

cally – of the criteria used by different categories of market actors – including banks, mutual funds, hedge funds and others – to go in and out of countries as well as the incentives that encourage particular patterns of market actors' behaviour that contribute to speculative pressures on individual countries and to contagion to other countries. A better understanding of behavioural patterns and of trends in outflows could help design measures – to be taken by individual firms, by parts of the financial industry via self-regulation, by regulators and/or by governments (e.g. via tax measures) – to discourage market imperfections, like disaster myopia and herding, that contribute to currency crises.

It can be concluded that a package of measures need to be taken to make currency crises in emerging markets far less likely, and therefore ensure the efficient operation of the market economy in emerging markets, which should be a basis for sustained development. The objective of crises avoidance seems to require some discouragement and/or regulation of excessive and potentially unsustainable short-term inflows. Such measures would be most effective if they are applied both by source and recipient countries (though the main responsibility lies with recipient countries), if these measures avoid discouraging more long-term flows – which on the contrary need to be encouraged – if the rules designed are simple and clearly targeted at unsustainable flows and, particularly, if they are complemented by good policies in the emerging economies.

IV Provision of Official Liquidity in Times of Crisis

The Role of IMF and Other Institutions in Official Liquidity Provision

The need for liquidity provision in times of crisis is a well-accepted principle. It may be called the principle of the "emergency financier", to differentiate it from the role that a central bank plays at the national level as a "lender of last resort", which is not exactly matched by the IMF. Particularly, the Fund provides exceptional lending but certainly not liquidity, ¹¹ a fact which is reflected in the lack of automaticity in the availability of financing during crises. Such emergency financing role has led, as we saw in Section II, to the provision of anti-cyclical lending by the IMF, matched in some major "rescue packages" by bilateral financing from major countries, in addition to their contribution to IMF's agreements to borrow. Some major advances during the recent international financial crises were the significant increase in IMF resources through: (a) a new quota increase and the New Arrangements to Borrow,

¹¹ This important distinction is made by Helleiner (1999).

finally effective in 1998; (b) the launching of the new window in December 1997, to finance exceptional borrowing requirements during crises; and (c) the creation of the Contingency Credit Line (CCL) in April 1999 to provide financing to countries facing contagion.

Timing of Provision of Official Liquidity, the New Contingency Credit Lines

The CCL has responded to the strong demand for the IMF to leave aside the principles of "fundamental disequilibrium" of the balance of payments, on which it was built, to finance countries in difficulties before and not after international reserves are depleted. This is an essential requirement in the era of rapid capital outflows that can destabilise economies in a matter of days, a lesson that the international community learnt during the Mexican, Asian and post-Asian shocks. It is also, above all, a response to the request for new credit lines to finance countries facing contagion. Although this problem is certainly not new, it has reached unprecedented levels in the current decade, which led finally to a strong request for support to countries facing contagion.

The CCL has been widely perceived as a significant move from the IMF in the area of crisis prevention for countries victim of contagion. The facility was implemented by the IMF in April 1999 as part of its ongoing work on strengthening the architecture of the international financial system and as a response to the increased need for liquidity provision for crisis prevention. The facility is a "precautionary line of defense readily available against future balance of payments problems that might arise from international financial contagion" (IMF, 1999). To qualify, the increased pressure on the recipient country's capital account and international reserves must thus result from a sudden loss of confidence amongst investors triggered by external factors.

Early provision of liquidity should help reducing external constraints on domestic monetary policy, increasing the level of reserves available for currency defense and relaxing the constraints on interest rates. It is thus a very important and positive step further as it should, in principle, reduce the chances of entering into a crisis.

The CCL differs from the Supplementary Reserve Facility (SRF) mainly because of the timing of disbursement.¹² Indeed, the SRF is designed for

¹² The SRF was implemented at the end of 1997 as a response to the Asian financial crisis. It provides financial assistance for exceptional balance of payments difficulties due to a large short-term financing need resulting from a sudden and disruptive loss of market confidence. Up to now, SRF loans have been made to Korea, \$2.8 bn, Russia, \$0.9 bn and Brazil. The lending terms for the SRF are similar to those for the contingency facility.

countries already facing a financial crisis whereas the CCL is triggered early on, in a precautionary manner, for countries not facing a crisis at the time of commitment but rather fearing to be affected by contagion. The cost of the credit line, 300 basis points above the rate of charge on regular IMF drawings with a penalty of 50 basis points every six months, has been set up to reduce moral hazard on the debtor side and is the same as for the SRF. It should prevent countries from drawing on the line in "good" times.

The CCL's crucial aim is thus to reduce the chances of countries to be caught by contagion. Its way of functioning, to give leverage of conditionality to the IMF early on, is such that, ideally, countries should not suffer from contagion and thus need not draw on the line. Put differently, the CCL provides a strong incentive for countries to make sound policy choices that provide a stable economic and financial environment. The facility works as a two stage process, very much like an option that is bought in "normal times". Its cost is the country's compliance with four sets of criteria:

Adoption of Strong Policies. Member countries should have implemented a combination of policies that provide a stable economic environment such that in the absence of contagion, no IMF financing should be required. Economic stability together with financial sustainability should be evident. Special attention is paid to an economic and financial programme to be implemented within the period of examination.

Macroeconomic Performance. The article IV consultation is used as a benchmark for economic performance. An ongoing assessment of the country is also carried out once the consultation is over. This monitoring is used to assess the countries' willingness to – and effectiveness in – adopting policy suggestions.

Advances in Adhering to Internationally Accepted Standards. This is an area which is still evolving as some standards have not been finalised yet (notably the codes of transparency in monetary and financial policy). Other standards include the subscription to SDDS, the Basle Core Principles for bank supervision, the code of transparency of fiscal policy (see above). Countries need not necessarily meet all the standards but should prove some progress in adhering to them.

Relation with the Private Sector. The IMF stresses the importance of "constructive" relations with private creditors. These relations encompass management of external debt (limiting external vulnerability) and a number of

arrangements with private creditors. Examples of arrangements given by the Fund include private sector CCL, call options in debt instruments (allowing debtors to extend maturities), a modification of bond covenants (see section on involving the private sector below), and domestic bankruptcy laws.

The monitoring of external vulnerability through indicators of sustainability such as the level of international reserves, the ratio of short-term external debt in relation to reserves, and the exchange rate regime also are conditions. These conditions should help prevent Asian style crises in the future and therefore are very positive.

Once the above criteria are met and the CCL agreed, the country can exercise the option at any time but with one further restriction. An "expeditious" consultation is carried out by the Board to verify if the country is still eligible, before funds are disbursed.

However, the new credit line raises a number of issues, at least in five areas: First, the question of the scale of liquidity provision. Formally, the size of the CCL is unlimited. This is imperative as very large amounts of liquidity might be required in times of major loss of confidence. The rationale of this argument is based on Bagehot's rules, namely that, to perform well in a crisis, a Lender of Last Resort should lend quickly, freely and readily. However, in practice because of financial constraints, the Fund has disclosed a range of disbursement from 300 to 500% of member nation's IMF quota. This limitation is problematic, as in a crisis it is the unlimited nature of contingency financing which is crucial. A limited facility could, in certain circumstances, accelerate outflows, as creditors "rush for the door" for fear it may close, if revenues run out.

Estimates from April 1999, based on the upper ceiling of 500% of quota, evaluate the CCL to be of an order of \$20 bn for Brazil, \$11 bn for Korea and \$7.4 bn for Thailand. Non-affected countries like Argentina would receive up to \$14bn, Chile \$5.8bn, Mexico \$17bn, Hungary \$7bn and South Africa \$12bn (Davitte, 1999 and Chote, 1999). These amounts appear quite low and could turn out to be insufficient to fully absorb external shocks. For example, Brazil which accessed a financial package in some ways similar to the CCL but before its formal implementation, received more than twice the amount it is eligible for at present.

At the time of writing, no country had officially declared applying to the scheme although some policymakers had expressed their opinions on it. Mexican officials, for example, fear not to be eligible due to their current involvement with the IMF through a stand-by loan facility. Others have

 $^{^{13}}$ In April 1999, the Fund had \$76 bn in uncommitted resources plus \$46 bn available under pre-arranged credit lines.

underlined the paradoxical situation of "good" countries not willing to be labeled with the CCL while countries in potential difficulty finding it very hard to comply with too stringent conditions.

Second, the special "activation" review by IMF Board – as the CCL is today structured – does not look necessary. Indeed, the eligibility conditions have been designed so that the CCL is drawn as rarely as possible. As a matter of fact, the implementation of strong macro policies and the adherence to international standards together with the building up of sound relationships with private creditors should, by themselves, protect countries from financial crisis triggered by the deterioration of domestic factors. If a given country complies with these criteria, then, the only possible reason why it could face a financial crisis is because of contagion.

Furthermore, the automatic triggering is critical to the good functioning of the CCL as it would give instantaneous access to new liquidity. Indeed, as seen recently in several cases, a loss of confidence can have major impacts in a very short period of time. A few hours or days might then have a determinant impact on the outcome of the crisis. The approval required by the Board, even if it were expeditious, would still not be fast enough and could allow large outflows of funds.

The automatic disbursement, if implemented, could be associated with a shorter repayment period, possibly six months. Countries that experienced liquidity crisis in the past usually required fairly large amounts of liquidity, extremely rapidly but for a brief period.

Third, it is still not very clear what will be the potential signaling effect on private investors of countries applying for the CCL but failing to meet the criteria or of countries loosing their access to it. A certain degree of confidentiality could possibly dampen this effect. For example, information could only be disclosed on countries that have been accepted but not on those applying for it.

Fourth, as already mentioned, the facility is not open to countries with current or expected regular IMF financing. It could thus eliminate access to this type of financing to countries which are in a strong process of recovery from a past crisis but still have pending IMF credits.

So, despite significant advance, in practice the approved credit lines will continue to lack the full stabilising effects that are expected from IMF interventions during crisis, as the negotiation process will continue to be cumbersome and funds may not be available to all countries that require them at the appropriate time and in adequate quantities. Equally important, funds available to the IMF for exceptional financing will continue to be short of the amounts required, as the experience of the 1990s indicates. This is obviously a crucial issue, as stabilising effects will continue to be absent to the extent that the market judges that the intervening authorities

are unable or unwilling to supply funds in the quantities required to stabilise speculative pressures. Moreover, under these conditions, national authorities may be forced to overreact, adopting a pro-cyclical stance, in an effort to generate confidence in private markets. For the world economy as a whole, this would be reflected in enhanced deflationary biases.

Well-funded IMF contingency financing is obviously the *sine qua non* of any reform effort. As bilateral financing and contributions to the IMF will continue to be scarce, the best solution could possibly be to allow additional issues of SDRs under critical financial conditions, to create the additional liquidity required (United Nations Task Force, 1999a). These funds could be destroyed once financial conditions normalise. This procedure would also create an anti-cyclical element in world liquidity management and would give SDRs an increasing role in world finance, a principle that developing countries advocated in the past and should continue to do so. Though technically very attractive, this proposal may face significant opposition, particularly as several of the major countries have been opposed to any issues of SDRs at all, which has implied that no issues have taken place for a very long time. A second best alternative would be to allow the IMF to raise in the market the resources needed to adequately fund contingency financing or to rely on central bank swap arrangements, arranged either by the IMF or the BIS.

V The Role of Private Sector Involvement in Preventing and Resolving Crises

A number of proposals have been put forward for *ex ante* measures directly involving the private sector, to be designed and put in place before crises occur (for a very useful recent overview of such measures, see IMF, 1999), these would not only help diminish severity of crises should they occur, but also (for example by improving the pricing of risk) diminish the likelihood of crises occurring.

Measures involving the private sector can (a) help limit moral hazard, that arises when lenders and investors are repeatedly bailed out, (b) imply fairer burden-sharing between the official and private sector, should crises occur and (c) most importantly, contribute to fairer burden-sharing between capital-recipient countries and their creditors and investors. Indeed, the standard crisis response in situations like East Asia – where creditors and investors suffer only fairly limited losses and the people of the capital-recipient countries see their country's growth undermined and suffer large increases in unemployment and poverty – clearly needs modifying.

However, measures to involve the private sector (particularly in burden-

sharing) need to be carefully designed, so as to avoid excessively discouraging desirable private flows to emerging markets, or too sharp increases in their cost. The views of developing countries therefore need to be carefully considered.

In what follows we will review some of the main measures under discussion, briefly evaluating their costs and benefits.

Contingent Financing Arrangements From Commercial Banks

At the heart of currency and financial crises is the issue of provision of sufficient liquidity in times of distress, particularly for countries that are potentially creditworthy in the long term. Indeed, if sufficient liquidity is not provided in a timely fashion, there is a risk that liquidity crises can be turned into solvency problems, which increases the costs to all involved, and particularly to debtor countries.

An important reason for contingent financing arrangements is the existence of multiple equilibria (Stiglitz and Bhattacharya, 1999). Individual lenders and investors, who believe that others are going to withdraw their money, do so for that reason. The provision of temporary funds can limit a liquidity crisis, and stop it becoming a solvency crisis. Even better, the belief that there are funds available eliminates the incentive to pull out; as a result, the liquidity crisis can be avoided.

We have discussed above contingent finance provided by the IMF and other official bodies, and in particular, the recently created CCL. It seems important that such official facilities are complemented by private contingent credit lines. Indeed, one of the possible pre-conditions for an IMF CCL is for the country to have "in place, or be putting in place, contingent private credit lines or similar arrangements" (IMF Summing Up by Chairman of Executive Board Meeting 99/48, available on IMF website).

An important operational issue is how private-IMF credit levels would be coordinated if a CCL is approved. One possibility would be for the IMF to approve a CCL in broad terms, for private financing then to be sought, and for levels of contingent IMF credit to be finalised afterwards. Though this could reduce the scale of IMF lending, and improve burden sharing, between the official and private sector, it could have the problem of indeterminacy. Therefore, it may be easier for countries to arrange, for example, a full CCL first (including the actual levels of contingency lending) and then approach the private sector for complementary contingency lending.

It is interesting that Argentina, Indonesia and Mexico have already arranged such lines of credit with private banks, to be drawn upon in the event of difficulties. These arrangements – though having different modal-

ities – all include a regular commitment fee. Mexico's creditor banks initially argued against the drawing, even though as IMF (1999) rightly argues, Mexico had adhered strictly to the arrangement. However, the loan was disbursed when Mexico requested it. Mexico's Finance Minister Gurria¹⁴ argued, the creditor banks resented disbursing loans at the low spreads that had been pre-committed, at a time when spreads for Mexico and other emerging market countries were much higher. A possible way to overcome such problems could be to for example link the loan spread, when arranging the loan, to bond market yields prevailing at the time (Gray, 1999). This could encourage creditors, but could – in times of crisis – increase the cost of such borrowing. The Argentina line has not been drawn, but its existence may have helped forestall market pressures.

This seems clearly an appealing mechanism. However, several questions remain. Firstly, would banks be willing to provide this kind of finance to a broad range of countries, including for example poorer ones. Secondly, do these facilities really provide additional financing in times of crisis, or do they partly crowd out other lending? Even more seriously, could banks involved in extending credit lines adopt dynamic hedging strategies to offset their exposure, and as a consequence leaving their overall exposure to the country the same? This would clearly neutralise the positive impact of such an arrangement.

Restricting Put Options in Debt Contracts

To reduce risk of loans, creditors like to introduce put options, which give them the option (but not the obligation) of shortening the contractual maturity of loans of bonds. For example, a five year loan – statistically recorded as such – can have a one year put, which allows the creditor the option of asking for repayment in a year, increasing his/her flexibility. Debtors accept such put options because it allows for somewhat lower spreads; however, in doing so, they often under-estimate the risk that conditions may deteriorate significantly – as a result they may lose market access – and the put may be exercised.

Put options have become an important additional source of vulnerability for developing countries, – including some low-income ones – as these countries have increasingly accepted puts in the last years, as derivatives became more widespread and as the risk of crises increased (for example in Brazil, the share of "putable" bonds increased significantly as the crisis approached). According to the IMF (1999), a minimum estimate of \$20

¹⁴ Presentation in May 1999 at HSBC, London.

billion in loans and bonds is "putable" in 1999 alone, which is a very high figure.

It is therefore very important for countries to be far more careful than in the past about accepting or using derivatives, such as put options, as well as other such investments when these increase countries' vulnerability to crises. It is also important to improve transparency and understanding of such modalitites and issues, as the operations of financial intermediaries are often both complex and opaque. This may be particularly urgent for low-income countries, where there may – as yet – be less familiarity with such instruments. Technical assistance (from the IMF, World Bank, BIS or others) could thus be very valuable, and particularly so for poorer countries.

Amending Sovereign Bond Clauses

There is an urgent need to have flexibility in debt contracts for the case of unpredictable shocks arising. In a national context, this can be achieved by bankruptcy proceedings. Whilst this option is not yet available internationally (even though there have been several interesting proposals to establish one), a good "second best" is to have internationally state contingent contracts, that is to have flexibility for changing contracts if unforeseen circumstances arise.

After the Mexican peso crisis, the discussion of such changes has been particularly applied to international bonds, possibly because emerging bond finance has rapidly grown, with gross flows of bond placements increasing from \$6 billion in 1992 to over \$40 billion in 1997 and 1998. This is particularly true for Latin America. Indeed, it is unclear to what extent changes in the bonds contracts would have had a significant impact on the East Asian crisis, where the greatest part of the problem related to short-term bank lending and not to bonds.

Specifically, Eichengreen and Portes (1995) proposed changing the contractual provisions governing sovereign debt to allow for: (a) collective representation of bondholders in the event of a crisis; (b) qualified majority voting on changing the terms and conditions of the debt contract; and (c) sharing of proceeds received from the debtor among creditors. These clauses would facilitate a more orderly resolution of crises, for example by preventing a minority of dissident investors from holding up settlement. More broadly, it would help overcome problems associated with lack of creditor coordination, particularly the creditor "grab-race", whereby actions taken by individual creditors in pursuit of their self-interest can disrupt orderly debt workouts, and thus reduce the potential resources available to all creditors and help create a situation of panic.

The ideas for modifying bond contracts were supported by the 1996

G-10 Deputies report (after the Mexican crisis), by the G-22 Working Group on International Financial Crisis (after the East Asian crisis) and has been both supported and developed further in the 1999 IMF document on Involving the *Private Sector*, quoted above. However, little concrete progress has been made to date.

This lack of progress has two main reasons. On the one hand, most creditors are reluctant (see, for example, IIF, 1999), though some creditors especially in Europe, see possible advantages in modifying bond clauses (for an interesting discussion, see Gray, 1999). On the other hand, debtors are concerned that such clauses could restrict future access, in terms of volume, or at least in terms of cost. This concern needs to be evaluated seriously, as long-term bonds are an important mechanism for funding development. However, the view can also be taken that, once the market has accepted these changes, the clearer "rules of game" would actually improve market access.

In any case, it does not seem appropriate for international institutions like the IMF to impose, as part of conditionality, modifications to bond contracts on developing countries, as it has been recently suggested. A very positive way forward would be for G-10 sovereigns to include in their new bond issues the new contractual terms discussed above. This would have two positive effects: the G-10 would lead by example and they would help define a new market standard. If the completely creditworthy G-10 countries would modify their new bond contracts (which would be extremely unlikely to increase their spreads), this would imply that it would become far more acceptable for developing countries to do so, and that negative effects on availability and costs of new bonds for them would deteriorate far less than if they did it on their own. However, there seems to be some resistance amongst G-10 governments for them to undertake such changes. The reasons given are purely technical, the problems raised seem relatively small, so they could be easily overcome if political will was there. One problem is that not all G-10 countries are currently active in international markets; this could be overcome either by modifying bond clauses only for those G-10 countries currently issuing bonds or by G-10 countries issuing bonds beyond their normal funding programme. Another, highly technical objection, is that modifying bond clause covenants, for those G-10 countries where secondary markets are very liquid and where parts of the bonds are "stripped", could lead initially to some fragmentation of that strips market.

It is important to point out that the problems for restructuring bonds do not apply to all types of bonds. Indeed, British-style bonds contain a number of important characteristics that facilitate an orderly restructuring. This is because they include provisions for the debtor, bondholders or the trustee (if there is one, see analysis below) to call bondholders meetings,

and for a qualified majority of bondholders represented to agree to changing the terms of the bonds for all holders. Furthermore, under one of two categories of British-style bonds (called Trustee Deeds) individual bondholders are generally prohibited from accelerating the bonds and initiating litigation. As IMF (1999) points out with British-style bonds it may be fairly easy to achieve high participation rates, as creditors that are reluctant to participate in changing conditions will know that they face the alternative of a modification of terms that can be imposed by a majority of bondholders. In the case of Trustee Deed bonds, the limits on individual creditors to initiate litigation provides further incentive to participate in an orderly restructuring.

However, there are difficulties in achieving an orderly bond restructuring after market access has been lost for countries with debt structured in the form of American-style international bonds – the most prevalent bonds issued by developing countries – or by German-style bonds. Those instruments do not include provisions for majorities to modify terms of bonds, and impose those changes on minority holders. Furthermore, in case of a default, the bonds have few limits on individual bondholders to start – and benefit from – litigation.

It is interesting that up to now there is no premium in favour of US-style bonds, that is investors have not discriminated in favour of those more "protected" instruments, possibly because they have not noticed the difference. This is rather encouraging, as it would imply that drawing on the precedent of UK-style bond clauses and generalising them would not increase the cost of borrowing for developing countries. However, reportedly, some of the major rating agencies have started to examine the terms of specific sovereign debt obligations, with distinctions being placed on technical nuances of different debt issues, which could possibly lead to differential pricing. Perhaps a problem has been the excessive publicity given to the possibility of amending conditions on developing country bonds (without actually doing it), which has focused too much attention on this issue. A more effective way could have been to modify the terms of new bonds – to make them similar to UK-style ones – without so much public discussion of the matter.

There is a second, more technical difficulty, for rescheduling bonds. Currently, these bear the modality of bearer bonds, which makes it far harder to get bondholders together, so they can agree restructuring or other changes. This problem can, however, be remedied for new issues by the appointment by the issuer of a single trustee, who is empowered to act for bondholders. Such trustees can: (a) prevent bondholders taking unilateral action, and (b) provide a useful channel for communication and possible negotiation between bondholders and the debtor.¹⁵

The modification of bond terms has attracted a lot of debate and attention, and could have important positive effects in that in the medium term it could contribute very significantly to orderly debt-workouts, and to a more level playing field amongst different categories of instruments. The initial impact on modifying debt servicing would be restricted by the fact that these changes would apply to new bonds only, and would not provide flexibility in the event of payments difficulties for the large existing stock of bonds. Furthermore, as discussed above, particularly if these changes were introduced only by developing countries, they could – especially initially – limit access and increase cost for them to this important source of funding.

Debt Standstills and Orderly Debt Workout Procedures

There has also been growing international consensus on the need to create internationally sanctioned standstill provisions, though these proposals have been less well worked out by institutions like the IMF, especially on the legal aspects. However, it is important that the G-22 report had examined alternative ways of achieving standstill-type arrangements, including ways in which the international community might be able to signal its approval for standstills in exceptional cases. Though countries should make every effort to meet the conditions of all debt countries in full and on time, in certain cases - the G-22 report accepted - a temporary suspension of payments could be a necessary part of the crisis resolution process. The preventive suspension of debt service and agreed rescheduling would help to solve the coordination problem, typical when creditors panic and rush for the door, and thus to help avoid some of the worse effects of such outflows. As a result, in a context of potential multiple equilibria, such a practice could lead to an equilibrium with higher output, less bankruptcies and - probably - less long-term disruptions to capital flows.

The G-22 report went further in recognising that there may be extreme cases when an orderly and cooperative restructuring process would be aided by "an enhanced framework for future crisis management", that would allow the international community to signal its approval of a temporary payments suspension by providing financial support for the crisis country. The G-22 supported the IMF decision to extend its policy of lending to countries in arrears on payments to private creditors. According to the G-22, this signal (and the explicit support which the IMF would give thus to the standstill) would only be provided where the international community believed the government's decision to suspend debt payments was

¹⁵ I thank Robert Gray for this point.

the only reasonable course open to it, that it was implementing a strong programme of policy reform, and that it was making every effort to reach agreement with creditors. The IMF would be signaling confidence in the debtor's policies and long-term prospects, and indicating to creditors facing temporary standstills that their interests would best be served by reaching quick agreement with the debtors. A standstill imposed as part of such a cooperative and non-confrontational process would hopefully be less penalised by creditors.

UNCTAD (1998), which has provided a forceful and detailed defense of the standstill mechanism, has suggested a possible second alternative procedure to implement standstills. This would allow countries to unilaterally call the standstill, but then to submit it for approval to an independent international panel within a specified period, whose sanction would then give it legitimacy. Such a procedure would be similar to WTO safeguard provisions allowing countries to take emergency actions. A third complementary possibility (Ocampo, 1999) would be to draft *ex ante* rules under which debt service would be automatically suspended or reduced if certain macroeconomic shocks are experienced; such rules have sometimes been incorporated into debt renegotiation agreements (e.g. Mexican Brady bonds). A problem may be that crises have both common – but also different – features, which may make it more difficult *ex ante* to define the macroeconomic shocks.

As regards any of these three alternatives, it can be argued that they would increase perceived country risk, and therefore could increase cost and limit access to international capital flows for developing countries. On the contrary, it may be argued that such a mechanism would only legally recognise default risks that already exist, and that it could actually reduce the default risk for individual operations. Alternatively, it could be argued that if initially there was some increase in interest rates – especially by short-term foreign lenders – this could be good as it would make those lenders focus more clearly on the risks involved in such lending; these risks extend beyond the parties to the transaction, to innocent bystanders – workers and small businesses – repeatedly hurt under existing financial arrangements (Stiglitz and Bhattacharya, 1999).

In some ways an even more radical proposal for a standstill has been made by Buiter and Sibert (1999); this suggest a universal debt roll-over option with a penalty (UDROP); *all* foreign currency lending – private or sovereign, long or short, marketable or not – would have to have such a roll-over option for a specified period (e.g. three or six months) at a penalty rate. The penalty rate would be high to discourage debtors using this option. In this proposal, the roll-over mechanism would be automatic, and activated only at the discretion of the borrower. As such it would be

speedy. This proposal has the important attraction of simplicity, speed and universality (both for all debtors and all instruments). However, it has two problems. Firstly, it does not elaborate the legal and other mechanisms necessary to enforce it. Secondly, it seem somewhat unlikely that creditor countries' governments would accept such a mechanism, as it could be unattractive to creditors.

To some extent of course some kind of concerted standstill for one key category of debt – short term, cross-border interbank credit lines – have been fairly successfully implemented in the recent crises in South Korea and Brazil, even though the delays in arranging them led to fairly significant haemorrhaging of outflows before it was arranged. However, in South Korea, the concerted roll-over of short-term bank lines was helpful in stabilising a critical situation and also facilitated a restructuring of interbank claims into sovereign guaranteed bonds. Also Brazil was able to secure agreement of international banks to maintain their exposure to Brazilian financial institutions. However, there is a widespread view that, particularly South Korea's success, reflected especially favourable circumstances – such as the problem being limited to short-term debt, with the rest of the capital account fairly closed – which would be difficult to replicate in other countries.

Furthermore, the fear has been expressed (IMF, 1999) that concerted operations in one case could lead creditors to withdraw credit lines in advance of a crisis elsewhere for fear of a concerted roll-over.

A broader standstill mechanism – than just concerted roll-overs of short-term debt – seems very important to establish. However, the relative success of existing roll-overs or partial standstills, provides a valuable precedent for a more structured standstill mechanism.

VI Summary and Conclusions

It seems important to attempt to evaluate progress so far, as regards the reform of the international financial architecture. A positive feature is that a fairly important proportion of the proposals on the table by spring 1998 (for a review and analysis then, see for example, Griffith-Jones, 1998) have either been seriously studied or actually began to be implemented. This is particularly true for those proposals that do not require significant institutional innovation.

Amongst the most positive steps are the creation of the Forum for Financial Stability (FSF), the creation of new facilities of the IMF (including most recently and significantly the CCL), as well as improvements in information, particularly on developing countries. However, the way in

which each of these have been implemented have serious limitations. Furthermore, in the areas of amending bond clauses and internationally sanctioned standstill arrangements, little actual action has taken place, though the discussion has become increasingly more specific and certain consensus seems to be broadly emerging.

As regards progress in global regulation of private flows, the rapid creation and beginning in the operation of the FSF is an important step forward. However, the current lack of participation of developing countries in the decisionmaking Forum is a serious limitation, even though these countries do participate in the Working Groups, where important work is beginning. Participation of developing countries – including low-income ones – in this Forum is urgent, as they are the main victims of the volatility that this Forum is attempting to stem. Secondly, the Forum may need to be strengthened in its decisionmaking power, as its purely coordinating and consensus-seeking role may not be sufficiently strong in the future.

Thirdly, it is unfortunate that certain regulatory changes – on which very broad consensus has been reached – such as modifying capital adequacy rules to reduce regulatory incentives for short-term bank lending to developing countries, have taken so long to be made. Fourthly, the initial priority areas of work (highly leveraged institutions, offshore centres and curbing volatility of short-term flows) are extremely important; however, other areas – such as evaluating prudential regulation of other institutional investors, such as mutual funds, could be usefully added.

As regards the creation of the CCL, this is also potentially an important step forward to limit contagion, by encouraging countries to adopt policies that will discourage crises happening and by signaling to the markets that this facility is available. Both may help avoid crises happening. However, there are several concerns about the way the CCL is being structured. Firstly, would the scale be sufficient to stem a crisis? Secondly, why is disbursement – in the stage of crisis threat – not automatic, for countries that have pre-qualified? Thirdly, why is the CCL not open to countries with current or expected regular IMF financing? Fourthly, will conditions be too restrictive, and thus make countries unwilling to negotiate CCL? Careful monitoring of evolution of the CCL and its use is required, as well as continuous analysis on the complex issue of how best official liquidity can be used in emergency financing.

Much useful progress has also been made on improving information on developing countries, which hopefully will help markets and policymakers take better decisions. However, the possibilities and benefits of improved information have very important limits, both due to asymmetries of information and because of the significance of how information is processed. Furthermore, more limited progress has till now been made on the equally

important issue of improving information on international financial markets. Much emphasis has also been placed on the development of numerous standards, and their implementation by developing countries. A source of concern is that developing countries – especially low-income ones – do not on the whole participate much in the definition of those standards, though they are being asked to implement them. Both meeting standards and enhancing information puts an important burden on developing countries, especially low-income ones. As a consequence, technical assistance in this field, especially to the poorer countries, is a priority.

As regards the issue of emergency measures involving the private sector during crises, some limited progress has been made, especially as regards broadening the power of IMF lending into arrears and the arrangement of concerted roll-over of credit for Brazil and Korea. However, the larger issues have not yet been tackled, both because of their complexity and because of different interests and perspectives involved. It is important that concrete progress be made on orderly debt work-outs, including particularly changes in bond covenants; interestingly UK-issued bonds already have more flexible clauses, and these do not as yet carry higher spreads; this provides a very important precedent for modifying clauses in US and German bonds. It is, however, important that changes in these clauses are introduced both by developed and developing country borrowers, to avoid stigmatising and marginalising developing country borrowers. In particular, modifying bond contracts should not be imposed by IMF conditionality on developing country debtors, as has been suggested. Whilst bond covenants are not modified for all countries – including developed ones – developing countries need to have the freedom to decide whether they want to modify them, assessing carefully costs and benefits of such a measure; the costs include possible reduction in access to bond markets and possible increases in spreads, whereas the benefits include greater flexibility and better burden-sharing in times of crises. As regards internationally sanctioned standstills, even less progress has been made, though a number of interesting proposal have emerged on mechanisms, modalities and institutional arrangements.

There is still much to do on financial architecture. This is particularly so because recent crises have had an unacceptably high cost in terms of interrupting and – sometimes – reversing growth and development, increasing poverty, and discouraging future private investment, both by national and foreign investors. These currency crises also distract the international official community from the crucial task of increasing and improving official flows to low-income countries, which need to play a continued role in helping their growth and in supporting poverty alleviation in them.

Though this paper has focused more on issues of international measures

to prevent and better manage crises, clearly these need to be complemented by national measures, both in the prudential and capital account regulatory area and in macroeconomic policy. Prudence in the liberalisation of certain categories of capital flows (the more volatile ones) is also an important area.

More generally, at a national level, the traditional emphasis on crisis management needs to be changed to the management of booms, since it is in the periods of euphoria from capital inflows and terms of trade improvement that crises are incubated. This implies introducing stronger countercyclical elements in: (a) macroeconomic policy; (b) strengthening as well as increasing counter-cyclical elements of financial regulation and supervision, to prevent excessive risk taking. Indeed, prudential regulation must take into account not only the micro but also the macroeconomic risks typical for developing countries in an increasingly globalised and volatile world. Firm, as well as total, debt exposures need to be carefully monitored, as well as their profiles, to prevent vulnerability to crises. And (c) if excessive short-term, potentially reversible, capital flows enter the economy, measures – such as Chilean style or Colombian style reserve requirements – clearly need to be taken.

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Comment on "Towards a Better Financial Architecture," by Stephany Griffith-Jones

Jack Boorman

Having wrestled with all too many papers in the various areas that Stephany has touched upon, she is to be complemented for producing a reader-friendly compending of all these various issues. Let me try to give a flavour of what is going on in this area, at least as far as the Fund is concerned. I would like to thank Stephany in particular for giving us a sense that it hasn't been all talk and all words, that there really is quite a lot that has been done in this area. Needless to say progress has been made above all in the areas where agreement was easier – there still is a lot left to do. But things are changing and they have been changing fairly rapidly.

Transparency and Standards

Let me talk first about the two issues of transparency and standards, which in my view are key elements of the "institutional substructure" of the capitalist market economy or what some refer to as "the plumbing". It seems to me there is a very important change taking place in the view of the international community about what is needed to successfully run a market economy. You can't forget the plumbing, you can't forget the institutions, you need standards, you need transparency, you need discipline, you need supervision, you need regulation and you need the agencies to be able to manage all of those things. That is critical.

Stephany makes a number of points about the processing of information. She makes a distinction between micro data and macro problems and questions whether more information on the micro efficiency side will help to limit crises on the macro level. Though I agree with Stephany that improvements in this area by themselves are certainly not going to prevent future crises, I am a bit more optimistic than she is. If you look back to the Asian crisis and at the experience of both Korea and Thailand – and Martin Mayer made reference to this in his paper – you can make a reasonably good case that if the market had known in time the quality and the way in which both the Thais and the Koreans were using their reserves, the market probably would have reacted quicker, perhaps more gradually

and perhaps more orderly, and the whole history of this episode might have been different.

But there is progress in this area. Along with the committees in the BIS and the G-10, we have constructed a template for the provision of information on international reserves. It is now part of the special data dissemination standard, the SDDS. It is very detailed: it is not just gross reserves, it is not just net reserves, it is a very detailed listing of the reserve accounts of a central bank or reserve holding authority. This holds the prospect to make the kind of difference that we are talking about. I would have been happier if the industrial countries would have been a little bit more ambitious on this, as ambitious as some of the developing countries are and some of the emerging market countries, like Mexico for example who now is a model of presentation on reserve data. However, the industrial countries refuse to put out more than monthly data and that is disappointing. They should have been leading on this and they didn't.

We have also made progress by establishing an inter-agency task force asking the following question: if you gather all of the external debt statistics of a country together, how do they fit? Are they consistent with each other, where are the gaps, where are the holes, what else needs to be done? One result of this task force is a presentation on the websites of the BIS, the World Bank, the OECD and the Fund, showing the external debt position of developing countries – emerging market countries – in a detail that was either not available at all or not easily available. I agree with Bill White that while much of these data were available, they were not available in a terribly user-friendly way. We really do need systems where market analysts and everybody else can easily get a picture and a portrayal of a country's data situation. That is partly what these presentational devices are trying to get to.

Also in the area of standards there is major work underway. We have in the Fund put forward standards on fiscal policy. There is also a standard just about to be completed on monetary and financial policy, and there is the SDDS of course, which was created right after the Mexican crisis. We are now also taking to the full membership of the Fund the Basle Core Principles on banking supervision and doing assessments of the extent to which member countries adhere to those standards. The Fund has been asked by the G-22 to do transparency reports on each member country as well and we are experimenting with that. The big question, however, is on what aspects these transparency reports need to focus; that question was not given much thought in the G-22. With all this attention on standards, it is useful to have an agency report on countries' adherence to transparency standards and the Fund, because of its surveillance mandate, has been given that responsibility.

Reporting on transparency, however, is not an easy job. Early on, when I was working on the policy side of transparency standards, I said that the Fund should not get involved in simply checking off the extent to which a country is transparent; that can be highly misleading. We have to go behind transparency itself to see what exactly is being reported and what the quality is of what is being reported. It will do neither us nor anybody else any good to say that a country's corporations are putting out semi-annual balance sheets, if these balance sheets are inaccurate. Somebody has to make decisions about the quality of the auditing systems and so forth, to assess whether the information that is made transparent is in fact quality information that can be relied upon.

I'm not sure that I agree with Gerry Helleiner or Stephany's quotation of Helleiner on taxation without representation. I think there is participation or representation to a reasonable degree in the Fund as well as in the other organisations. The standards that we have created are endorsed and discussed by the 182 member countries in the Board of the Fund. IASC, the International Accounting Standards Committee, for example has about a 100 countries in its body. The IAIS, the International Association of Insurance Supervisors, has 80 member countries. So these are broadly representative organisations that are setting the standards.

As I said, we are experimenting with these transparency reports. My colleague Roger Nord, who is the Fund's regional representative in Central Europe, is in fact deeply engrossed in doing these reports with the Czech Republic authorities. I don't know what such reports will look like in the end. I'm beginning to think that the only way these reports are going to be able to be done, partly because of the complexity of doing them in each of these different standard areas - accounting fiscal code, monetary code, SDDS, corporate governance, bankruptcy and so forth - is to conceive something like a loose-leaf folder. Then basically as you do an assessment in each one of these areas of the extent to which a country adheres to the standards, you fill up the loose-leaf folder. We in the Fund can do it on the standards in which we have responsibility in four core areas; the World Bank will do it perhaps with the OECD on corporate governance. I don't know exactly how this will emerge in the end, but the idea that you can run across an entire set of standards for a given country in a three-week mission, strikes me as impossible. I think we are going to have to find a way to build it up over time and that is why I say that we are experimenting with it right now.

I won the remarks I made earlier. On the Financial Stability Forum, I agree. It is a good initiative. It has already been expanded the way Stephany was calling for in her draft paper. The G-7, at its summit, agreed

to bring in Singapore, Hong Kong, Australia and the Netherlands on the grounds that those four countries have major financial centres and therefore should be part of the Forum. That is to the good. Where I probably disagree a bit with Stephany is the thrust of her remarks which go to making the Forum an institution. I think the Forum as a concept is the right concept: a forum for countries with major financial markets, for the standard-setting bodies and others, to come together, share information, make sure that gaps in the system are seen and are taken care of. The work can be done as a collaborative forum; I'm not sure it needs to be an institution.

On this issue of regulatory gaps I share Stephany's concern about the potential bias in the inter-bank market on short-term flows and I was surprised that Bill McDonaugh's report was not more concrete in addressing this issue. I understand it is based on a paper that was done by the New York Fed, which I have not yet read but seems to come to the conclusion that the bias some of us see in this market is likely not there. I think that we need to go back and revisit that issue.

Private Creditors

Let me take up two other issues quickly. One is the private sector and its involvement in not just crisis cases, but also in what can be done in terms of countries' management of the claims on the country by private creditors in a preventive fashion, so as to avoid crises. This is probably the most important area that is now under discussion. It holds the potential to change financial markets in a way that none of us see right now. I don't think it is going to be done by dictum, because many of the ideas that have been put on the table do not yet receive sufficient support for them to be moved into actual policy. But as we work through some of the cases that we are dealing with, precedents are going to be set which the markets are going to take very seriously. I will talk a little bit about that.

There is a consensus of views, in principle, about what needs to be done. The most important part of that consensus is that the official community has come to the conclusion that it simply will not tolerate official money being put into countries if it is at risk of leaving the country, so as to permit the exit of private creditors. That's a fairly hard conclusion, supported to different degrees by the official community.

Most progress to date has been made on preventive measures. How can you build an external debt profile of a country in a way that limits its vulnerability? Many ideas have already been mentioned, such as limiting puts, limiting short-term exposure, possibly removing bias in inter-bank transactions which some of us think stem from the specific capital adequacy requirements. All this is in a sense on the negative side, what you shouldn't

do. On the positive side there is more encouragement to foreign direct investment, perhaps calls in short-term debt, use of structured notes, use of private contingent credit lines à la Mexico and so forth.

And here, just to go to a point that Martin Mayer has made, my understanding of the Argentinean and Mexican contingent credit lines in fact is that they do not have "material change in circumstances" clauses; that is one of their novel features. The banks may well have been unhappy when the Mexicans decided to draw, because they thought that the spread which had been written into the negotiated agreement was not appropriate to the then prevailing circumstances. However, Mexico had every legal right to draw and in the end did draw. One result of this, however, is that the contingency mechanism went back to the drawing board to devise different ways of pricing these mechanisms.

Another aspect of this debate Stephany has touched upon is bond contracts. I'm not sure where this is going to go. The G-10 deputy group is actively examining this issue. The signals coming out of that group are a bit negative on whether or not the G-10 is willing to lead by example. I would be surprised, actually, if they concluded that they will. There is the concern on the part of the emerging market countries themselves about the costs and spreads. I don't know what the bottom line of that argument is. One can make what to me sounds like a perfectly credible analytical argument, that introduction of these clauses will increase costs and spreads for borrowing countries and one can make just as good and convincing an argument on exactly the other side of the issue. It is an empirical question and people looking back at the data have not been able to find a difference in spreads between bonds that do and bonds that do not include such clauses. But it is interesting, when you talk to players in the market, that most of them are unaware of the legal differences between American-style bonds and British-style bonds. The people we have talked to said it was never part of their consideration when deciding whether to go to London or New York as the venue of issue. But as Stephany says, maybe now that the issue has been raised, they will take it into consideration. We will see whether the future empirical results are different from those in the past.

On the other issues there has been some progress. If the official community is going to say: we will not put money into a country if it is at risk of leaving the country simply so that private creditors can exit, then we are going to be faced with the situation where, if the country doesn't pay its private creditors and goes into arrears, the Fund's support is put into question. The Board of the Fund has already taken the decision, establishing the criteria, that it indeed will support member countries in arrears to private creditors under certain circumstances. That is another decision made, which may be tested very quickly as I'll come to in a second.

The more radical proposal to have the IMF in a legal position to be able to endorse a stay on payments of a country by modifying Article VIII 2b of the Fund's articles of agreement, is much more contentious. There are a number of countries in our Board who are in favour of doing this. There may even be a slight majority by voting power. However, the United States, among others, is quite opposed to it, on the grounds that it is not needed. We, the staff, are accused of overstating the risk of litigation from private creditors when a country defaults. It is argued that you don't need it because the private creditors won't litigate, they will cooperate. There are other reasons as well, such as the sovereignity issue that was already mentioned. The idea of going to the US Congress with this proposal and expecting them to smile and agree is beyond my comprehension. So, I don't think it is going to happen in the near future.

The problem is, though, that we are now working with Ecuador, Pakistan, Romania and Ukraine on exactly these issues, and that the community does not yet have the tools. We don't have the tools in the Fund necessary to do the job in a way where we can be confident about the results. For example, when a country defaults on its obligations, the question is whether the creditors will sue. We don't know the answer. And if they do sue, what will their options be in terms of claiming assets of that country? We don't know the answer to that question either.

We have several situations. The Paris Club has demanded comparability of treatment from the bondholders in Pakistan. We don't know how that is going to work out. We don't know whether the Pakistani authorities will be sued by the bondholders, when finally they begin to confront them on this issue. The timeframe on that is a little bit longer. Ecuador is going to be a tremendously interesting case, because it is so complicated. It has inter-bank lines, it has trade-lines, it has Brady bonds, it has Euro bonds, it has foreign currency denominated domestic debt, it has everything! And when that comes onto the table, it is going to raise enormously complicated issues about how to proceed. Korea, on the other hand, was easy, because the only thing that was involved basically was inter-bank lines, and you could get those banks together around the table and you could get the central banks to exert a little moral suasion on them to roll over and then to restructure. And it worked.

Contingency Financing

Let me take just a couple of minutes on the CCL, the Contingency Credit Line. You know the Fund has always had the capacity to help countries before a crisis. Countries had only to come and ask for a programme. In fact we had precautionary arrangements: a country could come and ask for a precautionary arrangement. When president Clinton made his proposal for this kind of facility last September, I noted that I thought the Fund already had the capacity to do this. But notwithstanding my reservations, the US went ahead and pushed for it anyway. Then, as I thought about it, I came a little bit more to their view partly for its virtue in emphasising the need for a more activist policy in this area.

I came to the view, because we had had a discussion on something called the short-term financing facility in 1994. It did not go anywhere, a hard proposal was never made. It was more a think-piece that the staff did and that was discussed by the Board. It got side-tracked by a couple of things, one of which was an inability to make a proposal on a conditionality for the facility that the Board was comfortable with. One of the ideas proposed then was to endorse a country's policies under Article IV consultation and, on the basis of that endorsement, the country would have access to a line of credit, let's say for six months or a year. The Board was not comfortable with endorsement and then automatic access to resources. The other thing that blew it away was the Mexican crisis. That crisis more or less ended the series of discussions that had been held. But as I thought through the CCL and how we were going to construct this, I came to the conclusion that the world has changed enough that this was more feasible now than it was before, partly because of this work that I started with, standards and transparency.

I think we have a better grip now on some of the things that one would want to judge to decide whether or not the infrastructure of a country's policies is reasonably robust. That was something which was not on the table at all in the previous discussions in 1994. The other is the involvement of the private sector, and this goes a little bit to Stephany's questions about access. Two points on that. One is, there is a specification in the decision on the CCL which says that access normally will be in the range of three hundred to five hundred percent of quota, but it is not a hard access limit. In the case of a country whose situation warrants something more than that, something more could be proposed. But even more important than that are the qualifying criteria. A country has to show that it has a robust external debt situation, that it has made efforts to try to put in place some of these private contingent credit lines, that it has avoided undue use of puts in its medium and long-term credits, and so forth. That will make the situation inherently more stable. It is the combination of that more stable external situation vis-à-vis private creditors plus a commitment of some resources from the Fund that makes the CCL potentially useful.

But the Board still was not ready to give a free line of credit on the basis of some kind of endorsement. They have insisted that when a country asks for help, the Board will have to review the country's situation. The decision

on the CCL however, stresses that such consideration will be "expeditious" and "fast" and "quick" and so forth – that was the compromise that was struck. What we intend to do is to monitor a country as closely as possible and certainly get involved very quickly if the situation begins to threaten. I'm not sure that I would agree with Stephany that it is a matter of hours and not days. It seems to me when you look at the way the pressure has developed on Thailand and Korea, it was in fact a matter of weeks and months that you could see it coming. I am confident that there is a chance during that period to do the kind of assessment that would need to be done.

Will it work? I don't know. It is under discussion by a number of countries. We consider it extremely important that we get countries in which really have first-class policies, so that this facility takes on a very special character. What will be important is that it happens and that it really does invite a positive reaction from the private market in terms of spreads. The countries need to see a reward and if they do see a reward it seems to me that the CCL does have the capacity to catch on. How many countries will we have under this facility six months from now? I don't know.

Comment on "Towards a Better Financial Architecture," by Stephany Griffith-Jones

John Williamson¹

As she has done so often, Stephany Griffith-Jones provides us in this paper with a well-informed review of recent thinking on how to deal with financial problems (in this case, financial crises), interjecting her own judicious judgments on the way forward, viewed from the standpoint of developing countries. I am in broad sympathy with her diagnosis and her objectives, and also with many of her proposals, but I will focus my discussion on my two major disagreements with her approach.

In the first place, I fear that the paper minimises what I see as an inherent conflict between the provision of additional liquidity intended to head off crises by bolstering confidence and the resolution of crises by the ability to order a standstill.² If we create an orderly mechanism for decreeing standstills, then we have to anticipate that the private sector will attempt to predict when it is likely to be invoked, and will endeavour to get out before it is invoked. This implies that the cost of an orderly mechanism for resolving crises will be that crises happen earlier and more often than would otherwise have been the case. If we also have a Contingency Credit Line (CCL), or even if we respond to a crisis by lending under the oldfashioned IMF stand-by facilities, this will enable some of the creditors to get out before the standstill is ordered. Indeed, the mere call on IMF resources is likely to alert foreign creditors, and domestic holders of mobile capital, that there is a risk of a standstill being invoked, and is therefore likely to encourage the very withdrawal of capital that will require a standstill. Hence IMF lending before a standstill will simply enable some of the creditors to get out whole rather than take a haircut, and is quite unlikely to avoid the need for a standstill. As someone who has been sceptical of the currently popular claim that capital mobility has eliminated the possibility of interior solutions to the choice of exchange rate regime, I think we have here a genuine case where we are going to have to choose between the two extreme solutions.

On leave at the World Bank at the time of the conference.

² This dilemma was emphasised by Martin Wolf at a recent conference held by the IMF.

One choice is to be prepared to put unlimited sums of money behind any country whose policies win the approval of the international community. This does not imply wasting taxpayer money: on the contrary, US taxpayers could undoubtedly have enjoyed the same windfall profits from Korea's misfortunes in December 1997 that they did from Mexico's catastrophe in January 1995, had the US Treasury weighed in as it did with Mexico. There are of course big, if familiar, problems in designing the conditionality that would justify providing the liquidity that would be needed, but I doubt if those are the principal obstacle to this solution. This is, shall we say, the improbability of the US Congress voting the \$100 billion plus increase in the US quota in the Fund that would be needed to make such an approach credible.

The other approach is to abandon IMF lending except in the context of supporting a standstill. I suspect that this is where we will drift over time, which implies that the CCL will prove a temporary aberration rather than the wave of the future. This is a world in which crises will be better handled but, *ceteris paribus*, more frequent. That in turn suggests that the emphasis ought to shift toward preventing ceteris being paribus, i.e. toward crisis avoidance.

I agree with Stephany in thinking that the primary emphasis in terms of crisis avoidance needs to be placed on the source countries rather than the host countries. And I agree with many of the proposals that she advances toward that end. I agree that there is a case for considering some modest variation in capital adequacy requirements driven by anti-cyclical considerations. I certainly agree that short-term bank loans should carry at least as great a risk weight as long-term loans. I strongly agree that there should be a heavy risk weighting applied to loans made to "highly leveraged institutions" (i.e. hedge funds), as well as disclosure requirements and perhaps other regulations on those institutions themselves. I agree that it is high time that we brought the offshore centres within the regulatory net, and that this would be perfectly feasible. When loans contain put options, it seems clear that their maturity should be counted up to the next put, not until their nominal maturity.

My other major disagreement with her is that I am not convinced by her proposal that mutual funds should be required to hold a risk-weighted cash requirement, which seems to me of more relevance to reducing the risks faced by the investors than to easing the instability facing the borrowers. I would instead seek to encourage a move back to closed-end funds.

Would those proposals suffice to address what I perceive to be perhaps the main problem of the capital markets, which is that in good times they are prone to direct excessive funds toward countries with good fundamentals, thereby destroying those good fundamentals? I doubt it. This is a subject that is going to need more thought.

Floor Discussion of "Gaps in the International Institutional Framework"

Counter-Cyclical Regulatory Policies

Bill White started the discussion by pointing to the need for a better connection between regulatory and macro issues. He suggested to examine the possibility of counter-cyclical regulatory policies with respect to both domestic booms or bubbles and inflows of foreign capital. "One of the things we learned from the Mexican crisis is that financial stability and macro stability are two sides of the same coin. Yet, the monetary policy is done in one place and the regulatory stuff is increasingly done some place else. I am sure there are all sorts of reasons for separate supervisory authorities, but it seems a bit odd since all the recent crises have shown how interrelated these two things are and how financial instability leads to macro instability and vice versa.

One could think of counter-cyclical capital ratios. These are not easy to determine with internationally active banks whose cycles they would be responding to. But there are examples, such as Hong Kong and Singapore, where, as prices on commercial property increase, the proportion that you can actually use as collateral against loans decreases. This recognises the fact that what goes up might also go back down again.

Closely related to this is provisioning. At the moment, there are too many banks which wait until things have gone bad and then say, 'Oh my God, we'd better provision against that loan'. But this is the most inopportune moment to try to do this because the economy has already turned down, the loans are going bad, and provisioning means that you lower your capital, so you have to restrict your lending even more. There should be far more attention to ongoing provisioning, so that whenever your loans go up, you automatically provision a certain part of it because you know that an expected loss is associated with it. This would have an actively counter-cyclical element because you would be provisioning to the loss when the economy was still expanding and you were making the loans.

At the very least, we should try to make sure that the regulatory framework that we have in place is not pro-cyclical. Consider the nature of the Basle Capital Accord and what it allowed the Japanese to do as a result of a difficult set of international negotiations. It allowed them to take 45 percent of the unrealised gains and factor it back into their capital. This meant that the more prices went up, the more capital the banks had, the more loans they made, and the more prices went up. Here is an example where

the macro people, had they been around the table, might have had something to say about the design. So there should be better ways through which the regulatory people, who tend to look at individual institutions, can interact with the macroeconomic people, who look at the larger picture.

And if this is true in terms of design, it is also true in terms of the application of the regulatory apparatus. For example, in Japan and Korea, regulators were saying almost in a mindless way, 'You are starting to violate the 8 percent capital restriction and therefore we ask you to cut your loans so that you can meet the capital ratios'. But the macroeconomists responded, 'Wait a second, you are using the capital regulations to force banks to behave in a way that capital is designed to avoid, it is a fallacy of composition'. Regulators tend to have a bottom-up approach, they have a very micro view. There must be better interaction with the macro people who say, 'But if everybody does this, we have a problem'."

Stephany Griffith-Jones agreed with Bill White. "This idea that you should provision more in boom times is a good way forward in terms of the idea of counter-cyclical regulatory policies."

Jack Boorman suggested that one easy way to improve the connection between regulators and macroeconomists in the source countries would be to improve the accessibility of Fund reports to regulators. "I did a bit of exploration and found out that there are virtually no supervisory authorities in the world who receive Fund country reports. Why don't the Japanese supervisory authorities have access to Fund reports on Thailand and Malaysia? This is bizarre to me. In the US it varies. The Federal Reserve certainly has them, while their availability in the FDIC is random at best. And other countries don't circulate them widely. This is a simple step that could be taken in the source countries so that supervisors and regulators become more conversant with what the Fund sees as some of the threats."

Standards

Stephany Griffith-Jones reacted to Jack Boorman's comment on standards. "Jack wants to improve the plumbing, and I think that is fine, but we don't all have to have the same house. Countries fear that they will be forced into having uniform economies with Anglo-Saxon style banking because it is presumed to be superior. So I would say 'yes' to standards, but 'no' to total homogeneity.

Zdeněk Drábek agreed with Griffith-Jones' emphasis on the adoption of standards, but wondered what the character of these standards should be. "What kind of status would you envision for these standards? Is there an

obligation on the part of countries, just like WTO member countries have to notify the WTO of their commitments, or would the standards be voluntary?"

Griffith-Jones responded that she would prefer them to be voluntary. "If they are good for the country, then they will follow them voluntarily because they will feel benefited by them. I don't think they should become a part of conditionality."

Boorman confirmed that most of the standards would be voluntary with the exception of the somewhat mandatory SDDS. He also said that the market needs to reward countries that adhere to the standards. "The adoption of the SDDS, the special data dissemination standard, in the IMF has been made one of the qualifying criteria for access to the CCL, the Contingency Credit Line. So there is a somewhat mandatory nature in that if you want the CCL, you have to adhere to the SDDS. But, the other standards are voluntary.

My own view is that if this initiative is going to work, countries will have to see that they begin to get rewarded for adhering to good standards. It needs to show up in spreads. If the markets don't reward countries for doing these things, then we'll continue to have episodes like we had in Indonesia where nobody – and I insist nobody – knew what the exposure of the Indonesian corporate sector was, let alone what the nature of that exposure was. This type of episode will continue to occur unless countries like Indonesia can see that it is in its financial interest to be more transparent and to accept these various standards."

Drábek drew a parallel with the WTO and wondered whether the standards could be applied with differential treatment for emerging economies. "I can imagine that there would be some arrangement for developing countries and emerging economies similar to what the WTO knows as special and differential treatment for emerging economies.

Griffith-Jones agreed that further parallels with the WTO should be investigated. "It is interesting to think about parallels with the WTO because regulations in trade seem to work better, on the whole, than regulation in finance, which is a bit behind. Zdeněk's ideas on special and differential treatment for emerging economies is something we could look at, and we can learn more from other WTO rules as well."

The Contingency Credit Line

Stephany Griffith-Jones was not impressed by the observation that John Williamson made in his comment about the inherent conflict between the CCL and the standstill. "That conflict is, of course, also a problem under the current and previous arrangements because of this contradiction that

people tend to rush-out of the lender of last resort facility if they think there will be some kind of standstill. On the other hand, choosing one or the other on its own is also problematic. A standstill by itself may be too radical and may risk not being used when the crunch times come. And simply providing additional liquidity presents the problem that the liquidity you need is so much that central banks get worried."

György Szapáry had some questions about the rationale for the CCL. "If I understand it correctly, the CCL was established as a precautionary line of defense against financial contagion. For that to be useful, you need to foresee a crisis somewhere, and we haven't been very good at that in the past. And even assuming that we can foresee a crisis, then the best thing to do is to go quickly to that country and do something in order to avoid the crisis. I don't know how the CCL is supposed to work then.

My second point about the CCL is that there is a moral hazard issue. If countries know that there is a line of defense which is providing their bailout, then they may not follow the policies that are required to arm themselves against contagion. I am thinking, for instance, about the countries that have a lot of capital inflow. If these countries are aware that this is fickle capital, then the best line of defense is to accumulate reserves and to use those reserves when faced with the threat of a crisis. But the existence of the CCL may preclude them from doing that.

Third, Jack mentioned that with the CCL, there would be some benefit and therefore the spreads would narrow. But I am afraid that our announcement that we are going to a CCL would actually *widen* our spreads. Because even though we are doing well, if we think that there might be a crisis in the Ukraine or Brazil or somewhere else and we go to the CCL, investors will say, 'What is happening to this country, and why is it going to this facility?'.

Fourth, on this idea of penalty interest, let's assume that I go to the CCL and that it does not increase the spread. In the case of contagion, however, I have to go to the CCL with a penalty interest. Then I am better off accumulating reserves or maybe even borrowing before I get there. So, who would ultimately use the CCL? Maybe those who will use it are not the ones that you thought should use it, the ones that it was originally designed for. Maybe I do not correctly understand what the CCL is; perhaps it is not intended for the good countries that are exposed to contagion, but for countries that might actually be the source of the crisis and that is a different issue."

Griffith-Jones dwelled on Szapáry's point that the CCL could encourage moral hazard because countries could say, 'I have the CCL, so I don't need to accumulate reserves'. "My question is: why should countries allow major inflows if all the money, or most of it, will go into reserves? That is

very expensive, you have to sterilise it and so on at costs. The advantage of something like the CCL is that you could use more of the money for some growth – obviously not too much because if it is too much, we are talking about a boom."

Martin Mayer pointed to another problem of the CCL. "The announcement-effect associated with these credit lines is enormous. Just as banks are very hesitant to borrow at the discount window because it reveals that they are in trouble, countries would be concerned that they would be rejected by going to the CCL.

Another point is on the terms of the Argentinean credit facility, as outlined in a recent speech at the World Bank. There is an annual commitment fee of 25 basis points and US Treasury paper is being used as collateral on the loan of something like seven billions of dollars. It is remarkable that people should pay 25 basis points on a few billions dollar loan, and pay that out every year to have the right to buy money on those terms."

Jack Boorman defended the CCL. "It is a concept that should answer the kinds of questions raised by John Williamson. There is a set of decisions, there are qualifying criteria and there are access guidelines. The kind of country that ought to be able to qualify for a CCL should be far from a situation where we would have to impose a stay on its own payments to creditors – because of the structure of its external debt, its policies, its adherence to standards and all the features that are qualifying criteria. It should not be in the same camp – unless the world really deteriorated in a much more dramatic way than occurred with the Asian or the Russian crisis. We have countries in two different camps.

On György's question of penalty interest rates and Martin Mayer's point about the Argentine credit line, paying a charge of a quarter percentage point is a lot cheaper in most cases than holding reserves. Paying a quarter of a percent to have reserves online is not really a bad deal. The only cheaper way to provide reserves would be for us to allocate SDRs, but as you all know, we can't get them to the right countries. Basically you have to allocate SDRs according to quota, so we can't provide liquidity to the countries that need liquidity.

On the moral hazard side and the surcharge. I don't know what Hungary's spread is now, but I suspect that it is more than the surcharge on the CCL. What is the bottom line on this? The bottom line is in terms of the countries in the two camps. If this concept is turning into reality, we are going to have countries with first-class policies coming in. And we are going to have to establish the rules of this facility and create an environment in which the markets will make the kind of judgements about it that we want. We have been harmed to a certain extent by initial reactions to the CCL and maybe this was our fault because of how it was put out.

David Folkerts-Landau was saying, 'Why would a country expose its weaknesses by going to the Fund?' That is exactly the reverse of the rationale for the facility. The rationale for the facility is for a country to expose its strengths by getting the endorsement under the very difficult eligibility and qualifying criteria that are established with the CCL. But that notion has not been circulated partly because of these types of remarks and the reception it was given in the market. So, it is a concept, and I cannot predict where this is going to be six months from now."

Alternative Ways to Solve Liquidity Problems

Warren Mosler suggested that an emerging economy could solve its debtservicing problems in a completely different way: through a debt for labour swap. "Consider the problem of servicing the external debt, for instance of the Ukraine. Short-term dollar debt is rolling over and part of the problem that the markets have with all of these papers is uncertainty. One day everybody is going to be bailed out and the spreads come in, and the next day you might lose everything and the spreads go out. There is no certainty. All you have is a promise by a government to pay. There is no bankruptcy procedure and there are no rules for what the final outcome will be.

The entire package of emerging market debt has almost become the same thing. As a market participant, I hear that that is what people are doing and that is why people who are in are prepared to get out. I am suggesting that there may be an anchor at the end. Some anchors have already been tried. To some extent, the proceeds from privatisations are an example because it gives people some sense that there is an exit strategy for the country involved. Another example is something that Martin Mayer mentioned, which is the idea that the world is going to securitisations, which is somewhat similar: put some collateral behind it.

A country's ability to service its debt is based on its net exports. That is where the revenues are supposed to come from to service the debt. But what is export revenue? Apart from privatisations, net export revenue output is always the labour content of the product. And with marginal cost pricing nowadays, you can be sure that all net exports are pretty much the labour content of value added through local labour of the product. Given that, in the case of the Ukraine, for example, with a 160 million dollar problem, you might say, 'Why don't we convert this into a labour commitment because that is all it is anyway?'. Maybe instead of 160 million dollars you owe 80 million hours of labour and the creditor takes 80 million hours of labour. What you can do with it is sell it to Coca-Cola or Budweiser, who I'm sure has a bottling plant over there. The local government then

reimburses them and meets their payroll in local currency.

This would probably be traded at some discount and it would then become a local currency commitment which does a couple of things. It certainly does not increase unemployment. In fact, quite the opposite, it probably encourages more local employment. It encourages foreign direct investment because now along with it, you can have these vouchers so that the labourers are paid for. And it provides the basis of analysis for the debt burden. An analyst can say, the most a country can provide is 5 or 6 percent which is translated into so many labour hours. That way we can look at the debt burden in a fresh way and it provides a final anchor which will stabilise the value of the outstanding debt."

Ariel Buira saw the access to a collective pool of reserves as a solution to liquidity problems. "When we have the issues of volatility and changing expectations that can lead to problems with liquidity, the first question is: why didn't you accumulate reserves? Well, of course you did accumulate reserves. At some point last year developing and emerging economy countries were holding 1.2 or 1.3 trillion dollars in reserves, which cost them an enormous amount in terms of the interest rate differentials and so forth. This is a form of self-insurance and it seems a very primitive sort of approach to risk that everyone applies. Why do you have to have self-insurance? Why don't you have collective group-insurance? In fact, why doesn't the IMF or the BIS or somebody else provide these reserves? Why don't we just pay a commitment fee and have access to some pool of reserves in order to have some kind of group-insurance?

Another case is the type of contingency credit line Argentina and Mexico have with private banks. The problem with this is not the costs which were mentioned earlier, it is additionality. Investors want to have a specific amount of exposure to Mexico, and once they have committed this amount to the Mexican government, they won't lend anymore to Mexican companies. The overall exposure is whatever they decided it is going to be. So this doesn't really add to the availability of resources to the country and it doesn't really solve the problem.

Why don't we have some kind of group-insurance or why doesn't the Fund or the BIS just do it? We can do this by either pulling reserves or through quotas and have a commitment fee. And we can guarantee such a facility by pledging export revenues in the future."

Back to the CCL

Jack Boorman reacted to Ariel Buira by saying that the CCL is exactly what Buira just described, collective insurance. "The CCL is an insurance fund. I agree with your comments on the private contingent credit lines. It

would be nice to think about this as co-insurance from the official sector and the private sector. But resorting to guarantees by pledging export revenues doesn't really change anything. Because in order to generate the revenue from future export receipts, you'd still have to have an adjustment programme to generate those exports. So you are back to where we are."

György Szapáry observed that, because of the conditionality attached to the CCL, the resources would not be as quickly available as a country's reserves. He added that the reason why emerging countries cannot use large parts of their capital inflow is that growth cannot be based on capital that might leave the country again after a short period. "The CCL can, in fact, be a substitute for reserves. There must be a certain amount of reserves to insure confidence. It would be nice to say to investors, 'We have very low reserves compared to our other liabilities, which we believe are short-term liabilities, but don't worry about it, we have a CCL'. However, we will have to convince them that they are just as quickly available as our reserves would be. But this is difficult because conditionality is attached to it. If one could display it as part of reserves, it might help.

Stephany asked, 'Why accumulate reserves? Why don't you use them for growth?' The answer is that it is the nature of emerging markets that this money is here for a short term. I cannot confidently base growth on it and commit it to use until I am convinced that it is going to remain here for a while – and after a while, it will. But until you convince the markets that the money will not go out if something happens elsewhere in the world, it cannot be used for growth."

Griffith-Jones agreed with Szapáry that there shouldn't be additional conditionality attached to the CCL. "If we base it on Ariel Buira's idea that it should be insurance, then there should not be additional conditionality. If you have fire insurance and your house burns down, then you just get the money. If the CCL is for cases where no mistakes have been made in the countries and an external shock – which in this case is a contagion shock – occurs, it would be illogical to have additional conditionality. Similarly, the initial Compensatory Financing Facility with commodity prices had zero conditionality. The argument was that it was not the country's fault, for instance in the case of Chile, that the price of copper had fallen. If we're talking about pure contagion, then there should be no additional conditionality.

I agree also with György that you can't use the reserves because the money is so easily reversible. But then why does a country accept the money if it can't really use it? What is the point of borrowing short-term if one is unable to use it? Why incur these differential costs of holding the reserves, vis-à-vis for example sterilising them which has a fiscal cost?"

Ariel Buira dwelled on the conditionality of the CCL funds and pursued

the analogy with a fire insurance. "In my scheme of things, the insurance would be unconditional of course. Access would be automatic. There could be conditionality in the sense of saying, 'O.K., you get fire insurance provided your house is made of certain materials, or you follow certain policies and you have certain fire security measures'. If you comply with the standards of the fire department, you get the insurance. But the insurance is automatic. Once you have complied, the access is assured. You pay the fee and if you need it, you can draw. But this is not what we have yet, and thus you cannot count it in reserves. If it were automatic, you could.

Once some years ago in the Bank of Mexico, we counted reserves as what we had in actual reserves as well as the lines of credit that we had open which were fully assured. This could include a swap with so and so, or whatever we wanted to include as long as we felt confident that we could draw on it, if necessary. In the Bank's annual reports, we included reserves and what we called the secondary lines of credit which were available on a call-in basis."

Boorman thought Buira's insurance analogy was a good one and said that was where the CCL headed. "The way Ariel put it is right. That is what is going on under the CCL. You have to comply with the standards in order to qualify for it. But, even with fire insurance, the insurance company checks to make sure you didn't start the fire. And that is what this is all about. It has to be contagion, it has to be from the outside and the activation review is basically for the Board to check that the country didn't start the fire."

The Role of Information

Rohinton Medhora added that apart from financial issues, there are 'real' issues that need to be looked at in order to avoid crises and elaborated the example of information. "The issues raised in Stephany's paper are necessary but not sufficient conditions for crisis avoidance. The East Asian crises, for example, were a consequence of several events of which the financial one was only one. There was also a real side, be it over-investment, over-capacity, wrong product lines or whatever. Generally, there is a real issue of who collects the information, what kind of information is collected, who processes it, and who synthesises it. This is not a question of gathering a few financial data and publicising them, although that is an important component. The problem is that a lot of the so-called information that is out there is really opinion. So we need to sort out some of these questions of who collects information and why, and what sort of process spin is put on it."

Griffith-Jones agreed that it may be necessary to include some real vari-

ables in the analysis, but she saw some limitations to that. "It would make it more complex, and could the BIS or the IMF look at indicators of over-capacity? Could anybody do it? But it is an interesting question because most of the indicators are in the financial macro sphere and to the extent that there are some real economy elements in overcapacity, this may be interesting – even though it will also increases the amount of information."

Roger Nord elaborated the issue of symmetry in information and argued for increasing information. "Let me first say that I subscribe to much of what Stephany Griffith-Jones said. One point in Stephany's paper, which is her argument for more symmetry, can be usefully divided into two questions. One is whether asymmetry, or the absence of symmetry, is harmful. Some central banks argued that it was harmful for them to disclose information if the private sector, the so-called speculators, were not obliged to disclose information as well. I disagree with this view. Transparency benefits markets, and if you believe that markets function better with information, then releasing the information ought to benefit central banks as well. A good example is Argentina which believes that total transparency on its reserves and the daily publication of reserves is beneficial for running the currency board, regardless of whether they receive information on speculators

That is one way of looking at symmetry. The other way of looking at it is to ask if more information on private sector positions is useful, regardless of whether you start in asymmetry or not? I think the answer is yes. One shouldn't forget however that private sector positions also have a counterpart. In many cases of recent crises, the counterpart was an official position. With regard to certain engagements by the Thai central bank in the forward markets, you could ask for disclosure by whatever counterparties they had, but you could also simply ask for the central bank to be more transparent. As concerns counterparties in the private sector, there is a lot of work to be done. Some countries have gone into this in a major way. The IMF has worked fairly closely with a number of countries, both those in crisis such as Korea and those that are not under our surveillance mantle, to try to improve the amount of information that is available on what private sector positions are. That kind of information is useful and you often need to set up information systems to create that information. I think that is good, and it will make markets function better."

Jan Kregel argued that more information would not have prevented the crises. "The emphasis that has been placed on increasing information to increase market efficiency is a bit of a red herring, and it is distracting us from the basic problems. Who needs the increased information and what should they have done with it, had they had it? From reading the BIS reports from 1996 on, it is quite easy to know that there were difficulties in

Southeast Asia. Also, the IMF had been recommending to the Thai government at least a year before the crisis, that they do something about the exchange rate. Furthermore, I was part of an UNCTAD mission in 1996 to Southeast Asia. We visited a number of countries and indicated that, from our point of view, there were serious difficulties about to arise and that they should do something to deter them very rapidly. So clearly, the BIS, the IMF, UNCTAD – and I presume the World Bank – had sufficient information to assess that there were difficulties.

Still, this argument persists and the example of the trades in the forward market of the Thai central bank is often given. Anybody who knows anything about the Thai forward market, or the non-deliverable forward market, knows that it is an extremely small market with one predominant dealer, which is J.P. Morgan. On May 11th and 12th, the Thai central bank put something between 15 and 20 billion dollars worth of forward contracts through this extremely thin market: this could not have been unnoticed. It is impossible that people did not know. If the BIS, the IMF, UNCTAD or anyone else wanted to know the Thai central bank's real position on reserves, they could have telephoned J.P. Morgan or anybody else who operated in that market. They could also have sent people around to the local bar to listen to what the traders said after business that day. So, this information was widely available. The question is whether things would have turned out any differently, and I would say no. The problem was not that we didn't know what the Thai position was in terms of nondeliverable forwards, the problem was that nobody managed to convince the Thais that they had difficulties a year before the crisis occurred, and that they should do something about them. I would suggest that the market information we are recommending to make the market function more efficiently would have done absolutely nothing to prevent the crises. I am not against increasing information, but in terms of crisis avoidance, the great importance we place on information is not going to produce much of improvement in the way the system currently operates."

Griffith-Jones agreed that the unavailability of information is not the real problem. "I also have an anecdote about information. I wanted to know Mexico's level of reserves for a paper I wrote for CEPAL. Exceptionally, Ariel Buira was not very helpful because he said that it was confidential. So I phoned up some of my friends in London, and then spent less than an hour doing some calculations. Everybody in London knew what the level of reserves was. In spite of that, I think it is useful to improve information, but one should just not expect too much from it because the people who are trading or trying to make profits, don't look at the information very much. I will give you another anecdote. When I wrote a country report for a bank where I worked, the manager phoned me

up saying that he didn't like the report. I asked him if something was wrong with it, and he said, 'No, it is perfectly fine technically, but I don't like the conclusion'. The problem was that my conclusion differed from the one he had in mind. I understand from a BIS survey that this is actually quite common. The decisions that banks make in lending are often made without properly reading the reports of their own research departments or they are made against the advice of their own research departments. Therefore one shouldn't place too much trust in improved information."

Jack Boorman objected to Jan Kregel's and Stephany Griffith-Jones' comments by calling for a better system where information is transparent and accessible to everyone. "I am not as sanguine as Jan or perhaps even Stephany about this issue of data. You should not have to spend an hour on the telephone calling contacts in financial centres in order to find out a country's level of reserves. That is not how financial markets should work. Nor should you have to send your research assistant to the bars in New York to find out information about a country's reserves. Similarly, I think that you could go to all the bars in New York, and all of the bankers in New York could be in those bars, and you will still be unable to accumulate Long-Term Capital Management's exposure to the banking system. You shouldn't waste your time gathering data from secret sources, but you should be able to call up those data, particularly with today's technology, and do analysis and stress-testing and risk-analysis. It should be facile. I think it is just wrong to say, ex post: You could have read this particular journal and over the weeks you could have accumulated the Mexican auctions of Tesobonos. Yes, you could have, but that doesn't help run an international financial system in a fair, clear and transparent manner. I think there is a lot to be said for getting systems in place and making sure that everybody has access to this kind of information."

Jan Kregel responded that he wasn't against more information, but that it would not have avoided the crises. "Jack, I'm not arguing that more information is bad, I'm saying that having that information available would not have changed what happened. On May 11th, if the Bangkok Post had published that the Thai central bank had just committed, I can't remember the exact figure but let's say15 billion dollars worth in forwards, would this have changed anything?"

Boorman said that with the right information, the market would have reacted differently and policies would have been modified earlier and in a more orderly way. "The Thai authorities were willing to totally utilise their reserves down to a net level of virtually zero through the forward market. I don't know what the counterfactual is, but I don't think the market would have permitted them to do that if it had known. The Thai report on their own situation says that there were two officials in Thailand who

knew what was being done in the forward market. I don't know of anyone in Washington who knew what was going on there.

Similarly, I don't think the Koreans would have been able to basically work their reserves down to 7 billion dollars from what was supposedly 50 billion dollars before they decided to call the IMF. The market would have reacted in a different way, and it would have pressured the authorities in both these cases to modify policy earlier and in a more orderly fashion, rather than to be faced with a situation where their hands were totally tied behind their backs because they had no money left at the moment that information was released. It is both the reaction of people in the market to the smooth unfolding of the situation along with the pressure on the authorities to react differently than they did."

Kregel insisted that the information on Thailand was available before the crisis. "J.P. Morgan knew and the Fund was already recommending to the Thais that they should have done something. As I understand it, in July of 1996, a year before, there was already a formal Fund letter to the Thais recommending that they either do something in order to reduce their foreign exposure or change the exchange rate. What more information did you need and would more information have changed your position?"

Boorman then said that the IMF was unable to convince the Thai authorities to act. "We couldn't convince the Thai authorities because there was political commitment to the pegged exchange rate. They were willing to go to the wall, with a hope and a prayer, that if they continued to use reserves, something would happen to turn it around. But there was an alternative to the crisis and that was more pressure from the markets on the Thais in a more orderly fashion, which I think would have emerged if the markets were aware of what was happening to the reserve situation through a steady release of information. And this is where we differ. You are presuming that the markets knew. I'm pretty confident that the markets in general simply did not know what was happening either to the Thai reserve situation or to the Korean reserve situation. It was not common knowledge by any means."

Martin Mayer turned the discussion on information to Griffith-Jones' idea of a credit register for bank loans. "I want to stand up and cheer about this notion of a credit register for bank loans in Stephany's paper. There are all sorts of things where information helps. The more information that is out there, the greater the possibility that some small boy will see that the emperor is not wearing any cloths and make a fuss about it. It is quite clear that if people, including bankers, had been paying attention, they would not have done some of the dumb things they did. The information doesn't have to be published, it simply has to be available within the market. You have to see how much weight is on the shelf to know how much trouble

you are going to be in if the shelf suddenly breaks and falls on you. And you can never get this in the secretive world of banking and derivative traders unless you have to register somewhere. I would not worry about driving business offshore with that because these markets care desperately about a legal order, and the legal order is in the control of the government."

Appendix

List of Participants in the Conference on "The Management of Global Financial Markets: Challenges and Policy Options for Emerging Economies, the EU and the International Institutions", held at the National Bank of Hungary, Budapest on 24-25 June 1999

Mr. Mohamed Ariff Executive Director, Malaysian Institute of

Economic Research, Kuala Lumpur

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. Ariel Buira Ambassador of Mexico in Greece, former

Deputy Governor of the Central Bank of

Mexico, Athens

Mr. Zsolt Darvas Senior Economist, National Bank of Hungary,

Budapest

Mr. Kálmán Dezséri Senior Research Fellow, Institute for World

Economics of the Hungarian Academy of

Sciences, Budapest

Mr. Zdeněk Drábek Counsellor, Economic Research and Analysis,

World Trade Organization, Geneva

Ms. Éva Ehrlich Research Director, Modernization,

Infrastructure and Services Division, Institute

for World Economics of the Hungarian

Academy of Sciences, Budapest

Mr. Ádám Farkas Managing Director in charge of the International Capital Markets, National Bank of Hungary, Budapest Mr. Ricardo Ffrench-Principal Advisor on Economic Policy, Davis UN-Economic Commission for Latin America and the Caribbean, Santiago Mr. Pál Gáspár Director, Central and Eastern European Office, International Center for Economic Growth, Budapest Ms. Stephany Griffith-Senior Fellow, Institute of Development Studies, Brighton, Sussex Jones Mr. Barry Herman Chief International Economic Relations, Department of Economic and Social Information and Policy Analysis, United Nations, New York Mr. András Hernádi Research Director, Japan, East and Southeast Asia Division, Institute for World Economics of the Hungarian Academy of Sciences, Budapest Mr. András Inotai General Director, Institute for World Economics of the Hungarian Academy of Sciences, Budapest High Level Expert in International Finance, Mr. Jan Kregel UNCTAD. Professor of Political Economy, University of Bologna Mr. Martin Mayer Guest Scholar, Economic Studies, The Brookings Institution, Washington D.C.

Mr. Rohinton Medhora

Senior Specialist Economics, Programs Branch,
International Development Research Centre,
Ottawa

Mr. Kálmán Mizsei Chief Investment Officer, American Insurance Group, Budapest Mr. Warren Mosler Managing General Partner, Adams, Viner and

Mosler, West Palm Beach, Florida

Mr. Roger Nord Regional Representative in Central Europe,

International Monetary Fund, Budapest

Mr. György Surányi President, National Bank of Hungary, Budapest

Mr. György Szapáry Deputy President, National Bank of Hungary,

Budapest

Mr. Elemér Terták Chairman of the Board, Daewoo Bank of

Hungary Ltd., Budapest

Mr. Jan Joost Teunissen Director, Forum on Debt and Development,

The Hague

Mr. William White Economic Adviser and Head of the Monetary

and Economic Department, Bank for International Settlements, Basle

Mr. John Williamson Chief Economist, South Asia Region, The

World Bank, Washington D.C.