UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Management of Capital Flows:

Comparative experiences and implications for Africa



UNITED NATIONS New York and Geneva, April 2003

Note

The views expressed in this book are those of the authors and do not necessarily reflect the views of the UNCTAD secretariat. The designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

*

Material in this publication may be freely quoted; acknowledgement, however, is requested (including reference to the document number). It would be appreciated if a copy of the publication containing the quotation were sent to the Publications Assistant, Macroeconomic and Development Policies Branch, Division on Globalization and Development Strategies, UNCTAD, Palais des Nations, CH-1211 Geneva 10.

UNCTAD/GDS/MDPB/2003/1

UNITED NATIONS PUBLICATION

Sales No. E.03.II.D.20

ISBN 92-1-112594-4

Copyright © United Nations, 2003 All rights reserved

Acknowledgements

This volume contains seven papers that were presented at a workshop on management of capital flows, organized jointly by the UNCTAD secretariat and the Government of Egypt in Cairo on 20–21 March 2001. The authors of these papers, whom we wish to thank for their time and efforts, extensively revised and updated their research papers in the light of the discussions held at the workshop.

We would like to express our appreciation to the Government of Egypt for hosting this event and to the Government of Japan for its financial assistance through project RAF/97/A28, without which the workshop and the research presented in this volume would not have been possible.

Active participation in the workshop by officials from Egypt and the following African countries enriched the discussions: Algeria, Cameroon, Côte d'Ivore, Ethiopia, Gabon, Ghana, Kenya, the Libyan Arab Jamahiriya, Morocco, Mozambique, Nigeria, Senegal, South Africa, Tunisia, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe. Contributions to the discussions at the workshop were also made by officials from the United Nations Development Programme (UNDP), the Economic Commission for Africa (ECA) and the International Monetary Fund (IMF).

This project was directed by Yilmaz Akyüz, Director, Division on Globalization and Development Strategies, UNCTAD, and managed by Shigehisa C. Kasahara. Kamran Kousari, UNCTAD's Special Coordinator for Africa, was closely involved in all aspects of the project. Heather Wicks provided logistical and secretarial support in preparation for, and organization of, the workshop. Praveen Bhalla edited the final text and Petra Hoffmann was responsible for its layout and overall presentation. The cover was designed by Diego Oyarzun-Reyes.

List of contributors

- *Xavier Cirera*, Fellow at the Institute of Development Studies, University of Sussex, United Kingdom
- *Wei Ge*, Professor, Economics Department, Bucknell University, Lewisburg, United States
- *Ricardo Gottschalk*, Fellow at the Institute of Development Studies and Programme Director, University of Sussex, United Kingdom
- *Stephany Griffith-Jones*, Professorial Fellow at the Institute of Development Studies, University of Sussex, United Kingdom
- Chon Pyo Lee, Professor, School of Economics, Seoul National University, Republic of Korea
- *Francis M. Mwega*, Professor, African Economic Research Consortium, Nairobi, Kenya
- *Léonce Ndikumana*, Associate Professor, Economics Department, University of Massachusetts, United States
- *Indira Rajaraman*, Professor, Department of Economics, National Institute of Public Finance and Policy, New Delhi, India
- *Delphin G. Rwegasira*, Executive Director, African Economic Research Consortium, Nairobi, Kenya
- *Ajit Singh*, Professor, Economics Department, University of Cambridge, United Kingdom
- Alaka Singh, PhD. Student, University of Cambridge, United Kingdom
- Bruce Weisse, PhD. Student, University of Cambridge, United Kingdom

Contents

Abbreviations	xiii
Introduction and summary	xvii

CORPORATE GOVERNANCE, COMPETITION, THE NEW INTERNATIONAL FINANCIAL ARCHITECTURE AND LARGE CORPORATIONS IN EMERGING MARKETS

Ajit Singh, Alaka Singh and Bruce Weisse

I.	Introduction	1
II.	The Asian financial crisis and corporate governance	4
III.	The new international financial architecture and corporate governance	7
IV.	Corporate governance in emerging markets: the facts	. 10
	A. Patterns of share ownership and control of large corporations in developed and emerging marketsB. Crony capitalism	. 10 . 16
V.	The theoretical foundations of the OECD/World Bank proposals on corporate governance	. 18
	A. The LLSV thesisB. The Berglof and von Thadden critiqueC. The Glen, Lee and Singh analysis	. 18 . 21 . 22
VI.	Corporate governance and corporate finance in emerging markets: the 1980s versus the 1990s	. 24
	A. Corporate finance, the stock market and corporate governanceB. Corporate governance and takeovers	. 31 . 33
VII	C. Developing country corporations and high gearing	. 30
V 11.	A Empirical evidence	. 30
	B Policy issues: <i>chaebol</i> reform in the Republic of Korea	.41
VIII.	Competition and corporate governance: theoretical issues	. 47

65

THE OECD EXPERIENCE WITH CAPITAL ACCOUNT LIBERALIZATION

Stephany Griffith-Jones, Ricardo Gottschalk and Xavier Cirera

I. Introduction	71
II. The Code of Liberalization of Capital Movements: historical background and instruments	
III. Evolution of the OECD Code and patterns of liberalization among the OECD member countries	
IV. Use of derogation and reservations	
A. Analysis of derogation in the CodeB. Analysis of reservations in the Code	
V. Experiences of selected countries with capital account liberalization: a comparative analysis	
A. Spain	
B. The Czech Republic, Mexico and the Republic of KoreaC. Lessons	
VI. Conclusion	
Annex tables	100
Notes	105
References	106

MANAGEMENT OF THE CAPITAL ACCOUNT: A STUDY OF INDIA AND MALAYSIA

Indira Rajaraman

I.	Introduction	109
	A. India and Malaysia	109
	B. The issues	113
	C. Outline of the paper	116

II. India	116
A. Introduction	116
B. The balance of payments: an overview	118
C. Invisibles in the current account	121
D. Capital inflows	122
E. Returning flight capital	130
F. The foreign exchange market	131
G. Financial sector reform	134
H. Conclusions	137
III. Malaysia	141
A. Introduction	141
B. Capital account management prior to 1997	143
C. The crisis of 1997	147
D. The capital controls of 1998–1999	152
E. Financial sector reform	158
F. Conclusions	162
IV. Conclusions	164
Appendix A: External policy milestones: India	173
Appendix B: External policy milestones: Malaysia	178
Notes	182
References	182

CHINA: MANAGING FINANCIAL INTEGRATION

Wei Ge

I. Financial integration and vulnerability	
II. The Chinese economy in transition: a brief overview	
A. Accomplishments in two decades of reform	
B. Economic reforms and systemic transformation	
C. Opening up to the outside world	
III. The changing pattern of capital inflows	
A. The predominance of foreign direct investments	
B. Growing significance of joint ventures and	
foreign-owned firms	
C. Managing the external debt	
D. The role of the "greater Chinese economy"	
E. Capital outflows and the issue of "round-tripping"	

IV. Financial sector restructuring and management	
A. The exchange rate system and management	
B. Operation of equity markets	
C. Financial sector reform and regulation	
D. Financial sector weakness and policy responses	
V. Concluding remarks	
Notes	
References	223
*	

POST-CRISIS FINANCIAL REFORMS IN THE REPUBLIC OF KOREA: PROBLEMS AND PROPOSED REMEDIES

Chon Pyo Lee

I. Introduction	227
II. Crisis resolution in the Republic of Korea: four reforms	232
A. Financial sector	233
B. Corporate sector	234
III. Global standards and evaluation of the post-crisis adjustments.	236
A. Qualitative standards and their effects	237
B. Quantitative standards and their effects	239
IV. Public funds and other adjustment efforts	242
A. Labour	242
B. Capital: foreign capital	243
C. Public funds	245
D. "Big Deal" and work-out programmes	247
V. An assessment of three years of restructuring efforts	248
VI. Lessons for better restructuring	251
Notes	256
Bibliography	257

PUBLIC DEBT AND MACROECONOMIC MANAGEMENT IN SUB-SAHARAN AFRICA

Delphin G. Rwegasira and Francis M. Mwega

I.	Int	roduction	259
II.	Th	e debt problem in sub-Saharan Africa	260
	Α.	External debt	260
	В.	Public domestic debt	264

III. The linkages between external and domestic debt	
IV. Financing budget deficits	279
V. The limitations and trade-offs of the various fiscal deficit financing methods	
 A. Inflationary financing versus other domestic borrowing B. Inflationary financing versus external borrowing C. External borrowing versus domestic borrowing 	281 284 285
VI. Implications of public debt for macroeconomic management and monetary policy in Africa	286
A. Exchange-rate policyB. Interest-rate policyC. Opening up of the capital account	286 291 .293
VII. Summary and conclusions	
Notes	307

CAPITAL FLOWS, CAPITAL ACCOUNT REGIMES AND FOREIGN EXCHANGE REGIMES IN AFRICA

Léonce Ndikumana

I.	Introduction	313
II.	Capital flows: recent trends and patterns	316
	A. FDI "surge" in Africa: an illusion?	316
	B. Other capital flows to Africa	322
	C. Constraints on private capital inflows into Africa	325
III.	Capital account regimes: openness and related issues	328
	A. Recent developments in capital account policies	328
	B. Motivations for capital account restrictions in Africa	330
IV.	Exchange rate regimes: transitions and implications for	
	capital mobility	334
	A. The global context: regime shifts and the "hollowing-out"	
	of the middle ground	334
	B. Exchange rate regime shifts in Africa: asymmetric	
	transition	335
	C. Exchange rate regimes and economic performance:	
	some casual observations	337
	D. Further issues related to exchange rate regimes	348

V.	Currency regimes, dollarization/"euroization", and	
	implications for capital flows	. 350
	A. Dollarization/"euroization": the new context	. 350
	B. Advantages and disadvantages of dollarization/"euroization"	. 351
	C. Currency unions in Africa: opportunities and constraints	. 354
VI.	Capital flight from Africa	. 355
	A. Magnitude of the problem in African countries	. 355
	B. Conduits, causes and macroeconomic consequences	
	of capital flight	. 358
	C. Capital account liberalization and capital flight	. 359
VII.	Summary and policy implications	. 360
	A. Attracting and monitoring capital flows	. 360
	B. Liberalization and openness: a cautionary note	. 361
	C. Strengthening financial markets	. 361
Appe	ndix	. 363
Notes		. 381
Refer	ences	. 381
v		

Abbreviations

ADRs	American Deposit Receipts
ALM	asset-liability management
BAFIA	Banking and Financial Institutions Act
BIS	Bank for International Settlements
BLR	base lending rate
BNM	Bank Negara Malaysia
BOP	balance of payments
BSE	Bombay Stock Exchange
CAC	Capital Account Convertibility
CBI	Cross-Border Initiative (in Eastern and Southern Africa)
CBN	Central Bank of Nigeria
CDRC	Corporate Debt Restructuring Agency
CFA	Communauté financière africaine (franc zone)
CGE	computational general equilibrium
CLOB	Central Limit Order Book
COMESA	Common Market for Eastern and Southern Africa
CPI	consumer price index
CRAR	capital to risk assets ratio
CRR	cash reserve ratio
DRI	differential rate of interest
ECB	external commercial borrowing
EEC	European Economic Community
EEFC	exchange earners' foreign currency
EMS	European Monetary System
EMU	European Monetary Union
ERM	Exchange Rate Mechanism (of EMS)
EU	European Union
FCNR(A)	Foreign Currency Non-Resident (accounts)
FCNR(B)	Foreign Currency Non-Resident (banks)
FDI	foreign direct investment

xiii

FFMA	Foreign Exchange Management Act
FERA	Foreign Exchange Regulation Act
FI	financial institution
FII	foreign institutional investment (or investor)
FIPR	Foreign Investment Promotion Board
FRA	forward rate agreement
FSC	Financial Supervisory Commission
GDP	gross domestic product
GDR	Global Deposit Receint
GNP	gross national product
HIPC	heavily indebted poor country
	Industrial Credit and Investment Corporation of India
IDRI	Industrial Development Bank of India
IFCI	Industrial Einance Corporation of India
IME	International Monetary Fund
IPO	initial public offering
IRS	interest rate swan
KAMCO	Korea Asset Management Corporation
KDIC	Korea Deposit Insurance Corporation
I A F	Liquidity Adjustment Facility
	least developed country
LEC	Liberalized Exchange Rate Management System
LIROR	London Inter-Bank Offered Rate
M& A	merger and acquisition
MAI	multilateral agreement on investment
MIBOR	Mumbai Inter-Bank Offered Rate
MIGA	Multilateral Investment Guarantee Agency
NGO	non-governmental organization
NIF	newly industrializing economy
NOFP	net open forward position
ΝΡΔ	non-performing asset
NPIs	non-performing loan
$NR(F)R\Delta$	non-resident (external) runee accounts
NR(NR)RD	non-resident (onn-repatriable) rupee deposits
NR(S)RA)	non-resident special rupee account
NK(S)KA)	non-resident special rupee account

xiv

NRI	non-resident Indian
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OEEC	Organisation for European Economic Co-operation
PLR	prime lending rate
RBI	Reserve Bank of India (the central bank)
RIB	Resurgent India Bond
ROA	return on assets
RWCR	risk-weighted capital requirement
SADC	Southern African Development Community
SARB	South African Reserve Bank
SEBI	Securities Exchange Board of India
SILIC	severely indebted low-income country
SLR	statutory liquidity ratio
SME	small and medium-sized enterprise
SOE	State-owned enterprise
SRR	statutory reserve ratio
SSA	sub-Saharan Africa
TNC	transnational corporation
TRIPS	Trade-Related Aspects of Intellectual Property Rights (WTO
	Agreement)
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

INTRODUCTION AND SUMMARY

The issue of management of capital flows has been brought into sharp focus by bouts of financial crises in the developing world and emerging market economies. Before the outbreak of the financial crisis in East and South-East Asia in 1997, the newly industrializing economies in the region were considered to be showcase models of development. Many researchers studied appropriate ways to replicate their performances in other regions. The UNCTAD secretariat also undertook intensive research on what were seen as successful development strategies in East Asia, and reported its analytical findings in the *Trade and Development Report (TDR) 1996*. However, as the crisis persisted and its contagion spread, both within and beyond the region, a heated debate emerged about the appropriateness of their development strategies in the context of the increasing international mobility of financial capital.

The UNCTAD secretariat has been closely following this debate; its analysis of the Asian experiences during and after the crisis were presented in *TDR 1998*, with the aim of drawing lessons to help contribute to the design of appropriate policies in other developing countries. Part two of that report, entitled *African Development in a Comparative Perspective*, sought to examine development strategies and growth performance in African countries in the light of the East Asian experience.

Increasing international mobility of private financial capital is a major aspect of the contemporary global economy, where the volume of international financial transactions far exceeds that necessary to finance trade and investment. Efforts to integrate the African region into the global financial system, and to attract private flows through rapid liberalization of the capital account, have resulted not in increased inflows of such capital but in greater volatility, with attendant consequences for exchange rate instability and misalignments. A number of countries in the region experienced considerable financial instability and payments difficulties, but these were given little attention by the international community largely because, unlike the financial crises in the emerging markets of Latin America and East Asia, they did not pose a serious threat to the stability of the international financial markets.

Given this situation, the UNCTAD secretariat considered it useful to take stock of the financial policies and capital account regimes within the region of sub-Saharan Africa (SSA), and to draw appropriate lessons from the ways in which the capital account in other regions was managed. For this purpose, seven papers were commissioned by the secretariat and discussed at a workshop organized by UNCTAD and hosted by the Government of Egypt in Cairo on 20-21 March 2001. The workshop was attended by policy makers from a selected number of low- and middleincome African countries, many officials and experts from the public and private sectors in the host country, as well as representatives from some international organizations. The aim of the workshop was to enhance understanding of the complex relationship between external financing, capital account regimes, macroeconomic policies, and trade and development. Furthermore, it sought to promote dialogue between the researchers (both from developed and developing countries) and African policy makers and to help strengthen the policy relevance and analytical basis for the future work of the UNCTAD secretariat with regard to African growth and economic development.

* * *

Three sets of issues emerged from the discussions at the workshop:

- (i) The need for and role of foreign capital in developing countries;
- (ii) How to manage the capital account so as to limit the potential damages caused by the instability of international capital flows without reducing the ability of developing countries to supplement their domestic resources with foreign capital; the latter, through access to international financial markets, necessary for faster accumulation, growth and development; and
- (iii) The role of financial institutions, and the possible contribution of global standards and codes on governance, competition and transparency in promoting stability and growth.

While there was a convergence of views in a number of areas, considerable differences emerged regarding the contribution of domestic institutions and policies on the one hand, and external factors on the other, to accumulation, growth, financial instability and crises in emerging markets.

Two main reasons for reliance on foreign capital were suggested: for closing the resource gap and for transfer of technology. It was also pointed out that a reliance on transnational corporations might be necessary for establishing linkages with global production networks and access to financial markets. However, in all these respects, it was recognized that considerable differences existed among developing countries in their need for foreign capital as well as in the policy approaches pursued.

It was generally agreed that, while there was a need to fill the resource gap through capital inflows in Africa, and in other regions where income levels were too low to generate adequate domestic savings, this was not the case for a number of East Asian countries where savings rates were over 30 per cent of gross domestic product (GDP). Again, for many middleincome countries with per capita incomes of over \$3,000, there was considerable scope to increase self-reliance by raising domestic savings. It was therefore counterproductive for such countries to pin their hopes on foreign capital. Furthermore, successful growth and development often entailed reducing dependence on capital inflows. This was the case in East Asia, but not in Latin America and Africa, where savings rates remained low even when these regions were experiencing relatively high growth rates in the 1960s and 1970s.

On the type of capital inflows needed, there was a broad preference for greenfield investments, as opposed to either mergers and acquisitions of existing assets, or financial inflows of a speculative nature. It was noted that the motive pursued by foreign capital was profits, and not development, and that these objectives did not necessarily coincide. Hence there was the need to place policies on foreign direct investment (FDI) into a broad development strategy, and to retain policy autonomy in this respect. With regard to conditions that attract FDI, particularly in the traded-goods sector, it was broadly believed that, except for a few countries rich in natural resources, the SSA economies did not have the requisite human and physical infrastructure and institutions needed to attract FDI, and that foreign capital inflows to develop such conditions were unlikely.

It was argued that capital account liberalization was neither necessary nor sufficient to attract foreign capital. China was held as an example of a country that was receiving large amounts of greenfield FDI without pursuing an open capital account regime while many countries in SSA were receiving very little despite a rapid liberalization of their capital account. And some Asian countries, notably the Republic of Korea, drew on funds from international capital markets in the early stages of industrialization, while retaining strict controls over capital flows. On the other hand, while it was pointed out that liberalization of the capital account could bring some of the flight capital back to SSA by allowing it to re-exit, it was also noted that a considerable amount of flight capital had little to do with economic incentives. Further, capital account openness allowed leakages by the residents even in the absence of a serious distortion of incentives.

There was also general agreement that official financing should play a greater role in SSA. The Heavily Indebted Poor Countries (HIPCs) Initiative was seen as having fallen short of expectations. The process was tedious, burdened by excessive conditionality, requiring too much effort and time on the part of debtor countries, and diverting a handful of skilled people to endless preparations and negotiations with little benefit at the end.

On the management of the capital account, there was broad agreement that developing countries needed strategic, as opposed to full, integration into the international financial system. The degree and pattern of integration would vary according to the level of economic and institutional development. The experiences of various countries in Asia, including China, India, Malaysia and the Republic of Korea, showed that successful management of the capital account required a policy approach that differentiated between:

- sources/types of capital (such as FDI, loans, and portfolio and equity flows);
- different maturities;
- different domestic uses;
- actors (residents versus non-residents; different types of borrowers such as banks and non-bank corporations); and
- inflows and outflows.

There was also agreement that in terms of its macroeconomic effects, dollarization (or use of foreign currencies in current and capital transactions among residents) was not very different from capital account liberalization.

A discussion on the role of sequencing in capital account liberalization noted that there are several approaches to the concept. One approach emphasizes sequencing of liberalization among different spheres of economic activity (e.g. trade, domestic financial sector, current account and capital account). In the sphere of finance, a distinction was made between different types of capital flows in the liberalization process (such as FDI, long-term borrowing and short-term flows). Another approach finds it necessary to sequence capital account liberalization.

The relationship between exchange rate policies and capital flows was also discussed. While it was agreed that the kind of exchange rate regime adopted has important implications for capital flows, it would be difficult to address the question of what constitutes an appropriate exchange rate regime without reference to the underlying regime of the capital account. Attaining exchange rate stability under an open capital account regime by fixing or floating the currency against major reserve currencies is not easy. Again, it was emphasized that effective management of capital flows and the exchange rate also depends on fiscal discipline and the level of indebtedness of the public sector.

The question was raised as to whether some countries may have gone too far in capital account liberalization and whether it was possible to reverse this. While it was felt that restrictions and control in times of crisis may not work, paradoxically governments did not have the incentive to adopt such measures during good times.

The role of regional cooperation for greater financial and exchange rate stability was also taken up in the context of management of the capital account. The Chiang Mai Initiative in East Asia was seen as a small but important step towards greater cooperation. It was also noted that the experience of the European Union provided some important lessons in this respect.

Discussions around the role of institutions and global standards and codes drew significantly on the East Asian experience in the context of the financial crisis of 1997–1999. It was observed that there was a tendency to explain every crisis ex post by ad hoc arguments. The debt crisis of the 1980s was attributed to excessive government spending and borrowing. The orthodox view was that external debt and deficits associated with a private savings gap should not be a cause for concern. But this view had been quickly discredited by the Mexican crisis, which occurred against a background of budget surplus. The new explanation was that capital flows had been used for consumption rather than investment. But this view too had to be revised after the East Asian crisis, where much of the private borrowing went into investment. This had prompted suggestions that corruption and cronyism (attributed to government failure), led to unproductive investment. It had been argued that, although policies and institutions mattered, it often took a debtor and a creditor to create a bad debt and a financial crisis. Even developed countries with sound financial institutions and policies, such as Sweden, had been seemingly hit by international speculators.

While weaknesses in corporate governance and financial institutions may often lead to unproductive and excessive investment, whether an investment is good or bad also depends on the perceptions of markets and the macroeconomic environment. When overall economic conditions change, an investment that initially looked profitable to creditors and investors may cease to be viable. Financial bubbles, as occurred in the information technology (IT) sector of the United States in recent years, were often created as a result of such investment.

On the nature of discipline that financial markets exert over policy makers, it was argued that financial market pressures can have an adverse impact on stability and growth. Herd behaviour in these markets, and surges in capital inflows, can support unsustainable policies, leading eventually to currency appreciation and large external deficits. Financial markets can also put pressure on countries with sound fundamentals through contagion.

It was pointed out that there is no single set of institutions for the financial sector and for corporate governance that can be appropriate for all countries. Different models, such as the Japanese, German and Anglo-American systems of finance and corporate governance, may be appropriate under difference circumstances. Each has its positive aspects and its drawbacks, and the international community needs to be aware of the risks of promoting any single model through new sets of international codes and standards.

* * *

This volume contains seven papers by researchers commissioned by the UNCTAD secretariat. The original papers were presented at the Cairo workshop, and were subsequently revised and updated by their authors following the workshop, in the light of the discussions held there. The major elements and general findings of these papers are presented below.

To place the present debate on financial policies and current account regimes in the wider development context, particularly that surrounding the need for improved management of increasingly globalizing trade and investment, the first paper covers a range of issues concerning corporate governance, competition, the new international financial architecture and large corporations in emerging markets. Of the remaining six papers, four examine the experiences of economies in East and South-East Asia and those of the Organisation of Economic Co-operation and Development (OECD). These experiences may provide useful lessons to policy makers in the SSA countries. Finally, two papers are concerned with an analysis of the situation in the SSA region, particularly with respect to internal management (i.e. macroeconomic policies related to public debt owed to the domestic and foreign sectors) and external management (i.e. wideranging financial policies related to external account issues).

In their paper entitled Corporate Governance, Competition, the New International Financial Architecture and Large Corporations in Emerging Markets, Singh, Singh and Weisse examine, from the developing country perspective, important analytical and policy issues arising from two major trends: the current international discussions about corporate governance in relation to proposals for a new international financial architecture; and changes in the international competitive environment as a result of a spate of corporate mergers in advanced countries. The background to the current international discussions is the emergence of corporate governance as a key issue in the current G-7 proposals for a new international financial architecture. This emphasis by the G-7 can be traced back to the thesis that the "deeper" reasons for the Asian crisis lay in the microeconomic behaviour of corporations and businesses in the affected countries. Alleged failings in their corporate governance mechanisms and distortions of their competitive processes have been subject to particular scrutiny in such analyses.

The international competitive environment is changing rapidly, as large corporations in the industrialized countries are in the process of potentially "cartelizing" the world marketplace through numerous cross-border mergers and takeovers. This trend raises serious policy concerns for developing countries. The authors' main conclusions are the following. First of all, the thesis that the deeper causes of the Asian crisis were flawed systems of corporate governance and a poor competitive environment in the affected countries is not supported by evidence. Secondly, the Anglo-Saxon model of widely-held corporations with dispersed share ownership is the exception in developing countries and in much of continental Europe. Empirical evidence suggests that emerging markets, as well as European countries such as Germany, Italy or Sweden, have successful records of rapid, longterm growth with different governance systems to those of the Anglo-Saxon countries. Thirdly, empirical evidence does not support the view that the Asian crisis of 1997–1999 was caused by crony capitalism. Fourthly, corporate financing patterns in emerging markets in the 1990s were broadly similar to those observed in the 1980s. Unlike their counterparts in the industrialized countries, large, developing-country firms continued to rely overwhelmingly on external sources to finance their growth. Finally, challenging the widely held claim that developing country conglomerates are inefficient, financially precarious and necessarily create moral hazard, the authors argue that market competition in emerging market economies is no less intense than in the industrialized economies.

In their paper, *The OECD Experience with Capital Account Liberalization*, **Griffth-Jones**, **Gottschalk** and **Cirera** discuss the OECD Code of Liberalization of Capital Movements, which aims to promote capital account liberalization among the OECD member countries. Their analysis of the Code and, more generally, of the OECD experience with liberalization, leads the authors to identify three major historical trends. Initially, liberalization in the OECD area was very gradual, but speeded up in the 1980s and 1990s. During the first 25 years, the process was sequenced, with long-term capital flows being liberalized first and short-term flows only much later, in the 1980s. Acknowledging the diversity among the OECD member countries, the process initially allowed middle-income member countries to pursue liberalization more gradually than the industrialized countries. However, this changed later, with new members – all from emerging market economies – facing requirements for much more rapid liberalization as a prerequisite for membership of the organization.

Although they do not ascribe a mechanistic causal link, the authors raise the concern that, of the six emerging market countries that joined the OECD in the 1990s, three had a large and costly currency crisis shortly after they joined. This should be seen as a warning of the risks of an internationally agreed framework on capital account liberalization, even if it is carefully designed, for the purpose of supporting orderly liberalization. If a divergence of interests exists among member countries, rather than guaranteeing orderly liberalization, such a framework may result in one group of countries imposing the objective of full capital account convertibility on a wide range of countries, most of which are still unprepared for undertaking such a step. The authors conclude that whilst there has not been significant progress towards creating a new international financial architecture that could help avert currency crises or make them less costly, the decision on the pace and timing of capital account liberalization should be left to individual countries.

In her paper on *Management of the Capital Account: A Study of India and Malaysia*, **Rajaraman** compares and contrasts the approaches of these countries to capital account management, which, although widely different historically, have arrived at a remarkable convergence following the East Asian crisis of 1997. The author seeks to demonstrate that there are advantages in not requiring a monotonic transition to capital convertibility. Though the paper does not recommend a reversal of convertibility for nonresident capital, which has damaging effects on a country's reputation, it does argue that retention of rights of sovereign control over resident capital is essential for macroeconomic control over the real sector. In countries with institutional weaknesses in the financial sector, it is damaging to focus on the gains of free capital flows without giving adequate attention to the institutional consolidation that would prevent a recurrence of episodes of volatility.

India and Malaysia are quite disparate in terms of long-term rates of growth and their degree of openness. Malaysia accepted Article VIII status under the IMF (current account convertibility) in November 1968, and the

Malaysian ringgit was floated along with major world currencies in 1973. India, by contrast, accepted Article VIII status only in August 1994, following a single floating rate for the rupee in March 1993. The Malaysian export/GDP ratio equals, or actually exceeds, 100 per cent. India on the other hand has an export/GDP ratio at the 11-12 per cent level. The Malaysian response to the currency crisis of 1997 backtracked on what had been one of the longest traditions of openness on current and capital accounts in the developing world. As the capital outflows from Malaysia reached crisis levels, the country famously imposed capital exit barriers, and a policy of lower interest rates that ran directly contrary to the policy proposed for other East Asian countries similarly afflicted. The Indian external liquidity crisis in mid-1991 on the other hand, when foreign reserves fell to an all-time low of \$1 billion, led to the gradual opening up of the Indian capital account. In both countries today, non-resident capital inflows enjoy full freedom of repatriation. In Malaysia, a vestigial 10 per cent exit levy on portfolio capital gains repatriated within a year after entry was removed in May 2001. Capital outflows for corporate residents are permitted within prescribed limits, but all other outflows of capital by residents are banned.

There is a lesson in this policy convergence of the two countries with very disparate points of origin in terms of macroeconomic openness. Malaysian policy, whether during the 1993 capital surge, or after the 1997 capital outflow, has demonstrated the benefits of imposing temporary reversals of freedom of cross-border capital flows on residents. The paper examines in detail what has been done in both India and Malaysia, in terms of controlling the quantum and the composition of capital flows, in the context of the exchange rate regime in each country. The author concludes with a look at the likely future direction of policy towards the capital account.

In his paper entitled *China: Managing Financial Integration*, **Ge** explains that the Chinese economy exhibits many characteristics similar to those of the Asian countries that were affected by the financial crisis, particularly in terms of weaknesses in the financial and corporate sector. Despite this, China not only survived the worst external shock since its integration into the world economy – a process that began in 1979 – but actually achieved a very impressive rate of growth. The value of the Chinese

currency remained stable as did net capital inflows. How did China manage to accomplish this feat? Put more generally, given all the recognized structural and institutional weaknesses that characterize developing countries and economies in transition, how may a smoother process of economic integration and liberalization be facilitated, while minimizing the potential costs? The author explores this question in the context of the Chinese economy. His study is concerned mainly with the essential issues concerning financial sector reforms and capital account management.

Following a brief overview of China's economic transition since 1979, he examines the changing patterns of capital flows into China. He then goes on to discuss some of the critical elements and mechanisms that prevented China from being dragged into the Asian financial crisis, including restructuring of the financial sector, the exchange rate system and management, and the structure and operation of equity markets. Ge concludes with comments on some potential impacts on China following its entry into the World Trade Organization.

Lee, in his paper on *Post-Crisis Financial Reforms in the Republic* of Korea, examines the changes in policy measures aimed at applying global standards to Korean financial restructuring efforts after the financial crisis. He points out that existing global standards do not cover all areas, and, where applicable, they are not applied uniformly. Furthermore, the paper stresses that the various ramifications resulting from adjustment should be taken into consideration in the implementation of financial sector reforms. The author draws several important lessons, including cautioning against a heavy reliance on the external sector as a source of funding for carrying out the needed restructuring of the domestic financial sector.

Public Debt and Macroeconomic Management in Sub-Saharan Africa by **Rwegasira** and **Mwega** focuses on external debt and its servicing, which pose a major problem in SSA, causing a negative impact on investment and growth. The region's external debt almost doubled between the mid-1980s and late 1990s. Its external debt as a proportion of GNP and exports was nearly twice the average for all developing countries, although the external debt service ratio was lower due to the concessional terms of much of its borrowing. Some SSA countries have also accumulated substantial domestic debt since the mid-1980s (e.g. Cameroon and Côte d'Ivoire), which has further aggravated their external balance.

The authors suggest that there is a correlation between the fiscal position of SSA Governments and the evolution of the external debt ratio. They point out that there are clear limitations and trade-offs with respect to the various fiscal deficit financing methods. Empirical studies, for example, show seignorage revenue to be relatively modest, while domestic borrowing through the sale of securities is constrained by weak capital and money markets (with a few exceptions such as those of Côte d'Ivoire, Kenya, Nigeria and Zimbabwe). Deficits have also been financed, in part, by proceeds from the sale of assets (e.g. privatization proceeds) and through payments arrears (i.e. delayed payments for goods and services).

The authors argue that public debt has specific implications for macroeconomic management and monetary policy. Large fiscal deficits, for example, undermine the two competing objectives of exchange rate policy: control of inflation and improvement in external competitiveness. This is compounded by feedback effects on the budget deficit from changes in the exchange rate. Since the late 1980s, many SSA countries have also liberalized their financial systems. However, these reforms have been undertaken in the context of pervasive macroeconomic instability, contrary to the consensus on the appropriate sequencing of such reforms. Between the 1970s and 1990s there has been an increase in the volatility of international capital flows and in the terms and conditions on which external finance has been available. The causes range from changes in donor sentiments to disagreements on policy conditionalities. In addition, swings in private capital flows may have significant implications on key macroeconomic variables, notably the exchange rate and interest rate. The authors conclude that an opening up of the capital account is likely to render the SSA economies even more vulnerable to these adverse external developments.

In his paper on *Capital Flows, Capital Account Regimes and Foreign Exchange Regimes in Africa*, Ndikumana first examines capital account regimes in African countries over the past two decades. Evidence shows that official lending to Africa has declined. At the same time, the volume of private capital flows remains low, and significantly below the levels observed in other developing regions. The author argues that since private capital inflows to Africa are limited, due to factors such as weakness of the macroeconomic environment, underdeveloped financial systems, high country risk, and exchange rate misalignments, policy reforms for overcoming the shortage of development finance must be focused on alleviating these constraints.

The author discusses motivations for capital account restrictions in Africa and highlights recent reforms in capital account regimes there. While many African countries have pursued reforms aimed at liberalizing their capital account and exchange rate regimes, such liberalization has not always resulted in income growth, price stability and trade performance. He argues that African countries need to give serious attention to the scope, speed and sequencing of capital account liberalization to minimize the potential adverse effects of openness. It is desirable for countries to maintain selective discretionary control over capital movements and foreign exchange markets in order to hedge against adverse shocks to the economy and maintain macroeconomic and financial stability. To attract foreign capital, any move towards capital account openness and exchange rate liberalization must be supported by reforms aimed at improving the credibility of macroeconomic policy and establishing an investmentfriendly environment. These reforms will not only attract foreign capital, but also encourage domestic investment.

An important aspect of capital movements in Africa is the high level of capital flight. There is an urgent need for policies to stem further capital outflows from Africa and induce the repatriation of private capital held abroad. This will require not only improvement in the macroeconomic conditions to ameliorate incentives for domestic investment, but also reform of the political and legal systems to improve accountability and credibility of economic policy. Exploring the implications of recent exchange rate regime transitions for capital mobility and economic performance, the author discusses motivations, advantages, and disadvantages of dollarization or "euroization" in the context of increasing financial integration.

CORPORATE GOVERNANCE, COMPETITION, THE NEW INTERNATIONAL FINANCIAL ARCHITECTURE AND LARGE CORPORATIONS IN EMERGING MARKETS

Ajit Singh, Alaka Singh and Bruce Weisse

The proper governance of companies will become as crucial to the world economy as the proper governing of countries. (James Wolfensohn, President, World Bank)

I. INTRODUCTION

Since the dramatic events of the Asian financial crisis, followed by the financial crises in the Russian Federation and Brazil and the associated difficulties with the highly leveraged United States hedge fund, Long Term Capital Management (LTCM), there has been widespread concern among the G-7 industrial countries about the stability of the international financial system. In the immediate aftermath of the crises, many initiatives were launched to reform the system and establish, what former United States Treasury Secretary Robert Rubin termed a "new international financial architecture". However, with the abatement of these crises, any interest in serious reform of the international financial system, if it ever existed, appears to have evaporated.

Nevertheless, with the ostensible objective of preventing future crises, the G-7 countries have been continuing to press for reforms of the financial and economic systems in developing countries. The central argument of the G-7 is that the proposed reforms in developing countries are essential for the proper functioning of the global markets. The implicit suggestion is that the financial crises were not the outcome of market failures, but rather the failure of developing country governments and institutions that did not provide accurate and adequate information to markets, and imposed other distortions on them. Many economists have rejected this thesis; nonetheless, such reforms, pressed on the crisis-affected Asian countries as part of IMF conditionality, are now being advocated for other developing countries. Whether or not the G-7 analysis is correct, given the distribution of political and economic power in world affairs, developing countries would be well advised to acquire a full understanding of the nature of the reforms being proposed and their implications for long-term economic development.

This paper concentrates on two of the proposed subjects of reform. First is the question of corporate governance: how large enterprises are governed and operated in developing countries. Secondly, it is concerned with the closely connected questions of domestic and international competition policies in an environment of liberalization and globalization. The paper sets out the main proposals being discussed in these areas and critically examines their implications, specifically for long-term economic development. Developing countries are not generally exercised by these two issues in the way developed countries are. A large number of them do not have competition policies at all. Similarly, corporate governance is not high on the development agenda of most developing countries. The main purpose of this paper is to provide these countries with an appreciation of the issues involved in the proposed reforms, so that they can make informed judgements about the desirability of their implementation, and, if necessary, formulate counter-proposals.

This paper is organized as follows. Section II provides the essential background to the G-7 proposals on corporate governance, which have their origins in the perceived structural weaknesses of the Asian economies on the eve of the crisis. This section also sets out the main proposals

that are currently the subject of attention. Section III provides information on the systems of corporate governance that prevail in developing countries and how they differ from those in developed economies. Section IV considers the role of large corporations in emerging markets, and, specifically, how they are financed – a question that is closely related to corporate governance. Section V addresses one of the key areas of controversy: the efficiency and viability of large conglomerate organizations found in many developing countries. Should such organizations be forced to become more focused and shed their conglomerate character? Sections VI-X address the question of competition policy and the nature of competition in developing countries; the following specific issues addressed are:

- (i) What is the relationship between competition in the product and capital markets, on the one hand, and corporate governance on the other?
- (ii) How intense is competition in the product markets of emerging economies? How does this compare with competition in developed countries?
- (iii) Do developing countries need a competition policy? If so, should this competition policy be the same as in developed countries? If not, how should it differ?
- (iv) Will competition policy in developing countries be adequate to cope with the implications of the gigantic international merger movement led by developed country firms, which is currently sweeping the world economy.

Finally, Section XI concludes and draws together implications for economic policy.

II. THE ASIAN FINANCIAL CRISIS AND CORPORATE GOVERNANCE

The crisis which erupted in Thailand in July 1997 and quickly spread to other Asian economies provided the impetus for the quest for a new international financial architecture. Whereas previous crises had struck economies with a history of financial instability and low growth, such as Mexico in 1995, the Asian crisis devastated countries that were the fastest growing in the world economy and had solid achievements in technological upgrading and poverty reduction. The international financial institutions and private commercial and investment banks had frequently cited these as prime examples of the benefits of export-led growth and a "marketfriendly" approach to development. Policy makers and market participants were therefore deeply shocked.

After the initial shock had worn off, however, an influential theory emerged, which argued that the deeper reasons for the crisis could be found in the institutional structures of the Asian model. This view was succinctly conveyed by Larry Summers, then Under Secretary of the United States Treasury, who argued that the roots of the Asian financial crisis did not lie in bad policy management, but in the nature of the economies themselves. Summers was reported to have stated that "[this crisis] is profoundly different because it has roots not in improvidence but in economic structures. The problems that must be fixed are much more microeconomic than macroeconomic, and involve the private sector more and the public sector less" (*Financial Times*, 19 February, 1998). This view was echoed in slightly different terms by the widely respected Chairman of the United States Federal Reserve, Alan Greenspan:

In the last decade or so, [the world has observed] a consensus towards, for want of a better term, the Western form of free-market capitalism as the model which should govern how each individual country should run its economy...We saw the breakdown of the Berlin wall in 1989 and the massive shift away from central planning towards free market capitalist types of structures. Concurrent to that was the really quite dramatic, very strong growth in what appeared to be a competing capitalist-type system in Asia. And as a consequence of that, you had developments of types of structures, which I believe at the end of the day were faulty, but you could not demonstrate that so long as growth was going at 10 percent a year. (Greenspan, 1998)

This "structuralist" interpretation of the Asian crisis greatly influenced the design of the policy response of the International Monetary Fund (IMF). The IMF's emergency loans were made conditional on deep structural reforms that went far beyond the usual stabilization measures; they encompassed fundamental changes in labour regulations, corporate governance and the relationship between government and business. The scope of the IMF's conditionality prompted the conservative economist Martin Feldstein to argue that the IMF "should not use the opportunity to impose other economic changes that, however helpful they may be, are not necessary to deal with the balance of payments problem and are the proper responsibility of the country's own political system (Feldstein, 1998)".

In spite of such concerns, the "structuralist" interpretation has continued to underpin policy proposals and has framed the academic debate on the issue. This view consists of several interlinked arguments. The first of these is that the fragile financial systems resulted from relationship banking, weak corporate governance structures and lack of competition. Johnson et al. (2000) argue that measures of corporate governance, and, in particular, the effectiveness of protection for minority shareholders, explain the extent of the exchange rate depreciation and stock market decline better than do standard macroeconomic measures. Furthermore, the cronyism between financial institutions, business and the government shielded the system from market discipline and encouraged the overinvestment that led to the crisis. Second, and related to the first point, the high leverage ratios of Asian firms heightened their vulnerability and created the conditions that precipitated the crisis. Third, the lack of transparency and the poor quality of information in such an insider-dominated system created informational asymmetries that exacerbated the crisis. Markets did not have adequate information about the true financial status of the corporations and the banks. Thus, once the market began to assess the true facts, there was a collapse of confidence. As the former managing director of the IMF, Michel Camdessus, argued:

In Korea, for example, opacity had become systemic. The lack of transparency about government, corporate and financial sector operations concealed the extent of Korea's problems – so much so that corrective action came too late and ultimately could not prevent the collapse of market confidence, with the IMF finally being authorised to intervene just days before potential bankruptcy. (Speech to Transparency International, reported in *IMF Survey*, 9 February, 1998) To remedy these alleged faults in the Asian system, reformers sought to dissolve the close links between the State and business, create an arm's-length relationship between banks and businesses, and promote greater transparency in economic relations.

The "structuralist" interpretation is not, however, the only account of the Asian crisis, nor the most persuasive. Singh and Weisse, (1999) have argued that the "structuralist" interpretation is not credible for several reasons. First, it does not explain the previous exemplary success of the Asian economies. As Paul Krugman (1999) remarked: "But if the system was so flawed, why did it work so well for so long, then fail so suddenly?" Second, it does not explain why countries such as China, and, especially India, with similar systems, did not experience a crisis.

A more credible explanation for the crisis, that encompasses these facts, is that the afflicted economies dismantled their controls over the borrowing of the private sector and embraced financial liberalization. As a consequence, the private sector built up short-term foreign currency debt that often found its way into the non-tradable sector and into speculative real-estate ventures. Accompanying financial liberalization was the "irrational exuberance" and contagion that are always latent in private international financial flows. In sum, Singh and Weisse have argued that the crisis occurred not because the Asian model was flawed, but precisely because it was not being followed. Thus, while Phelps (1999) associates the crisis with the failure of Asian corporatism, it can be argued that in reality this system underpinned the most successful industrialization drive in history and dramatically reduced poverty. However, the system was vulnerable to the forces unleashed by financial liberalization.

In this paper, two key elements of the Greenspan-Summers "structuralist" interpretation will, *inter alia*, be examined in detail. The first is the contention that there was poor corporate governance resulting from crony capitalism, which, together with the lack of competition in product markets, led to a disregard of profits and hence to overinvestment, and, ultimately, to the crisis. The following sections outline the nature of the differences in the systems of corporate governance between developing and industrial countries, variations within each group, and implications
for economic efficiency of these diverse systems/institutions. A later section addresses the second element by examining evidence on the intensity of competition in the product markets of Asian and other developing countries.

III. THE NEW INTERNATIONAL FINANCIAL ARCHITECTURE AND CORPORATE GOVERNANCE

In a move towards defining a new international financial architecture, the G-7 assigned the task of reforming corporate governance to the Organisation for Economic Co-operation and Development (OECD) and the World Bank. So far, the main contributions to this initiative have been the following:

- (i) The OECD Principles of Corporate Governance (see appendix);
- (ii) The OECD/World Bank Compact on the Reform of Corporate Governance;
- (iii) The Corporate Governance Forum meetings between officials and businesspeople;
- (iv) "Self-assessment" exercises in corporate governance carried out under the guidance of the World Bank and the Asian Development Bank; and
- (v) Investor surveys of domestic and international investors organized by the World Bank on the private sector's response to the progress and credibility of reform.

The five basic principles of corporate governance promoted by the OECD/World Bank initiative have been summarized in the World Bank's main document on corporate governance, *Corporate Governance: A Framework for Implementation* (Iskander and Chamlou, 2000). The study points out that the principles, outlined below, are based on tenets of "fairness, transparency, accountability and responsibility".

Protection of shareholder rights to share in company profits, receive information about the company, and influence the firm through shareholder meetings and voting.

Equitable treatment of shareholders, especially minority and foreign shareholders, with full disclosure of material information and prohibition of abusive self-dealing and insider trading.

Protection of stakeholder rights as spelled out in contracts and in labour and insolvency laws, in a framework that allows stakeholder participation in performance-enhancing mechanisms, gives stakeholders access to relevant company information, and allows effective redress for violations of stakeholder rights.

Timely and accurate disclosure and transparency on all matters material to company performance, as essential to market-based monitoring of companies, and shareholders' ability to exercise voting rights, with accounting according to quality standards of disclosure and audit, and with objective auditing by independent assessors.

Diligent exercise of the board of directors' responsibilities to guide corporate strategy, to manage the firms' executive functions (such as compensation, business plans, and executive employment), to monitor managerial performance and achieve an adequate return for investors, to implement systems for complying with applicable laws (tax, labour, competition, environment), to prevent conflicts of interest and to balance competing demands on the company, and with some independence from managers to consider the interests of all stakeholders in the company, treat them fairly, and give them access to information.

The World Bank report (Iskander and Chamlou, 2000) has gone to some lengths to point out that "there is no one-size-fits-all blueprint for corporate governance". Furthermore, it explicitly states – although only in a footnote found on careful reading – that the Anglo-Saxon model of corporate governance is not the model it seeks to impose elsewhere:

The report does not advocate one form of ownership structure over another and certainly not the Anglo-US models. These markets have developed over time in response to investor needs, institutional capacity and the investing preferences of the population. They cannot be easily copied in other environments. (footnote 1, p. 53) The report also states that the model should be prepared by each country according to the above principles and that it should be "nationally owned".

However, the entire thrust of the report's arguments and its definition of "best practice" structures, detailed in the appendices to the report, belie any assertion that it treats the different models of corporate governance equally. Indeed, it is difficult to find much difference between the report's conception of "best practice" and the Anglo-Saxon model of corporate governance, which leaves little doubt that it is the preferred system. Furthermore, the genesis of the corporate governance project was a questionable analysis of the Asian crisis on which far-reaching policy proposals have been based. The overarching theme of this orthodox analysis, as noted earlier, was one based on marketization, arm's-length relationships and transparency.

The current "self-assessment" exercises under the guidance of the World Bank and the Asian Development Bank have already identified salient problems in corporate governance systems: lack of effective oversight by boards of directors, poor disclosure, weak compliance with regulatory and statutory requirements, tight insider control, and shareholder and creditor passivity. Further results along these lines can be expected following the World Bank's investor surveys of domestic and international investors on the private sector's response to the progress and credibility of reform.

In summary, there is considerable activity in international forums with respect to identifying best practice codes for corporate governance. Developing countries know from past experience that today's best practice often becomes tomorrow's conditionality if a country has the misfortune of requiring IMF assistance. Advanced emerging markets in particular must therefore proactively engage in the proceedings of the Global Corporate Governance Forum and the Regional Corporate Governance roundtables being organized jointly by the OECD and the World Bank. One reason for doing this is that the private sector, which is engaged in these activities in many countries, does not appear to be fully appreciative of the subtle issues involved in examining the question of corporate governance. It is not unusual to find that business school economists in private sector organizations in developing countries, who usually have a narrow view of the subject, put forward proposals for a market-based system of stock market governance that are even more extreme than those suggested by the international financial institutions.¹

IV. CORPORATE GOVERNANCE IN EMERGING MARKETS: THE FACTS

The analysis of corporate governance structures in developing countries has long been hindered by a lack of detailed information. One benefit to arise from the Asian crisis and the focus of the international financial institutions on governance structures has been the assembling of a large body of evidence on corporate governance structures in developing countries by the World Bank. This has included information on the structure of share ownership and corporate governance laws, which enables the construction of a more informed picture of the governance structures in a wide range of developing countries.

A. Patterns of share ownership and control of large corporations in developed and emerging markets

One of the key insights to emerge from the new empirical studies is that the widely-held corporation described in the classic study by Berle and Means, (1933) is an Anglo-Saxon phenomenon. As table 1 indicates, in the developing economies of Mexico, Hong Kong (China) and Argentina, for example, the shares of family-controlled² firms in the top 20 publiclytraded companies are 100 per cent, 70 per cent and 65 per cent respectively. In contrast, in the United Kingdom the top 20 quoted companies are 100per-cent widely-held. However, among developed countries there is a diversity of structures. In Sweden and Portugal, 45 per cent of publiclytraded firms are family-controlled, while in Greece and Belgium the figure is 50 per cent. Even in the United States, 20 per cent of the top 20 publiclytraded firms are family-controlled.

Table 1 CONTROL OF PUBLICLY-TRADED FIRMS AROUND THE WORLD, 1996

(Per cent)

Economy	Widely- held	Family- owned	State- owned	Widely- held financial	Widely- held corporation
OECD countries					
(Non-bank borrower)					
Australia	65	5	5		25
Austria	5	15	70		
Belgium	5	50	5	30	
Canada	60	25			15
Denmark	40	35	15		
Finland	35	10	35	5	5
France	60	20	15	5	
Germany	50	10	25	15	
Greece	10	50	30	10	
Ireland	65	10			10
Italy	20	15	40	5	10
Japan	90	5	5		
Netherlands	30	20	5		10
New Zealand	30	25	25		20
Norway	25	25	35	5	
Portugal	10	45	25	15	0
Spain	35	15	30	10	10
Sweden	25	45	10	15	
Switzerland	60	3		5	
United Kingdom	100				
United States	80	20			
Bank borrowers and othe	rs				
Argentina		65	15	5	15
Hong Kong, China	10	70	5	5	
Israel	5	50	40		5
Mexico		100			
Singapore	15	30	45	5	5
Korea, Rep. of	55	20	15		5

Source: Iskander and Chamlou (2000).

In terms of State ownership and control of large firms, the picture is similarly complex. In Israel and Singapore, nearly half (40 per cent and 45 per cent, respectively) of the top 20 publicly-traded firms are State controlled. In the major OECD economies, this figure ranges from zero in the United States and the United Kingdom to 25 per cent in Germany and 40 per cent in Italy. Among the smaller developed economies there is a similar range, with Austrian State-run corporations controlling a 70 per cent share of the top 20 publicly-traded firms. It is therefore not surprising that there is now a higher degree of private ownership in the Russian Federation than in many Western European countries.

Table 2 provides evidence from Asian countries assembled by Claessens, Djankov and Lang (2000), which is based on a very large sample of nearly 3,000 publicly-traded firms in nine countries. It indicates that when 10 per cent equity ownership is defined as control, Japan is the only country with the Berle and Means-style system of dispersed-share ownership (42 per cent of publicly-traded firms), but with an additional 38.5 per cent of firms controlled by widely-held financial institutions. At the 10-per-cent level, most other countries have systems dominated by families: Indonesia (68.6 per cent), the Republic of Korea (67.9 per cent), Taiwan Province of China (65.6 per cent), Malaysia (57.5 per cent) and Thailand (56.5 per cent). When control is defined at the 20 per cent level, the Berle and Means widely-held system becomes more pronounced, as many firms in Japan, the Republic of Korea and Taiwan Province of China have family ownership of between 10 per cent and 20 per cent of the equity. However, even after redefining control, family-controlled corporations still account for 48.4 per cent of publicly-traded companies in the Republic of Korea and 48.2 per cent in Taiwan Province of China. Moreover, in other countries the share of family-controlled firms (as a share of the total number of firms under "control") increases when control is redefined: in Indonesia, the class of family-controlled firms increases at the expense of State control, widely-held financial and widely-held corporate control; in Thailand, family control increases from 57.7 per cent to 67.2 per cent, and in Malaysia from 57.7 per cent to 67.2 per cent (Claessens, Djankov and Lang, 2000: 104).

An interesting variant is provided by the typical pattern of share ownership and control in large Indian firms – the business groups. Table 3

Country	Number of corporations	Widely- held	Family- owned	State- owned	Widely- held financial	Widely- held corporations
10 per cent cutoff						
Hong Kong, China	330	0.6	64.7	3.7	7.1	23.9
Indonesia	178	0.6	68.6	10.2	3.8	16.8
Japan	1 240	42.0	13.1	1.1	38.5	5.3
Korea, Rep. of	345	14.3	67.9	5.1	3.5	9.2
Malaysia	238	1.0	57.5	18.2	12.1	11.2
Philippines	120	1.7	42.1	3.6	16.8	35.9
Singapore	221	1.4	52.0	23.6	10.8	12.2
Taiwan Prov. of China	141	2.9	65.6	3.0	10.4	18.1
Thailand	167	2.2	56.5	7.5	12.8	21.1
20 per cent cutoff						
Hong Kong, China	330	7.0	66.7	1.4	5.2	19.8
Indonesia	178	5.1	71.5	8.2	2.0	13.2
Japan	1 240	79.8	9.7	0.8	6.5	3.2
, Korea, Rep. of	345	43.2	48.4	1.6	0.7	6.1
Malaysia	238	10.3	67.2	13.4	2.3	6.7
Philippines	120	19.2	44.6	2.1	7.5	26.7
Singapore	221	5.4	55.4	23.5	4.1	11.5
Taiwan Prov. of China	141	26.2	48.2	2.8	5.3	17.4
Thailand	167	6.6	61.6	8.0	8.6	15.3

Table 2 CONTROL OF PUBLICLY-TRADED FIRMS IN EAST ASIA

Source: Claessens et al. (2000: 103).

Note: Newly assembled data for 2,980 publicly -traded corporations (including both financial and non-financial institutions), based on Worldscope and supplemented with information from country-specific sources. In all cases, Claessens et al. collected the ownership structure as of the end of fiscal year 1996 or the closest possible date.

shows that directors and their families held only 22.4 per cent of the shares of the top 40 companies, and financial institutions and banks held 27.9 per cent. All these financial institutions were controlled by the Government, and in many of these largest corporations the Government had, effectively, a controlling shareholding. However, traditionally, Indian financial insti-

Quartile	Foreign	Government	Corporate	Directors	Public	Total
Quartile 1	16.1	28.9	23.1	1.1	30.8	100
Quartile 2	24.3	25.6	25.6	1.2	23.3	100
Quartile 3	20.7	23.9	17.9	0.7	36.8	100
Quartile 4	22.9	33.0	19.2	1.0	23.8	100
Total	19.0	27.9	22.4	1.1	29.6	100

 Table 3

 PROPORTION OF OWNERSHIP IN INDIA^a

Source: Original data, Institute for Studies in Industrial Development, New Delhi. We are grateful to Dr Surinder Goyal, Director of the Institute, for making this data available.

Note: Foreign refers to foreign institutional investors, and other foreigners and foreign entities, including non-resident Indians. *Government* refers to all public financial institutions, including central and state banks. *Corporate* refers to promoters, subsidiary companies and holding companies. *Directors* refers to directors and relatives. *Public* refers to general public companies.

a 44 companies.

tutions have supported the owning family unless the company's performance was exceptionally poor.

Evidence also suggests that in Asia, firms controlled by families are most likely to have a separation between ownership and control. Table 4 presents the mean-ratios of cash flow over control rights for a sample of Asian economies. A low ratio indicates that the control rights exceed the cash-flow rights; it thus provides a measure of the degree of corporate "pyramiding". The table indicates that in all countries except for Japan and Singapore, family-controlled firms have the greatest separation between ownership and control. In Japan, firms controlled by financial institutions have the greatest separation (0.495). The pattern across company size is less clear, but it appears that small firms are most likely to have a larger wedge between cash flow and control rights, regardless of the type of ownership. In three economies, however, (the Republic of Korea, Singapore and Taiwan Province of China), there is a greater separation of ownership and control among the 20 largest family-controlled firms.

LARGEST CONTROLLING SHAREHOLDER AND COMPANY SIZE Widely-held Widely-held Category Family State financial corporation Country Hong Kong, China All firms 0.826 1.000 0.876 0.993 Largest 20 0.832 1.000 0.656 n.a. Middle 50 0.886 1.000 1.000 1.000 Smallest 50 0.805 1.000 1.000 0.988 Indonesia All firms 0.687 1.000 1.000 0.949 Largest 20 0.741 1.000 1.000 n.a. Middle 50 0.677 1.000 1.000 0.927 Smallest 50 0.702 n.a. n.a. 1.000 Japan All firms 0.984 1.000 0.495 0.943 Largest 20 1.000 1.000 n.a. n.a. Middle 50 1.000 1.000 0.512 0.956 Smallest 50 0.983 0.446 0.867 n.a. All firms 0.833 1.000 1.000 0.986 Korea, Rep. of Largest 20 0.619 1.000 n.a. n.a. Middle 50 1.000 0.807 1.000 1.000 Smallest 50 0.861 n.a. n.a. 1.000 All firms 0.785 0.959 1.000 0.895 Malaysia Largest 20 0.942 0.871 n.a. 1.000 Middle 50 0.787 1.000 1.000 0.752 Smallest 50 1.000 0.795 0.692 0.789 Philippines All firms 0.819 0.914 0.965 0.956 1.000 1.000 Largest 20 0.878 n.a. Middle 50 0.837 1.000 0.932 0.938 Smallest 50 0.775 0.742 0.909 0.975 Singapore All firms 0.722 0.685 0.956 0.944 Largest 20 0.604 0.794 n.a. n.a. Middle 50 0.693 0.659 1.000 1.000 Smallest 50 0.768 0.655 1.000 0.907 Taiwan Prov of China All firms 0.757 1.000 0.989 0.922 Largest 20 0.643 1.000 1.000 1.000 Middle 50 0.704 1.000 1.000 0.904 Smallest 50 0.763 n.a. 0.969 0.894 Thailand All firms 0.920 1.000 1.000 1.000 0.969 1.000 Largest 20 n.a. n.a. Middle 50 0.935 1.000 1.000 1.000

THE SEPARATION OF OWNERSHIP AND CONTROL ACROSS TYPE OF

Table 4

Source: Claessens et al. (2000: 102).

Smallest 50

Newly assembled data for publicly traded corporations (including both financial and non-financial Note: institutions) was collected from Worldscope and supplemented with information from countryspecific sources. In all cases, the ownership structure was collected as of end fiscal year 1996 or the closest possible date. Controlling shareholders are defined at the 20 per cent (benchmark) cutoff. Size refers to the largest 20 firms, the median 50 firms, and the smallest 50 firms in terms of market capitalization. Widely-held firms are excluded from the sample. The reported numbers represent the mean ratio of cash-flow over control rights. When no firm fits the category, it is marked "n.a.".

0.859

1.000

1.000

1.000

B. Crony capitalism

Claessens, Djankov and Lang (2000) also present evidence (reported in table 5) on the degree to which family-controlled firms account for gross domestic product (GDP). As noted earlier, the orthodox argument in the wake of the Asian crisis was that "crony capitalism" - the complex relationships between large capitalist families and their government allies - created the conditions for economic collapse. However, the evidence indicates that there is no direct link between the share of GDP controlled by family firms and performance. In Hong Kong (China), the top 15 families controlled 84.2 per cent of GDP in 1996, while in Singapore and Malaysia the respective figures were 48.3 per cent and 76.2 per cent. Hong Kong (China) and Singapore were both able to weather the Asian financial crisis, although Malaysia experienced a sharp downturn and currency crash. Similarly, the top 15 families in Taiwan Province of China controlled 17 per cent of GDP and that economy avoided the financial crisis. Yet the Republic of Korea, where the top 15 families accounted for 12.9 per cent of GDP, experienced a sharp contraction and currency depreciation in late 1997 and early 1998. Thus, crony capitalism, while it certainly exists, cannot be attributed simplistically to the extent of influence of family-controlled groups in the economy.

A similar story applies when we measure the influence of the top 15 families by their ownership of corporate assets, although in this case the top 15 families controlled 38.4 per cent of the corporate assets in the Republic of Korea compared to 20.1 per cent in Taiwan Province of China (this, however, reflects the more concentrated industrial structure in the Republic of Korea and the dominance of large firms in its stock market). It should be noted that such concentrations of economic power in a set of families is not necessarily antithetical to the efficient functioning, transparency and democratic accountability of the industrial system. For example, in Sweden, the highly influential Wallenberg family is believed to control up to 60 per cent of that country's industrial capital, and, consequently, little is done in the country which does not have the family's approval. Furthermore, as Berglof and von Thadden (1999) note, crony capitalism is not a corporate governance problem in a strict sense, since

	Average	i	Per cent of of listed corp that families	f total value oorate asset control (199	s 6)	Per cent of GDP 1996
Country	of firms per family	Top 1 family	Top 5 families	Top 10 families	Top 15 families	Top 15 families
Hong Kong, China	2.36	6.5	26.2	32.2	34.4	84.2
Indonesia	4.09	16.6	40.7	57.7	61.7	21.5
Japan	1.04	0.5	1.8	2.4	2.8	2.1
Korea, Rep. of	2.07	11.4	29.7	36.8	38.4	12.9
Malaysia	1.97	7.4	17.3	24.8	28.3	76.2
Philippines	2.68	17.1	42.8	52.5	55.1	46.7
Singapore	1.26	6.4	19.5	26.6	29.9	48.3
Taiwan Prov. of China	1.17	4.0	14.5	18.4	20.1	17.0
Thailand	1.68	9.4	32.2	46.2	53.3	39.3

Table 5HOW CONCENTRATED IS FAMILY CONTROL?

Source: Claessens et al. (2000: 108).

family owners are likely to have the right incentives in their firms. Rather, crony capitalism is a product of the complex relations between the business and political elite, and, in principle, could arise in systems with widely dispersed ownership. Taken collectively, the prevalence of family-controlled firms in developing economies suggests that they are an effective vehicle of late development and industrialization and that they remain prominent in many developed economies.³

Note: Newly asembled data for 2,980 publicly traded corporations (including both financial and nonfinancial institutions). The data was collected from Worldscope and supplemented with information from country-specific sources. In all cases, data on the ownership structure was collected as of end of fiscal year 1996 or the closest possible date. The "average number of firms per family" refers only to firms in the sample. To avoid discrepancies in the cross-country comparison due to different sample coverage, we have scaled down the control holdings of each family group in the last four columns by assuming that the firms missing from our sample are not controlled by any of the largest 15 families. The per cent of total GDP is calculated using market capitalization and GDP data from the World Bank.

V. THE THEORETICAL FOUNDATIONS OF THE OECD/WORLD BANK PROPOSALS ON CORPORATE GOVERNANCE

The World Bank's preference for the Anglo-Saxon model of corporate governance is based on what it regards as "best practice". Conspicuously, it is not based on systematic theoretical analysis or rigorous empirical research. However, a recent series of papers by La Porta, Lopez-de-Silanes, Schleifer and Vishny (hereafter referred to as LLSV) on law and finance has helped fill these theoretical and empirical lacunae.

A. The LLSV thesis

The central proposition of the fairly extensive literature generated by LLSV and their colleagues is that there is a systematic causal relationship between the legal framework, corporate financing patterns, corporate behaviour and performances, and overall economic growth.⁴ More specifically, it argues that the greater the protection afforded to minority shareholders and creditors, the more external financing firms will be able to obtain. Through a variety of mechanisms this greater access to external finance modifies corporate behaviour and improves performance, which then has a positive impact on aggregate economic growth.

The LLSV analysis is based on an empirical and theoretical evaluation of different legal systems, the historical origins of which are exogenous (or, in the case of the least developed countries (LDCs), they are a legacy of colonial rule). The studies differentiate between four types of law systems: Anglo-Saxon "common law" (as practiced in the United States and other former British colonies), French "civil law", and German and Scandinavian legal traditions (which are, in general, closer to the French "civil law" tradition). The main analysis focuses on the differences between the common and civil law traditions.

A distinguishing characteristic of these contributions is their strong empirical emphasis. The empirical results presented by LLSV indicate that the predictions of the legal origin model are verified by the data. Specifically, they argue that the lack of protection for minority shareholders, as in the countries governed by French civil law, leads to concentration of share ownership, a point indicated by the data as correct. Similarly, they suggest that, other things being equal, corporations in countries subscribing to common law pay out more dividends and have higher share prices than firms in countries subscribing to civil law. In addition, the evidence – in conformity with the theory – indicates that there has been a faster development of stock markets under the common law system than under the civil law system. In point of fact, however, their claim is even more ambitious: that the legal system provides a better classification of countries than the distinction between "bank-based" and "stock-market-based" financial systems.

Table 6 provides data on the origins of the legal system and investor rights in 49 countries from the LLSV sample. Panels A and B provide measures of shareholder and creditor protection, respectively, while Panel C reports measures of enforcement capability. It is evident from the table that there are clear differences between the countries governed by common law and civil law in all these spheres. Specifically, the evidence reported indicates that civil law countries have low accounting standards, more corruption, less efficient judicial systems and poor protection for creditors and shareholders. These reported inefficiencies, it is argued, lead to poor corporate governance and lower economic growth.

The policy implication that LLSV draw from this analysis is that countries should move towards the more efficient common law system based on transparency and arm's-length relationships. It is argued, however, that this would not be easy, given the vested interests connected with concentrated share ownership that could frustrate any government attempt to dilute their equity stakes. Governments are therefore advised to carry out the reforms in a much more indirect and subtle way that would challenge the influence of the conglomerates.

			Legal origin		
Variables	Common law (18 countries)	French civil law (21 countries)	German civil law (6 countries)	Scandinavian civil law (4 countries)	World average (49 countries)
		Panel A: Mea	sures of shrehold	ler protection	
Antidirector rights index	4.00	2.33	2.33	3.00	3.00
Proxy by mail <i>(per cent)</i>	39	5	0	25	18
Shares not blocked before meeting (per cent)	100	57	17	100	71
Cumulative voting/proportional rep. (per cent)	28	29	33	0	27
Oppressed minority (per cent)	94	29	50	0	53
Preemptive right to new issues (per cent)	4	62	33	75	53
Share of capital to call and ESM<10 (per cent)	94	52	0	0	78
		Panel B: Me	asures of credito.	r protection	
Creditor rights index	3.11	1.58	2.33	2.00	2.30
No automatic stay on secured assets (per cent)	72	26	67	25	49
Secured creditors first (per cent)	89	65	100	100	81
Paid restrictions for going into reorganization (per cent)	72	42	33	75	55
Management does not stay in reorganization (per cent)	78	26	33	0	45
		Panel C:	Measures of enfo	rcement	
Efficiency of the judicial system	8.15	6.56	8.54	10.00	7.67
Corruption	7.06	5.84	8.03	10.00	6.90
Accounting standards	69.92	51.17	62.67	74.00	60.93

Source: La Porta et al. (2000: 10-11).

20 AJIT SINGH, ALAKA SINGH AND BRUCE WEISSE

Table 6

B. The Berglof and von Thadden critique

There are two significant lines of criticism that can be directed against this body of thought. The first, articulated by Berglof and von Thadden (1999), finds the theoretical framework presented in LLSV far too limited for examining corporate governance issues in developing countries. At an empirical level, they argue that the LLSV characterization of corporate governance in these countries is not only too narrow but also misleading.

The focus of the analysis on protecting minority shareholders and creditors is too narrow, Berglof and von Thadden contend, even to be applied to most European countries, let alone developing countries. LLSV appear to be solely interested in the question of the protection of providers of external finance to the exclusion of other significant stakeholders in firms. In particular, there is no mention of labour laws or, equally vital, the relationships between workers and managers, suppliers and owners/ managers, local communities and the corporation, and the government and the corporation. Thus, any sense of the structures in which the firm is embedded, and which determine its performance and competitiveness, is expunged from consideration, while a disproportionate weight is given to one – potentially small – aspect of this structure. Berglof and von Thadden do not regard external finance as the only, or even the principal, constraint on a firm's growth (see, however, Section VI on this point).

Berglof and von Thadden also note that the reference point for the LLSV study is the widely-held, Berle and Means-type corporation which is prevalent mainly in the United States and the United Kingdom (as was indicated by the analysis in section IV). In the developing country context, they point out that the LLSV paradigm is valid and relevant only for transitional economies, which is not entirely surprising given the fact that some of the LLSV authors were intimately involved in Russian reforms in the 1990s. The former Russian State-owned sector has been dominated by owners/managers who have benefited from insider privatizations; they have often effectively expropriated outside investors who played a central role in the implementation of painful restructuring (Berglof and von Thadden, 1999: 24). In this context, Berglof and von Thadden argue, improved

investor protection can be useful in attracting outside capital and forcing restructuring.

The typical firm in developing countries, however, is family-controlled or closely held by block holders (that is, it has concentrated share ownership). The important corporate governance problem for this class of firms is not legal protection for outside shareholders, but rather the problems of family succession and maintaining of family control while raising funds from outside investors.

The LLSV argument is also susceptible to the fact that the direction of causality between a legal system and a financial structure could run either way: the legal system may lead to the formation of a certain financial structure, as LLSV maintain, but it is at least equally plausible that the financial structure may also lead to the creation of certain legal norms. In the latter view, the law accommodates larger structural changes taking place in the economy, financial markets and politics. Therefore, to argue, as LLSV do, for the primacy of legal origins in financial market development is to place the cart before the horse.

It is important to note that even on its own terms, maximizing investor protection cannot be optimal. It will result in the dilution of efficiency advantages deriving from the lower agency costs of concentrated ownership. Moreover, a system which is more oriented towards investor protection may also lead to the familiar problems of short-termism, which often characterize firms in the Anglo-Saxon stock market economies, resulting in lower levels of investment and an emphasis on financial engineering (Cosh, Hughes and Singh, 1990; Porter, 1992; Singh, 2000).

C. The Glen, Lee and Singh analysis

The second and rather different critical line of argument against the central LLSV thesis has been presented by Glen, Lee and Singh (2000). They suggest that over the past 20 years there have been major changes in corporate financing patterns and in stock market development in emerging

markets. It would be difficult to attribute these enormous variations, as detailed below, to changes in corporate law or to legal origin. This will be illustrated by considering the specific experience of India, a pre-eminently common-law-based country. Despite this fact, in accordance with political decisions of the Indian leadership, the stock market played hardly any role in the economy until 1980. Stock market capitalization as a proportion of GDP was a mere 5 per cent until then. The Government began to change its economic policy stance in the early 1980s, implementing financial liberalization internally. However, following the balance-of-payments and liquidity crisis of 1990-1991, the Government initiated a more full-scale internal and external liberalization process. The net result was a stock market boom: total market capitalization rose from 5 per cent in 1980 to 13 per cent in 1990, and to 40 per cent in 1993. There were two million mutual fund investors in India in 1980, and by 1995 there were over 40 million, second only to the United States. The number of companies listed on the Indian stock markets rose to nearly 8,000 - more than that for the United States, the largest developed country market. Hundreds of companies made initial public offerings (IPOs) and a large number of existing listed companies raised fresh equity finance on the stock market. These enormous changes in stock market development and financing of Indian corporations occurred within a brief space of time without any fundamental changes in India's constitution or basic legal framework (see Singh, 1998a).

India, however, is not a special case. Other emerging markets (for example, Taiwan Province of China, Mexico, Thailand and Malaysia) in the 1980s also recorded enormous increases in stock market activity in the wake of financial liberalization. Again, this was not a response to changes in the basic legal framework from a civil law to a common law regime (Singh, 1997; Singh and Weisse, 1998). Rather it was the result of the deliberate change in economic policy. Laws were changed to accommodate economic policy decisions without altering their fundamental framework. Obviously, there will be examples of the opposite kind, where the legal framework has led to changes in economic institutions. There is thus likely to be a mutually interactive relationship between laws and economic policy. LLSV greatly overstate their case by asserting a one-way causal relationship.

The LLSV legal-origin approach is therefore unable to account for the huge changes in corporate financing patterns and stock market development within emerging markets over time. Thus, even if we accepted that legal origin may explain some of the cross-sectional variations between developing countries, it is not helpful for explaining the much more important structural changes that have been taking place in emerging markets over the last two decades.

Finally, the LLSV analysis also requires us to accept that countries with a civil law tradition and, consequently, offering less protection to outside investors, have been either willing to accept or are ignorant of the economic costs of their legal system. If they had been rational, Germany and France would have imported a common law system decades ago and even experienced higher rates of growth. In view of the fact that over the last century economic growth in Japan and Germany was faster than it was in France and comparable to that in the Anglo-Saxon economies, such an argument strains credulity.⁵

VI. CORPORATE GOVERNANCE AND CORPORATE FINANCE IN EMERGING MARKETS: THE 1980s VERSUS THE 1990s

The previous section touched upon issues of corporate finance in the context of a critique of the LLSV approach to law and finance. Here, we shall report more directly on corporate financing patterns in developing countries. As is implicit in the previous discussion, there is a close relationship between corporate governance and corporate finance. Indeed, Shleifer and Vishny (1997) define corporate governance in terms of the rules and procedures which ensure that external investors and creditors in a company can get their money back and that it will not simply be expropriated by those who are managing the company.

Two of the first large-scale empirical studies of the financing of corporate growth in emerging markets were done by Singh and Hamid (1992) and Singh (1995a) (henceforward, both studies will be referred to

as S-H). The two studies arrived at surprising conclusions. One would have expected, a priori, that because of the underdevelopment and imperfections of developing country capital markets, firms in these countries would largely be self-financing. However, these two studies produced results that were quite contrary to these expectations. Large developing country firms, it was found, depended overwhelmingly on external rather than internal finance, and used equity financing to a surprisingly large degree (see table 7).

Table 7 suggests that during the 1980s the average company among the 100 largest listed manufacturing firms in each country, in a sample of 10 emerging markets, financed merely 40 per cent of its growth of net

Internal finance	External finance (equity)	External finance LTD
56.4	36.0	7.7
40.5	19.6	39.9
66.3	22.1	11.6
35.6	46.6	17.8
24.4	66.6	9.0
74.0	1.7	24.3
19.5	49.6	30.9
27.7	n.a.	n.a.
15.3	65.1	19.6
58.0	38.8	3.2
38.8	39.3	20.8
20.0*	31.4*	21.2*
16.69**	18.93**	6.38**
	Internal finance 56.4 40.5 66.3 35.6 24.4 74.0 19.5 27.7 15.3 58.0 38.8 20.0* 16.69**	Internal financeExternal finance (equity)56.436.040.519.666.322.135.646.624.466.624.466.624.71.719.549.627.7n.a.15.365.158.038.838.839.320.0*31.4*16.69**18.93**

Table 7

THE FINANCING OF CORPORATE GROWTH IN 10 EMERGING MARKETS DURING THE 1980s

Source: Singh (1995a).

a F-statistic for comparison of means across countries. (*) implies rejection of the null hypothesis of the equality of means.

b Bartlett-Box F-statistic for variance across countries. (**) implies rejection of the null hypothesis of equality of variance. assets from retained profits. About 60 per cent of corporate growth in the sample was financed by external sources: 40 per cent from new equity capital and 20 per cent from long-term debt. Even though the equity financing figures were to some extent overstated by virtue of the fact that an indirect method of estimation was used (on account of lack of direct information), these figures were much larger than might have been expected, a priori.⁶ In developed economies with well-developed capital markets, the typical large firm is thought to follow a "pecking order" in which most of the needed finance for growth is obtained from retained profits. If additional resources are required, the firm borrows funds, and only as a last resort will it issue new shares in the equity market.

In explaining these results for emerging markets, Singh (1995a) hypothesized that the much greater recourse to external finance in developing country corporations was due to the faster growth of these firms relative to those in developed countries; they therefore had a greater need for external capital. On the supply side, such finance was forthcoming, at least for the large developing country firms, through government-directed finance, while it was the small firms that faced credit rationing. However, he explained the surprisingly high use of equity finance in conjunctural terms:

- (i) The direct role of the governments in stimulating stock market development in many emerging countries so as to facilitate privatization;
- (ii) External and internal financial liberalization, often leading both to a stock market boom and to higher real interest rates; the former lowered the cost of equity capital whilst the latter increased the cost of debt finance.

Singh suggested that once these temporary factors ceased to operate, the situation would revert to the normal low levels of equity financing. Most of the factors that lead corporations in developed economies to avoid new share issues, such as asymmetric information, apply, *mutatis mutandis*, to developing countries as well. In addition, the desire of wealthy families in developing countries to retain control over large firms also militates against the use of equity finance. Similarly, the greater volatility of share prices observed, as well as expected, in developing country stock markets should discourage the use of equity finance. Have the corporate financing patterns in emerging markets changed in the 1990s compared with the 1980s? If so, have they changed in the direction indicated above – that is, do they suggest that the conjunctural factors have ceased to operate or are less applicable? Tables 8, 9a and 9b attempt to answer this question for four emerging markets. The tables are based on the WorldScope dataset for individual listed corporations for four countries, India, the Republic of Korea, Malaysia and Thailand. The dataset provides information only for the 1990s, so that a direct comparison of these results to those of Singh (1995a) and Singh and Hamid (1992) for the 1980s must be made carefully and with due regard to the intrinsic differences in the datasets.

Specifically, the WorldScope dataset makes it possible to measure the extent of equity financing directly, instead of using the indirect residual method employed in the S-H studies because of data limitations. The new dataset also allows us to undertake a more comprehensive analysis of sources of financing for corporate growth, including both short- and longterm debt and working capital. The S-H studies only examined long-term debt, which, in the case of developing countries, as subsequent events demonstrated, is not an adequate reflection of their normal indebtedness. This is because developing country corporations use large amounts of shortterm debt for long-term investment purposes. Such debt is normally rolled over, turning it into the functional equivalent of long-term debt, but creditors may refuse to roll over these debts in crisis situations, as exemplified by the Asian crisis of 1997–1998. Therefore, the results reported in table 8 are based on a methodology that differs from that of S-H in the following respects:

- (i) It measures the contributing of equity finance directly (as noted above, the WorldScope data provides that information);
- (ii) It includes short-term debt and trade credit in external sources of finance. The earlier studies were only concerned with long-term capital employed in the firm (i.e. the growth of net assets). The exercise in table 8 includes all sources of finance: short term as well as long term.
- (iii) It includes another category for revaluation reserves, minority interests, preferred shares and non-equity reserves.

Table 8

BALANCED SAMPLE: SOURCES OF FINANCING OF GROWTH OF TOTAL ASSETS, 1992–1996

	India	Malaysia	Thailand	Rep. of Korea ^b
Retentions	23.1	25.3	13.3	5.7
External finance	76.9	74.7	86.7	94.3
Shares	31.2	14.6	9.6	16.1
Debt finance	43.3	51.0	70.8	80.6

(Unweighted average, per cent)^a





Source: WorldScope database.

The results in table 8 confirm the main S-H result, that developing country firms depend overwhelmingly on external financing to finance their growth. As expected, the contribution of external finance is, if anything, greater than in the S-H studies because of the inclusion of short-term debt and working capital in the sources of finance. In the Republic of Korea, for example, nearly 95 per cent of the total sources of finance consisted of external finance; in Thailand the corresponding figure was 87 per cent;

a Unweighted averages are the average of the sum (over companies) of each source of finance in each year divided by the sum of the growth of total assets. The balanced samples for the four countries are as follows: India = 115; Malaysia = 130; Thailand = 98; Rep. of Korea = 95.

b Unweighted ratios for the Republic of Korea are calculated over three years: 1994–1996. Some unusually large ratios for 1993 were omitted from the overall average.

Table 9a

BALANCED SAMPLE: SOURCES OF FINANCING OF GROWTH OF NET ASSETS: 1992–1996

	India	Malaysia	Thailand	Rep. of Korea
Net asset growth	37.2	32.9	39.7	20.6
Retentions	36.9	56.9	48.0	13.7
External finance	64.9	46.8	55.6	96.5
Long-term debt	40.6	14.4	36.1	67.8
Shares	24.0	18.2	15.9	21.1
Other	0.3	14.2	3.6	7.6
Statistical adjustment	-1.9	-3.8	-3.5	-10.2

(Unweighted average, per cent)

Source: WorldScope database.

Note: The balance samples for the four countries are: India = 115, Malaysia = 130, Thailand = 98, Republic of Korea = 95. All cases where average annual rates of growth of net assets was less than 1 per cent were rejected since low values of growth (the denominator) would lead to high values for the whole ratio. Internal and external finance were constrained to those between -100 per cent and +200 per cent (see Singh, 1995a). Internal and external finance were calculated as in Singh (1995a: 39). Note also that external finance of net assets by equity (new shares) was calculated directly as against the residual used in Singh, 1995a. The statistical adjustments in the table arise from the constraints placed on the financial ratios.

Table 9b

BALANCED SAMPLE: SOURCES OF FINANCING OF GROWTH OF NET ASSETS: 1992–1996

(U	nwei	ight	ted	ave	rage,	per	cent))
۰ ۱			-			U /			

	India	Malaysia	Thailand	Rep. of Korea
Retentions	36.9	56.9	48.0	13.7
External finance	63.1	43.1	52.0	86.3
Long-term debt	40.6	14.4	36.1	67.8
Shares	22.5	28.6	15.9	18.5
Total	100.0	100.0	100.0	100.0

Source: WorldScope database.

Note: The balance samples for the four countries are: India = 115, Malaysia = 130, Thailand = 98, Republic of Korea = 95. This table was constructed using Singh (1995a), residual method. Retentions and long-term debt were calculated directly and new shares were the residual sources of funds.

and in Malaysia and India, it was 75 and 77 per cent respectively. The contribution of short-term debt to total sources of finance is also striking, ranging as it does from just under 30 per cent in India to well over 45 per cent in the Republic of Korea.

However, the results for the equity financing variables are more mixed. Although only a rough comparison can be made, the results show reduced equity financing in some countries in the 1990s compared with the 1980s, and increased equity financing in others. In India, there is a 10 percentage point increase in the contribution of new share issues to total sources of finance between the 1980s and 1990s; and in Malaysia and the Republic of Korea the proportions contributed by new share issues is smaller than in the S-H studies. Nevertheless, in both countries the contribution of new share capital is more than 15 per cent which, contrary to the "pecking order" theory, is greater than the share of retained profits (it is of course well above the figure attributed to new share issues in developed economies) (Mayer, 1990; Corbett and Jenkinson, 1994).

The question remains whether the above results can be attributed entirely to the biased measurement of the equity financing variable in the benchmark S-H studies for the 1980s. To investigate this, both the Singh and Hamid residual method and the direct method were used to calculate the financing of net assets (i.e. the long-term capital employed in the firm) in a sample of four countries over the 1992-1996 period. The results reported in tables 9a and 9b show that the direct method and the S-H residual method produced broadly similar results. For both India and the Republic of Korea, the residual method slightly underestimated the contribution of equity finance while for Malaysia it significantly overestimated its contribution; for Thailand, both methods arrived at identical results. This analysis therefore suggests that in three out of four countries the S-H method did not overstate the contribution of equity finance. Thus in the case of these countries, the observed changes in the corporate financing patterns from the 1980s to the 1990s are likely to reflect the substantive factors discussed earlier, rather than measurement bias.

It is useful to discuss the Indian example, where we observed a modest increase in equity financing in the 1990s compared to the benchmark figure

in table 8. The early 1990s saw an acceleration of the liberalization reforms process, both financial and non-financial, following the balance-of-payments crisis of 1991. A subsequent stock market boom resulted in increasing price/earnings ratios, and consequently a lower cost of equity finance relative to debt (as interest rates rose modestly during the period). More companies went to the stock market for finance, with 700 companies making IPOs in 1995–1996. By 1999, which is well beyond the period of the WorldScope data examined in this study, IPOs had fallen to almost zero as the stock market declined and price/earnings ratios fell.

A. Corporate finance, the stock market and corporate governance

In view of the large recourse to equity financing by developing country firms, the stock markets might be expected to significantly affect their behaviour and their corporate governance patterns. It is therefore important to ask how. The stock market can affect corporate governance and behaviour either directly through movements in share prices, or more indirectly through the market for corporate control. We examine each of these in turn below.

Judging from the pattern of finance, stock markets may be expected to have a significant influence on large developing country corporations because of the scale of finance they obtain from these markets. Whether this is a positive or negative development depends, to a large extent, on the position one takes with regard to the ability of the stock market to efficiently finance corporations. In the traditional textbook treatment of the subject, the liquid secondary equity market leads to a better allocation of funds, which results in more efficient and dynamic firms obtaining capital at lower cost. Less efficient firms or firms in less dynamic industries face a higher cost of equity capital. The movement of funds to more efficient, productive firms results in higher degrees of technological progress and economic growth.

However, a more critical literature, originating in the work of John Maynard Keynes, has pointed out that the pricing process may not be as efficient as the textbooks suggest, but may instead be dominated by speculation. James Tobin has distinguished two concepts of share price efficiency on the stock market: informational efficiency (in the sense that all currently available information is incorporated into the share price) and *fundamental valuation* efficiency (whereby share prices accurately reflect the future discounted earnings of the corporation). While real world stock market prices may reflect the former, the critical school maintains that there are strong reasons to doubt that it attains the latter, more important, criterion of efficiency. The reasons for this are found in the psychology of stock market participants.⁷ As Keynes pointed out in his famous description of the beauty contest in the General Theory, often the art of the successful investor does not consist in appreciating fundamental values of corporations, but rather in guessing at the likely movements of other stock market participants. Such a process leads to herding, myopia and fads that can cause stock market values to diverge significantly from underlying values. (For a current example, note the rise and fall of technology shares on international stock markets.) The volatility associated with this process further reduces the capacity of share prices to transmit efficient signals to market participants.

Experience from developed countries suggests that the stock market may also encourage managers to pursue short-term profits at the expense of long-term investment, since firms are obliged to meet quarterly or halfyearly earnings per share targets that are determined by market expectations. Any serious fall in performance will quickly be reflected in a lower share price, making the firm vulnerable to takeover. In the late 1980s and early 1990s, numerous analysts in the United States ascribed that country's relatively poor comparative performance, vis-à-vis competitors with bankbased financial systems, such as Japan and Germany, to the short-termist demands of Wall Street, resulting in lower investment in technological upgrading and new capacity.⁸ In a closely related but more general sense, the dominance of stock markets can also result in the ascendancy of finance over productive enterprise. The rules of the game are constructed in such a way that companies can rise or fall, depending on their ability to engage in financial engineering rather than in developing new products or processes. This is often reflected within the firm itself, in the dominance of managers trained in finance over those who come from other backgrounds such as engineering or marketing.

Thus the benefits of having large corporations dependent on a highly liquid equity market are far from being unambiguous, particularly from the perspective of good corporate governance (see further Bhide, 1993).

B. Corporate governance and takeovers

The market for corporate control is thought to be the evolutionary endpoint of stock market development. The ability of an outside group of investors to acquire a corporation, often through a hostile bid, is the hallmark of the stock-market-dominated financial systems of the United States and the United Kingdom. As noted above, the textbook interpretation of takeovers is that they improve efficiency by transferring corporate assets to those who can manage them more productively. Consequently, more effective managers emerge who can raise the firm's profitability and share price. Even if current managers are not replaced, an active market for corporate control presents a credible threat that inefficient managers will be replaced; it thus ensures that the incumbent management actively seeks to maximize shareholder value, thereby raising corporate performance. Even if quoted firms were not directly susceptible to changes in share prices, because they finance themselves almost exclusively from internal finance (as the pecking order theory implies and empirical evidence on developed country corporations confirms), the market for corporate control could still discipline managers. Furthermore, even if all firms were on the efficiency frontier, the amalgamation of some through takeovers might lead to a better social allocation of resources via synergy.

However, a critical school has developed a multifaceted critique that increasingly questions the above textbook version of the market for corporate control. First, a number of analysts in the critical school have pointed out that in the real world the market for corporate control, even in developed economies, has an inherent flaw in its operation: it is far easier for a large firm to take over a small one than the other way round (Singh, 1971; 1975; 1992). In principle, while it is possible that a small efficient firm may take over a larger and less efficient company (and to a degree this occurred in the United States takeover wave of the 1980s through "junk bonds"), its incidence is very small (Hughes, 1991). This consideration is particularly important for developing countries like India where there are large, potentially predatory conglomerate groups (Singh, 1995a). These could take over smaller, more efficient firms, and thereby reduce potential competition to the detriment of the real economy. In a takeover battle it is the absolute firepower (absolute size) that counts rather than the relative efficiency. Therefore, the development of an active market for corporate control may encourage managers to "empire build", not only to increase their monopoly power, but also to progressively shield themselves from takeover by becoming larger (see further Singh, 1975; 1992).

Secondly, the efficient operation of the takeover mechanism requires that enormous amounts of information be widely available. Specifically, market participants require information on the profitability of a corporation under its existing management and on its prospective profitability under an alternative management if it were taken over. It has been noted that such information is not easily available even in developed countries and is likely to be even more scarce in developing countries.

Thirdly, takeovers are a very expensive way of changing management (Peacock and Bannock, 1991). There are huge transaction costs associated with them in countries such as the United States and the United Kingdom, which hinder the efficiency of the takeover mechanism. Given the lower income levels in developing countries, these costs are likely to be proportionally heavier in these countries. It should also be borne in mind that highly successful countries such as Japan, Germany and France have not had an active market for corporate control, and have thus avoided these costs while still maintaining systems for disciplining managers. Furthermore, there is no evidence that corporate governance necessarily improves after takeovers. This is for the simple reason that not all takeovers are disciplinary; in many of them the acquiring firm is motivated by empirebuilding considerations or even by asset-stripping.

Fourthly, there is theoretical work (see, for example, Stein, 1989) which suggests that even if managers wish to maximize shareholder wealth, it pays them to be myopic in a world of takeovers and signal-jamming. Thus, takeovers could exacerbate the existing tendencies towards short-termism in a stock-market-based system.

Fifthly, it has been argued that takeovers can be used as a device to avoid honouring implicit contracts developed between workers and the former management (Shleifer and Summers, 1988). This abandonment of implicit contracts can be argued to be socially harmful in that it discourages the accumulation of firm-specific human capital by workers. The absence of strong worker protection laws in many developing countries means that such considerations may be significant.

These critiques of the market for corporate control have been based on the experience of developed countries. Nonetheless, there is every reason to believe that they are likely to be even more relevant to potential takeover markets in developing countries. However, the takeover market in developing countries remains rudimentary because of the fact, noted earlier, that shareholding is not widely dispersed and standards of disclosure are not conducive to takeovers. It is therefore not surprising that hostile takeovers are rare in developing countries; for example, in the past decade in India there have been only five or six such attempts, not all of which have been successful. However, this situation may change if large transnational corporations (TNCs) are allowed to engage in takeovers in developing countries. Domestic firms, with their limited funds and relatively restricted access to international capital markets, would not be able either to compete or resist the TNCs. In addition, as we will discuss later, the entry of large TNCs in the takeover market may reduce competition in product markets in these countries.

There are also other potential factors that could cause financial liberalization and stock markets to have a negative effect on corporate governance. Financial liberalization establishes a strong link between two potentially volatile markets: the stock market and the foreign exchange market. The Asian crisis of 1997–1998 demonstrated that there could be a strong negative feedback relationship between a falling stock market and a depreciating currency. As the stock market declines, investors pull out of the market and move their funds into foreign currency. The depreciating currency then lowers real returns on the stock market, which, in turn, propels the cycle.⁹ Such a collapse in currency and equity values, of course, ultimately may encourage "fire-sale" type FDI in the form of takeovers (suggesting that the expected rate of return measured in foreign currency

has increased sufficiently due to the steep decline in domestic share prices). This may overturn quite successful corporate governance structures and replace them with ones that are less suitable.

C. Developing country corporations and high gearing

It has frequently been observed that companies in developing countries are highly geared by international standards. This observation depends on what definition of gearing is used. If the ratio of long-term debt to equity is used, developing country indebtedness ratios are not high. However, if the more encompassing ratio of total debt to total equity is used, the gearing of developing country corporations is high (see table 10). This reflects the extensive use of more easily available short-term debt by many developing

	Debt ratio	Long-term debt to total equity	Short-term debt to total equity	
Developing Countries				
Brazil	0.560	0.139	0.421	
India	2.700	0.763	1.937	
Korea, Rep. of	3.662	1.057	2.390	
Malaysia	0.935	0.284	0.639	
Mexico	0.817	0.375	0.442	
Thailand	2.215	0.518	1.769	
Developed Countries				
France	3.613	1.417	2.108	
Germany	2.732	1.479	1.188	
Italy	3.068	1.114	1.954	
Japan	3.688	0.938	2.726	
United Kingdom	1.480	1.065	1.065	
United States	1.791	1.054	0.679	

 Table 10

 CAPITAL STRUCTURE OF FIRMS IN SELECTED COUNTRIES, 1980–1991

Source: Demirguc-Kunt and Maksimovic (1996: 354).

country corporations to finance their often rapid growth. In the wake of the Asian crisis and the evidence that the large amount of short-term debt contracted by conglomerates – particularly in the Republic of Korea, but also in the other affected economies – increased the vulnerability of these countries to a reversal of capital flows, the international financial institutions and governments have been calling for a reduction in gearing ratios.

However, it is possible, a priori, to use high gearing ratios to improve performance (by creating an optimal contract that bridges the agency problem between owners and managers), which enables the creation of conglomerates in the first place. This is important since, as will be discussed in the next section, large conglomerates are instrumentally effective in late developing countries. The key question at the heart of this issue is what defines the optimal degree of gearing. In theoretical terms this is not difficult; the optimal gearing ratio is the one that maximizes shareholder value. Empirically, however, it is very difficult to determine.

It has also been argued that high gearing ratios are only possible because the conglomerates themselves are considered by the State as "too big too fail", and they do not, therefore, have to bear the cost of financial distress. However, this overlooks the mechanism by which discipline was instilled in the system. A failing conglomerate in the Republic of Korea was not simply dissolved through the market (which might not place a value on the firm), rather it was taken over by another conglomerate. The conglomerate thus ceased to have an independent existence and the managers who ran it were dismissed. Again, in markets which are incomplete such a mechanism is efficient and reduces the losses associated with completely dissolving the conglomerate. These countries have maintained high growth rates despite such supposedly "inefficient" practices.

Following the Asian crisis there has been a chorus of calls for the establishment of an effective bankruptcy code in these countries. Given that capital account liberalization has increased the presence of foreign banks and investors in Asian corporations, such a development is probably necessary. However, it does not answer the important question of which bankruptcy code to establish. Bankruptcy codes are very different throughout the OECD, and developing countries will have to examine them closely to determine which one is the most effective for their specific circumstances.

High gearing ratios entail both benefits and costs for the firm. High ratios can help alleviate the agency problem that exists between owners and managers by compelling the latter to work harder to improve profitability and productivity. Furthermore, high gearing ratios also allow families that are reluctant to issue new equity to retain control of companies. Under normal circumstances, high gearing ratios do not present many problems since short-term debt is almost always rolled over, making it the functional equivalent of long-term debt. However, as the Asian crisis demonstrated, high levels of debt can also be a source of vulnerability, especially if the debt has a short maturity structure and is denominated in foreign currency. In principle, this problem should be attenuated if the debt is contracted in local currency because the central bank can expand the money supply to reduce the real financing burden of the corporate sector.

VII. CONGLOMERATES AND ECONOMIC EFFICIENCY

Another issue closely connected with corporate governance and corporate finance in emerging markets concerns the large family-owned conglomerates found in many developing economies. These have been blamed for the Asian crisis because of their lack of transparency, poor corporate governance, inadequate accounting procedures and lack of focus. The owners are thought to be more interested in empire- building than in pursuing shareholder value. It is also suggested that the giant third world conglomerates, or business groups, are viewed by their governments as being 'too big to fail', leading to moral hazard. The high gearing ratios of developing country conglomerates, such as those in the Republic of Korea, are thought to reflect cronyism between corporations, banks and the government. The business groups often have in-house banks, which, it is alleged, are used by the controlling families to undertake risky debtfinanced projects, or to create over-capacity. This is, however, only a partial, one-sided picture of business groups in developing countries, which ignores the most recent theoretical and empirical research on the subject. It also overlooks the salient point, that such firms have been playing a leading role in emerging markets in all continents, notwithstanding the differences in institutional structures, cultures and government economic policies. Economic policy towards developing country conglomerates needs to be based on a full comprehension of their specificity, rather than simply applying the lessons of diversified firms in the United Kingdom and the United States.

The other side of the story is provided by Amsden (1989; 2000), and in a series of papers by Khanna and Palepu (notably 1997; 1999), and Khanna and Yafeh (2000), as well as earlier works of other scholars (see, for example Leff, 1978; 1979). These scholars point out important differences between the third world conglomerates and their western counterparts. The latter, particularly in the United States, were products of the huge takeover movements of the 1960s. At that time, the Anglo-Saxon stock markets were convinced that conglomerates added value and they became the glamour stocks of the period. However, the subsequent lacklustre performance of conglomerate firms by the mid-1980s led stock market opinion to move decisively against these diversified firms. The same market professionals and investment banks who had made money in the 1960s on assembling these conglomerates through the takeover process now profited from disassembling these through the same process - what Scherer (1988) called the "bustup" takeovers. Apart from the social cost of these obvious mistakes of the stock markets,¹⁰ the significant point is that developing country conglomerates are a different breed: they are normally not products of takeovers but in fact have usually grown and diversified organically. Many of them are, however, engaged in such a wide variety of products and industries, with no apparent technological connections between them, that they have been rightly called idiosyncratic conglomerates.¹¹ Historically, today's developed countries too had diversified firms during the course of their economic development. However, this diversification was usually limited to technologically closely-related industries (Chandler 1977; Amsden and Hikino, 1994). The emerging market conglomerates are diversified far beyond such technological linkages.

Amsden (1989; 2000) regards the Republic of Korea's chaebols as the engines of that country's industrial development, contributing to its enormous success in international markets. Khanna and Palepu, in their papers cited earlier, provide the theoretical rationale as to why these big business groups may be more successful in emerging markets than in developed countries. Their argument is straightforward. Developing countries suffer from a large number of market defects. They have incomplete or missing product, labour and capital markets - far more than in developed countries. In addition, emerging markets do not yet have the whole gamut of information gathering and disseminating private organizations, regulatory institutions and professional bodies, all of which constitute the economic, social and legal institutional framework within which developed country markets are embedded. In the absence of such a framework in emerging markets, conglomerate firms help fill this institutional void. To illustrate, in the absence of trained managers and training institutions for such managers, business groups would often have in-house training centres for their group managers. Tata in India, for example, has a world class training programme for all its group managers. Similarly, in view of the many imperfections of developing country capital markets, it is more efficient for the business group's central office to allocate capital directly through an appropriate internal allocative mechanism. Williamson (1975) is the classic reference on this subject.

In international trade, developing country corporations are at a serious competitive disadvantage vis-à-vis those from developed countries. The latter have well-established brand names and huge advertising budgets that constitute enormous barriers to entry for developing country firms. The business group gives these firms an institutional means of at least partially overcoming this handicap. Instead of promoting brand names for particular products, as developed countries' corporations do, those in emerging markets attempt to build the image and reputation for high quality of the business group as a whole. Thus, the Samsung and Hyundai groups are promoted – rather than single product lines – as a strategic response to the market disadvantages which individual or unaffiliated developing country firms face. This has, arguably, been a major factor in the success of large Korean conglomerates in the international market place. So much so that by 1990 11 Korean firms were listed in Fortune magazine's ranking of the

world's top 500 corporations, the same number as for Switzerland. Twenty years earlier, there was not a single Korean company in the top 500.¹²

Amsden and Hikino (1994) have put forward a different kind of argument to explain the existence and efficiency of privately-owned business groups in the late industrializing countries. They suggest that in these countries, business group managers have become adept at choosing, purchasing and adapting relevant technologies from abroad, and that this kind of expertise is not industry specific; rather, it can be used in many different industries. Support for this hypothesis is provided by the management agency system, which prevailed in India for almost 100 years. Under this system, teams specializing in modern management would offer to run firms on modern lines in different industries for a management fee. The system was ultimately abolished in India after independence, not on grounds of inefficiency, but rather on grounds of equity; the system was viewed as promoting monopoly power and at variance with India's "socialistic" pattern of development. Many of the leading present-day Indian business groups are direct descendants of the management agency system.

There are thus powerful analytical arguments for the existence, survival and efficiency of business groups in developing countries. In the absence of appropriate institutions and markets, which have taken a long time to develop, the dominant Anglo-Saxon strategies of "core competence" and "focus" are therefore unlikely to be suitable for business groups in emerging markets.

A. Empirical evidence

Turning now to empirical evidence, how do developing country business groups perform relative to unaffiliated firms? Are they so idiosyncratically diversified that, despite the reasons outlined above, they are, nevertheless, inefficient and need to be downsized or abolished altogether? Some empirical research on this issue is summarized in table 11. The table comes from Khanna and Yafeh's (2000) careful and painstaking study of

			GROUP /	AFFILIATION AR	ROUND THE W	/ORLD		
		90 24	No. of group	Median size of group affiliate firms/	Median of ROA of group affiliated firms	Median of ROA of un- affiliated firms	Median standard deviation of ROA, group affiliated firms	Median standard deviation of ROA, unaffiliated firms
Country	Year	firms	firms	unaffiliated firms		(Pe	r cent)	
Argentina	1990–1997	25	1	5.53	3.95	7.78**	3.67	4.91**
Brazil	1990–1997	108	51	2.50	3.30	1.85**	4.05	5.07
Chile	1989–1996	225	50	18.71	5.93	2.2*	4.42	4.10
Colombia	1988–1997	16	7	4.54	1.43	0:90	7.40	9.02
India	1990–1997	5 446	1 821	4.37	11.73	9.56*	4.65	4.37*
Indonesia	1993–1995	236	153	2.79	7.31	7.81	1.93	2.53*
Israel	1993–1995	183	43	4.99	5.60	3.90	4.40	6.80
Korea, Rep. of	1991–1995	427	218	3.63	4.85	5.12	1.88	2.58*
Mexico	1988–1997	55	19	2.29	8.22	6.08	4.89	4.92
Peru	1988–1997	21	5	1.62	7.92	7.86	10.51	9.98
Philippines	1992–1997	148	37	3.43	7.32	3.98	2.48	2.95
Taiwan Prov. of China	1990–1997	178	62	2.05	5.07	6.22	1.75	2.26**
Thailand	1992–1997	415	258	2.33	2.90	4.41*	4.32	4.93**
Turkey	1988–1997	40	21	0.96	24.62	26.32	12.52	12.37
Venezuela	1988–1997	7	2	1.45	3.68	4.60	6.11	3.90*
Pre-war Japan	1932–1943	58	17	6.80	5.50	6.40	4.40	7.10
Post-war Japan	1977–1992	1 002	94	8.50	3.41	3.63	2.23	2.29
Source: Khanna and Ya Note: The table show	feh (2000). s summary stati	istics on g	roup risk and	1 operating performat	nce for fifteen eme	erging markets as	well as for pre-and p	oost-was Japan. Firm
numbers, as we for the country ir	ell as statistics or 1 question. Firms	n firm size s with profit	(total assets rates above) and median return c 100 per cent or below	on assets (ROA) ar / -100 per cent are €	e all based on the section the section of the secti	year for which we ha analysis. In pre-wars J	ve maximal coverage Japan group affiliation
refers to affiliati for the comparis	on in the largest sons of medians	three zaib: are based	atzu only. In j on Wilcoxon	oost-war Japan, grou signed-rank tests. * d	p members are defi Jenotes significanc	ined as members c e at 5 per cent leve	of Presidents' Club on el and **denotes signi	ly. Significance levels ficance at 10 per cent
level.								

Table 11

42 AJIT SINGH, ALAKA SINGH AND BRUCE WEISSE
business groups from 15 emerging markets. As the definition of what constitutes a business group differs between countries in this research, it is defined on the basis of local expert knowledge in each country.¹³ The table pertains to various periods in the 1980s and 1990s. It indicates that in 9 out of 15 emerging markets, the average rate of return of the group-affiliated firms was greater than that of the unaffiliated firms. In 8 out of 15 emerging markets, the average standard deviation of the rate of return of the affiliated groups was smaller than that of their unaffiliated counterparts. Nevertheless, only a few of the differences are statistically significant. Khanna and Yafeh (2000) conclude from this evidence that the "provision of risk sharing, to compensate for underdeveloped capital markets, is probably not the most important reason for the ubiquity of business groups around the world".

Khanna (2000) provides a review of the empirical studies on the efficiency of business groups. He concludes:

... the existing evidence suggests that the performance effects of group affiliation are large and generally positive. There is substantial evidence that part of this is due to welfare-enhancing functions originating in the idea that groups substitute for missing outside institutions, but that part is also due to welfare-reducing minority shareholder exploitation. (p. 748)

The last clause in Khanna's conclusion suggests that there are also negative effects of business groups. Specifically, these groups are known to exploit the minority shareholders of their companies (see further Claessens, Djankov and Lang, 2000; and Johnson et al., 2000). However, notwith-standing anecdotal evidence about rent-seeking and monopolistic behaviour of business groups, there is very little systematic empirical evidence on this subject.

B. Policy issues: chaebol reform in the Republic of Korea

The most important and immediate policy issues with respect to the business groups in emerging markets arise in relation to the *chaebol* conglomerates in the Republic of Korea. *Chaebol* reform constituted an

important element in IMF conditionality for the Republic of Korea following the Asian financial crisis of 1997–1998. Reforms involved improvements in corporate governance, greater focus, reducing the level of diversification and reductions in the debt/equity ratio. This was envisaged to be a part of the structural reform of the corporate sector – from close relationships between the Government, business and the banks, to an arm's-length relationship between the three entities. After initially hesitating, the new Kim Dae Jung Government evidently supported these reforms (Krause, 2000).

The most serious criticism of the *chaebol* was that they had invested recklessly in unprofitable projects on borrowed money. It is indeed true that the top *chaebol* had, at the time of the crisis, high debt/equity ratios (see table 12). The top five *chaebol* had an average debt/equity ratio of 458 per cent in 1997. Under the Government's reorganization plan, the *chaebol* were required to reduce these ratios to 200 per cent by the end of 1999.

It will be appreciated, in the light of the theoretical and empirical discussions above, that the case for such reforms on the grounds of economic efficiency is rather thin. As Khanna and Palepu (1999) noted, abolishing or restricting the *chaebol* may be inefficient in the absence of a range of market institutions that will take time to develop. There is also no reason to believe that the optimal debt/equity ratio for the top five *chaebols* should necessarily have been 200 per cent, rather than any other arbitrary number. Other countries with different financial systems than those of the United Kingdom and the United States also have high debt/equity ratios: for example, Norway has 500–538 per cent, Sweden has 555 per cent and Finland has 492 per cent. In Japan the debt/equity ratio in 1991 was measured at 369 per cent, while in France and Italy it measured 361 per cent and 307 per cent respectively. Moreover, there is reason to believe that the debt/equity ratios of United States corporations are rising as they are buying up their own equity by borrowing money (*The Economist*, 2001).

However, as Singh (1998c) notes, the more significant point in relation to the high debt/equity ratios of the Korean *chaebol* is that these corporate financial arrangements were functional within the traditional Korean

Table 12
DEBT-EQUITY RATIOS OF KOREAN CHAEBOLS

(Million won)

Company	Total assets	Debt	Debt/equity ratio
Samsung	50 856 4	37 043 6	268.2
Hyundai	53 183 7	43 319 3	439.1
Daewoo	34 205 6	26 383 2	337.3
Lucky-Goldstar	37 068 4	28 765 6	346.5
Haniin	13 904.5	11 787.7	556.9
Kia	14 161.9	11 890.9	523.6
Ssanvong	15 807.2	12 701.4	409.0
Sunkyong	22 726.6	18 040.3	385.0
Hanwha	10 967.7	9 718.8	778.2
Daelim	5 793.3	4 586.5	380.1
Kumho	7 398.0	6 117.9	477.9
Doosan	6 402.0	5 594.0	692.3
Halla	6 626.5	6 320.8	2 067.6
Sammi	2 515.4	2 593.3	3 329.0
Hyosung	4 124.4	3 252.8	373.2
Hanil	2 628.1	2 231.8	563.2
Dong-Ah Construction	6 287.9	4 905.8	355.0
Kohap	3 653.6	3 123.6	589.4
Jinro	3 940.5	3 865.2	8 598.7
Dongkuk Steel	3 697.5	2 536.4	218.4

Source: Financial Times, 8 August 1997, reproduced in Singh (1998).

system. These arrangements were particularly useful during that country's industrialization drive, as the corporations were induced by the Government to enter into new technological areas involving huge risks. Left to themselves, these corporations may not have been able to undertake such risks, but with the Government becoming, in effect, a co-partner through the banking system, such technological risks were effectively "socialized". However, this system became dysfunctional when the Government introduced financial liberalization and abolished economic planning in the early 1990s in preparation for its membership of the OECD. By permitting Korean companies and banks to raise money abroad without the traditional supervision and control, the authorities were unable to control – or even monitor – the rapid accumulation of short-term, foreign-currency-denominated debt.

In this connection, it is interesting to note the case of India, since business groups there are also highly geared. However, despite the fact that India's fundamentals were, if anything, weaker than those in the Republic of Korea, a crisis did not develop because the Government maintained strict controls on the foreign-currency exposure of the private sector. Thus, India's limited and deliberate move towards capital account convertibility lessened the vulnerability of the rupee to sudden shifts in investor sentiment and to speculative attacks.

The empirical evidence in support of the popular view that business groups in developing countries must be drastically reformed, or even abolished, is strikingly thin. In fact there remains theoretical and empirical support for the view that large business groups play a key role in late industrialization by compensating for structural gaps in developing country capital, product and labour markets. Given the paucity of evidence and studies in this area, it is appropriate to adopt a more cautious stance with regard to these groups than the current orthodox policy consensus allows. As Khanna notes in the conclusion to his study: "What seems clear is that an extreme characterization of groups as purely socially harmful or purely socially welfare enhancing appears unsupported by the evidence." (Khanna, 2000: 756).

It is also pertinent to point out that the charge that business groups are large bureaucratic organizations which thwart innovation and small firm entry is not supported by analysis and evidence. On the contrary, Khanna and Palepu (1999) note that in the absence of specialized venture capital firms, the business groups in emerging markets help fill this institutional gap. Evidence from India – a country that has successfully developed its information technology (IT) sector – suggests that the top 25 Indian exporters and producers of IT were mostly offshoots of big business groups (Singh, Singh and Weisse, 2000).

Finally, in relation to corporate governance, the IMF's view is that the *chaebol* should be restructured so as to maximize shareholder value, giving greater power to minority shareholders and increasing the representation of non-executive directors on the board – in other words, to make them look more like Anglo-Saxon firms. However, Singh (1998c; 1999) and Chang and Park (2000) have argued that this is not the most desirable reform agenda, let alone the only possible one. An alternative reform strategy is proposed by Singh (1999) which envisages building on the close relationship between government, business and finance. It is suggested that in order to overcome the crisis, these relationships need to be strengthened further rather than being abandoned. One way to do this would be to extend the government-business relationship to other social sectors, particularly labour and civil society. Such cooperative relationships with respect to the governance of corporations and society at large are more likely to help in the current crisis than arm's-length relationships between government, business and labour. The latter have a tendency to degenerate into adversarial relations during times of crisis, that can make the desired changes more difficult to achieve.

VIII. COMPETITION AND CORPORATE GOVERNANCE: THEORETICAL ISSUES

Milton Friedman (1953) long ago argued that if there were perfect competition in product markets, economists would not have to worry about problems of separation of ownership and control in modern corporations or about the associated problem of corporate governance. Natural selection in a competitive market would ensure that only the profit maximizers – and by implication, only the optimal ownership patterns and corporate governance structures – would survive. However, as Winters (1964) subsequently showed rigorously, if competition were imperfect, different corporate governance systems could coexist.

The debate then moved to the capital market. In seminal contributions, Alchian and Kessel (1962) and Manne (1965) argued that even if there were imperfect competition in the product markets, firms would still be forced to maximize profit and adopt the optimal governance structures. Otherwise they would be subject to takeover from those willing to maximize monopoly profits. The validity of this assertion depends on the existence of a perfect capital market, including a market for corporate control. In the event, although there have been huge merger waves during the last century or more (specifically during the 1960s, 1980s and 1990s) in the Anglo-Saxon economies, these have not fulfilled the requirement of a perfect market for corporate control. As noted earlier in Section VI, this market suffers from fundamental imperfections: it is much easier for a large and profitable firm to take over a small profitable firm than the other way round. This hypothesis is confirmed by empirical evidence which suggests that in the real world, the probability of survival for a large unprofitable firm is significantly higher than it is for a smaller, relatively profitable firm.

In the light of these difficulties with the market for corporate control, the wheel has turned full circle. It is now being suggested that the main constraint on the behaviour and governance structure of the large corporations is the intense international competition in product markets. Nevertheless, neoclassical economists now recognize that in view of the oligopolistic nature of product-market competition and imperfections in the market for corporate control, there does exist a governance problem in the modern corporation: this is modelled in the form of a principal-agent problem (Jensen and Meckeling, 1976; Jensen, 1988). In this conception, the separation of ownership and control imposes agency costs on the corporation. The magnitude of this cost varies inversely with the nature and extent of the competition in the product and capital markets. As the relevant aspects of the market for corporate control has already been examined, above and in Section VI, we turn now to a discussion of the nature and extent of competition, including international competition, in emerging markets.

IX. PRODUCT-MARKET COMPETITION IN EMERGING MARKETS

Apart from its significance for the study of corporate governance, it is also important to examine product-market competition in emerging markets for other, more practical, reasons. These relate to new developments during the last two decades in the international economy and in the domestic economies of developing countries. The implications of these developments for the competitive behaviour of firms and for the intensity of competition in emerging markets will be discussed in this section, and those for competition policy will be taken up in the next discussion.

- (i) There has been a worldwide trend towards privatization of State industry and deregulation that was initiated in the United Kingdom during the 1980s by former Prime Minister Margaret Thatcher. The privatized firms in many of the emerging markets often involve natural monopolies. It is therefore important to find out how competition and competitive behaviour has changed as a result of the privatization of former State-owned monopolies and other publicly-owned enterprises.
- (ii) The international economy under globalization and liberalization has been subject to a gigantic international merger wave during the last decade. There have been large merger waves before in developed countries that have occurred simultaneously in several countries (e.g. the merger wave of the late 1960s), but generally these have not involved any significant amount of cross-border takeovers. However, the current merger wave in the United States and the United Kingdom (the two countries with the best historical statistics on this subject) is not only likely to be the largest ever recorded, in terms of the total value of the corporation acquired (suitably adjusted for inflation and the size of GDP), but it also has, for the first time, a large cross-border component.

The cross-border M&A activity has mainly involved corporations in developed countries. Nevertheless, there has been considerable M&A activity in emerging markets as well (see tables 13a and 13b). The activities have mainly involved foreign multinationals (the domestic market for corporate control in emerging markets is typically very small, if not nonexistent). These takeovers by foreign multinationals in emerging markets have direct implications for the competitive behaviour of firms, and hence for competition policy. As noted earlier, even the merger activity in developed countries has potential consequences for competition and competition policy in emerging markets.

Notwithstanding the significance of the subject, there is very little systematic information available on the intensity of competition in emerging markets on an international comparative basis. There are anecdotal evidence

Table 13a

CROSS-BORDER M&As:" SALES AND PURCHASES, 1998-1999

(\$ billion)

	S	ales	Purci	hases
Region/economy	1998	1999	1998	1999
Developed countries	445.1	644.6	511.4	677.3
European Union	187.9	344.5	284.4	497.7
United States	209.5	233.0	137.4	112.4
Japan	4.0	15.9	1.3	9.8
Developing countries	80.7	63.4	19.2	41.2
Africa	0.7	0.6	0.2	0.4
Latin American and the Caribbean	63.9	37.2	12.6	24.9
Europe		0.3		
Asia	16.1	25.3	6.4	15.9
Pacific		0.1		•
Central and Eastern Europe ^b	5.1	10.3	1.0	1.6
World ^c	531.6	720.1	531.6	720.1

-

Source: UNCTAD, FDI/TNC database
a Cross-border M&As that result in the acquisition of more than 10 per cent equity share.
b Includes the countries of the former Yugoslavia.
c Includes amounts which cannot be allocated by region.

Table 13b

SALES OF CROSS-BORDER M&As IN THE FIVE ASIAN COUNTRIES MOST AFFECTED BY THE FINANCIAL CRISIS, BY SECTOR, 1990-1999

Sector/industry	1990	1995	1996	1997	1998	1999
Primary	15	76	3	367	146	47
Secondary	54	457	935	5 134	5 087	8 125
Tertiary	102	1 935	1 619	807	5 633	6 547
Total	171	2 468	2 558	6 308	10 866	14 719

Source: UNCTAD (2000).

and conjectures about the degree of competition in these countries. For example, as stated earlier, the IMF analysis of the structural reasons for the Asian financial crisis in 1997-1998 suggests that the deeper reasons for the crisis lay, in part, in the poor competitive environment in countries such as the Republic of Korea, leading to overinvestment. On the other hand, Porter (1992) and Amsden and Singh (1994) believe that Korean chaebol display vigorous rivalry in both national and international markets. However, some support for the IMF position is provided by table 14 which gives average concentration ratios for different time periods for a small group of emerging markets. It suggests that concentration tends to be high in these countries, being sometimes greater than that in developed countries. However, economists have long recognized that such measures of

Table 14 CONCENTRATION RATIOS IN EMERGING ECONOMIES

Economy	Share
con	Three-firm centration ratios
Japan, 1980	56
Korea, Rep. of, 1981 Taiwan Prov.	62
of China, 1981	49
con	Four-firm centration ratios
Argentina, 1984	43
Brazil, 1980	51
Chile, 1979	50
India, 1984	46
Indonesia, 1985	56
Mexico, 1980	48
Pakistan, 1985	00 67
United States, 1972	40

Source: World Bank (1993).

concentration, based only on the size distribution of firms, are inadequate for measuring the intensity of competition in an economy.

Recently, however, Glen, Lee and Singh (2000) have addressed the question of intensity of competition in emerging markets directly, and provided systematic comparative evidence on how this varies between emerging markets and between developed and developing countries. The authors use standard methodology, based on the so-called "persistence of profitability" studies, to measure intensity of competition. This methodology has been employed in a large number of studies to analyse the intensity of competition in developed country product markets.¹⁴ The basic intuition here is that if competition were intense, firms would tend to display low persistence of profits, as any temporary advantage which a firm might enjoy (either, for example, because of good management, a new money making technique, or monopoly power) would soon be competed away by

Table 15

MEAN VAL	UES OF	λ, YLR AN	ID 2 ²
	Mean λ	Mean YLR	Mean 2²
Deseil	0.010	0.000	0.440
Brazil	0.013	0.003	0.418
India	0.229	0.003	0.282
Jordan	0.348	0.050	0.299
Korea, Rep. of	0.323	0.005	0.300
Malaysia	0.349	0.009	0.302
Mexico	0.222	-0.002	0.316
Zimbabwe	0.421	0.157	0.249

Source: Glen, Lee and Singh (2000).

rivals. On the other hand, if the competition were not so intense, then those with above average profits in one period would continue to have above average profits in subsequent periods.

Glen, Lee and Singh have carried out a time series analysis of profitability for 350 emerging market corporations in seven countries. Their estimated persistency coefficients are reported

in table 15. The corresponding coefficients for developed countries, based on the same methodology, are reported in table 16. A comparison of the two tables reveals that, remarkably, the persistency coefficients in emerging markets are systematically lower than those for developed countries. This result is quite unexpected as many economists would assume, a priori, that emerging markets will have less intense market competition than developed countries. Laffont (1999), for example, argues that developing country markets are likely to be highly imperfect because of their small size, lack of transportation and other infrastructural deficits.

Glen, Lee and Singh argue that their results may be counter-intuitive but not implausible. Economists have had similar preconceptions about competition in Japan, which was thought to be less intense than in the United States manufacturing industry. However, systematic empirical research has indicated that, in fact, this is not the case; it is true that United States retailing is more efficient than Japanese retailing, but wholesale manufacturing goods markets, if anything, display greater intensity of competition in Japan than in the United States. More importantly, Glen, Lee and Singh's conclusion on the intensity of competition in emerging markets is fully in accord with evidence presented in a comprehensive review article on the efficiency of the third world manufacturing sector by Tybout (2000). He observes:

The manufacturing sectors of developing countries have traditionally been relatively protected. They have also been subject to heavy regulation, much

period	per firm	of firms	(Lamda [i])
1947–1977 1965–1982 1961–1981	29 21 21	5 55 28	0.488 0.412 0.410
1961–1982	22	299	0.485
1950–1972	23	551	0.183
1948–1977	30	243	0.482
1964–1982	19	129	0.425
1964–1982	19	376	0.465
1961–1981	21	283	0.509
1970–1989	20	12 986	0.540
	1963–1962 1961–1982 1950–1972 1964–1982 1964–1982 1961–1981	1963–1962 10 1961–1981 21 1950–1972 23 1948–1977 30 1964–1982 19 1964–1982 19 1961–1981 21	1960-1962 10 23 $1961-1981$ 21 28 $1961-1982$ 22 299 $1948-1977$ 30 243 $1948-1977$ 30 243 $1964-1982$ 19 129 $1964-1981$ 21 283 $1961-1981$ 21 283 $1970-1989$ 20 12986

Table 16

of which is biased in favour of large enterprises. Accordingly, it is often argued that manufacturers in these countries perform poorly in several respects: (1) firm productivity dispersion is high; (2) small groups of entrenched oligopolists exploit monopoly power in product markets; and (3) many small firms are unable or unwilling to grow, so important scale economies go unexploited.

It is important to emphasize that these remarks about the unexpectedly high intensity of competition in emerging markets apply only to the manufacturing sector. Sectors such as banking and retailing are much less efficient in emerging markets than in developed country markets. Tybout concludes:

Indeed, although the issue remains open, the existing empirical literature does not support the notion that LDC manufacturers are relatively stagnant and inefficient. Turnover rates in plants and jobs are at least as high as those found in the OECD and the amount of cross-plant dispersion in measured productivity rates is not generally greater. Also, although small-scale production is relatively common in LDCs, there do not appear to be major potential gains from better exploitation of scale economies.

X. DEVELOPING COUNTRIES, THE WORLD TRADE ORGANIZATION AND COMPETITION POLICY

Apart from their effects on the intensity of competition in emerging markets, the new national and international developments detailed in the previous section also have important implications for competition policy. Even though we have found that product market competition is no less intense in developing than in developed countries, this does not obviate the need for a competition policy. Such a policy is required in developing countries today, not least to counter the potential anti-competitive impact of mergers and acquisitions by large multinationals, both within developing countries and worldwide.

Many developing countries do not have a competition policy, and, so far, have not needed one, mainly because of State control of economic

activities and regulation of various markets. Many governments had the powers to use direct price controls to restrain monopoly power if necessary. But now, with extensive privatization, a much diminished State sector and deregulation, it is clearly necessary for developing countries to have some polices to regulate anti-competitive behaviour. The main question is what kind of competition policy is appropriate for these countries? Should they adopt the same kind of competition laws as those implemented in the United States or the United Kingdom? Or should competition policies of developing countries be different from those of developed countries?

At the World Trade Organization (WTO), developed countries have been pressing developing countries to include competition policy in WTO agreements in order to ensure "fair play" and "level playing fields" between countries. The argument is simple: if one country allows mergers freely while another has a competition policy prohibiting monopoly-creating mergers, there would not be "fair" competition between firms in the two countries. This will lead to both a global misallocation of resources and unfair competition between firms in the two countries.¹⁵ Most developed countries have a competition policy of one kind or another, and in their case it is a matter of harmonizing such policies so that free trade and free capital flows between countries are unimpeded.

Developing countries have been opposed to the proposal that competition policy should become a part of the WTO disciplines. Their formal stance has been that since a large number of them do not yet have a competition policy, whereas developed countries have experience with such policy (some of them for the last 100 years), they cannot be expected to enter into negotiations in an area about which they have little knowledge. The real reason for developing country opposition is that they are against any new disciplines being included in the WTO agreements because of the provision of cross-sanctions: a violation in one area may be penalized in another area by the complaining country (if the complaint is held to be justified). Developing countries take the view that the Uruguay Round Agreements, that established the WTO, need to be reviewed for their impact on developing countries before undertaking a new round of tariff cutting or starting negotiations on new subjects such as competition policy and a multilateral agreement on investment (MAI). As the subject of MAI has been examined elsewhere,¹⁶ we confine ourselves in this paper to the question of competition policy. At the Singapore Ministerial Meeting of the WTO in 1996, a compromise was struck whereby it was agreed that competition policy would be examined by a study group without prejudice to any future negotiations. It was to give particular attention to the development dimension of competition policy. The term of the study group, duly established at the WTO to examine the matter, was extended at the Seattle meeting in 1999. Notwithstanding the justified misgivings of developing countries with respect to any negotiations on the subject at the WTO, it is important for them to acquire an understanding of the important issues involved in this area, and be prepared to offer counter proposals when appropriate.

The question of competition policy in developing countries is being studied not only at the WTO but also by a number of other organizations, including the United Nations Conference on Trade and Development (UNCTAD), the World Bank and the Commonwealth Secretariat. Consequently, there is a considerable and growing body of literature on the subject but, with a few exceptions, much of it is unsatisfactory as it does not take into account the development dimension (despite claims to the contrary).

Singh and Dhumale (1999) provide a trenchant critique of the documents generated by the WTO study group in relation to the development dimension. They argue that for adequate recognition of this aspect of competition policy, it is not enough merely to give developing countries more time to adjust; rather, new concepts and definitions are needed. The WTO concepts and rules relating to market access, reciprocity and national treatment appear to be inappropriate for economic development. Specifically, the authors note that the main objective of competition policy in developed countries such as the United States is promotion of consumer welfare. For developing countries, on the other hand, a more appropriate objective would be to achieve sustained and substantial increases in the trend rate of growth of productivity. Such an objective was pursued in Japan during the period 1950 to 1973. That country, at the start of the period, had a level of per capita income similar to that of many developing countries today, but it attained exceptionally high growth in the subsequent two decades. The Japanese experience of this earlier post-Second World War era with respect to competition and industrial policy is particularly useful for developing countries.

Promotion of high rates of growth of productivity necessitates high rates of investment, which, in turn, in a mixed economy, requires maintaining the private sector's propensity to invest. Singh and Dhumale show that this needs an optimal degree of competition rather than maximum competition. They emphasize, in the case of developing countries, that keeping the private sector's propensity to invest at high levels requires a steady growth of profits. This necessitates government coordination of investment decisions to prevent overcapacity and falling profits. The authors therefore outline the concept of an optimal combination of competition and cooperation to achieve fast long-term growth. They also introduce the concept of simulated competition (i.e. contests for State support), which can be as powerful as real market competition.

Singh and Dhumale add that these concepts are new only in relation to the current discourse on the subject at the WTO and other international organizations. The concepts are derived from modern economic theory and have been tested by empirical evidence. Interestingly, some of them have been used in the WTO Agreements themselves, but usually to benefit rich rather than poor countries. For example the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) allows temporary restraint on free competition in order to promote technical progress. However, the extra patent protection provided under this WTO Agreement benefits mainly rich countries who hold or produce most of the world's patents. At one level, all that Singh and Dhumale do is to apply such concepts to the advantage of developing countries in order to promote their economic development.

To sum up, there are two important implications following from the above analysis which deserve emphasis. First, developing countries do need a competition policy, but that policy needs to be specific to the relevant stage of a country's development. Secondly, there is a need for special and differential treatment of developing countries in relation to competition policy. This is required in order to truly "level the playing field" in an operational sense. Even large, developing country firms tend to be relatively small and handicapped by the many deficits that arise from economic underdevelopment as compared to the large TNCs from developed countries. In these circumstances, instead of "national treatment" of foreign TNCs, a developing country's competition authority may prohibit takeovers by such companies operating in the country and yet allow domestic firms to amalgamate in order to compete better against the larger multinationals. In this instance, non-national treatment may serve both competition and economic development.

However, even the development-friendly competition policy sketched out above may not be adequate to cope with the potential anti-competitive effects of the current international merger wave. For this, ideally, an international competition authority needs to be able to prevent abuse of a dominant position by large multinational firms and other anti-competition behaviour. This is needed because even a developed country such as the United States, with all its competition laws and extra-territoriality, is unable to prevent price fixing by international cartels. Not too long ago, a European cartel of vitamin producers was fined three quarters of a billion dollars for illegally fixing (high) prices. If this can happen to the United States, there is little to prevent cartelization by subsidiaries of multinational companies in developing countries and their engaging in similar activities. In the absence of an international competition authority, which the developed countries are not yet prepared to accept, developing countries would be better off dealing with anti-competitive behaviour of large multinationals collectively through regional organizations, rather than on an individual basis.¹⁷

XI. SUMMARY AND CONCLUSIONS

This study has examined analytical, empirical and policy issues relating to corporate governance and competition policy, subjects of particular concern for developing countries. These subjects are not currently high on the agenda of most of these countries, although they are being considered by several international bodies including the WTO, the World Bank and the OECD in the context of proposals for a new international financial architecture and a new liberalized trading system. These international organizations, however, do not always act in the interests of developing countries. The latter therefore need independent analyses of these issues so as to be able to properly assess the proposed reforms from their own perspective and, when necessary, offer alternative proposals. The main purpose of this paper has been to provide such an independent assessment and to raise awareness among developing countries about these issues.

The principal conclusions on corporate governance may be summarized as follows:

- (i) The main premise of the IMF and leading United States officials, that the deeper causes of the Asian crisis were the flawed systems of corporate governance and a poor competitive environment in the affected countries, is not supported by the evidence. The available facts are much more in accord with the alternative thesis, that the fundamental reason for the crisis was the precipitous capital account liberalization that a number of these countries had carried out in the period preceding the crisis.
- (ii) Despite claims to the contrary, the system of corporate governance favoured by the OECD and World Bank is the arm's-length model found in the United States and the United Kingdom. The codes of best practice and the self-assessment exercises reflect this preference, and it is thus likely to form the basis of these organizations' advice to developing countries, especially when conditionality is imposed in times of crisis.
- (iii) The arm's-length model of the relationship between businesses, banks and the government, as found in its ideal form in the United States and the United Kingdom, is deeply embedded in Anglo-Saxon jurisprudence and corporate law. It is particularly suitable for the Berle and Means corporate law pattern of dispersed-share ownership typically observed in large corporations in these countries. The Berle and Means corporation has specific governance problems, deriving from the separation of ownership and control. These lead to the wellknown problematique of the principal-agent relationships between

shareholders and managers, involving agency costs, asymmetric information and incomplete contracting.

However, the Berle and Means pattern of ownership is by far the exception in developing countries and in much of continental Europe. In these countries, the most prevalent form of ownership is family control. Corporate governance issues for large firms in these countries are, therefore, quite different from those of Anglo-Saxon economies. Family-based systems of corporate governance are often associated with relationship banking. There is no reason to believe, a priori, that such systems are necessarily inferior to the arm's length, stock-marketbased Anglo-Saxon model. Both have positive and negative features. To the extent that the former systems are better able to resolve agency problems and suffer much less from the short-termism and speculative bubbles of the stock-market-based model, they are arguably more conducive to the long-term economic development of emerging countries. Empirical evidence suggests that emerging markets, as well as European countries such as Italy, Sweden or Germany, have successful records of fast long-term growth with these systems that are indeed superior to those of the Anglo-Saxon countries.

- (iv) However, in the wake of the Asian financial crises, family-based corporate control systems have been associated with crony capitalism, measured in one important sense in terms of the control of a large proportion of national wealth by a small number of corporate families. Whether such crony capitalism leads to moral hazard and economic instability, or instead helps resolve coordination problems ubiquitous in a market economy, is pre-eminently an empirical question. Empirical evidence presented in this paper indicates that there is no relationship between crony capitalism and the Asian economic crisis. Countries both with and without a high incidence of crony capitalism experienced the crisis. Similarly, there are examples of both kinds of countries that escaped the crisis.
- (v) The theoretical foundations of the OECD/World Bank proposals can be found in the contributions of LLSV. The basic proposition of the LLSV approach is that the legal protection afforded to investors

(primarily minority shareholders) determines the availability of external finance. If minority shareholders are protected, external finance will become more prevalent, which will have beneficial effects on investment and, ultimately, on growth. The LLSV studies are an important contribution to our knowledge of legal systems and corporate governance structures and their relation to financing and growth. However, it is argued in this study that LLSV's conclusions are overstated. In particular, it is argued that the approach is far too narrow to adequately capture the changes taking place in corporate finance in developing countries; furthermore, the legal structure and corporate finance jointly interact, and the direction of causality is not simply from the former to the latter. The LLSV approach also elevates shareholders and creditors above other stakeholders in the firm and relegates other important relationships (such as the relationships between workers and management and suppliers and the firm) to secondary status.

(vi) Corporate finance patterns in developing countries in the 1990s were broadly similar to those in the 1980s in a number of important aspects. Large developing country firms continued to rely overwhelmingly on external sources to finance their growth of total assets. Contrary to the "pecking order" theory, many of these large firms financed more of their growth through issuance of equity on stock markets than through retained profits. Stock markets have thus helped large firms to raise considerable amounts of external finance, but whether this has led to higher national saving rates is unclear. The effects of stock market development on corporate governance and development depends on two market processes: (a) the nature and efficiency of the takeover mechanism, and (b) that of the pricing process. This paper has argued that there is a wealth of evidence that the latter is often dominated by speculation, herding and fads that undermine its capacity to efficiently direct allocation of resources. It has also suggested that the takeover mechanism is inherently flawed and is an expensive method of changing corporate governance. Furthermore, it has pointed out that the inadequacies and perverse incentives in both the pricing process and the takeover mechanism are likely to be greater in developing countries.

- (vii) In the wake of the Asian crisis, it had been argued that developing country conglomerates are inefficient, financially precarious and, because they are "too big to fail", create moral hazard. The analysis in this paper indicates that, on the contrary, conglomerates are in fact an efficient response to the inadequacies in developing country labour, capital and product markets. Far from being inefficient, conglomerates have been instrumental in overcoming market imperfections and promoting industrialization. The high leverage of developing country conglomerates was shown to be not out of line with that of many firms in developed country markets, and, given the ambiguities of what constitutes the "optimal" debt/equity ratio, it is difficult to say that it is necessarily too high. The conglomerates' difficulties with debt during the Asian crisis arose from their unmonitored and uncontrolled exposure to short-term external credit rather than from their high debt-equity ratios per se. These elements - government monitoring and control of capital movements - which were central to the traditional State-guided economic systems in these countries had been abandoned and, as noted earlier, replaced by capital account liberalization in the period immediately preceding the crises.
- (viii) Apart from poor corporate governance, it has been argued that inadequate competition between large firms in developing country markets was a contributing "deep" reason for the Asian crisis. However, empirical evidence examined in this paper suggests that this preconception is also greatly at variance with facts. A comparative analysis of the relative persistence of corporate rates of return in emerging markets and in developed economies indicates that the former displayed lower profits persistency than the latter. This suggests that product market competition is no less intense in emerging markets than in developed economies, and thus subjects developing country managers to market discipline.
- (ix) This paper suggests that despite the competitive environment, developing countries must develop effective competition policies because of (a) extensive privatization of State-owned enterprises, including natural monopolies; and (b) the current huge international merger wave. The latter imposes important new challenges to developing

countries, both to protect themselves from the potentially anticompetitive behaviour of mammoth multinationals and to provide space for their own national firms to grow. In the face of mergers between huge multinationals, even developed countries have had to enforce competition policies more diligently. The merger between McDonnell-Douglas and Boeing compelled the European Union competition authorities to intervene, while the cornering of the United States vitamin market by a European cartel obliged that country's authorities to enforce competition by imposing the largest ever antitrust fine of three-quarters of a billion dollars on the cartel members. Given that large developed economies can be subject to such actual or potential anti-competitive behaviour, smaller and more open developing countries are far more vulnerable.

(x) However, contrary to the approach being advanced by the WTO, which would allow no special or differential treatment of developing countries, this paper argues that from the perspective of economic development, these countries must be allowed to tailor their competition policy to suit their specific circumstances. In particular, they should not be compelled to extend national treatment to multinational enterprises, since the presence of these huge concerns in developing countries may reduce competition by driving smaller national competitors from the market. The United States model of competition policy stresses maximum competition; whereas the optimal policy for developing countries should contain a more subtle blend of competition and cooperation.

In sum, this paper has argued that there is a diversity of corporate governance systems that have proved effective in different national contexts. The continental Europeans and the Japanese have prospered with alternative corporate governance systems that have given a larger voice to stakeholders in the firm and have afforded relatively less protection to outside investors. The system of corporate governance in the United States and the United Kingdom is clearly not the only way to effectively and efficiently run the corporate economy and, indeed, for developing countries it is far from being the best way. Its reliance on the stock market, and consequently, on that market's pricing process and takeover mechanism creates perverse incentives that can undermine long-term growth by accentuating the influence of short-term considerations.

In place of a drive by international organizations to promote the Anglo-Saxon system of corporate governance around the world, there is need for a genuine recognition that there are many competing systems of corporate governance and it must be left to developing countries to decide which one is optimal for their particular circumstances. Above all, an analysis is needed of corporate governance structures underpinned by a solid factual understanding of these systems in economic development. This should be free of the ideology and prejudice that reflexively argues that conglomerates are bad, that competition in developing markets is inadequate and that any corporate governance system other than the Anglo-Saxon model is intrinsically flawed.

APPENDIX

Following is a summary of the set of Principles of Corporate Governance laid out by the OECD and quoted from Iskander and Chamlou (2000):

- The rights of shareholders (and others) to receive relevant information about the company in a timely manner, to have the opportunity to participate in decision concerning fundamental corporate changes, and to share in the profits of the corporation, among others. Markets for corporate control, should be efficient and transparent, and shareholders should consider the costs and benefits of exercising their voting rights.
- Equitable treatment of shareholders, especially minority and foreign shareholders, with full disclosure of material information and prohibition of abusive self-dealing and insider trading. All shareholders of the same class should be treated equally. Members of the board and managers should be required to disclose any material interest in transactions.
- Recognition of the role of stakeholders in corporate governance, as established by law. The corporate governance framework should encourage active co-operation between corporations and stakeholders in creating wealth, jobs and financially sound enterprises.
- Timely and accurate disclosure and transparency on all matters material to company performance, ownership, and governance and relating to other issues such as employment and stakeholders. Financial information should be independently audited and prepared to high standards of quality.
- The responsibilities of the board for the strategic guidance of the company, the effective monitoring of management, and accounting ability to the company an shareholders.

NOTES

- 1 See, for example, Confederation of Indian Industry (1998).
- 2 Note that control is defined as a 20 per cent or higher share of equity.
- 3 See also the discussion in the next section, and Amsden (1989; 2000).
- 4 La Porta, Lopez-de-Silanes, Shleifer and Vishny 1997; 1998; 1999; and 2000.
- 5 For a comparison of growth rates in developed economies, see Maddison (1991); the comparison above was based on Maddison, table 3.1, page 49. French growth over the period 1870–1989 was 1.8 per cent (annual average compound growth rate), which compares favourably with that of the United Kingdom (1.4 per cent) and the United States (1.8 per cent).
- 6 For a fuller discussion of these measurement biases, see Whittington, Saporta and Singh (1997).
- 7 Graham and Dodd, in their classic work on security analysis noted that "The stock market is a voting machine rather than a weighing machine." (Graham, 1934: 452).
- 8 See collection of studies in Porter (1992).
- 9 Of course, there is also a positive feedback loop between the two markets, with higher stock market valuations leading to capital inflows and an appreciating exchange rate. It is thus possible that a stock market bubble will lead to an overvalued real exchange rate, which, in turn, affects the competitiveness of the tradable sector.
- 10 See further Ravenscraft and Scherer (1987) on this point.
- 11 This is Guy Pfefferman's phrase. See Singh (1995a).
- 12 See further Amsden and Hikino (1994); and Singh (1995b)
- 13 In some countries, business groups are organized along the lines of holding companies (i.e. the leading company, either directly or through pyramiding, holds a controlling equity stake in the affiliated company). In other countries, the affiliated companies are not bound by large equity stakes, but more by social ties, ethnic origin or firm history (such as the Japanese *keiretsu*). For a fuller discussion, see Khanna (2000).
- 14 The classic references here are Mueller (1986) and Mueller (ed.) (1990), the latter comprising a collection of studies for a large number of developed economies. See also Waring (1996) and Goddard and Wilson (1999).
- 15 Such unfair competition may be ameliorated by a strict enforcement of "national treatment", which is not always observed even in developed countries.
- 16 For a discussion of MAI see Singh and Zammit (2000).
- 17 An early international "initiative" in this area was the discussion of restrictive business practices by large multinationals at UNCTAD II in New Delhi in 1968 and at UNCTAD IV in Nairobi in 1976. The United Nations General Assembly, in December 1980, adopted, by Resolution 35/63, a "set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices". However, this is not a legally binding document and has not been helpful to developing countries (see Correa, 1999).

REFERENCES

- Alchian AA and Kessel RA (1962). Competition, monopoly and the pursuit of pecuniary gain. *Aspects of Labour Economics*. Princeton, National Bureau of Economic Research.
- Amsden A (1989). Asia's Next Giant: South Korea and Late Industrialization. New York, Oxford University Press.
- Amsden A (2000). The rise of "the rest": Challenges to the West from late-industrializing economies. Oxford, Oxford University Press.
- Amsden A and Hikino T (1994). Project executive capability, organisational know-how and conglomerate corporate growth in late-industrialisation. *Industry and Corporate Change*, 3 (1): 111–147.
- Amsden A and Singh A (1994). The optimal degree of competition and dynamic efficiency in Japan and Republic of Korea. *European Economic Review*, 38 (3/4): 941–951.
- Berglof E and von Thadden L (1999) The changing corporate governance paradigm: Implications for transition and developing countries. Unpublished Working Paper, Stockholm Institute of Transition Economics, Stockholm, Sweden.
- Berle A and Means G (1933). *The Modern Corporation and Private Capital*. New York, Macmillan.
- Bhide A (1993). The hidden cost of stock market liquidity. *Journal of Financial Economics*, 34: 31–51.
- Camdessus M (1998). Speech to Transparency International reported in *IMF Survey*, Washington, DC, International Monetary Fund, 9 February 1988.
- Chandler AD (1977). *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA, Harvard University Press.
- Chang, H-J and Park, H-J (2000). An alternative perspective on government policy towards the *chaebol* in Korea: Industrial policy, financial regulations, and political democracy.In: Jwa S-H & Lee I, eds., *Korean Chaebol in Transition: Road Ahead and Agenda*. Seoul, Korea Economic Research Institute.
- Claessens S, Djankov S and Lang L (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58: 81–112.
- Confederation of Indian Industry (1998). *Desirable Corporate Governance: A Code*. New Delhi, Confederation of Indian Industry.
- Corbett J and Jenkinson T (1994). The financing of industry, 1970-89: An international comparison. Discussion Paper No. 948. London, Centre for Economic Policy Research.
- Correa CM (1999). Competition law and development policies. Paper presented at the seminar on Issues of International Competition, University of Zurich, Zurich, Switzerland, 8–10 July 1999.
- Cosh A, Hughes A and Singh A (1990). *Take-overs and short-termism in the United Kingdom: Analytical and policy issues in the U.K. economy.* London, Institute for Public Policy Research.
- Demirguc-Kunt A and Maksimovic V (1996). Stock market development and firm financing choices. *World Bank Economic Review*, 10(2): 354.
- Feldstein M (1998). Trying to do too much. Financial Times, 3 March 1998.

- *Financial Times* (1998). US looks to G-7 backing in Asia Crisis. Article written by Baker G. 19 February.
- Friedman M (1953). *Essays in Positive Economics*, Chicago. Chicago, IL, The University of Chicago Press.
- Glen J, Lee K and Singh A (2000). Competition, corporate governance and financing of corporate growth in emerging markets. Cambridge Discussion Paper in Accounting and Finance No. AF46, Department of Applied Economics, University of Cambridge, United Kingdom.
- Goddard JA and Wilson JOS (1999). The persistence of profit: a new empirical interpretation. International Journal of Industrial Organisation, 17(5): 663–687.
- Graham B and Dodd D (1934). Securities Analysis. New York, McGraw-Hill.
- Greenspan A (1998). Testimony before the Committee on Banking and Financial Services, United States House of Representatives, 30 January 1998.
- Hughes A (1991). Mergers and Economic Performance in the UK: A Survey of the Empirical Evidence 1950–1990. In: Fairburn J and Kay JA, eds., *Mergers and Merger Policy* (2nd edition). Oxford, Oxford University Press.
- Iskander MR and Chamlou N (2000). Corporate governance: A framework for implementation. The World Bank, Washington, DC.
- Jensen MC (1988). Take-overs: their causes and consequences. Journal of Economic Perspectives, 2 (1): 21–48 (winter).
- Jensen M and Meckeling W (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305–60.
- Johnson S, Boone P, Breach A and Friedman E (2000). Corporate governance in the Asian financial crisis. *Journal of Financial Economics*, 58: 141–186.
- Khanna T (2000). Business groups and social welfare in emerging markets: Existing evidence and unanswered questions. *European Economic Review* 44: 748–761.
- Khanna T and Palepu K (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, July–August.
- Khanna T and Palepu K (1999). The right was to restructure conglomerates in emerging markets. *Harvard Business Review*, July–August.
- Khanna T and Yafeh Y (2000). *Business groups and risk sharing around the world*. Social Science Research Network (SSRN) Working Paper Series (http://papers.ssrn.com), January 25, 2001.
- Krause L (2000). The aftermath of the Asian financial crisis for South Republic of Korea. The Journal of the Republic of Korean Economy, 1(1): 1–22, Spring.
- Krugman P (1999). The Return of Depression Economics. Harmondsworth, Penguin.
- Laffont J (1999). Competition, information, and development. In: Pleskovic B and Stiglitz J, eds., *Annual World Bank Conference on Development Economics* Washington, DC, the World Bank.
- La Porta R, Lopez-de-Silanes F, Shleifer A and Vishny RW (1997). Legal Determinants of External Finance, *Journal of Finance*, 52: 1131–1150.
- La Porta R, Lopez-de-Silanes F, Shleifer A and Vishny RW (1998). Law and finance. *Journal* of Political Economy, 106: 1113–55
- La Porta R, Lopez-de-Silanes F, Shleifer A and Vishny RW (1999). Investor protection: Origins, consequences, reform. Manuscript. Cambridge, MA, Harvard University.

- La Porta R, Lopez-de-Silanes F, Shleifer A and Vishny RW (2000). Agency problems and dividend policies around the world, *Journal of Finance*.
- Leff N (1979). Entrepreneurship and economic development: the problem revisited. *Journal* of *Economic Literature*, 17: 46–64.
- Leff N (1978). Industrial organization and entrepreneurship in developing countries: the economic groups. *Economic Development and Cultural Change*, 4: 661–675.
- Maddison A (1991). Dynamic Forces in Capital Development: A Long-Run Perspective. Oxford, Oxford University Press.
- Manne HG (1965). Mergers and the market for corporate control. *Journal of Political Economy*, 73: 693–706.
- Mayer C (1990). Financial systems, corporate finance and economic development. In: Hubbard RG, ed., Asymmetric Information, Corporate Finance and Investment. Chicago, University of Chicago Press.
- Mueller D ed. (1990). *The Dynamics of Company Profits: An International Comparison*. Cambridge, Cambridge University Press.
- Mueller D (1986). Profits in the Long Run. Cambridge, Cambridge University Press.
- Peacock A and Bannock G (1991). *Corporate Take-Overs and the Public Interest*. Aberdeen, Aberdeen University Press for the David Hume Institute.
- Phelps ES (1999). The global crisis of corporatism. Wall Street Journal, 25 March.
- Porter ME (1992). Capital disadvantage: America's falling capital investment system. *Harvard Business Review*, September–October: 65–82.
- Ravenscraft DJ and Scherer FM (1987). Mergers, Sell-Offs and Economic Efficiency. Washington, DC, Brookings Institution.
- Scherer FM (1988). Corporate take-overs: The efficiency argument. *Journal of Economic Perspectives*, 2 (1), winter.
- Shleifer A and Summers L. (1988). Breach of trust in hostile take-overs. In: Auerbach A, ed., Corporate Take-overs: Causes and Consequences. Chicago, University of Chicago.
- Shleifer A and Vishny RW (1997). A survey of corporate governance. *Journal of Finance*, 52: 737–783.
- Singh A (1971). *Take-overs, Their Relevance to the Stock Market and the Theory of the Firm.* Cambridge, United Kingdom, Cambridge University Press.
- Singh A (1975). *Take-overs*, economic natural selection and the theory of the firm. *Economic Journal*, September.
- Singh A (1992). Corporate takeovers. In: Eatwell, J, Milgate M and Newman P, eds., *The New Palgrave Dictionary of Money and Finance*. London:, Macmillan: 480–486.
- Singh A (1995a). Corporate Financial Patterns in Industrializing Economies: A Comparative International Study. Technical paper, International Finance Corporation (IFC), Washington, DC.
- Singh A (1995b). The causes of fast economic growth in East Asia. UNCTAD Review: 91-127.
- Singh A (1997). Financial liberalization, stock markets and economic development. *Economic Journal*, 107: 771–782.
- Singh A (1998a). Liberalization, the stock market and the market for corporate control: A bridge too far for the Indian economy? In: Ahluwalia, IJ and Little IMD, eds., *India's Economic Reforms and Development: Essays for Manmohan Singh.* Oxford, Oxford University Press.

- Singh A (1998b). Savings, investment and the corporation in the East Asian miracle. *The Journal of Development Studies*, 34 (6).
- Singh A (1998c). Financial crisis in East Asia: the end of the Asian model? Issues in Development, Discussion Paper 24, International Labour Office, Geneva.
- Singh A (1999). 'Asian capitalism' and the financial crisis. In: Michie J and Grieve Smith J, eds., *Global Instability: The Political Economy of World Economic Governance*, London, Routledge: 9–36.
- Singh A (2000). The Anglo-Saxon market for corporate control: The financial system and international competitiveness. In: Howes C and Singh A, eds., *Competitiveness Matters: Industry and Economic Performance in the US*. Ann Arbor, University of Michigan Press.
- Singh A and Dhumale R (1999). Competition policy, development and developing countries. *T.R.A.D.E. Working Paper* 7, South Centre, Geneva.
- Singh A and Hamid J (1992). Corporate financial structures in developing countries. Technical paper 1, International Finance Corporation, Washington, DC.
- Singh A and Weisse B (1998). Emerging stock markets, portfolio capital flows and long-term economic growth: Micro and macro perspectives. *World Development*, 26 (4): 607–622.
- Singh A and Weisse B (1999). The Asian model: A crisis foretold? *International Social Science Journal*, 160.
- Singh A, Singh A and Weisse B (2000). Information technology, venture capital and the stock market. *Cambridge Discussion Paper in Accounting and Finance* No. AF47, Department of Applied Economics, University of Cambridge, United Kingdom.
- Singh A and Zammit A (2000). International capital flows: Identifying the gender dimension. *World Development*, 28, (7): 1249–1268.
- Stein JC (1989). Efficient stock markets, inefficient firms: A model of myopic corporate behaviour. *Quarterly Journal of Economics*, 104: 665–70, November.
- The Economist (2001). Survey of Corporate Finance, 22 January-2 February.
- Tybout J (2000). Manufacturing firms in developing countries: How well do they do and why? *Journal of Economic Literature*, 38 (1), March.
- UNCTAD (2000). World Investment Report 2000: Cross-Border Mergers and Acquisitions and Development. Geneva and New York, United Nations publication sales no. E.00.II.D.20.
- Waring G (1996). Industry differences in the persistence of firm-specific returns. American Economic Review, 86: 1253–1265, December.
- Whittington G, Saporta V and Singh A (1997). The effects of hyper-inflation on accounting ratios: Financing of corporate growth in industrialising economies. International Finance Corporation Technical Paper 3, Washington, DC.
- Williamson OE (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York, The Free Press.
- Winters SG Jr (1964). Economic 'natural selection' and the theory of the firm. *Yale Economic Essays*. Yale University, Connecticut, Spring.
- World Bank (1993). *The East Asian Miracle: Economic Growth and Public Policy*. New York, Oxford University Press.

THE OECD EXPERIENCE WITH CAPITAL ACCOUNT LIBERALIZATION

Stephany Griffith-Jones, Ricardo Gottschalk and Xavier Cirera*

I. INTRODUCTION

Since the late 1980s a number of developing countries have pursued rapid capital account liberalization. Some of them have done so in a broader context of economic reforms. In most cases the "big-bang" approach of simultaneous reforms was adopted, thus departing from the conventional wisdom which recommended that reforms should be sequenced, with capital account liberalization occurring last (McKinnon, 1991; Williamson and Mahar, 1998).

The financial crises of the 1990s, resulting in severe developmental costs, have demonstrated the inconvenience of fast and deep capital account liberalization, particularly among emerging economies. Concerns have become widespread about the appropriateness of full capital account convertibility. There is a growing view that not only should capital account

^{*} We would like to thank Yilmaz Akyuz and Andrew Cornford for insightful suggestions. We are also grateful to Robert Ley for his valuable support.

liberalization come last – as the conventional wisdom advocates – but that it should be gradual and sequenced. Furthermore, for certain developing countries full capital account liberalization may not be desirable for a very long time.¹

Mexico and the Republic of Korea and, to a lesser extent, the Czech Republic figured among those emerging economies that undertook rapid capital account liberalization and experienced financial crises in the 1990s. Their liberalization pattern was largely associated with their recent accession to the OECD. This was in sharp contrast with the original members of that organization, which undertook gradual liberalization of their capital accounts – over 25 years in most cases – a process that was supported by the OECD Code of Liberalization of Capital Movements. The Code provided the framework that initially gave member countries the necessary mechanism for an orderly process of liberalization. This important fact, however, is neither sufficiently known nor acknowledged.

The objective of this study is to better inform the debate on capital account convertibility. To this end, the study examines the evolution of the OECD Code of Liberalization of Capital Movements since its inception. It shows that this initially allowed for a long-term, sequenced process that took due account of the heterogeneity of OECD member countries, but that it has changed over the past two decades, with a shift in emphasis towards rapid liberalization, irrespective of countries' conditions and circumstances.

The analysis of capital account liberalization in the OECD is presented in six sections. Following this introduction, section II provides a historical background and a short description of the OECD Code of Liberalization of Capital Movements. Section III describes how the Code has evolved over time, and identifies different liberalization patterns among the OECD member countries. Section IV examines the use of instruments provided by the Code that have enabled countries to pursue different liberalization paths. Section V compares the liberalization experiences of selected countries, highlighting the dissimilarities in their liberalization approaches and the results. Section VI concludes with a discussion of the relevant lessons.

II. THE CODE OF LIBERALIZATION OF CAPITAL MOVEMENTS: HISTORICAL BACKGROUND AND INSTRUMENTS

The first years of the post-war period were marked by extensive restrictions on all sorts of balance-of-payments operations, from trade and services to capital movements.² Although they were part of countries' efforts to reconstruct their economies (OECD, 1993), these restrictions reflected, above all, an economic approach that asserted, as a basic value, the need to preserve autonomy in the conduct of national policies.

Initiatives towards reducing such restrictions began in the late 1940s, with European countries forming the Organisation for European Economic Co-operation (OEEC) in 1948.³ In the subsequent two years, the OEEC member countries agreed to gradually remove restrictions on trade and current "invisible" operations, as well as to avoid new restrictions on the current account. In 1950, a Code of Trade Liberalization was established, and in 1951 it was extended to include invisible current account operations, especially those related to economic activities and international trade. Later in the 1950s, restrictions on current payments were dropped in most of the OECD countries (OECD, 1987). Recommendations to liberalize capital movements had started slowly and tentatively in the mid-1950s, leading eventually to the creation of the OEEC Code of Liberalization of Capital Movements in 1959. Its structure was similar to that of the Code for Current Invisible Operations, but with a narrower scope regarding the sorts of operations to be liberalized.

In December 1961, the year when the OECD was created,⁴ the existing Codes were adapted to form the OECD Code of Liberalization of Current Invisible Operations and the OECD Code of Liberalization of Capital Movements. According to the OECD, the latter Code was created as an agreed multilateral framework to promote capital account liberalization among the OECD member countries.⁵ From its originally narrow scope, it expanded gradually over time. This implied an embedded flexibility, which permitted the OECD member countries initially to pursue a gradual liberalization of their capital account in conformity with their specific needs and circumstances. This flexibility was made possible by the existence of legal procedures – reservations and derogation – which countries used extensively in order to dictate their own liberalization path.

Countries aiming to pursue a gradual liberalization process could – and still can – lodge *reservations* (i.e. restrictions under specified rules) on items covered by the Code. A reservation can be applied when the country adheres to the Code, when a new item is included in the Code or when a specific item begins to apply to the country concerned.⁶ The OECD created two lists (A and B) in order to prevent countries from keeping reservations in place even when they do not use them. For the items in list A, once such reservations are withdrawn, they cannot be imposed again. For items on list B, countries can reimpose reservations at any time. With list B, the OECD hoped that countries would be more inclined to remove reservations, as these can be reimposed in the future if need arises.

Countries can also apply *derogation*, which can be general (Article 7a) or specific (Articles 7a and 7b). General derogation is a dispensation from all operations specified in the Code, and can be applied if the country finds that its economic and financial situation justifies such a course of action, with no time specified for its removal. In the past, countries that have adopted general derogation are Greece, Iceland, Spain, Turkey and Portugal. This has permitted them to liberalize very slowly and over a long period of time, in most cases over 20 years. More recently, although formally the right to impose a general derogation still exists, countries have not used it on joining the OECD. Specific derogation can be applied in two cases: first, when a country faces economic and financial problems caused by liberalization (Article 7b), and second, when it faces serious balance-of-payments difficulties (Article 7c). The latter kind of derogation is temporary and is expected to be lifted as soon as the problems justifying its application are overcome. In principle, it is not permitted to last longer than 18 months.⁷

III. EVOLUTION OF THE OECD CODE AND PATTERNS OF LIBERALIZATION AMONG THE OECD MEMBER COUNTRIES

From its inception in the early 1960s until the late 1980s, the OECD Code of Liberalization of Capital Movements was gradually expanded (see box 1 for a detailed description of the main items of the Code and major changes over time).

In the early 1960s, the main items covered by the Code included inward foreign direct investment (FDI), long-term portfolio flows, and transactions related to business and trade. Member countries decided not to liberalize short-term operations in order to avoid balance-of-payments problems caused by speculative activities of investors, and to preserve autonomy in the conduct of their economic policy, particularly with regard to the exchange rate (Poret, 1998).

In the 1970s, an important step towards liberalization was the inclusion of collective securities in the Code. In the 1980s, inward FDI was further encouraged, with the adoption of the right of establishment and the inclusion of conditions of reciprocity. Finally, in 1989 a major step towards further liberalization was taken with the inclusion in the Code of short-term transactions in securities and inter-bank markets, short-term financial credits and loans, and foreign exchange operations (including spot and forward transactions, swaps, futures, options and other innovative instruments). The year 1989 can thus be considered a turning point; since then virtually all types of capital movements have been covered by the Code.⁸ Meanwhile, most operations involving portfolio flows have been moved to list A, which, as noted earlier, implies that, once withdrawn, reservations on these operations cannot be reimposed.

Thus, gradualism was an important feature of the initial OECD approach to capital account liberalization. A second important feature was sequencing: the OECD member countries first liberalized long-term capital flows, particularly FDI,⁹ followed by short-term flows, particularly short-term portfolio flows. The latter category of flows was clearly specified in the Code only in the late 1980s. Gradualism and sequencing were part of a

Box 1

ITEMS INITIALLY COVERED BY THE CODE AND MAJOR CHANGES OVER TIME

- Initially, the Code covered the following items: inward and outward long-term FDI, liquidation of non-resident-owned FDI,¹ personal capital movements (e.g. exchange authorizations to nationals and foreigners, inheritances, dowries, gifts), use and transfer of nonresident-owned funds, physical movements of securities and buying and selling of securities.²
- Major changes in the Code occurred in the following years: 1964, 1973, 1984 and 1989.

1964: The list was considerably expanded, to include new items: operations in real estate, credits directly linked to international commercial transactions and services, financial credits and loans, admission of securities to capital markets, sureties and guarantees, and physical movements of capital assets other than securities (see table A.1).

In addition, the existing items were better specified. For example, on direct investment, the Code permitted long-term loans (of five years or more) for the purpose of establishing lasting FDI and removed the possibility of countries restricting operations if they believed such operations to be detrimental to their interests. On physical movements of capital, the Code introduced a distinction between bonds and securities.

Furthermore, a number of items were placed in list B, such as: the trading of securities in unrecognized security markets, and credits directly linked to international transactions which are short- and medium-term (up to five years) and provided by (non-financial institutions) residents to foreigners, in addition to other outward credit flows not specified in list A.

The changes apparently reflected a desire to better discriminate between operations within each category listed in the Code so as to

Box 1 (continued)

provide countries with the flexibility to impose restrictions on certain operations, particularly those involving securities and certain kinds of credits and loans. Indeed, most of the member countries have lodged reservations on items of securities placed in list B. As for credits and loans, a number of restrictions have been imposed on those not related to international trade. As argued in OECD (1990: 43), countries have targeted such types of credits and loans because they are seen as being "of less importance to the 'real' side of the economy, potentially destabilising, and an easy conduit for circumventing other controls".

1973: The Code was amended to include operations in collective investment securities in List A. Specifically, buying and selling of collective investment securities by residents operating abroad and non-residents operating in the country concerned were permitted. These operations, however, had to be carried out through authorized resident agents. Moreover, residents were expected to hold funds and securities only through such agents, and the contracting of buying and selling was permitted only in the spot market.

1984: The definition of inward FDI was expanded to include the main features of the right of establishment, such as licences, concessions, requirements for running an enterprise and the type of operating - subsidiary, branch or agency (OECD, 1995: 22). In 1986, the principle of non-discrimination³ was relaxed, with the inclusion in the Code of conditions of reciprocity for inward FDI. This amendment allows a country to restrict the conditions under which it permits access to its markets for a direct investor to those applying in the investor's country of origin.

1989: The Code explicitly discriminates between short- and longterm securities and bonds, and covers the new and innovative forms of financing, such as swaps, futures and options. As regards operations in securities on capital markets, those of more than one year previously placed in list B (see above) are now in list A, while those of less than one year remain in list B under the new item, "operations on money markets". The Code is also updated to include in list B other operations in negotiable instruments and non-securitized claims, as well as operations of deposit accounts and those in foreign exchange, not

Box 1 (concluded)

specified in list A. Finally, the Code adds financial back-up facilities to the item on sureties and guarantees, while those facilities that are not related to international trade are placed in list B (see table A.2 for changes).

- More specifically, the area of FDI covered the creation or extension of a wholly-owned enterprise, subsidiary or branch, acquisition of full ownership of an existing enterprise, participation in new existing enterprises and long-term loans of five years or more.
- ² Physical movements of securities are far more restricted than other operations involving securities. For example, in certain cases only movements for administrative purposes are permitted and only on a temporary basis. A summary of the 1960 Code list and the amendments made thereafter can be found in table A.1.
- ³ According to the principle of non-discrimination originally established in the Code, a country should not discriminate between member countries when applying liberalization measures or restrictions. This however can be relaxed when a country, as a member of a special customs or monetary union, applies liberalization measures to other member countries of the union without extending such measures to non-members.

widely accepted view in the 1960s and early 1970s on how capital account liberalization should be pursued. At that time, growth and full employment were major policy objectives, and autonomous national policies, which could be badly affected by premature liberalization, were seen as a basic condition to achieve them.

In the 1970s, although further liberalization was carried out through an expansion of the provisions of the Code, with the inclusion of collective securities, countries remained cautious, reinforcing rather than relaxing their restrictions. Evidence of their cautious approach was that they continued to maintain fairly numerous regulations (which directly and
indirectly affected the balance-of-payments operations) and exchange controls not captured by the Code, partly in response to the collapse of the Bretton Woods system and the first oil crisis.

However, gradualism soon began to wane as a result of a major ideological shift towards greater liberalization in the late 1970s; OECD member countries no longer followed changes in the Code but rather anticipated them. Many of them speeded up liberalization by removing their reservations and derogation and by dropping restrictions not captured by the Code. By the late 1980s, when the Code included short-term financial operations, many countries had almost fully liberalized their capital accounts.

Another important influence on capital account liberalization in the OECD area was the process of deregulation in the domestic financial sector. This process, which had begun in OECD countries in the early 1960s, intensified in the late 1970s and early 1980s in search of a higher degree of efficiency and competition for the sector (OECD, 1989). In addition, membership of the then European Economic Community (EEC, the precursor to the EU) also influenced the path of liberalization of many OECD countries at the time; the EEC regime for capital movements, particularly its 1988 directive, represented a significant step towards full capital account convertibility. (For a detailed account of the EEC/EU regime for capital movements, see Akyuz and Cornford, 1994.)

In the 1990s, OECD member countries continued to liberalize further, especially the new members, which faced pressure to catch up quickly with the original members. Some of these new members probably accepted tough conditions to join the OECD because of various incentives to do so. For example, becoming an OECD member country gave them a lower risk weight, according to the 1988 Basel Accord, which meant that banks would probably lend more and/or with lower spreads. Paradoxically, though, Mexico, whose risk weight was lowered as a result of its accession to the OECD in 1994, faced a currency crisis that same year.

Thus, another important feature of OECD membership was that countries followed different liberalization paths. Three main categories of

countries can be identified, according to the timing and speed of their liberalization (see figure 1). The first wave comprised the developed countries of the OECD area.¹⁰ These countries undertook a fairly gradual liberalization path, with a speeding up only from the early 1980s onwards. The second wave constituted those members that were middle-income countries at the time of accession to the OECD: Greece, Iceland,¹¹ Portugal, Spain and Turkey. They liberalized very slowly for more than 20 years (due to the prolonged use of the general derogation, as noted above), with some opening being observed only towards the late 1980s and a speeding up of the process from the early 1990s onwards. Finally, the third wave comprised the emerging economies that acceded to the OECD more recently: the Czech Republic, Hungary, Mexico, Poland and the Republic of Korea. These newcomers, though not ready for full liberalization, had to face tougher liberalization conditions to enter the organization, including no restrictions on payment transfers, an open and transparent regime for FDI, liberalization of long-term transactions, and a short time frame for further liberalization (Poret, 1998).¹²

Even within each of these categories the speed of liberalization differed, especially among the first-wave countries. In this group the United States, Switzerland and Canada adopted a more liberal approach in the

Countries/years	1960s	1970s	1980s	1990s
First wave				
Second wave				
Third wave				

Figure 1 SPEED OF LIBERALIZATION, BY GROUPS OF COUNTRIES

Source: Authors' compilation.

Note: White = no liberalization; light shade = slow liberalization; dark shade = fast liberalization.

early 1950s, and Germany abolished most of its controls by 1958 (OECD, 1993). Therefore these countries began liberalizing even before their adoption of the OECD Code, though, as discussed below, most of them later resorted to controls (and benefited from the safeguards of the Code), either in response to balance-of-payments difficulties or to avoid excessive capital inflows.

Among the remaining countries of the first-wave group, which constitute the large majority of members, liberalization was initially very gradual, with restrictions of different sorts being kept during the first 15 to 20 years, for the purpose of retaining autonomy to conduct economic and monetary policies and avoiding macroeconomic instability. After this initial period marked by caution, these countries started to liberalize more quickly, but in different ways. For example, Australia, Japan, New Zealand and the United Kingdom lifted the remaining extensive restrictions virtually in one sweep. The United Kingdom abolished nearly all its capital controls in 1979, and Japan did the same in 1980. Australia almost completely liberalized its capital movements in 1983, and New Zealand in 1984 (OECD, 1990: 40-41). Rapid liberalization in that group of countries was motivated mainly for ideological reasons, except in Japan. In the latter case, the quick move towards a liberal capital account reflected a structural change in the country's external sector, which started to witness a growing surplus in the balance of payments.¹³ The remaining first-wave countries speeded up liberalization but retained a measure of gradualism: the Netherlands completed liberalization by 1986, and Denmark and France in 1988 and 1989 respectively. Finally, only between 1988 and 1990 did Austria, Ireland, Italy, Norway and Sweden drop a substantial number of restrictions.

Among the second-wave category of countries, liberalization was more homogeneous than among the first-wave countries, as all of them (except Spain) made use of a general derogation until the 1980s. Once they removed the use of that instrument, they pursued a gradual liberalization path, though at different speeds. Turkey, for example, dropped the general derogation in 1985, and kept just a few reservations while moving towards a very open capital account by the end of the 1980s. This pattern seemed to be associated with the country's political developments, marked by an ideological shift in the direction of a market-based economic approach. Other countries such as Portugal and Spain, which faced pressures in the 1980s to liberalize due to their accession to the EEC, were, nevertheless, more cautious. Portugal dropped its general derogation in 1981, but kept a specific derogation until 1987 – one year after its entry into the EEC – and invoked it again between mid-1991 and late 1992 (see below). It also kept in place a large number of reservations throughout the 1980s and until 1992, when it undertook broad liberalization. The liberalization path pursued from then onwards was closely associated with the EEC requirements for capital account liberalization. As for Spain, it had dropped the general derogation in the early 1960s, but slowed down the liberalization process by relying on a wide variety of reservations and other restrictions until the early 1990s. In the next section, we describe in greater detail Spain's experience with capital account liberalization.

Finally, as regards the third-wave countries, owing to the requirements for obtaining OECD membership, none of them made use of the general derogation. Therefore, unlike the first- and second-wave countries, the third-wave countries liberalized their capital accounts very rapidly, either before or at the time of their entry into the organization. This seems particularly surprising in the case of the transition economies, which were only just starting to develop the necessary market institutions.

Below we attempt to describe how countries proceeded with liberalization of their capital accounts through their use of the reservation and derogation instruments. However, a number of caveats are in order when adopting this approach. On the one hand, resort to derogation and reservations over time might merely reflect a precautionary approach, thus not showing the precise degree of the countries' capital account liberalization. On the other hand, many countries kept indirect controls over capital movements that were not captured by the Code. As argued in OECD (1990: 41), this was particularly true until the mid-1970s, when countries such as Belgium, France, Ireland, Italy, Japan, the Netherlands and the United Kingdom "allowed certain capital movements to take place only through particular closed-circuit payments channels or alternative exchange markets". Among other kinds of controls also extensively used were restrictions on the overall positions of financial institutions, reserve requirements and restrictions on interest payments. Germany, for example, imposed reserve requirements on banks' and non-banks' external liabilities between 1971 and 1974, whereas Switzerland prohibited interest payments on non-residents' deposits in 1972 (OECD, 1990: 41).

IV. USE OF DEROGATION AND RESERVATIONS

This section provides a more detailed analysis of the pattern of liberalization among OECD member countries by examining their use of reservations and derogation. These are the two main instruments they have used to adjust the Code to their specific policy objectives and needs.

A. Analysis of derogation in the Code

(i) The use of general derogation (Article 7a)

As explained above, derogation can be specific (Articles 7b and 7c), but most importantly it can take the form of a general dispensation from the Code (Article 7a). It is thus a powerful measure for determining the true pattern of capital account liberalization.

In the past, the OECD member countries that made use of general derogation at the time of adherence to the Code – the second-wave countries – kept this instrument in force for more than 10 years (excluded Spain), the average being 24.5 years (in sharp contrast with the third-wave countries which did not apply the general derogation at all). Greece and Portugal removed the general derogation in the early 1980s, Turkey in 1985 and Iceland in 1990 (see table A.3). This means that in fact this group of countries only started to liberalize their capital accounts in the 1980s.

(ii) The use of specific derogation (Articles 7b and 7c)

Since then, some of the second-wave countries have applied Articles 7b and 7c on a number of occasions (table A.3). As explained above, Article 7b allows for the use of a specific derogation when the country faces economic and financial problems caused by liberalization, and Article 7c when the country faces serious balance-of-payments difficulties.

Portugal, which removed the general derogation in 1981, already had specific derogation in place since 1977. This lasted until 1987 and was invoked again between mid-1991 and late 1992. Although specific, the derogation clause covered quite a large number of items relating to both capital inflows and outflows (OECD, 1990: 42). Iceland, which removed the general derogation in December 1990, applied a specific derogation in January 1993. Spain, unlike the other countries, made use of a general derogation only in the early period of adherence to the Code – from 1959 to 1962 – and it applied a specific derogation for three years during the 1980s (from mid-1982 to mid-1985).

Most of the first-wave countries have made considerable use of specific derogation over the years. Between the creation of the Code and 1993, their average use of the articles 7b and 7c was 4.5 years. Countries that sought such a recourse for relatively long periods (five years or more) were Australia, Austria, Finland, Germany, Italy, Norway, Sweden and the United States. On the other hand, Belgium, Canada, France, Ireland, Luxembourg, the Netherlands and New Zealand did not apply the derogation clauses (table A.3).

As reported in OECD (1990), in the 1960s and early 1970s countries such as the United Kingdom, the United States, Italy and Sweden used the derogation procedure to avoid capital outflows, while in the early 1970s another group of countries – Australia, Austria, Germany and Japan – applied the derogation clause to prevent excessive capital inflows. In the 1980s and 1990s, the use of derogation became far less frequent and was restricted to the Scandinavian countries.

B. Analysis of reservations in the Code

A first step in the analysis of the use of reservations by the OECD member countries is to look at the number of items that have been subject to reservations in each country over time.¹⁴ As explained above, these items are distributed between lists A and B. In the former list, once withdrawn reservations cannot be reimposed, whereas in the latter they can be.

(i) The first-wave countries

The first-wave countries have exhibited a fairly homogeneous pattern in the use of reservations. As can be seen from table 1, initially the number of reservations each country lodged under the Code increased gradually, reaching a peak in 1978, with an average number of 7.1 against 2.9 in 1960. This increase reflected not only the expansion of the Code to include more items of the capital account, but also a real attempt to impose restrictions on balance-of-payments movements. The need for such restrictions was associated with the problems relating to the Bretton Woods system in the late 1960s and early 1970s and with the effects of the 1973 oil shock.

From 1978 a gradual decline in the number of reservations can be observed (table 1). This decline stopped (and was in some cases reversed) at the turn of the 1870s to the 1980s. Two major exceptions to that deserve mentioning: the United Kingdom and Japan; the former removed all of its reservations between 1979 and 1982, and the latter reduced reservations from five to two over the same period. This is consistent with the fact noted above, that these two countries almost completely liberalized their capital accounts at the time, from a previously fairly restrictive regime.

From 1982 onwards, the decline in the number of reservations resumed and accelerated during the decade. It is noteworthy that the number of restrictions on list B was larger among the first-wave countries than among the second-wave countries, which suggests that for the former (the developed countries) such a recourse was temporary and associated with balance-of-payments problems.

86	Stephany	Griffith-J	IONES,	Ricardo	Gottschalk	AND XAVI	ier Cirera
----	----------	------------	--------	---------	------------	----------	------------

		1960	1969	1978	1982	1990	1992	1997
Austria	List A	2	3	4	3	1	3	1
	List B	0	3	4	4	2	4	1
	Total	2	6	8	7	3	7	2
Australia	List A			5	5	4	2	2
	List B			5	5	5	5	3
	Total			10	10	9	7	5
Belgium	List A		1	2	2	3	3	4
	List B		1	1	1	1	2	1
	Total		2	3	3	4	5	5
Canada	List A					2	2	2
	List B					2	1	1
	Total					4	3	3
Denmark	List A	2	3	4	3	1	1	1
	List B	0	4	4	4	3	1	1
	Total	2	7	8	7	4	2	2
Finland	List A			7	6	5	3	2
	List B			5	5	5	3	1
	Total			12	10	9	6	3
France	List A		1	2	2	2	3	3
	List B		2	5	4	1	1	1
	Total		3	7	6	3	4	4
Germany	List A					1	2	2
	List B					0	1	1
	Total					1	3	3
Ireland	List A	2	4	5	5	4	8	1
	List B	0	5	5	5	4	8	1
	Total	2	9	10	10	8	16	2
Italy	List A	4	5	6	5	4	3	2
	List B	0	5	5	5	4	0	0
	Total	4	10	11	10	8	3	2
Japan	List A		4	1	1	1	2	2
	List B		5	4	1	0	1	1
	Total		9	5	2	1	3	3

Table 1 RESERVATIONS LODGED BY FIRST-WAVE COUNTRIES, 1960–1997

LuxembourgList A List B1 Total0 20 00 00 00 0NetherlandsList A List B2 Total2 62 62 61 11 11 1New ZealandList A List B2 Total2 62 61 61 11 11 1New ZealandList A List B3 Total5 65 5 55 64 2 22 22 11 11 1NorwayList A List B Total3 65 5 55 5 54 2 22 22 2SwedenList A List B Total4 43 44 42 4 42 42 2 22 2SwitzerlandList A List B Total1 41 41 41 41 41 41 4United Kingdom TotalList A List B Total3 43 43 43 42 42 2 22 2 2TotalList A List B Total3 41 41 41 41 41 41 41 4United Kingdom TotalList A 420 437 437 434 42 424 424 424 424 424 424 424 424 424 424 424 424 424 424 424 42			1960	1969	1978	1982	1990	1992	1997
LuxembourgList A List B1000000NetherlandsList A List B2221111New ZealandList A List B4440000New ZealandList A List B444232NorwayList A List B3555422Total31010933SwedenList A List B4344222List A List B43442222Total434422221SwitzerlandList A List B1111321United KingdomList A List B33340111United StatesList A List B1111132231United StatesList A List B203757494047343433			-	-	-				
List B Total100000NetherlandsList A List B222111New ZealandList A List B444000NorwayList A List B3555422NorwayList A List B3101010933SwedenList A List B4344222SwitzerlandList A List B4344222SwitzerlandList A List B1111321Total43443633SwitzerlandList A List B1111111United KingdomList A List B33340111United StatesList A List B111111111United StatesList A List B20375749404734Cotal203757494047343550AverageList A List B2.062.643.352.882.112.471.79AverageList A List B2.856.077.126.124.114.322.63AverageList A List B<	Luxembourg	List A		1	0	0	0	0	0
Total20000NetherlandsList A List B222111New ZealandList A List B Total444232NorwayList A List B Total35555422NorwayList A List B Total35555511NorwayList A List B35555511NorwayList A List B43442222SwedenList A List B43442222List B Total11113233SwitzerlandList A List B Total3340111United KingdomList A List B Total33401111United StatesList A List B Total20375749404734AverageList A List B Total2.862.643.352.882.112.471.79AverageList A List B Total2.862.643.352.882.112.471.79AverageList A List B Total2.862.643.352.882.112.471.79AverageList A List B <td> 5</td> <td>List B</td> <td></td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	5	List B		1	0	0	0	0	0
Netherlands List A List B Total 2 4 2 4 2 4 2 4 2 4 1 4 1 4 <th1 4 1 4<!--</td--><td></td><td>Total</td><td></td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></th1 		Total		2	0	0	0	0	0
Instruct List B Total List B 6 List A 6 List A 6 List A 6 List A 6 List A 7 List A 1 List A 3 List A 4	Netherlands	List A		2	2	2	1	1	1
Total666111New ZealandList A List B44232List B44111Total88343NorwayList A List B3555422List B0555511Total3101010933SwedenList A List B4344222List B0555321Total4899543SwitzerlandList A List B111132United KingdomList A List B3340111United StatesList A List B1111322TotalList A List B0550000Total334011111United StatesList A List B Total20375749404734List B List B Total2.862.643.352.882.112.471.79AverageList A List B Total2.856.077.126.124.114.322.63	Homonando	List B		4	4	4	0	0	0
New Zealand List B List A List B 4 Total 4 4 4 4 2 4 3 4 2 1 1 Norway List A List B 3 5 5 5 4 2 2 Norway List A List B 3 5 5 5 4 2 2 Sweden List A List B 4 3 4 4 2 2 2 Sweden List A List B 4 3 4 4 2 2 2 Switzerland List A List B 1 1 1 1 3 2 3 1 United Kingdom List A List B 3 3 4 0 1 <td< td=""><td></td><td>Total</td><td></td><td>6</td><td>6</td><td>6</td><td>1</td><td>1</td><td>1</td></td<>		Total		6	6	6	1	1	1
New ZelandList A List B444111Total88343NorwayList A List B3555422List B0555511Total3101010933SwedenList A List B4344222List B0555321Total4899543SwitzerlandList A List B111132Inited KingdomList A List B3340111United StatesList A List B1111322Total111113231United StatesList A List B0000111United StatesList A List B20375749404734Cotal2085121104788250AverageList A List B2.862.643.352.882.112.471.79AverageList A List B2.856.077.126.124.114.322.63	New Zealand	Liet A			1	1	2	3	2
List D441111Total88343NorwayList A3555422List B0555511Total3101010933SwedenList A4344222List B0555321Total4899543SwitzerlandList A111132List B3340111United KingdomList A334011United StatesList A334011United StatesList A203757494047Total1111142TotalList A203757494047AverageList A20851211047682AverageList A2.862.643.352.882.112.471.79AverageList B0.003.433.763.242.001.840.84Total2.856.077.126.124.114.322.63		List R			4 1	4 1	∠ 1	3 1	∠ 1
Norway List A 3 5 5 4 2 2 List B 0 5 5 5 5 1 1 Total 3 10 10 10 9 3 3 Sweden List A 4 3 4 4 2 2 2 List B 0 5 5 5 3 2 1 Total 4 8 9 9 5 4 3 Switzerland List A 1 1 1 1 3 2 List B 3 3 3 2 3 1 United Kingdom List A 3 3 4 0 1 1 1 United States List A 3 3 4 0 1 1 1 United States List A 3 8 9 0 1 1 1		LISI D Total			4 Q	4 Q	2 I	і Л	2 I
NorwayList A List B3 05 55 54 52 2SwedenList A List B43 044 42 22 2SwedenList A List B43 044 42 22 2SwitzerlandList A List B Total11 41 81 91 32 3SwitzerlandList A List B Total1 41 41 41 41 32 3United KingdomList A List B Total3 33 44 40 41 41 4United StatesList A List B Total1 41 41 41 41 41 4United StatesList A List B Total20 337 5749 4047 4734 42AverageList A List B Total20 2037 8555 32 2882.11 2.412.47 4.111.79 4.32		iulai			0	0	3	4	3
List B Total0 35 35 55 51 1 11 91 3SwedenList A List B43 044 52 52 32 1 1 3SwitzerlandList A List B Total1 41 81 91 11 1 33 22 1 3SwitzerlandList A List B Total1 41 41 41 41 33 22 3United KingdomList A List B Total3 33 44 40 41 41 31 2 3United StatesList A List B Total1 201 371 471 321 31 32TotalList A List B Total20 3737 5757 4940 4047 4334 42AverageList A List B Total2.86 2.642.88 3.762.11 3.242.00 2.001.84 4.840.84 2.63	Norway	List A	3	5	5	5	4	2	2
Total 3 10 10 10 9 3 3 Sweden List A 4 3 4 4 2 2 2 List B 0 5 5 5 3 2 1 Total 4 8 9 9 5 4 3 Switzerland List A 1 1 1 1 3 2 3 1 Total 4 4 4 3 6 3 3 3 2 3 1 United Kingdom List A 3 3 4 0 1 </td <td></td> <td>List B</td> <td>0</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>1</td> <td>1</td>		List B	0	5	5	5	5	1	1
Sweden List A List B 4 0 3 5 4 5 4 5 2 5 2 3 2 1 Switzerland List A List B 1 1 1 1 3 2 Switzerland List A List B 1 1 1 1 3 2 United Kingdom List A List B 3 3 4 0 1 1 1 United Kingdom List A List B 3 3 4 0 1 1 1 United Kingdom List A List B 0 5 5 0 0 0 0 Total 3 8 9 0 1		Total	3	10	10	10	9	3	3
List B Total0 45 85 93 92 51 4SwitzerlandList A List B1 31 31 31 33 32 33 3United KingdomList A List B3 03 543 33 32 33 3United KingdomList A List B3 03 543 33 34 40 41 41 11 1United KingdomList A List B Total3 33 34 40 41 11 11 1United StatesList A List B Total1 41 11 11 13 32 2TotalList A List B Total20 2037 4557 4940 40 4747 34 4AverageList A List B Total2.86 2.642.64 3.353.85 2.88 2.112.47 2.471.79 1.79 2.63	Sweden	List A	4	3	4	4	2	2	2
Total 4 8 9 9 5 4 3 Switzerland List A 1 1 1 1 1 3 2 List B 3 3 3 3 2 3 1 Total 4 4 4 4 3 6 3 United Kingdom List A 3 3 4 0 1 1 1 United Kingdom List A 3 3 4 0 1 1 1 United States List A 3 8 9 0 1 1 1 United States List A 1 1 1 1 3 2 Total 1 1 1 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 <		List B	0	5	5	5	3	2	1
Switzerland List A List B Total 1 4 1 4 <th1 4 1 4<!--</td--><td></td><td>Total</td><td>4</td><td>8</td><td>9</td><td>9</td><td>5</td><td>4</td><td>3</td></th1 		Total	4	8	9	9	5	4	3
List B Total333231United KingdomList A List B3340111United KingdomList A List B33401111United StatesList A List B11111111United StatesList A List B1111132TotalList B List B000010Total111142TotalList A List B Total20375749404734AverageList A List B Total2.862.643.352.882.112.471.79AverageList A List B Total2.862.643.352.882.112.471.79AverageList A List B Total2.856.077.126.124.114.322.63	Switzerland	List A		1	1	1	1	3	2
Total 4 4 4 3 6 3 United Kingdom List A 3 3 4 0 1 1 1 List B 0 5 5 0 0 0 0 Total 3 8 9 0 1 1 1 1 United States List A 1 1 1 1 3 2 List B 0 0 0 0 1 1 1 1 1 United States List A 1 1 1 1 3 2 List B 0 0 0 0 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78		List B		3	3	3	2	3	1
United Kingdom List A 3 3 4 0 1 1 1 List B 0 5 5 0 0 0 0 Total 3 8 9 0 1 1 1 United States List A 1 1 1 1 3 2 List B 0 0 0 0 1 1 1 1 1 Total 1 1 1 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.2		Total		4	4	4	3	6	3
List AList ACSGFOTTTList B0550000Total3890111United StatesList A111132List B000010Total111142TotalList A20375749404734List B0486455383516Total2085121104788250AverageList A2.862.643.352.882.112.471.79List B0.003.433.763.242.001.840.84Total2.856.077.126.124.114.322.63	United Kingdom	List A	3	3	Δ	٥	1	1	1
Total 3 8 9 0 1 1 1 United States List A 1 1 1 1 1 3 2 List B 0 0 0 0 0 1 1 1 3 2 List B 0 0 0 0 0 1 1 1 3 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total List B 0 48 64 55 38 35 16 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63	Ginted Kingdolli	List B	0	5	5	0	0	0	0
United States List A 1 1 1 1 1 1 3 2 List B 0 0 0 0 1 1 1 1 0 Total 1 1 1 1 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63		Total	3	8	9	0	1	1	1
Onniced States List A 1 1 1 1 1 1 1 3 2 List B 0 0 0 0 0 1 0 Total 1 1 1 1 1 0 1 0 Total 1 1 1 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63						4			
List B 0 0 0 0 0 1 0 Total 1 1 1 1 1 4 2 Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63	United States	LIST A		1	1	1	1	3 1	2
Total List A 20 37 57 49 40 47 34 List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63		LISI B		U 1	U 1	1	U 1	1	0
Total List A List B 20 0 37 48 48 57 64 64 121 49 55 104 40 47 38 35 38 35 36 47 34 16 55 38 38 35 50 Average List A List B Total 2.86 0.00 3.43 2.64 3.76 3.35 3.24 3.24 2.81 2.00 2.47 1.84 1.79 0.84 0.84 2.63		TOTAL		1	1	Ĩ	1	4	2
List B 0 48 64 55 38 35 16 Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63	Total	List A	20	37	57	49	40	47	34
Total 20 85 121 104 78 82 50 Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63		List B	0	48	64	55	38	35	16
Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63		Total	20	85	121	104	78	82	50
Average List A 2.86 2.64 3.35 2.88 2.11 2.47 1.79 List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63									
List B 0.00 3.43 3.76 3.24 2.00 1.84 0.84 Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63	Average	List A	2.86	2.64	3.35	2.88	2.11	2.47	1.79
Total 2.85 6.07 7.12 6.12 4.11 4.32 2.63	Ŭ	List B	0.00	3.43	3.76	3.24	2.00	1.84	0.84
		Total	2.85	6.07	7.12	6.12	4.11	4.32	2.63

Table 1 (concluded) **RESERVATIONS LODGED BY FIRST-WAVE COUNTRIES, 1960–1997**

Source: Authors' compilation, based on the OECD Code of Liberalization of Capital Movements (various issues). Note: Totals do not add up due to rounding.

(ii) The second-wave countries

Table 2 shows the number of reservations the second-wave countries applied between 1960 and 1997. It is clear that they kept quite a large number of reservations – more than 10 on average – for most of the period between 1960 and 1992. This means that, on average, each country imposed

		1960	1969	1978	3 1982	1990) 1992	1997	,
Greece	List A				11	10	11	2	
	List B				6	5	8	1	
	Total				17	15	19	3	
Iceland	List A							2	
	List B							1	
	Total							3	
Portugal	List A	2	7	8	8	6	6	2	
	List B	0	6	6	6	6	9	0	
	Total	2	13	14	14	12	15	2	
Spain	List A		6	6	6	4	5	2	
	List B		6	6	6	6	8	1	
	Total		12	12	12	10	13	3	
Turkey	List A					5	4	4	
,	List B					5	4	3	
	Total					10	8	7	
Iotal	List A	2	13	14	25	25	26	12	
	List B	0	12	12	18	22	29	6	
	Total	2	25	26	43	47	55	18	
A	1:-+ 0	0.00	0.50	7.00	0.00	0.05	0.50	0.40	
Average	LIST A	2.00	0.50	7.00	8.3U	0.25	0.50	2.40	
	LIST B	0.00	6.00	6.00	6.00	5.50	7.25	1.20	
	Total	2.00	12.50	13.00	14.30	11.75	13.75	3.60	

 Table 2

 RESERVATIONS LODGED BY THE SECOND-WAVE COUNTRIES, 1960–1997

Source: Authors' compilation, based on the OECD Code of Liberalization of Capital Movements (various issues).

Note: Totals do not add up due to rounding.

restrictions (total or partial) on at least 10 items of the Code. Until the early 1980s such reservations coexisted with the use of general derogation in all cases, except for Spain. The reason for this was that reservations had to be adopted at the time of adherence to the Code and when a new item was included. This precautionary approach enabled the countries to have reservations in place during the 1980s, when derogations were dropped. As can be seen from table 2, the number of reservations kept during the 1980s was very high, averaging 12 to 14, with a marginal increase from 1990 to 1992.

From 1992 onwards an important change occurred: the number of reservations declined very rapidly, reaching an average of 3.6 in 1997, which is very low, especially if we take into account the fact that derogation had been removed. For Greece, Portugal and Spain, the speeding up of the liberalization process was probably associated with their accession to the EEC. Turkey, a non-EEC member, however, dropped the general derogation in 1985, and from then until 1997 kept a lower-than-average number of reservations for most of the time.

Three phases in the liberalization process can thus be identified for the second-wave countries through the analysis of the use of derogation and reservations. Initially, between the early 1960s and 1980s, due to the use of general derogation, liberalization was extremely slow, except in Spain. Then, for most of the 1980s, with the removal of the general derogation but with a significant number of reservations in place, a gradual liberalization process took place. Finally, during the 1990s, with the rapid decline in the number of reservations, reaching an average of 3.6 per country, liberalization speeded up considerably for the first time.

(iii) The third-wave countries (or newcomers)

For the emerging-market, third-wave countries, the analysis is restricted to the year 1997, given that all of them adhered to the Code only by about the mid-1990s. According to table 3, at first view the newcomers in 1997 were in a situation similar to that of the second-wave countries in the 1980s; their number of reservations averaged 11.4. However, in relative

RES	ERVATION	S LODGE	D BY THE	E THIRD-W	AVE COU	NTRIES,	1997
	Czech Republic	Hungary	Mexico	Poland	Rep. of Korea	Total	Average
List A	4	5	6	7	7	29	5.8
List B	2	8	4	7	7	28	5.6
Total	6	13	10	14	14	57	11.4

Table 3

Source: Authors' compilation based on the OECD Code of Liberalization of Capital Movements (various issues).

terms this number is actually lower, given that in the 1990s the Code had been considerably expanded, with the inclusion of items related to shortterm portfolio flows.

Thus the third-wave group differs markedly from the second-wave group at least in two ways. First the countries in the former group made less use of reservations at the time of adherence to the Code,¹⁵ and second, but more importantly, they did not apply any general derogation. Since this recourse was still available, it suggests that they indeed faced considerable pressure to accept stringent requirements concerning liberalization of their capital account as a condition for OECD membership. Also, at least in some cases, their new governments were committed to rapid capital account liberalization and/or had made such commitments in other contexts (e.g. Mexico with the North American Free Trade Agreement).

V. EXPERIENCES OF SELECTED COUNTRIES WITH CAPITAL ACCOUNT LIBERALIZATION: A COMPARATIVE ANALYSIS

This section sheds additional light on the dissimilar liberalization paths between the second- and third-wave countries, by describing the experiences of Spain (representative of the second-wave category) and of the Czech Republic, Mexico and the Republic of Korea (representative of the third-wave countries). It shows the appropriateness of the gradual approach adopted by the second-wave countries and the risks and costs of the "bigbang" approach adopted by the third-wave countries.

A. Spain¹⁶

To compensate for the removal of the general derogation in 1962, Spain made extensive use of reservations to restrict capital movements in the 1960s and 1970s. The country then began a number of structural reforms, including, initially, trade liberalization, and then labour market deregulation and domestic financial liberalization, as part of its preparation for accession to the EEC in 1986.

Between 1982 and 1985, Spain made use of specific derogation while keeping a number of reservations in place. Between 1987 and 1989, the country witnessed increasing capital inflows, linked mainly to its EEC accession. It responded to these inflows by permitting free entry to most forms of FDI (believed to be sustainable), and imposing a number of restrictions on portfolio and short-term capital inflows, seen as speculative and therefore easily reversible.¹⁷

Such restrictions took various forms and were adopted in steps. In March and April 1987, the reserve requirements on domestic bank accounts were extended to include deposits in convertible currency held by nonresidents, with non-bearing interest rates for such account balances exceeding 10 billion pesetas. In July 1987, non-residents were forbidden to purchase short-term domestic public assets in the forward market or those with buy-back clauses. In June 1988, resident borrowers had to obtain authorization for external financial loans of over 1.5 billion pesetas that had a maturity of less than three years. And in February 1989, the Government adopted non-remunerated reserve requirements. The requirement levels were 30 per cent on foreign loans to physical residents and the corporate sector, and 20 per cent on the increase in the short-term currency position of the banking sector. (Note that the latter measures were the forerunner of the now widely-known Chilean reserve requirements!)

By helping to moderate the volume of capital flowing to the country, especially the more volatile kind, these restrictions facilitated the conduct of domestic macroeconomic policies, particularly in the monetary and exchange rate areas, and they contributed to the sustainability of the external sector. However, by February 1992, the restrictions were phased out in order to comply with the EEC directives on capital account movements. As these controls were removed, the country started to witness increasing net inflows of portfolio and short-term capital, which led to the overvaluation of the peseta and, later, made the economy prone to currency attacks. These attacks materialized in full force during the crisis with the European Monetary System (EMS) in September 1992.

The Spanish response to such speculative attacks was to keep the peseta within the exchange rate mechanism (ERM) of the EMS after devaluing it by 5 per cent. To sustain this new exchange rate, it imposed punitive restrictions on short-term swap operations involving non-residents. These restrictions took the form of requiring the domestic financial system to make one-year, non-remunerated deposits in the Bank of Spain equivalent to its total new lending to non-residents. In addition, ceilings were imposed on the foreign currency transactions of foreign banks operating in Spain and of domestic banks having branches abroad. The restriction in the form of deposit requirements on outflows showed a reasonable degree of effectiveness, but lasted only a short while, until the 23 November 1992, when the peseta was again devalued, this time by 6 per cent. Since then, Spain has maintained a very liberal regime with regard to capital movements.

B. The Czech Republic, Mexico and the Republic of Korea

In stark contrast with Spain, all new OECD members liberalized their capital accounts very rapidly, partly because of the liberalization requirements imposed as a condition for accession to the OECD, and partly because of their own drive towards a market-based economy. The case of the Czech Republic is a good illustration of the pattern of liberalization adopted by the economies in transition. The move towards a market-based economy included, from the outset, rapid liberalization of the capital account, even though it was initially designed to be a gradual process (Klacek, 1999). Liberalization included allowing inflows of direct and portfolio investment and external credit borrowed by residents.¹⁸ By the mid-1990s, the country became a recipient of massive capital flows that reached over 16 per cent of its GDP in 1995, much of them short-term. This was despite an initial regulatory attempt to influence their maturity structure. The response to such developments was to reform the legislation in order to adapt it to the reality, and to further liberalize capital movements, leaving just a few restrictions in place. The Czech authorities discussed the possibility of introducing safeguards such as giving discretionary powers to the central bank to impose interest-free reserve requirements on certain types of credit inflows; however, these were never implemented.¹⁹ Furthermore, although the country experienced a "mini" currency crisis in 1997, it did not resort to capital controls; instead, it responded to the crisis with a liquidity squeeze and let the exchange rate float (Dedek, 2002).

Both Mexico and the Republic of Korea joined the OECD in the 1990s, together with the transitional economies, and followed a path of capital account liberalization similar to that of the Czech Republic.

Mexico undertook major liberalization measures in 1989 and 1990. At that time the Government allowed non-residents to buy money market instruments, invest in the stock market and hold domestic bonds, including public ones (Griffith-Jones, 1996). As a result, Mexico experienced massive inflows, averaging nearly 7 per cent of GDP between 1992 and 1994; most of these were of short-term maturity and were invested in government and equity securities, as well as in private sector instruments (Edwards, 1997). Government papers and bonds held by non-residents were a key factor in the Mexican peso crisis of 1994–1995. Edwards (1997) suggests that the desire to join the OECD was one reason for Mexico's liberalization. However, equally, if not more important, may have been the Government's interest in joining NAFTA as well as its own free-market preferences.

In the Republic of Korea, broad liberalization started in 1991 and 1992, when residents were granted permission to issue securities abroad and foreigners were allowed to invest directly in the Korean stock markets (Park and Song, 1998).²⁰ In 1993, the new government of Kim Young Sam accelerated the pace of capital account liberalization (Chang et al., 1998). Non-residents could hold domestic bank accounts, and later, in 1994, they were permitted to invest in public bonds. Between then and 1997, additional deregulation measures were undertaken in the area of capital movements. These included allowing small and medium-sized firms to issue equity-linked bonds and non-guaranteed bonds, and large firms to issue non-guaranteed, long-term bonds, and, most importantly, short-term foreign loans were permitted for different sorts of domestic activities (commercial, infrastructure and FDI-related) that previously had been restricted.

As Wang (2000) notes, the Government maintained some restrictions on the capital account, particularly on some forms of capital inflows, due to concerns about a surge of capital inflows caused by interest rate differentials. The restrictions were mainly in the form of ceilings on foreign portfolio investments in domestic securities and borrowings from abroad by non-banks. However, there were exceptions where liberalization occurred far more rapidly, some of which we now know proved harmful. This included trade-related short-term financing for domestic firms. Another and particularly problematic area was the short-term foreign currency borrowings of domestic banks. Finally, control over FDI by domestic firms was also relaxed (Shin and Wang, 1999).

According to Chang (1998) and Chang et al. (1998) both domestic and foreign pressures played a role in speeding up liberalization in the Republic of Korea. It is worth pointing out that on the external front both the United States Government and the OECD are believed to have put strong pressure on the Korean Government to open up the economy. However, as Wang (2000: 11) reports, in the negotiations over the country's accession to the OECD in 1996, the Korean Government tried to resist full capital account liberalization (although short-term credit had already been liberalized) for the reasons already mentioned; it intended to delay full liberalization "until the interest rates would significantly converge". But its resistance was weaker than its desire to "show the world" the achievements of the Korean economy, and to prove it by "joining the OECD club". Thus more rapid capital account liberalization was seen as a price worth paying for this prize.²¹

Some of the changes in Korean capital account liberalization were rather subtle, although important. For example, from the early 1990s banks and financial institutions were legally free to borrow short-term capital from abroad; however, till 1994 such borrowings required the Government's discretionary authorization. Similarly, limits on ratios of long-term foreign currency loans to short-term currency loans for individual finance were lowered in 1996, which Korean economists now view as having been a serious mistake. The scale of the increase of the short-term debt was apparently not fully captured in the statistics, as about half of banks' foreign currency operations were handled by overseas branches, whose transactions were not recorded in the overall Korean data on debt exposure. The Korean authorities were reportedly warned by United States regulators in early 1997 of this problem and of a maturity mismatch in foreign branches; however, they did not react.

Among the reasons given by the authorities for not controlling shortterm loans or taking other measures, was that they had "just joined the OECD and had agreed to liberalize; imposing controls or taxes on shortterm flows would imply losing credibility in relation to the OECD". Furthermore, the fact that the country had joined the OECD was seen by the authorities to imply that it did not need to worry about the high level of short-term debt. However, there were other reasons (not related to OECD accession) given as to why the Korean authorities did not move to curb excessive growth; these included, the far lower cost of short-term loans, the fact that banks were inundated with lenders willing to lend, with rollover ratios of 100 per cent – and the perception that the Republic of Korea held large reserves.²² The liberalization path thus resulted in a large foreign debt, although not so large when measured as a proportion of the country's GDP (25 per cent in early 1997). Also, it was mostly short-term (58 per cent by the end of 1996). This implied a large maturity mismatch, particularly among merchant banks, whose borrowings were 64 per cent short-term, and lending was 85 per cent long-term (Chang et al., 1998). Short-term foreign debt and maturity (and currency) mismatch were the main causes of the major currency and financial crises in 1997 (Park, 2001; Park and Park, 2002).

C. Lessons

The Spanish experience shows that gradual and sequenced liberalization gave the country time to build regulatory institutions in the financial sector that helped it to maintain macroeconomic stability. When the economy witnessed surges of capital inflows, it managed to reduce their potentially destabilizing effects with a variety of both quantitative and price-based restrictions on short-term, speculative flows. Removing such restrictions left the country vulnerable to currency attacks. Yet when the currency crisis erupted, it had the flexibility to reintroduce restrictions, doing so fairly successfully in terms of taming speculative attacks against its currency. Restrictions on the balance of payments were imposed in the late 1980s and early 1990s, when the first-wave countries were undertaking their final major steps towards full capital account convertibility. This clearly shows that different timing of liberalization was still permitted among the OECD member countries.

However, the experiences of the Czech Republic, Mexico and the Republic of Korea with capital account liberalization were quite different from those of Spain as they faced radically different conditions within the OECD. The new members experienced rapid liberalization, a predominance of short-term over long-term capital flows (in the Mexican and Korean cases) and currency crises. The contrasting experiences and outcomes of Spain on the one hand, and the Czech Republic, Mexico and the Republic of Korea on the other, strongly point to the need for a new approach towards capital account liberalization for the emerging economies. This approach should take account of the positive aspects of the liberalization experience of Spain (and, more generally, of second-wave countries), as well as the earlier experiences of the first-wave industrialized countries. These include gradual liberalization, a cautious approach to short-term capital flows, and the provision of safeguard mechanisms that can be used effectively in times of difficulties.

VI. CONCLUSION

A number of important conclusions can be drawn from this study. First, the original OECD member countries initially adopted a gradual approach to capital account liberalization. Second, the process was sequenced, with long-term capital flows being liberalized first, and shortterm capital flows only later when the economies had the strength and institutional capacity to absorb such flows. Third, the process initially allowed for heterogeneity, with countries being able to shape their own liberalization pattern in accordance with their structural characteristics and policy objectives.

From the adoption of the OECD Code of Liberalization of Capital Movements in the early 1960s until the 1980s, the developed member countries of the OECD had, on average, 25 years to pursue orderly capital account liberalization. If we take the end of the Second World War as the starting point to gauge the time frame of liberalization, then the whole process lasted even longer, 40 years on average. Among the original OECD members, that were middle-income countries at the time the OECD was created, liberalization started only in the 1980s, as it was recognized that these countries needed even more time in order for the process to be sustainable. This has changed in the recent past, however. New OECD members – emerging economies – have been, if not pushed, at least greatly encouraged to liberalize more rapidly. As a consequence, they have undergone premature liberalization, and half of them have experienced deep and costly financial crises.

In the light of these experiences, it would seem preferable if the OECD returned to its original mission, which was to support orderly capital account

liberalization. Accordingly, it should support member countries that prefer to relax controls on capital movements gradually, and discourage countries that are tempted to open up quickly from doing so. This should apply particularly to those countries that have weak and badly regulated domestic financial systems. A cautious approach should, however, be broad based to include even those developing countries that are believed to have solid market institutions and supervisory frameworks in place, as these can at best reduce the likelihood, but not entirely prevent, a crisis episode. Particularly short-term and other easily reversible inflows should not be fully liberalized.

Given the potentially destabilizing international financial markets, the ultimate aim should be both orderly and sustainable liberalization, an approach through which financial crises and reversibility of the process could perhaps be avoided. Nonetheless, capital account liberalization should be sufficiently deep to allow countries to benefit from the positive effects of capital flows.

Another important lesson that emerges from the study is that no matter how well designed a multilateral agreed framework may be for the purpose of supporting orderly liberalization, it can become ineffective, and even turn against the weaker members of the accord, if divergence of interests exists among member countries. This fact should be seen as a warning about the risks of an internationally agreed framework on capital account liberalization. Rather than guaranteeing orderly liberalization, such a framework, even if implemented with carefully designed safeguards, may result in one group of countries imposing, through an international body, full capital account convertibility on a wide range of countries, most of which are still unprepared for such a step. This latter problem could possibly be overcome to the extent that developing countries are properly represented in the international organization implementing capital account liberalization.

More broadly, as long as there is no significant progress on an international financial architecture (including mainly international measures) that would make the occurrence of currency crises far less likely and less costly, it seems appropriate that decisions on pace and timing of capital account liberalization (as well as reintroduction of measures to discourage inflows or outflows) should be left to individual countries. As it is the country that has mainly to bear the costs of a crisis, should one occur, it is best, in present circumstances, for the national authorities to be left to weigh the benefits and costs of different paths of capital account liberalization. International experience or advice can be useful, but autonomous national decision-making seems clearly more appropriate.

ANNEX TABLES

Table A.1MAIN ITEMS COVERED BY THE CODE

Code		List A		List B
1960	I. II.	Direct investment. Liquidation of direct investment.	I. II.	Direct investment (not specified). Liquidation of direct investment
	III.	Personal capital movements.	III.	Personal capital movements (not specified).
	IV.	Use and transfer of non-resident-owned funds.	IV.	Use and transfer of non-resident- owned funds (cases not covered in list A).
	V.	Physical movement of securities.	V.	Physical movement of securities (not specified).
	VI.	Security dealing.	VI.	Security dealing (not specified).
1969	<i>I.</i> II. III.	Direct Investment. Liquidation of direct investment. Admission of securities to capital markets. Buying and selling of securities.	III. IV.	Admission of securities to capital markets (cases not covered in List A). Buying and selling of securities
	v .	Operations in real estate.	v .	(cases not covered in List A). Operations in real estate
	VII.	Credits directly linked with international commercial trans- actions or with the rendering of international services.	VII. VIII	(cases not covered in List A). Credits directly linked with international commercial trans- actions or with the rendering of international services. Financial credits and loans
	Х.	Personal capital movements.	Х.	Personal capital movements (cases not covered in List A).
	XI. XII. XIII.	Life assurance. Sureties and guarantees. Physical movement of capital assets.		
	XIV.	Disposal of non-resident-owned fun	ds.	
1978	I. II. III. IV.	Direct investment. Liquidation of direct investment. Admission of securities to capital markets. Buying and selling of securities.	III. IV.	Admission of securities to capital markets (cases not covered in List A). Buying and selling of securities
	V.	Buying and selling of collective investment securities.		(cases not covered in List A).

Table A.1 (concluded) MAIN ITEMS COVERED BY THE CODE

Code		List A		List B
	VI.	Operations in real estate.	VI.	Operations in real estate (cases not covered in List A).
	VIII.	Credits directly linked with international commercial trans- actions or with the rendering of	VIII.	Credits directly linked with international commercial trans- actions or with the rendering
		international services.	IX.	of international services (cases not covered in List A). Financial credits and loans.
	XI.	Personal capital movements.	XI.	Personal capital movements (cases not covered in List A).
	XII.	Life assurance.		
	XIII. XIV	Physical movement of capital assets		
	XV.	Disposal of non-resident-owned func	ls.	
990 ^a	I.	Direct investment.		
	П.	Liquidation of direct investment.		
	III.	Operations in real estate.	III.	Operations in real estate
	IV.	Operations in securities on capital markets.		(cases not covered in List A).
			V. VI.	Operations on money markets. Other operations in negotiable instruments and non-securitized claims.
	VII.	Operations in collective investment securities.		
	VIII.	Credits directly linked with inter- national commercial transactions or with the rendering of international services.	VIII.	Credits directly linked with inter- national commercial transactions or with the rendering of international services.
			IX.	Financial credits and loans.
	Х.	Sureties, guarantees and financial back-up facilities.	Х.	Sureties, guarantees and financial back-up facilities.
	XI.	Operation of deposit accounts.	XI. XII.	Operation of deposit accounts. Operations in foreign exchange.
	XIII.	Life assurance.		
	XIV.	Personal capital movements.	XIV.	Personal capital movements.
	XV.	Physical movement of capital assets		

Source: Authors' elaboration based on information obtained from the Code of Liberalization of Capital Movements 1960, 1969, 1978 and 1990 (revised version). The 1982, 1992 and 1997 editions of the Code did not show any change from their preceding ones.

Note: Bold: new items, not included before under another item. Italic: items that have partially or totally changed from one list to the other.

a Revised.

Table A.2

THE 1990 CODE LIST AND REVISED VERSION^a

		Revised Code	1990 Code
IV.	Operations in securities on capital markets		
	 A,B. Admission of domestic securities on a foreign capital market Issue through placing or public sale Introduction on a recognized foreign security market C,D. Buying and selling of securities Quoted on a recognized security market Not quoted on a recognized security market 	List A List A List A List A	List B List A List B List A
V.	Operations on money markets		
	A,B. Admission of securities and other instrumentsC,D. Purchase and sale of securities, and borrowing and lending through other money market instruments	List B List B	-
VI.	Other operations in negotiable instruments and non-securitized claims		
	A,B. Admission of negotiable instruments and claims C,D. Purchase, sale and exchange of other assets	List B List B	-
VII.	Operations in collective investment securities		
	A,B. Admission of collective investment securitiesC,D. Purchase and sale of collective investment securities	List A List A	List B List A
VIII.	Credits directly linked with international commercial transaction or with the rendering of international services	S	
i)	In cases where a resident participates in the underlying commercial or service transaction		
	A,B. Short- and medium-term credits (up to 5 years) Long-term credits (more than 5 years)	List A List A	List A -
ii)	In cases where no resident participates in the underlying commercial or service transaction A		
	 B. Short- and medium-term credits (up to 5 years) Long-term credits (more than 5 years) 	List B List B	List B -
IX.	Financial credits and loans		
	 A. Credits and loans granted by non-residents to residents Short-term (less than one year) Medium- and long-term (one year and more): a) The debtor being a financial institution b) The debtor not being a financial institution 	List B List B List B	- List B -

Table A.2 (concluded) THE 1990 CODE LIST AND REVISED VERSION^a

			Revised Code	1990 Code
	В.	Credits and loans granted by residents to non-residents Short-term (less than one year) Medium- and long-term (one year and more)	List B List B	List B
Х.	Sure	ties, guarantees and financial back-up facilities		
i)	In ca curre capit	ses directly related to international trade or international ant invisible operations, or in cases related to international al movement operations in which a resident participates		
	А. В.	Sureties and guarantees Financial back-up facilities	List A List A	List A -
ii)	In ca curre oper inter	ses not directly related to international trade, international ent invisible operations or international capital movement ations, or where no resident participates in the underlying national operation concerned		
	А. В.	Sureties and guarantees Financial back-up facilities	List A List B	-
XI.	Ope	ration of deposit accounts		
	А. В.	Operation by non-residents of accounts with resident institutions Operation by residents of accounts with non-resident institutions	List A List B	-
XII.	Ope	rations in foreign exchange		
	A,B.	Purchase and sale	List B	-
XIV.	Pers	onal capital movements		
	A. B,C.	Securities and other documents of title to capital assets Means of payment	List A List A	List A -

Source: OECD (1990). *a* Revised items are displayed in bold.

	Invocation of derogation	Cessation of invocation	Duration (Years)
Australia	09/1972	06/1978	5.75
Austria	11/1972	08/1980	7.75
Belgium	-	-	0
Canada	-	-	0
Denmark	02/1979	03/1983	4.08
Finland	06/1985	01/1991	5.58
France	-	-	0
Germany	06/1972	01/1974	1.58
Germany	02/1973	11/1980	7 75
Germany (total)	02/10/0		9.33
Greece	09/1967 ^a	06/1980	22 75
Iceland	1961 ^a	12/1990	29.92
celand	01/1993	12/1000	20.02
reland	01/1000	-	0
taly	04/1969	01/1078	8 66
lanan	04/1909	11/1072	1 02
Japan	01/19/2	02/1070	1.03
Japan (totol)	03/19/6	02/19/9	0.91
			2.74
	-	-	0
Netherlands	-	-	0
	-	-	0
Norway	11/1984	12/1989	5.08
Norway	08/1986	12/1989	3.33
Norway (total)	10003	1001	8.41
Portugal	1968*	1981	13
Portugal	1977	1981	4
Portugal	1983	1987	4
Portugal	07/1991	11/1992	1.33
Portugal (total)			22.33
Spain	1959ª	1962	3
Spain	07/1982	06/1985	2.92
Spain (total)			5.92
Sweden	09/1969	06/1986	16.75
Switzerland	03/1964	10/1966	2.58
Switzerland	07/1972	02/1974	1.58
Switzerland	02/1978	01/1979	0.92
Switzerland (total)			5.08
Turkey	1962 ª	1985	23
Jnited Kingdom	05/1966	03/1971	4.83
United States	01/1968	04/1974	6.25
Average years of deroga	tion for countries with g	eneral derogation	
(Greece, Iceland, Port	ugal, Spain and Turkey)	D	20.78
Average years of deroga	tion for countries withou	It general derogation	4.48
Average veers of derage	tion for OECD countries	until 1003b	7 56

Table A.3

104 Stephany Griffith-Jones, Ricardo Gottschalk and Xavier Cirera

Source: OECD (1993).
a General dispensation from the liberalization provisions of the Code.
b Without considering second derogation in Iceland.

NOTES

- 1 For a more elaborate discussion on this point, see for example, Akyuz (2000).
- 2 See OECD (1995) for a detailed account of the historical background of the OECD Code of Liberalization of Capital Movements.
- 3 The OEEC was founded by Austria, Belgium, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey and the United Kingdom. Spain and the former Yugoslavia were included as countries with "special status", and outside Europe, Canada and the United States were made "associate members".
- 4 The original OECD members were Canada, Spain and the United States, in addition to the 17 founders of the OEEC listed in the previous footnote. Those that joined next were Japan (1964), Finland (1969), Australia (1971) and New Zealand (1973). In the 1990s a new wave of accession took place: first with Mexico (1994), then the Czech Republic (1995), and, finally, the Republic of Korea, Hungary and Poland in 1996.
- 5 Liberalization here means the abolition of government restrictions on both transactions and transfers of those operations specified in the Code.
- 6 For example, there are instances in which certain items of the Code have not been developed in the country's domestic financial market; hence reservations on these can be applied only when such items finally come into existence.
- 7 Reservations and derogation are periodically examined by the Committee on Capital Movements and Invisible Transactions (CMIT). In the case of reservations, the purpose is to review existing provisions and amendments, as well as to propose their removal when they are no longer deemed necessary. This task is conducted on a country-bycountry basis. In the case of derogation, the purpose is to restore liberalization as quickly as possible.
- 8 The major exceptions are credits and loans from non-residents to residents other than enterprises. According to OECD (1995: 22), this springs from the desire to protect consumers.
- 9 However, it should be noted that since the early 1960s operations involving easily reversible flows were permitted, such as physical movements of securities (see box 1).
- 10 These were: Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Sweden, Switzerland, and the United Kingdom, followed by Canada, the United States, Japan, Finland, Australia and New Zealand.
- 11 Iceland may be an exception, given its relatively high income per capita at the time of its adherence to the Code.
- 12 Under such requirements, the newcomers did not apply a general derogation at the time of accession, even though, in theory, this is still possible, since Article 7a has not been removed from the Code. This suggests that there seems to have been a tendency towards a growing gap between the formality of the Code and the unwritten rules for capital account liberalization in the OECD area.
- 13 For a discussion of the Japanese experience with capital account liberalization, see, *inter alia*, Mathieson and Rojas-Suarez (1992).

- 14 Reservations on items of the Code can be total (i.e. cover the whole item) or partial (i.e. cover just one or a few sub-items).
- 15 As stressed above, this is true in relative terms. Moreover, if, for comparative purposes, we take the dates when the second-wave countries removed their general derogation (rather than when they adhered to the Code), the number of reservations they used was higher than that used by the third-wave countries; again, this is in relative terms, but for specific countries in absolute terms as well. Greece, for example, had 17 reservations in place at the time it dropped its general derogation.
- 16 This sub-section benefited from Solanes (1999).
- 17 Restrictions on portfolio and short-term outflows were also in place during this period.
- 18 See Dedek (1999) for a detailed account of capital account liberalization in the Czech Republic.
- 19 The OECD had, on the insistence of the Czech authorities, allowed the use of such interest-free reserve requirements on inflows for a time-limited period (personal interview).
- 20 In the 1980s, preliminary steps had already been taken, with foreigners being permitted to invest in the Korean stock markets through investment trust funds (Park and Song, 1998).
- 21 Personal communication.
- 22 This paragraph is based on interviews with Korean officials and academics.

REFERENCES

- Akyuz Y (2000). The debate on the international financial architecture: reforming the reformers. UNCTAD Discussion paper no 148, Geneva, UNCTAD, April.
- Akyuz Y and Cornford A (1994). Regimes for international capital movements and some proposals for reform. UNCTAD Discussion paper no 83, Geneva, UNCTAD, May.
- Chang H-J (1998). Korea: the misunderstood crisis. World Development, 26(8):1555-1561.
- Chang H-J et al. (1998). Interpreting the Korean crisis: financial liberalization, industrial policy and corporate governance. *Cambridge Journal of Economics*, 22: 735–746.
- Dedek O (1999). Capital account liberalization in the Czech Republic. In: Drabek Z and Griffith-Jones S, eds., Managing Capital Flows in Turbulent Times: The Experience of Europe's Emerging Market Economies in Global Perspective. Armonk, New York, M. E. Sharpe: 98–115.
- Dedek O (2002). Currency shake-up 1997: A case study of the Czech Economy. In: Griffith-Jones S, Gottschalk R and Cailloux J, eds., *Capital Flows in Calm and Turbulent Times: The Quest for a New Financial Architecture.* Ann Arbor, IL, University of Michigan Press (forthcoming).
- Edwards S (1997). The Mexican peso crisis: How much did we know? When did we know it? *NBER Working paper 6334*, Cambridge, MA, National Bureau of Economic Research, December.

- Griffith-Jones S (1996). The Mexican peso crisis. IDS Discussion paper 354, Institute of Development Studies, University of Sussex, Sussex, July.
- Klacek J (1999). Economic transformation, exchange rate, and capital inflows in the Czech Republic. In: Drabek Z and Griffith-Jones S, eds., *Managing Capital Flows in Turbulent Times. The Experience of Europe's Emerging Market Economies in Global Perspective*. Armonk, New York, M. E. Sharpe: 78–97.
- Mathieson DJ and Rojas-Suarez L (1992). Liberalization of the capital account: experiences and issues. *IMF Working Paper* 92/46, International Monetary Fund, Washington, DC, June.
- McKinnon R (1991). *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*. Baltimore, MD, Johns Hopkins University Press.
- OECD (1995). Introduction to the OECD Codes of Liberalization of Capital Movements and Current Invisible Operations. Paris, ECMT, OECD.
- OECD (1993). Exchange Control Policy. Paris, OECD.
- OECD (1990). Liberalization of Capital Movements and Financial Services in the
- OECD Area. Paris, OECD.
- OECD (1989). Competition in Banking. Paris, OECD.
- OECD (1987). Introduction to the OECD Codes of Liberalization. Paris, OECD.
- OECD (various). Code of Liberalization of Capital Movements, various issues. Paris, OECD.
- Park W-A (2001). Korea's management of capital flows in the 1990s. In: Griffith-Jones S, Montes M and Nasution A, eds., *Short-Term Capital Flows and Economic Crises*. UNU/ WIDER Studies in Development Economics. Oxford, Oxford University Press,
- Park YC and Park I (2002). Who destabilized the Korean stock market?. In: Griffith-Jones S, Gottschalk R and Cailloux J, eds., *Capital Flows in Calm and Turbulent Times: The Quest for a New Financial Architecture*. Ann Arbor, MI, University of Michigan Press.
- Park YC and Song C-Y (1998). Managing foreign capital flows: the experiences of the Republic of Korea, Thailand, Malaysia and Indonesia. In: Helleiner GK, ed., *Capital Account Regimes and the Developing Countries*. London, Macmillan Press.
- Poret P (1998). *The Experience of the OECD with the Code of Liberalization of Capital Movements*. Paris, OECD. http://www.oecd.org//daf/investment/legal-instruments/oecdexp.htm.
- Shin I and Wang Y (1999). How to sequence capital market liberalization: Lessons from the Korean experience. Working paper 99–30, Korea Institute for International Economic Policy, Seoul, Korea.
- Solanes JG (1999). International capital flows in the Spanish Economy. Lessons from the experience of the last ten years. In: Drabek Z and Griffith-Jones S, eds., Managing Capital Flows in Turbulent Times: The Experience of Europe's Emerging Market Economies in Global Perspective. Armonk, New York, M. E. Sharpe: 172–212.
- Wang, Y. (2000). Getting the sequencing right: The Korean experience in the capital market liberalization. Mimeo, Korea Institute for International Economic Policy, Seoul, Korea.
- Williamson J and Mahar M (1998). A survey of financial liberalization. *Essays in International Finance*, No. 211, November.

MANAGEMENT OF THE CAPITAL ACCOUNT: A STUDY OF INDIA AND MALAYSIA

Indira Rajaraman

I. INTRODUCTION

A. India and Malaysia

This paper contrasts the approaches of India and Malaysia to capital account management, which, although widely different historically, have arrived at a remarkable convergence after the East Asian crisis of 1997. The paper does not compare Malaysia with its East Asian neighbours in terms of post-1997 outcomes or in terms of their relative situations at the time of the crisis, as this ground is already covered in a large body of literature (see for example, Borgini, Claessens and Ferri, 2000; Das, 1999; Furman and Stiglitz, 1998; Radelet and Sachs, 1998).

India and Malaysia are macroeconomically quite disparate. Table 1 presents a summary macroeconomic profile that highlights the vast differences between the two. Beyond the more obvious differences in economic size in terms of total and per capita GDP, there is the historical growth differential. India took birth in 1991 as an open economy after 30 years of slow autarkic growth at 3.5 per cent, and some speeding up to

		Malaysia			India	
1	1997	1998	1999	1997	1998	1999
GNP _m , (\$ billion)	94.8	68.6	73.5	417.2	426.5	441.8
Population (<i>million</i>)	21.7	22.2	22.7	962.4	979.7	0.766
Per capita GNP (current \$)	4 369	3 090	3 237	434	435	443
PPP (current \$)	8 555	7 699	7 640	2 019	2 060	2 230
Foreign reserves (<i>\$ billion</i>)	15.6	26.2	30.9	29.4	32.5	38.0
Import cover (months)	3.4	5.7	5.9	6.9	8.2	8.2
Growth rate of GDP (<i>real</i>)	7.3	-7.4	5.6	5.0	6.8	6.4
Share of GDP (per cent)						
Gross domestic investment	43.0	26.6	22.3	26.2	23.4	23.3
Gross domestic saving	43.9	48.5	47.3	24.7	22.3	22.3
Exports (goods & non-factor services)	93.3	115.2	121.7	11.2	11.5	12.1
External debt /GDP (per cent)	60.6	56.7	57.8	24.4	23.5	22.0
Short-term/total external	25.3	19.9	15.0	5.4	4.5	4.1
Debt-service ratio	5.5	6.7	5.8	19.0	18.0	16.0
Fiscal (per cent) Current balance/GDP	7.5	4.3	4.0	-3.1	-3.9	-3.8
Inflation rate (CPI) (per cent)	2.7	5.3	2.8	7.2	13.2	5.0

Table 1

an average growth rate of 5.6 per cent in the period 1980-1990, the decade just prior to the big-ticket reforms of the 1990s. By contrast in Malaysia, a member of the second-rank quadruplet of Asian tigers, no decade prior to the1990s saw average growth under 5.2 per cent and no year in the 1990s had growth below 8.9 per cent until 1997, when the rate fell to 7.3 per cent. Supporting this historical growth disparity are vast differences in savings as a per cent of GDP, at the 25 per cent mark in India, and at nearly the 50 per cent mark in Malaysia. The investment rate, historically high in Malaysia but below the savings rate (the obverse of a historically positive balance on trade in goods and non-factor services) has come down in the post-crisis years to 22 per cent in 1999, with a corresponding widening of the favourable balance of trade. In India, the investment rate lies typically at about 1.5 percentage points above the savings rate, the obverse of a historically negative balance of trade. The Malaysian Government contributed to domestic savings with positive current fiscal balances, which continued throughout the crisis and post-crisis years; in India on the other hand, the Government dissaves, with negative current fiscal balances on the central Government account alone amounting to between 3 and 4 per cent of GDP.

Clearly the most startling difference between the two economies lies in their degree of openness. Exports in Malaysia have traditionally been roughly equivalent to GDP, and have actually exceeded GDP in the postcrisis years; India on the other hand had an export/GDP ratio at the 11–12 per cent level during the period 1997–1999, a notch up from ratios usually well below 10 per cent prior to that period.

The Malaysian tradition of openness goes back a long way. Malaysia accepted Article VIII status under the IMF (current account convertibility) as far back as November 1968. The Malaysian ringgit was floated at the same time as the major world currencies, in 1973 (see appendices A and B, which list external policy milestones in India and Malaysia respectively). India, on the other hand, accepted Article VIII status only in August 1994, following a unified floating rate for the rupee in March 1993.

Progress towards capital account convertibility in Malaysia began with the ringgit float in 1973, with a second major thrust in 1987. By 1990, there was even an offshore over-the-counter (OTC) market for Malaysian shares in Singapore which reinforced a pre-existing offshore ringgit market, perhaps the only case of an offshore market for a developing country currency. In India, by contrast, capital account convertibility has never existed for residents, although non-resident capital inflows are fully convertible. The 1997 Reserve Bank of India (Tarapore) Committee recommendation of a phased move to full capital account convertibility by 2000 (Reserve Bank of India (RBI), 1997) was not adhered to on account of failure to meet its recommended prudential markers on the fiscal and inflation fronts.

The Malaysian response to the currency crisis of 1997 backtracked on what had been perhaps the longest tradition of openness on current and capital accounts in the developing world. As the capital outflow crisis in East Asia hit Malaysia with full force (although Malaysia was inexplicably excluded by Summers (2000) from the list of Asian countries affected by the crises), the country famously imposed capital exit barriers and a policy of lower interest rates that ran directly orthogonal to the policy in other East Asian countries similarly afflicted.

By contrast, the Indian external liquidity crisis in mid-1991, when foreign reserves fell to an all-time low of \$1 billion, led to the opening up of the Indian capital account. Following the opening up of the Indian economy in 1991, there was a period, mid-decade, when the principal problem of capital account management arose from too large an inflow rather than too little. This was a problem in Malaysia as well at around the same period, handled through temporary entry barriers that were soon dismantled as the situation turned.

The East Asian crisis of 1997 reaffirmed the possibility of multiple equilibria in currency markets. The issue of whether hedge funds played a role in the crisis is empirically unproven, and is less important than the strenuous attempts made to investigate the matter might initially suggest. The finding by Brown, Goetzmann and Park (1998), of an absence of any correlation between hedge fund short positions in Asian currencies and movements in exchange rates, had methodological flaws, which yielded implausible overestimates of hedge fund short positions. What these attempts have served to highlight is the severe paucity of information on hedge funds. Reported figures suggest that hedge funds may be less geared than commercial and investment banks, but it is well-known that hedge funds rely principally on off-balance-sheet techniques to obtain leverage.

Even if market manipulation in its many forms – whether action-based (insider trading), information-based (rumour spreading), or trade-based (cornering markets) – is ruled out as a contributory factor, it is clear that herd behaviour with positive feedback can precipitate a crash, with selling low inducing further herd selling and therefore becoming profitable. This can then be transmitted across markets through pure contagion, where good macro-policy and capital markets, characterized by high secondary liquidity, are no guarantee against infection. On the contrary, high liquidity may accentuate amenability to infection, as indeed was the case in Malaysia.

B. The issues

This study examines what has been done in both India and Malaysia in terms of controlling the quantum and the composition of capital flows. There are two main relevant issues in composition: debt/equity composition, and the maturity structure of external debt.

In terms of a hierarchy of desired forms of capital inflows, equity investment is thought superior to debt inflows because of the sharing of risk (for countries as for corporates); and within equity flows, direct investment is superior to portfolio investment because of the greater stake in the host country. But between portfolio and debt, the relative hierarchy is less clear. The short-term component of external debt is by no means a complete measure of the scope for short-term capital outflows. Defendants of portfolio capital tend to dismiss its potential volatility as low, on the grounds that downward revisions in expectations regarding stocks impinge equally on domestic and foreign investors, so that changes in expectations would be fully reflected in downward stock market valuations, and not at all (or very little) in foreign investor sale and exit. The East Asian crisis has dramatically shown the falsity of that position. Such a position in one market leads to pressure on foreign investors to liquidate in third countries, even when stock expectations remain high, resulting in outward capital flows from these third countries by contagion.

When potential outward capital flows by residents are added on to potential foreign investor outflows, it is clear that the proportion of shortterm debt in total external debt is not so much a precipitator of capital outflows, as an indicator of how sharp the spike can be, whether precipitated by contagion or real factors.

In 1999, external debt as a per cent of GDP was higher in Malaysia, at 58 per cent (down from 61 per cent at the end of 1997), than in India at 22 per cent (table 1). Also, although the Malaysian short-term debt as a percentage of total external debt declined from 25 per cent in 1997 to 15 per cent in 1999, it was nevertheless much higher than the Indian short-term debt of 4 per cent. However, external debt taken as a percentage of exports alters somewhat the overall picture of greater conservatism in India than in Malaysia in respect of external borrowing (table 2). India until 1999 was above the prudent thumbrule of 200 per cent. Malaysia on the other hand had an external debt/exports ratio of 44 per cent. The figures for short-term external debt as a percentage of exports are even more startling: Malaysia's at 5 per cent was far lower than India's at 37 per cent at the start of the decade, and, despite a rise thereafter, exceeded India's only in 1997.

Thus, normalized by exported tradeables rather than by the size of the economy aggregating across tradables and non-tradables, Malaysia displays greater external prudence than India over the 1990s. The debt service ratio in Malaysia is correspondingly far lower, despite a much lower concessional proportion in total external debt in Malaysia (6 per cent) as compared to India (41 per cent), a result of the far greater proportion of exports in GDP (table 1).

Table 2 shows that in the 1990s Malaysia sustained stable annual flows of FDI in the \$2–4 billion range, whereas India saw a very slow climb to levels of about \$2 billion annually. Both countries saw a sharp increase in portfolio inflows mid-decade, which remained subsequently at the \$3–4 billion level in India, but turned into net outflows of \$10 billion in
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Foreign direct investment <i>(\$ billion, gross)</i> Malaysia	:	:	:	1.8	3.5	3.8	3.7	2.4	1.9	1 .8
India	0.2	0.1	0.3	0.6	1.0	2.1	2.4	3.6	2.6	2.2
Foreign portfolio investment (<i>\$ billion, net</i>) Malaysia	-1.0	-0.7	3.0	9.9	5.4	2.1	4.4	-10.1	-0.3	0.3
India	0.3	1. 4.	0.0	2.3	4.7	1.8	4.2	4.0	4.5	3.0
External debt/exports of goods and non-factor services (<i>per cent</i>) Malaysia	51.8	48.5	48.9	50.9	42.3	40.6	42.1	65.0	49.2	44.0
India	363.5	366.8	382.7	337.6	310.7	238.0	224.7	209.1	207.2	181.8
Short-term debt/exports of goods and non-factor services (<i>per cent</i>) Malavsia	5.0	6.8	11.5	12.8	8.2	7.7	10.8	16.5	9.8 8	6.7
India	37.1	30.4	26.9	13.0	12.9	12.7	16.2	11.2	9.1	7.5
Exchange rate (period average LCU/\$) Malavsia	7 0	с 8	о С	о Б	о С	с 7	с 7	с Х	0 6	cc C
India	17.5	22.7	25.9	30.5	31.4	32.4	35.4	36.3	41.3	43.0

Table 2

1997 in Malaysia. Given the footloose character of portfolio flows, and given also the negative real impact of an interest rate hike, which is the standard macroeconomic market corrective for capital outflows, it is not surprising that exit barriers to capital outflows have become, and will remain, a component of the menu of policy options to stabilize currency markets. The case of Malaysia has incontrovertibly established the real economy benefits of temporary suspensions of capital convertibility (see also Athukorala,1998; and James, 1999).

C. Outline of the paper

In what follows, the approach to capital account management in India is examined in section II, and in Malaysia in section III. Section IV presents conclusions. Appendices A and B list major external policy milestones in India and Malaysia respectively.

II. INDIA

A. Introduction

The opening of the Indian economy began in July 1991, in immediate response to an external liquidity crisis, with foreign reserves falling to a low of \$1 billion and a longer-term dissatisfaction with 40 years of slow, autarkic, growth. Prior to reform, the Indian rupee was not convertible on current account, and was officially set at an undisclosed moving peg to a basket of currencies (see Rajaraman, 1991). Import tariff rates were among the most punitive in the world, and capital inflows were largely official borrowings on concessional terms. Even today concessional debt accounts for 40 per cent of total external debt. Foreign portfolio investment was not permissible, and even FDI was regarded with suspicion and permissible only through case-by-case approval. Since 1991, the external price of the rupee has become marketdetermined, albeit with periods of intensive intervention by the Reserve Bank of India (RBI). There is current account convertibility, with caps on invisible outflows that vary by category, and there has been increasing facilitation of foreign direct and portfolio investment. Capital outflows from residents are still prohibited, although some liberalization of outward FDI by corporates is now possible without prior approval, through share swaps up to specified limits, and in excess of these limits with special approval. All outflows of capital from non-corporate residents remain banned. Foreign capital inflows, on the other hand, are granted full freedom of repatriation, barring a few channels of inflows for non-resident Indians that are non-repatriable. Thus there is capital account convertibility for non-residents but not for residents.

Since 1 June 2000, the legal regime governing both current and capital account transactions is defined by the Foreign Exchange Management Act (FEMA) of 1999, which replaced the Foreign Exchange Regulation Act (FERA) of 1973. FERA restrictions were not on volume of capital inflows so much as the denial of parity of treatment in terms of freedom of functioning between "FERA" companies (those with more than 40 per cent foreign equity) and other companies, and there were criminal penalties for contravention of the ban on foreign exchange outflows from residents.

FEMA is a civil law, a major departure from FERA, and it does not apply to Indian citizens resident outside India, unlike FERA, which applied to all Indian citizens regardless of the location of their residence. Thus, the passage of FEMA marks a major legal milestone in the opening up of the Indian economy. FEMA has a few residual restrictions on current account transactions (7 banned categories; 16 requiring permission only if a ceiling amount is crossed; and 11 needing permission irrespective of amount). On the capital account, the FERA amendment of 1993 had already legally enabled liberalization in respect of FDI and portfolio inflows that was very gradually introduced over the 1990s. FEMA introduced firsttime liberalization of rules in respect of cross-border inheritance of property, and first-time automatic approval for outward FDI by corporates through stock swap options, subject to sectoral caps, and with possible approval beyond those caps.

118 INDIRA RAJARAMAN

In what follows, section II.B reviews the structure of the balance of payments (BOP) as it has evolved over the 1990s. Section II.C examines in further detail current invisibles, which have kept the current account deficit at well under 1.5 per cent of GDP for all but one year in the decade, and reduced the need for capital inflows. Section II.D examines capital account inflows in respect of foreign equity investment and FDI, commercial borrowings, and special deposit schemes for non-resident Indians (NRIs) – a peculiar feature of the Indian capital account. Section II.E examines the return of flight capital during the 1990s, motivated by the progressive liberalization of the current account. Section II.F examines the market for foreign exchange in India, and the anatomy of interventions by the RBI in that market. There are no convertibility restrictions on foreign capital; thus the willingness of foreign capital to enter is a function of the fundamentals of the Indian economy, and of its political and economic governance parameters. A key feature of this, the health of the financial sector, is addressed in section II.G. Section II.H concludes.

Appendix A lists Indian external policy milestones in the 1990s. Indian policy in any sphere is characterized by incremental dribble, with punctuation at frequent intervals; the opening up in the 1990s shares this characteristic, although fortunately the moves are directionally monotonic. Instead of listing every change, which would render the Appendix tedious, we record only those which altered the essential parameters of policy, so as to make possible an understanding of the intent of the process at a glance.

B. The balance of payments: an overview

The first notable feature about the Indian current account after 1990/91, the crisis year preceding the introduction of reforms in July 1991, is that the deficit on current account has been at worst a little over 1.5 per cent of GDP, usually well under (table 3). This has been not because of a low deficit on trade account, which had grown over the period to the region of \$17 billion by 1999/00, but because of an explosion of net invisible inflows starting 1994/95, to the region of \$13 billion by 1999/00. Clearly the

5.45 -4.06 8.87 22.68 4.32 26.74 1.92 2.90 3.53 -1.16 1.80) -(0.40) 1.80) -(0.40) 2.94 9.70 0.56 1.97 0.56 1.97	-9.05 26.86 35.90 5.68 -3.37		1890/81	1997/98	1998/99	1999/00
5.45 -4.06 8.87 22.68 4.32 26.74 1.92 2.90 3.53 -1.16 1.80) -(0.40) 2.94 9.70 2.94 9.70 2.94 1.90	-9.05 26.86 35.90 5.68 -3.37					
8.87 22.68 4.32 26.74 1.92 2.90 3.53 -1.16 1.80) -(0.40) 2.94 9.70 2.94 9.70 2.94 1.90 2.94 1.90	26.86 35.90 5.68 -3.37	-11.36	-14.82	-15.51	-13.25	-17.10
4.32 26.74 1.92 2.90 3.53 -1.16 1.80) -(0.40) 1.80) -(0.40) 2.94 9.70 2.94 9.70 0.56 1.97	35.90 5.68 -3.37	32.31	34.13	35.68	34.30	38.29
1.92 2.90 3.53 -1.16 1.80) -(0.40) 2.94 9.70 0.56 4.24 0.56 1.90	5.68 -3.37 /1.00/	43.67	48.95	51.19	47.54	55.38
3.53 -1.16 1.80) -(0.40) 2.94 9.70 0.56 4.24 1.86 1.90	-3.37	5.45	10.20	10.01	9.21	12.94
1.80) -(0.40) 2.94 9.70 0.56 4.24 1.86 1.90	1001	-5.91	-4.62	-5.50	-4.04	-4.16
2.94 9.70 0.56 4.24 1.86 1.90	(00.1)-	-(1.60)	-(1.20)	-(1.30)	-(1.00)	-(0.90)-
0.56 4.24 1.86 1.90	9.16	4.69	11.41	10.01	8.26	10.56
186 190	4.81	4.81	6.15	5.39	2.41	5.19
>>	1.53	0.88	1.11	0.91	0.82	0.89
0.36 0.61	1.03	1.28	2.85	4.00	4.36	0.33
0.88 -1.05	-0.98	-0.95	-0.73	-0.77	-0.80	-0.71
2.00 1.21	0.17	1.10	3.35	1.13	1.74	2.14
1.08 -0.77	0.39	0.05	0.84	-0.10	-0.75	0.38
0.83 3.57	2.21	-2.48	-2.16	-0.54	0.48	2.42
0.59 8.54	5.79	-1.22	6.79	4.51	4.22	6.40
0.59 -8.54	-5.79	1.22	-6.79	-4.51	-4.22	-6.40
(55) (764)	(256)	(81)	(239)	(179)	(204)	(251)
(1999, tables 122	and 195 and	RBI Bullet	<i>in,</i> assorted	lissues.	con church co	
rt bill in the importir account (see note	שווטי שווש uru שווטי s to table 5)	ger than wh "Rupee de	en recorded	at the time (item IV.D)	of servicing is in respec	of initial שמוז the credit. t of rupee-
includes interest.	Short-term tr	ade credits	exclude loc	al currency	/-backed cre	sdit through
, 1999, tables 122 import, with medi rt bill in the importi account (see note includes interest.) ssions.	, and 1; um an ig yea s to ta Short-t	95 and d long r is larç ible 5).	95 and <i>RBI Bullet</i> d long term finan ris larger than wh ble 5). "Rupee de term trade credits	95 and <i>RBI Bulletin</i> , assorted d long term financing credits ris larger than when recorded ble 5). "Rupee debt service" term trade credits exclude loc	95 and <i>RBI Bulletin</i> , assorted issues. d long term financing credits included i ris larger than when recorded at the time ble 5). 'Rupee debt service" (item IV.D) 'erm trade credits exclude local currency	95 and <i>RBI Bulletin</i> , assorted issues. d long term financing credits included in external (r is larger than when recorded at the time of servicin ble 5). "Rupee debt service" (item IV.D) is in respection term trade credits exclude local currency-backed cre

Table 3

INDIA: OVERALL BALANCE OF PAYMENTS. 1990–2000

composition of invisibles is a matter of some importance for an assessment of whether this growth is sustainable (section II.C).

The low deficit on current account has meant that in most years of the period non-official capital flows have well exceeded 100 per cent of the account deficit (table 3). Thus, even though net official aid – both convertible and rupee-denominated components – has been negligible, except in the early 1990s, the decade has seen a rise in foreign reserves, to a stock of nearly \$30 billion at the end of 1998/99 (table 4). This has been the single most important indicator of the success of the economic reform programme begun in July 1991. Indeed, for a period during the mid-1990s, the chief problem of capital account management arose from too large an inflow rather than too little.

				Foreign cur	rency assets
End-March	Total	SDRs	Gold	Total	Change
1990/91	5.83	0.10	3.50	2.24	-1.13
1991/92	9.22	0.09	3.50	5.63	3.40
1992/93	9.83	0.02	3.38	6.43	0.80
1993/94	19.25	0.11	4.08	15.07	8.63
1994/95	25.19	0.01	4.37	20.81	5.74
1995/96	21.69	0.08	4.56	17.04	-3.77
1996/97	26.42	0.00	4.05	22.37	5.32
1997/98	29.37	0.00	3.39	25.98	3.61
1998/99	32.49	0.01	2.96	29.52	3.55
1999/00	38.03	0.00	2.97	35.06	5.54

Table 4INDIA: EXTERNAL RESERVES, 1990–2000

(\$ billion)

Source: Ibid., table 136, supplemented by RBI Bulletin, August 2000.

Note: The figures in this table are not consistent with the figures from the same source for balance of payments flow, because of changes in parities between constituent currencies in foreign assets.

C. Invisibles in the current account

The major prop of the balance of payments in the 1990s has been the spurt of private transfers in the current account to annual inflows of around \$12 billion, with two clearly visible discontinuous points of increase.

The first in 1993/94 was on account of the liberalization of gold imports, previously banned. The differential between the international and Indian prices of gold fuelled the infamous hawala channel of conversion of foreign currencies into and out of rupees. Hawala was an unofficial, but efficiently functioning, market whereby rupee assets were convertible into foreign currencies obtained principally from diverted remittances, but also from misinvoiced trade. With the 1992/93 decision to allow up to 5 kg of gold per non-resident Indian (NRI) returning to the country, gold imports entered into formally reported imports, with a contra entry in what are now recorded (implicit) private transfers, thus accounting for the increase in the latter starting in 1993/94. The net direct effect of each such gold import on the current balance was thus neutral, but secondary effects improved the current account balance with the narrowing gap between official and hawala rates on the dollar, and the consequently reduced attraction of transmitting private transfers through the *hawala* route. With the permissibility, starting October 1997, of gold imports by designated importing agents, the domestic price of gold declined still more to parity with international prices, thus eliminating altogether the market for diverted private transfers to finance gold smuggling.

The second discontinuous increase in transfers, starting in 1996/97, is the analogue of a policy change in respect of NRI deposits (see section II.E below).¹ With the start in 1992/93 of non-repatriable external deposits denominated in rupees, the first repayments of (non-repatriable) principal three years down the line in 1996/97 were contra-entered as private transfers, although other accounting arrangements might have been devised for what are not current account flows. But given this recording convention, private transfers are now in the \$10–12 billion range (see table 5). Other invisibles sum to zero because of steady outflows of the order of \$3 billion on account of interest on external debt. Software exports have grown at

Table 5 INDIA: INVISIBLES BY CATEGORIES OF TRANSACTIONS, 1990–2000

(\$ billion)

Year	Non-factor services, net (I)	Factor services, net (II)	Private transfers, net (III)	Official transfers, net (IV)	Invisibles, net (I to IV)	
1990/91 1991/92 1992/93 1993/94 1994/95 1995/96 1996/97 1997/98 1998/99	0.98 1.21 1.13 0.54 0.60 -0.20 0.73 1.32 2.17	-3.75 -3.83 -3.42 -3.27 -3.43 -3.21 -3.31 -3.52 -3.54	2.07 3.78 3.85 5.27 8.09 8.51 12.37 11.83 10.28	0.46 0.46 0.36 0.37 0.42 0.35 0.41 0.38 0.31	-0.24 1.62 2.90 5.68 5.45 10.20 10.01 9.21	
1998/99 1999/00	2.17 3.86	-3.54 -3.56	10.28 12.26	0.31 0.38	9.21 12.94	

Source: Ibid., table 124, supplemented by RBI Bulletin, August 2000.

Note: Starting 1992/93, data on gold and silver brought in by Indian returning from abroad have been included under import payments with a corresponding entry in private transfers. Starting 1996/97, repayments of non-resident non-repatriable rupee accounts were contra-entered as private transfers in the current account (see *RBI Annual Report 1998-99*, Box VI.3). Both changes reflect policy changes, and therefore do not introduce discontinuities in the data series.

explosive rates from an initial small base to reach present annual flows of the order of \$4 billion per year.

D. Capital inflows

(i) Equity

The liberalization of FDI, effective as of 24 July 1991, followed soon thereafter by the signing of the Multilateral Investment Guarantee Agency (MIGA) protocol, could be said to mark the start of the big-ticket reforms of the Indian economy. First-time automatic approval up to 51 per cent equity in 34 sectors was a major departure from the earlier regime of caseby-case consideration, with equity shares rarely permitted beyond a ceiling of 40 per cent, and, when permitted, subject to draconian limits on freedom of functioning prescribed under the FERA of 1973. These limits were done away with in January 1993 through amendment of the FERA.

Regulation of capital markets without government control was legally enabled through statutory empowerment of the Securities Exchange Board of India (SEBI) in January 1992. This made possible, for the first time, portfolio inflows from foreign institutional investors without case-by-case government approval, subject to registration with SEBI, and an aggregate ceiling of 24 per cent of issued share capital. Portfolio investment is restricted to foreign institutional investors and high-net-worth individuals. Aggregate percentage ceilings have been steadily liberalized to the present level of 40 per cent. Issue of convertible bonds and shares by Indian companies on foreign bourses through American Deposit Receipts (ADRs) and Global Deposit Receipts (GDRs) became permissible for the first time in April 1992, subject to government approval. This was an important development, supplementing the opening up to foreign institutional investors, because it enabled companies to reach investors unwilling to get embroiled in the settlements mess on Indian stock markets.

A landmark development was the incorporation in June 1996 of the National Stock Depository, enabling paperless trading for the first time in India. Dematerialization remained optional, but with recognition of the National Stock Depository by the American Securities Exchange Commission in August 1997 as an eligible foreign custodian, it became an option almost universally exercised by end-December 1999. Retail investors, other than foreign institutional investors, may still opt for the ADR/GDR route, but the premium has declined markedly.

Net equity/investment inflows responded to the lifting of these constraints and touched a peak of \$6 billion in 1996/97 (table 6), largely fuelled by portfolio flows. Portfolio inflows have fluctuated thereafter. Cumulative investment by foreign institutional investors in India from 1993 to mid-2000 stood at approximately \$12 billion. A phased move, starting in June 1998, towards permission for forward exchange cover for foreign institutional investors has progressed to permission for essentially full cover of exposure (in stages; see appendix A).

				Table	6					
	7IQNI	A: FOREIG	N INVES	TMENT/EC	ΩUITY INF	LOWS, 19	90-2000			
				(\$ billior	(-					
	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
A. Direct Investment	0.10	0.13	0.32	0.59	1.31	2.14	2.82	3.56	2.46	2.16
a. With approval (SIA/FIPB) b. Without approval	ı	0.07	0.22	0.28	0.70	1.25	1.92	2.75	1.82	1.41
RBI	ı	ı	0.04	0.09	0.17	0.17	0.14	0.20	0.18	0.17
NRI ^a	,	0.06	0.05	0.22	0.44	0.73	0.76	0.60	0.46	0.57
B. Portfolio Investment	0.01	00.0	0.24	3.57	3.82	2.75	3.31	1.83	-0.06	3.03
a. GDRs ^b	ı	ı	0.24	1.52	2.08	0.68	1.37	0.65	0.27	0.77
b. FIIS ^c	0.01	00.0	00.0	2.05	1.74	2.07	1.95	1.18	-0.33	2.26
Total (A+B)	0.10	0.13	0.56	4.16	5.13	4.89	6.13	5.39	2.40	5.18
Source: Reserve Bank of India Bu Note: SIA = Secretariat for Indu Includes acquisition of shi a Includes acquisition of shi b Indian Corporate issues o c Includes offshore funds.	<i>lletin,</i> Augu strial Apprc ares of Indi f Global De	st 2000, table wals; FIPB = I an companies pository Recc	46. There a Foreign Inve: s by non-resi eipts (GDRs)	re discrepant stment Prom dents under s and America	cies between otion Board; I section 29 of an Depository	the figures he II = Foreign i FERA. Receipts (AC	are and those nstitutional i Rs).	in the BOP s vestment.	statem ent.	

FDI, on the other hand, has stagnated at around the \$2 billion mark, despite the steady expansion of admissible sectors and relaxation of procedural requirements. India remains an insignificant destination for global FDI flows. Despite automatic FDI entry, possible for the first time in the 1990s, it is entry with approval, for investments crossing sectoral caps or in sectors requiring licensing, that has remained the dominant component. This may change with the placement in February 2000 of FDI in all sectors, but for a small negative list, in the automatic route.

(ii) Debt

External commercial borrowing is generally understood in India as pertaining to non-trade credit, even though such borrowings may carry sizeable import-earmarked components. There are three main parameters governing controls over external commercial borrowing: an aggregate cap on such borrowing in any year, with preferences within the cap for infrastructure and export; restrictions on use for rupee expenditure (i.e. other than foreign currency expenditure on imports), and a ban on investment in stock markets and real estate; and minimum maturity limits.

During the mid-1990s surge in capital inflows, the use of external commercial borrowing was confined to expenditure as foreign currency on imports. With the passing of the surge, these rules were gradually eased over time, except at the short-maturity end of the spectrum. Shorter maturities have been discouraged through a lifting of end-use conditions and approval procedures for longer maturities, subject to caps on the amounts so admissible, which vary directly with the length of the minimum maturity period. Today, end-use restrictions have been lifted altogether, and with that there is a floor maturity of three years. This rules out shortterm, non-trade credit altogether.

A peculiar feature of the Indian capital account has been the special deposit schemes for non-resident Indians (see box 1), which are accorded a separate row in the balance of payments, distinct from external commercial borrowings. Foreign currency deposits carried no exchange risk for depositors. During the long period until 1997, when deposit rates were

	Box 1
DEPOS	SIT SCHEMES FOR NON-RESIDENT INDIANS
A special dep started in 19 managed floa all exchange by the FCNF commercial b rate structure	posit schemes for non-resident Indians, NR(E)RA, was 70, during the Bretton Woods era. With the start of a tt, a new FCNR(A) scheme was introduced in 1975 with risk assumed by the RBI. This was replaced in 1993–94 R(B) scheme, where exchange risk was transferred to banks. Details on the various schemes and their interest e, are listed below.
Without exch	ange risk for depositors/banks.
FCNR(A)	Foreign Currency Non-Resident (Accounts), started November 1975, closed 15 August 1994.
Without exch	ange risk for depositors only.
FCNR(B)	Foreign Currency Non-Resident (Banks), started May 1993.
With exchang	ge risk for depositors.
NR(E)RA	Non-Resident (External) Rupee Accounts, started February 1970.
NR(NR)RD	Non-Resident (Non-Repatriable) Rupee Deposits (exchange risk only for repatriable interest), started June 1992.
NR(S)RA)	Non-resident special rupee account with facilities similar to those for resident accounts, introduced in mid-April 1999, but yet to attract inflows.
Interest rates	were administratively set until
FCNR(B)	 16 April 1997: ceiling rates 22 Oct. 1997: ceiling rate set at LIBOR 29 April 1998 : ceiling rate set at 50 basis points > LIBOR for maturity > 1 year; and 25 basis points < LIBOR for maturity < 1 year.
Rupee depos	its
22 April 1992 16 April 1997	 ceiling rates, usually 100 bp above domestic rates. rates freed for all but short-term (< 1 yr); corresponding domestic rates freed in stages between October 1995 and July 1996.
13 Sept. 1997	7: rates freed for all (all domestic fixed-term rates > 1 month freed 21 Oct. 1997).

not linked to world rates, they offered clear arbitrage opportunities varying from year to year as a function of the interest rate margin between the administratively set deposit rate and world deposit rates, with the additional factor of currency risk only in the case of rupee-denominated deposits. The aggregate net inflows varied accordingly from year to year in terms of both total and composition.

The interest rate structure on foreign currency deposits marked the first time that short-term deposits were formally discouraged, although the earlier administered-rate regime is thought to have incorporated a similar tilt in the rate structure. In October 1999, the minimum maturity of foreign currency, non-resident Indian deposits (FCNRB) was lengthened to one year, from a floor maturity which had all along been set at six months, thus doing away with short-term deposits altogether. What is important to note is that these policy nudges away from short-term deposits are recent, a clear effect of the 1997 East Asian crisis. The RBI has set up a Steering Committee and a Technical Group to work on a risk management model for sovereign external liability management in India.

The total stock of external debt has been well under \$100 billion in the 1990s (table 7). Differencing these stock data does not yield annual flows comparable to those in the balance of payments table, however, because of the valuation effect. Additionally, non-resident Indians' nonrepatriable rupee deposits are excluded from external debt stock figures, quite justifiably, perhaps, but this does pose problems of comparability with the balance-of-payments flow data.

Short-term trade credits, and short-term deposits by non-resident Indians (until the October 1999 decision imposing a minimum maturity of one year) together constitute aggregate external short-term liabilities. Shortterm debt in Indian official figures is classified by original, not residual, maturity.

In stock terms, short-term liabilities, aggregating across (suppliers') trade credits and non-resident Indian deposits, fell from \$7.5 billion at end-March 1991 to \$4.1 billion at end-March 2000, and in percentage terms, from around 10 per cent to around 4 per cent of total external liabilities.

		commerci	g-term al borrowing	7	rade credits	œ		NRI deposit:	qS	Short	-term
End-March	Total	Loans	Bonds ^c	Aggregate	Short-term	Short-term (Per cent)	Aggregate	Short-term	Short-term (Per cent)	Aggregate	Total (Per cent
991	83.80	6.83	3.20	9.10	4.80	52.75	12.95	2.74	21.16	7.54	9.00
992	85.28	6.72	4.87	8.22	4.23	51.46	12.92	2.84	21.98	7.07	8.29
993	90.02	6.49	5.15	7.28	2.96	40.66	14.52	3.38	23.28	6.34	7.04
994	92.69	6.31	6.05	6.99	1.79	25.61	14.49	1.83	12.63	3.62	3.91
995	00.00	6.66	6.33	8.62	1.99	23.09	15.76	3.38	21.45	5.37	5.42
966	93.73	7.23	6.64	7.53	2.15	28.55	14.89	3.88	26.06	6.03	6.43
997	93.47	8.53	5.81	8.81	2.95	33.48	14.78	3.77	25.51	6.72	7.19
998	93.53	9.98	7.01	9.38	2.85	30.40	14.10	2.19	15.53	5.05	5.40
666	97.67	10.34	10.75	8.98	2.19	24.39	14.54	2.20	15.13	4.39	4.49
000	98.44	9.95	9.42	9.21	2.56	27.80	16.06	1.48	9.22	4.04	4.10

The decline was sharpest and most steady in trade credits. Short-term nonresident Indian deposits rose to touch a peak of nearly \$ 4 billion before falling after 1997, in a clear response to the formal linking of deposit rates to the London Inter-Bank Offered Rate (LIBOR) established after that (this shows that whatever attempts were made to curb short maturities before that were not very successful). There are no balance-of-payments flow data on short-term non-resident Indian deposits (table 3). There are only the stock data which show a sharp decline after 1997, inclusive of the valuation effect.

Short-term trade credit inflows as recorded in the balance of payments (table 3) were never exceptionally large, of the order of \$1 billion even in the pre-crisis year, 1990/91. In subsequent years these declined to negative flows, again only of the order of \$1 billion at most in any year. However, these flows are complete only in respect of suppliers' credits. Short-term credits of less than six months' maturity through banking channels, backed by letters of credit, do not appear even in the residual "other capital" row, because commercial banks are not required to report trade credits of less than six months' original maturity, for which no foreign exchange approval is required.

The Bank for International Settlements (BIS) publishes external debt stock figures which do include short-term credits through banking channels. Despite this, total trade credits reported for India by the BIS are below the Indian figure. There are other areas of incomplete coverage in the BIS data.² This is unfortunate, since the BIS is the only source on short-term debt based on residual maturities. Thus the Indian official figures offer the only series available with full coverage of all debt, and, within the parameters of their limitations, they show a halving in the proportion of short-term debt by original maturity over the decade.

E. Returning flight capital

It is clear that there has been return of flight capital in the 1990s on a major scale, motivated by the progressive liberalization of the current account (including the legalization of gold imports already referred to), leading up to the August 1994 acceptance of IMF Article VIII status. By making possible legitimate purchases of foreign currency and thereby reducing the need for external holdings of foreign currency, current account liberalization has thus largely financed itself.

The fact of returning flight capital is acknowledged, but there are differences of opinion on the particular avenues used. One popular body of opinion holds that returning flight capital in India has been largely through export overinvoicing (export income throughout the 1990s was non-taxable; a first move towards phased taxation of export income was begun in April 2000). Somewhat confusingly, the impact of export overinvoicing is thought to be statistically evident, not so much in the current account itself, where export figures are entered as declared at customs, but in the capital account in the "other capital" row, where foreign currency receipts in excess of customs declarations are accommodated. The argument against that holds that the errors and omissions component of "other capital" is not large enough to suggest export overinvoicing on a massive scale. Another possible channel is through gold imports, although it is possible that transfers financing these have only moved to the formal from the informal channel, but continue to originate from earnings of nonresidents rather than from flight capital of resident Indians.

Non-resident Indian deposits are among the capital account channels available for returning flight capital. The inflows into the non-repatriable rupee schemes in particular are thought to be evidence of flight capital return. The equity issues abroad (ADRs and GDRs) by Indian corporates and bond issues, most recently Resurgent India Bonds in late 1998, which raised about \$4 billion, offer other avenues for flight capital return.

No official estimates are available of the stock of flight capital (Reddy, 2000, denied the existence of it) nor, needless to say, of inflows of returning

capital since 1991. A popular estimate is \$9–10 billion a year, but this is not rigorously underpinned.

F. The foreign exchange market

The Indian foreign exchange market remains thin, as acknowledged in the *RBI Annual Report, 2000*. The price of the rupee has been marketdetermined ever since March 1993, with no official control over trends, as distinct from episodes of volatility during which the RBI does actively intervene. The rupee depreciated nominally, by around 7 per cent annually over the period 1995–2000 (see table 8). Although India escaped unscathed during the Asian crisis of 1997, insulated from contagion effects by the low exposure of foreign portfolio investors to the country, there have in recent years been many episodes of volatility – periods of sharp downward pressure on the rupee – which the RBI has actively intervened to correct. During the period 1999–2000, there were three such episodes: in end-May 1999, end-August 1999, and again in end-May 2000.

In correcting these, the RBI's intervention strategy relied essentially on aligning domestic short-term rates, in particular in the call-money market, with interest rates implicit in forward premiums, by using its levers of control over the liquidity in the system so as to remove incentives to arbitrage. The standard levers of control used by central banks anywhere, the bank rate and the cash reserve ratio to be maintained by banks with the central bank, have been augmented with a liquidity adjustment facility (LAF), implemented starting June 2000 in a phased manner, whereby liquidity is injected/removed from the system through reverse repo/repo auctions. The recommendations of the two Narasimham Committees have served as templates for financial sector reform in India, and the LAF was introduced on the recommendation of the second Narasimham Committee (Government of India, 1998; 1991).

The LAF will eventually completely replace the present set of mechanisms involving collateralized short-term lending facilities and a fixed rate repo provision. LAF auctions are conducted daily, and in August 2000 the

				Table 8						
INDIA: E	EXCHANG	ie rates	AND FIN	IANCIAL	SECTOR	INDICAT	ORS, 199	0-2000		
	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Exchange rate (<i>R</i> s/\$)										
End period	19.64	31.23	31.24	31.37	31.5	34.35	35.92	39.5	42.44	43.62
Average	17.94	24.47	30.65	31.37	31.4	33.45	35.50	37.16	42.07	42.65
Commercial bank interest rates										
(end-period) (per cent)										
Deposit rate (1 yr.)	9.0	12.0	11.0	10.0	11.0	12.0	11.0	10.5	9.0	7.5
LIBOR (1 yr.)	8.5	6.3	4.2	3.6	5.6	6.2	5.8	6.1	5.5	5.7
(Dep. rate – LIBOR)	0.5	5.7	6.8	6.4	5.4	5.8	5.2	4.4	3.5	1.8
Inflation rate	13.4	13.6	6.8	8.3	9.9	8.2	10.2	7.2	9.0	5.0
Real deposit rate	4.4-	-1.6	4.2	1.7	1.1	3.8	0.8	3.3	0.0	2.5
Lending rates: Min.	16.0	19.0	17.0	14.0	:	:	:	:	:	:
PLR	:	:	:	:	15.0	16.5	14.8	14.0	12.5	12.3
Source: RBI, <i>Handbook of Statistics o</i> Bulletin; Government of India Bulletin ; Government of India Note: Deposit rates starting from 19! the officially reported average certain categories of advances are from year/end values of the the Indian fiscal year for three	<i>in Indian Ecc</i> , <i>Economic S</i> 95/96, and le 5: across the s. Banks are e CPI for urbs e of the four c	<i>snomy, 1999</i> <i>Survey, 1999</i> nding rates s five biggest required to p an non/manu quarters.	, tables 127, -2000, table tarting from public sectol rescribe a m rescribe a m	. 156; supple : 5.3; and IM 1994/95 wer r banks. Effe aximum spre .IBOR rates p	:mented by F F, <i>Internatio</i> e freed; the F ctive 29 Octt sad over PLF Pertain to cal	RBI, <i>Annual</i> <i>nal Financia</i> PLR came ini Der 1999, b Seince 1996/ endar year a	Report 2000 I Statistics for to being effe anks were fr 97, which thu verages as r	, appendix t or L/BOR; av ctive Octobe eed from bei ey are free to eported in th	able I.2 and erage Jan./h r 1994, with r 1994, with r 1994, with oftermine e source, ov	RBI, <i>Monthly</i> flay for 2000. the rates here o the PLR for inflation rates riapping with

tenor of the repos auctioned was extended from one day up to a maximum of seven days. At the same time, the players authorized to participate in repo auctions (i.e. to borrow from the RBI, and thus to get access to shortterm liquid funds) have been steadily expanded to include non-bank entities, after a ban for some years on repos as a consequence of a scam in 1992 involving the misuse of funds obtained through repos. The set of approved market makers in both the primary and secondary markets in government securities, termed primary dealers, now numbers 15. An attempt is being made to impose internal control systems and capital adequacy requirements on non-bank primary dealers so as to place them on par with bank primary dealers.

Even with all the widening in levers of control over liquidity in the system, the RBI has had to resort to ad hoc direct tampering with interest rates on exports (export credit rates are still controlled by the RBI), and surcharges on import finance (which are not controlled, hence the use of surcharges) in order to achieve targeted outcomes in the foreign exchange market.

The abrupt alteration in these during a volatility episode in mid-2000 was seen as a hark back to an earlier era of instability in policy parameters. There was particular resentment over the halving in August 2000 of both balances in, and permissible accretions to, the exchange earners' foreign currency (EEFC) accounts that exporters could maintain abroad. The EEFC Scheme introduced in 1992 allowed exporters for the first time to retain a prescribed percentage of their receipts in foreign exchange with an authorized dealer in India. The August 2000 ruling was reversed in October, with, however, retention of the new constraint introduced with that ruling, confining EEFC holdings to non-interest-bearing current accounts.

A forward market for foreign exchange now functions. The development of the forward market was given a major impetus with first-time permission in April 1997 for forward contracts without documentary evidence of underlying exposure, and beyond six months, subject, however, to a declaration of exposure and fairly stringent documentation. At the same time, the case-by-case approval of currency swaps was replaced by permission for authorized dealers to operate "swap books" within their open position limits. Forward cover for portfolio investments has been permitted starting in June 1998, extending in April 1999 to essentially the full extent of exposure (appendix A).

G. Financial sector reform

Starting from a pre-reform scenario in which all deposit and lending rates were prescribed, the interest rate deregulation introduced in October 1994 has left only a single vestigial deposit rate still set by the RBI on savings (non-term) deposits. Banks are now free even to offer floating rates on term deposits. However, there remain many more controls on lending rates, on small loans (up to Rs 200,000) and subsidized, differential rate of interest (DRI) loans to deprived sections, and on export credit, which are prescribed at flat rates or capped. Lending rates on other loans are capped at a maximum spread over the prime lending rate (PLR), with each bank free to set both the benchmark PLR and the spread. Since October 1997 banks have been free to set term-linked PLRs, and since October 1999 they have also been freed from PLR benchmarking for certain categories of advances.

Interest rate deregulation found banks in India with poor in-house risk-assessment abilities. Indeed, the requirement of a maximum spread (as set by each bank) over PLR was introduced because banks' inability to assess risk for sub-prime borrowers led initially to very large margins over the PLR, far in excess of the underlying credit risk. The only formal liquidity requirements in place (table 9) are the cash reserve ratio (CRR) and the statutory liquidity ratio (SLR). During the pre-crisis period, the former was set at 15 per cent, while the latter, which provides a captive market for government securities to finance fiscal deficits, was set at 38.5 per cent. Both the CRR and SLR have been brought down in tandem with interest rate deregulation, although banks continue to subscribe to risk-free government securities well in excess of the present SLR of 25 per cent because of continued in-house lacunae in credit and market risk assessment capabilities. The scrapping of CRR and SLR on inter-bank borrowings has reduced friction in the call-money market and has led to the Mumbai Inter-

Table 9	
INDIA: MONETARY CONTROL LEVERS,	1990–2000

(Per cent end period)

	Bank rate	Cash reserve ratio (CRR)	Statutory liquidity ratio
1990/91	10.0	15.0	38 5
1991/92	12.0	15.0	38.5ª
1992/93	12.0	15.0	37.3 ^a
1993/94	12.0	14.0	34.8 ^a
1994/95	12.0	15.0	31.5 ^a
1995/96	12.0	14.0	31.5 ^a
1996/97	12.0	10.0	31.5 ^a
1997/98	10.5	10.3	25.0
1998/99	8.0	10.5	25.0
1999/2000	8.0	9.0	25.0

Source: RBI, Handbook of Statistics on Indian Economy, 1999, table 36, supplemented by RBI, Annual Report 2000.

a These were on the stock of net liabilities on specified dates, with a reduced rate on incremental liabilities beyond that date.

Bank Offered Rate (MIBOR), which could develop into an effective benchmark (see also Williamson and Mahar, 1998).

The RBI issued a detailed set of guidelines for putting in place an asset-liability management (ALM) system for commercial banks in February 1999, and for other financial institutions in January 2000. The guidelines are equipped with periodic reporting requirements to the RBI, albeit without statutory conformity requirements or penal clauses. Meanwhile, latitude in respect of fund deployment continues to widen. Since the latest liberalization in early September 2000, banks have been permitted 5 per cent of total outstanding advances in equity and equity-linked instruments in the form of shares, convertible debentures, and units of mutual funds. This is expected to deepen equity markets, reduce the dominance of external portfolio investors and lead to a revival of slow-growth stocks.

Note: For change after 1 April 2000, see box in text.

A large number of initiatives have been undertaken to reduce friction in the banking system, in payments settlements for both domestic and crossborder settlement. This will, among other beneficial effects, have a lowering effect over time on rates at the short end of the market for liquidity. A major advancement towards enabling hedging of interest rate risks was made with the issue of guidelines in July 1999 for two rupee derivative instruments, forward rate agreements (FRAs) and interest rate swaps (IRS), permitting even market making participation without underlying exposure, but they are confined to plain vanilla contracts without explicit or implicit option features such as caps/floors/collars.

Permission to hedge commodity price exposures through participation in futures or options contracts in international exchanges is now granted by the RBI on a case-by-case basis. The recognition of the loss suffered in 2000 on account of unhedged imports of oil at a time of rising international oil prices is likely to speed up the pace of deregulation on this front. Major obstacles, however, are the large public sector presence in international commodity imports and internal constraints on their functioning on account of audit and vigilance regulations.

The traditional division in India between banks, as providers of working capital, and three term-lending financial institutions, as providers of project finance, was removed some years ago. The financial institutions are gradually being brought under the regulatory mantle of the RBI. At the smaller end of the size spectrum, non-bank financial institutions, have been brought under prudential control for the first time through the Reserve Bank Amendment Act of 1997, with a minimum capital requirement for registration and a higher requirement for the entitlement to accept fresh public deposits.

The share of non-performing assets (NPAs) in total bank loans has been a cause of worry for some years. Long time series on NPAs are not possible because there has been a phased alteration of the definition of NPAs completed only in 1994/95 (see Rajaraman, Bhaumik and Bhatia,1999). The most recent figures available relate to end-March 2000, and show a gross NPA percentage of 12.8 per cent, and a corresponding net figure of 6.8 per cent (see RBI, 2000). Although lower than the figures recorded at end-March 1997 of 15.7 per cent (gross) and 8.1 per cent (net), these are high figures by any standards, and clearly far removed from the target of 5 per cent gross set by the Tarapore Committee for end-March 2000 as a prior requirement for full capital account convertibility (see RBI, 1997). A particularly interesting feature of NPAs in India is the enormous crosssectional variation between banks as a function of vintage, ownership and region of operation (for regression results explanatory of cross-sectional NPA variations for 1996/97, see Rajaraman, Bhaumik and Bhatia, 1999).

A menu of options for the NPA problem has been offered to the banking system through Debt Recovery Tribunals and Settlement Advisory Committees. But these are hampered by an inadequate legal infrastructure (see RBI, *Report on Currency and Finance, 1999–2000*). The Government of India Budget for 2000/01 in February 2000 announced plans to establish a Financial Restructuring Authority to oversee recapitalization of weak banks in the system.

The minimum capital to risk assets ratio has been raised from 8 to 9 per cent effective as of 31 March 2000. The Government has announced its intention to dilute its shareholding in public sector banks, which dominate the banking sector, to 33 per cent, and banks are being encouraged to raise the requisite capital through the market rather than through strategic tie-ups.

The Insurance Regulatory and Development Authority Act was passed in 1999, whereby banks and non-bank financial companies are permitted to enter the insurance market, breaking a government monopoly in place for many decades in both life and non-life segments.

H. Conclusions

It is difficult to disentangle the essence of India's approach to capital account management through the thicket of liberalization notifications that have been issued in a steady stream since the onset of the opening up of the economy in July 1991, bearing the Indian policy hallmark of gradual incrementalism. What is clearly in evidence, however, is the monotonicity of the direction of movement towards liberalization of cross-border capital flows.

The capital account today in India carries convertibility for nonresidents but not for residents. Capital inflows, whether in the form of FDI or portfolio investment, are granted full freedom of repatriation. There does exist a non-repatriable rupee deposit scheme for non-resident Indians, but it is an option exercised by the depositor, co-existing with repatriable schemes, and is clearly an invitation to returning flight capital. Residents, on the other hand, are not permitted to hold foreign currency accounts, except for exporters and other exchange earners in EEFC accounts. Outward portfolio investment flows from non-corporate residents are prohibited. Outward investments by corporates through share swaps are permitted under the new Foreign Exchange Management Act, effective from 1 June 2000, without approval subject to sectoral caps, and with approval otherwise. Under the new Act, contraventions of the ban on outward capital flows are treated as a civil, rather than criminal, misdemeanour, a major alteration in the legal regime governing the capital account.

Capital account liberalization in India has been slow and cautious. The 1997 Report of the RBI (Tarapore) Committee recommended a threeyear phased move to full convertibility by 2000 subject to achievement of macro targets (see appendix A) for the (overall) fiscal deficit, inflation, and the debt-service ratio, apart from targets for financial sector indicators. Of these, the fiscal deficit target of 3.5 per cent of GDP in 1999/2000 is nowhere near actuals for the year, which were 5.6 per cent for the central Government alone, and 9.9 per cent combining central and state governments.

The institutional changes needed to improve regulation of the stock market without strangulating government control were introduced at the outset, but arrangements to dematerialize transactions in the share market were slow to follow. It is only as recently as April 1999 that the stock transactions included in the major indices were fully dematerialized. This reduction of friction in trading sets the stage for the development of stock market derivatives. The reform of the economy was motivated by an external liquidity crisis, with reserves at a low of \$1 billion. At end-March 2000, reserves stood at \$38 billion, a first attestation of the success of the reform process.

The introduction of current account convertibility in 1994 indisputably brought flight capital back into the country, but there is some dispute as to whether the avenue of return was the current account (through the financing of newly- permissible gold imports and through export overinvoicing), or the capital account (through the special deposit schemes and periodic external bond issues open to non-resident Indians). Whether fuelled by returning flight capital or not, the non-governmental flows on capital account amounted in the mid-1990s to well in excess of 100 per cent of the current account balance, so that until as recently as 1997 the capital account management problem was one of too much rather than too little.

FDI was not among the channels that contributed to the mid-decade surge. Notwithstanding steady liberalization in terms of required approvals and export obligations attached to dividend repatriation, FDI has been slow to respond, hampered, not as earlier by national entry obstacles, but by the continuing structural rigidities of the Indian economy, and by an absence of coherence between policy at the national level and procedural obstacles at the local level (Rajaraman, 1997). It was portfolio inflows, from both foreign institutional investors and external ADR/GDR share capital issues, that contributed to the mid-decade surge, responding to full repatriability with no lock-in periods.

The problem of excess capital inflows in the mid-1990s was tackled by restricting the end-use of equity capital raised through ADR/GDR issues and external commercial borrowings to foreign currency expenditure on imports, and by prohibiting use for rupee expenditure within the country (these stalled inflows were recorded as net outflows in the "other capital" row). As a technique of capital account management it was far superior to a more market-based approach of free entry with sterilization, and demonstrates the effectiveness of capital barriers in handling imbalances on the capital account. As the capital inflow surge ceased, the end-use restrictions were lifted. Today there are no such restrictions on ADR/GDR equity capital or on debt inflows above prescribed floor maturities. These floor maturities on non-trade external commercial borrowings have been effectively used to contain non-trade short-term debt.

A peculiar feature of external debt inflows into India is the menu of deposit schemes offered to non-resident Indians, which during the 1990s have seen a decisive shift towards rupee-denominated, and, within rupee-denominated, non-repatriable deposits (introduced in 1992). With non-repatriable rupee deposits, only the interest is repatriable (with currency risk). The foreign currency non-resident Indian deposit schemes lost their arbitrage advantage when the ceiling on deposit rates in 1997 was set at LIBOR. The first formal discrimination against short-term inflows within the non-resident Indian scheme in April 1998 was clearly motivated by the Asian currency crisis of late 1997. The impact on the short-term share of non-resident Indian deposits is clearly visible. With the raising of the minimum maturity on such deposits to one year in October 1999, short-term non-resident Indian deposits have been done away with altogether.

On non-repatriable, non-resident Indian rupee deposits, the principal payable at maturity is contra-entered in the current account as private transfers. This accounting artefact has been one of the two major causes of the extraordinary increase in private transfers to annual inflows of around \$15 billion today. The second is of course the legalization of gold imports, which has resulted in the restoration of private transfers to the formal channel from informal channels, not only as contra-entries in the first instance to legal gold imports, but also as secondary effects of the reduced attractiveness of exchange rates through the informal *hawala* channel.

The only long-term series available at the time of writing is the official Indian series from which it seems possible to conclude that there has been an indisputable fall in short-term trade credit since the early 1990s. The issue of what has happened in the last few years to short-term trade credits remains unresolved. BIS figures of short-term debt by residual maturity are uncomfortably inconsistent with the Indian figure by original maturity in terms of both level and direction of movement, but since the BIS figures exhibit evidence of incompleteness in respect of both the total debt stock and total trade credits, they are not immediately acceptable as the correct source on the direction of movement in recent years in respect of short-term trade credit.

Not surprisingly, the market for foreign exchange remains thin, with periods of volatility that have seen RBI intervention through not merely the use of monetary levers of control over liquidity in the system, but also ad hoc tampering with rates charged on export credit, which remain under administrative control, along with surcharges on import finance, and a halving (albeit short-lived) of balances in, and permissible accretions to, external (EEFC) accounts, as recently as August 2000. While none of these can even remotely be characterized as reversing the direction of the movement towards capital account liberalization, the sudden reversal of policy parameters, for example on EEFC accounts, is seen as a throwback to the pre-reform era of policy unpredictability.

If there should be another and more pronounced surge in foreign capital inflows, the process of liberalizing capital outflows may be carried further forward, beginning with corporate investment, and proceeding eventually to non-corporate portfolio outflows. In the interim, while the reduction in financial market friction is in itself an encouragement to capital inflows, it is the underlying real economy, and the continued fiscal, infrastructure and labour market bottlenecks that are in need of urgent reform.

III. MALAYSIA

A. Introduction

Malaysia prior to the Asian crisis of 1997 had had a long history of openness on both current and capital accounts, unique in the developing world, and ahead even of some developed countries. Current account convertibility under Article VIII of the IMF was accepted as far back as November 1968, and the Malaysian ringgit was among the first currencies to go into a float in May 1973, after the collapse of the Bretton Woods system (see appendix B). With the resulting need for hedging instruments,

the greater availability of these in more sophisticated offshore financial markets led to the development of an offshore ringgit market, located principally in Singapore. Malaysian exports and imports were ringgitdenominated, and the burden of hedging was transferred to non-resident counterparties in the offshore market.

Capital flows were liberalized in three major moves: in 1973, along with the ringgit float; in 1987, as part of a policy package to pull out of the mid-1980s recession; and in 1994, as part of a package of measures designed to handle excessive capital inflows. The Malaysian response to downward pressures on the exchange value of the ringgit during the Asian crisis of 1997 reversed this traditional openness. The long history of a floating exchange rate was abruptly terminated by a ringgit peg at 3.8 ringgit to the dollar on 2 September 1998, a day after the announcement of a package of financial policy measures. These measures were designed to kill the offshore ringgit market and to prevent all access by non-residents to ringgit, as well as to obstruct outward speculative flows of capital from residents. They also aimed to drive a further wedge between the foreign exchange market and the domestic imperative to lower interest rates which had been driven up during the crisis by the imposition of a 12-month stay on portfolio outflows, though only in respect of the principal. Meanwhile, interest and dividends remained freely repatriable and the current account remained free, apart from checks on porosity by requiring repatriation of export proceeds within six months from the date of export. There was also a limit on exports of foreign currency by residents, which functioned as a cap on invisible outflows.

As a package, the Malaysian retreat from capital account convertibility has to be among the major milestones in recent economic history. It challenged the prevailing economic orthodoxy, and was orthogonal to the recovery packages imposed by the multilateral financial institutions on other East Asian countries similarly afflicted. By not curtailing capital account convertibility, and therefore not severing the link between monetary policy and exchange markets, the recovery measures meant tight money and high interest rates, with devastating consequences for the domestic real economy in these neighbouring countries. In what follows, capital account management in Malaysia prior to 1997 is dealt with in section III.B, and the crisis itself in section III.C. The capital controls of 1998/99 are dealt with in section III.D, and the postcrisis financial sector reform measures in section III.E. Section III.F concludes.

B. Capital account management prior to 1997

Table 10 shows the Malaysian balance of payments in the 1990s. The two most striking features of the Malaysian current account were: (i) the consistently positive, though small (except in 1998, a recession year), balances on merchandise trade, with large export earnings at \$70–80 billion towards the end of the decade matched by an equivalently large import bill; and (ii) steady outflows on invisibles, now close to \$10 billion annually. The current account has thus always been in deficit (except in 1998). In fact, the current account deficit averaged around 7 per cent of GDP in the three years preceding the crisis.

Buoyant capital inflows more than compensated for the deficit on current account. Indeed, in the first half of the 1990s, non-official capital inflows exceeded the current account deficit by a factor of 4.5, and foreign reserves jumped from \$11 billion at end-1991 to \$28 billion at end-1993 (table 11), as the central bank, Bank Negara Malaysia (BNM), sought to contain the appreciation of the ringgit. The short-term component of inflows was especially large, at around \$5 billion in both 1992 and 1993. Inward capital controls were introduced in 1994 but withdrawn within the year (appendix B). These restrictions, which covered external borrowing, portfolio investment in Malaysian securities, and forward and swap transactions by banks, succeeded in reducing non-official capital inflows, and changed the direction of short-term flows from inflows of \$5.4 billion in 1993 to outflows of \$3.2 billion in 1994 (table 10). The temporary capital controls of 1993/94 were a minor blip, however, in what was, until September 1998, an unfettered regime for external capital inflows and relatively few constraints on capital outflows. Indeed, the response to the excess inflows of 1994 included a further relaxation on outward portfolio investment in February 1994.

			Table 1	0					
MAL	AYSIA'S C	VERALL	BALANCE	E OF PAYN	AENTS, 19	90–1998			
			(\$ billior	(
ltem	1990	1991	1992	1993	1994	1995	1996	1997	1998
I. Merch. trade balance (A-B)	2.62	0.53	3.38	3.20	1.70	0.04	4.01	3.65	17.59
A. Exports, f.o.b. B. Imports, c.i.f.	28.64 26.02	33.54 33.01	39.62 36.24	45.99 42.79	56.61 54.91	71.56 71.53	76.86 72.85	77.39 73.74	71.87 54.28
II. Invisibles, net	-3.54	-4.76	-5.59	-6.28	-7.33	-8.67	-8.47	-9.28	-8.21
III. Current Account (I+II) /GDP (per cent)	-0.92 -(2.09)	-4.23 -(8.62)	-2.21 -(3.73)	-3.08 -(4.60)	-5.63 -(7.56)	-8.63 -(9.73)	-4.46 -(4.42)	-5.62 -(5.61)	9.38 (12.93)
IV. Capital account (A to D), net	2.90	5.48	8.78	14.44	2.48	6.88	6.94	1.75	0.89
A. Private long-term capital	2.33	4.00	5.18	5.01	4.12	4.17	5.08	5.14	2.16
B. Official long-term capital	-1.05	-0.24	-1.13	0.38	0.33	2.45	0.30	1.65	0.54
C. Private short-term capital	0.50	1.87	4.69	5.41	-3.23	1.01	4.10	-4.59	-5.26
D. Errors and omissions	1.12	-0.14	0.03	3.64	1.27	-0.76	-2.53	-0.45	3.44
V. Overall Balance (III+IV)	1.98	1.25	6.57	11.36	-3.15	-1.76	2.48	-3.87	10.27
VI. Reserves and related items	-1.98	-1.25	-6.57	-11.36	3.15	1.76	-2.48	3.87	-10.27
IV [A+C+D]/III (per cent)	(430)	(135)	(448)	(456)	(38)	(51)	(148)	(2)	:
Source: Bank Negara Malaysia (BNM), <i>Mont</i> Note: Figures in ringgit converted to US do include external borrowings and accr between these figures and the sum or private capital inflows to the current	<i>thly Statistical</i> llars using per rued earnings of gross FDI ir account defic	<i>Bulletin</i> , June iod average e on FDI; and a nflows and ne it in percenta	e 2000, table exchange rati are net of FDI t portfolio inf ge terms; the	s V.6, VI.3 an es (see table outflows. The lows in table re is therefor	d VIII.1. Figu 12). The balar ere need there 2. Figures in p e no figure foi	res for 1999 v ree of payme efore be no ab parentheses i 1998 which	vere available nts figures for solute nor dir n the last row had a current	e only upto Q private long- ectional corr present the account sur	3. term capital espondence ratio of total plus.

Table 11 MALAYSIA: EXTERNAL RESERVES, 1990–2000

(\$ billion)

		Internation	nal reserves	
End of period	Special drawing rights	IMF drawing rights	Gold and foreign exchange	Gross international reserves
1000				10.00
1990	0.20	0.23	9.59	10.02
1991	0.21	0.26	10.72	11.19
1992	0.11	0.33	17.68	18.12
1993	0.12	0.31	27.88	28.31
1994	0.14	0.40	26.13	26.66
1995	0.15	0.68	24.28	25.11
1996	0.17	0.69	26.85	27.70
1997	0.12	0.42	14.67	15.21
1998	0.21	0.63	25.33	26.17
1999	0.09	0.83	29.94	30.86
2000 (June)	0.09	0.89	33.01	34.00

Source: BNM (1999), tables II.6 and II.7, updated with BNM, Monthly Statistical Bulletin, June 2000.
 Note: IMF drawing rights refer to Malaysia's quota in the International Monetary Fund, less IMF holdings of Malaysian currency.

The following constituted the configuration of capital account management prior to the East Asian crisis of 1997:

- *Portfolio capital inflows* by non-residents were freely permissible into all types of Malaysian financial instruments (bonds, equities, bank deposits, and all money market and derivative instruments).
- *Primary issue of securities*, whether abroad by residents or in Malaysia by non-residents, required prior approval.
- *Portfolio capital outflows* were unrestricted for individual residents and for corporates with no domestic borrowing; for those with domestic borrowing, prior approval was needed for remittances in excess of 10 million ringgit per corporate group per year.

- *FDI inflows* were not merely freely permissible, although with prior approval in a few sectors, but were welcomed with tax incentives and other kinds of incentives.
- FDI outflows were freely permissible.
- *External borrowing* was unrestricted for authorized dealers, including investment banks, with no restrictions on on-lending to residents or non-residents, subject to prudential limits on net open positions. Direct external borrowing by residents was subject to approval above sanctioned limits.

Overall, the package added up to a well-structured liberalization of capital flows, with limits and checks at critically necessary points, such as at the point of primary issue of securities, both inward and outward; on domestically leveraged large outward portfolio flows; and on direct external borrowing by non-institutional residents (see also Cole, Scott and Wellans, 1995).

The second major push in 1987 towards liberalizing the external capital flows regime was followed by financial sector reform and strengthening of prudential controls during the period 1989–1995. New legislation in 1989 strengthened regulatory and prudential provisions relating to loan classification, provisioning and disclosure, capital adequacy, and exposure risk, and extended the regulatory mantle of Bank Negara beyond commercial banks to include finance companies and merchant banks. Credit rating agencies were established, and measures were taken to deepen financial markets – principally the inter-bank money market, the foreign exchange market, and in particular the stock market – with the establishment of a Securities Commission in 1993, which led to improvements in trading and settlement systems. The only financial market which remained relatively underdeveloped was the bond market, because of the surprising retention of high minimum liquid asset requirements for banks (similar to the Indian statutory liquidity ratio).

Rate deregulation accompanied prudential control. By February 1991, banking institutions were free to set deposit rates and a base lending rate

(BLR), subject to a standardized formula benchmarked on deposit rates. The lack of incentive in such a system for banks to improve their internal efficiency was corrected in November 1995, when banks became free to set a BLR subject to a ceiling, benchmarked on the three-month inter-bank rate. A cap of 4 per cent above BLR remained on the maximum lending rate.

The sound configuration of capital account convertibility in Malaysia is especially important to keep in mind against the background of the capital controls introduced after the external account crisis. These controls were introduced in a country that had a background of prudently liberal, rather than reckless, capital account openness.

The strength of Malaysian macro fundamentals has already been commented on in section I. Malaysia was a country with high growth rates, of not less than 9 per cent in any year after 1988; the crisis of 1997 was the first year in a whole decade which saw growth dipping well below 9 per cent, to 7.3 per cent. This growth record was accompanied by remarkably low rates of inflation, at well under 5 per cent, a high savings rate in excess of 40 per cent, fiscal surpluses on current account, and remarkably low levels of external debt – both total and short-term – as a percentage of exports.

C. The crisis of 1997

Table 12 shows the stability in the value of the ringgit against the US dollar in the 1990s. There were some upward pressures on the ringgit middecade, with a rise in its value from 2.7 ringgit to the dollar in 1990 to a steady 2.5 ringgit to the dollar in 1994–1996 – three years immediately preceding the crisis – despite high current account/GDP ratios.

For a country as open as Malaysia, with exports equal to or greater than GDP, the exchange rate is the most important price. For that price to be plunged by forces beyond its control was a critical vulnerability that the country could not afford to ignore. Yet another vulnerability is the

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Exchange rate (RM/\$)											
End period	2.7	2.7	2.6	2.7	2.6	2.5	2.5	3.9	3.8	3.8	3.8
Period average	2.7	2.8	2.6	2.6	2.6	2.5	2.5	2.8	3.9	3.8	3.8
Shares in total manufactured exports (per cent)											
Electronic and electrical total	56.6	58.0	58.2	61.5	63.5	65.7	65.8	66.5	68.1	71.8	72.0
(of which electronic):	32.8	31.8	32.5	34.4	35.4	38.6	40.8	45.1	48.0	53.3	53.0
Semiconductors	24.9	21.3	20.1	20.9	20.7	22.5	22.4	22.8	22.9	24.1	21.8
Electronic equipment	7.8	10.5	12.4	13.5	14.8	16.0	18.4	22.3	25.1	29.2	31.2
Total manfd. exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 12

148 INDIRA RAJARAMAN

Source: Ibid', tables V.6 and VIII.5. **Note:** The figures for the year 2000 relate to the period January–May 2000. RM = Malaysian ringgit.

excessive dependence on electronics in manufactured exports, which account for 85 per cent of the total export basket. Electronic and electrical exports accounted for more than half of total manufactured exports at the beginning of the 1990s, and by end-decade the share had risen to more than 70 per cent. Malaysia was not unique among its neighbours in this respect. The figures for the first half of 2000 show shares for electronics exports of 58 per cent (Malaysia), 56 per cent (Singapore, excluding re-exports), 45 per cent (Taiwan Province of China) and 37 per cent (Republic of Korea).

A nominal depreciation of the ringgit to some degree was clearly necessary to maintain export competitiveness at a time of steep currency depreciation in the Asian competitive neighbourhood; but it was the accompanying rise in domestic interest rates with the build-up of speculative demand for the ringgit that was the major real threat, and clearly called for containment. The challenge posed was the need to reduce interest rates without precipitating a further decline in ringgit value.

After years of positive portfolio inflows, there was a net outflow in 1997 of \$10 billion (table 2), although FDI continued to hold steady, with inflows of \$2.4 billion in 1997. Speculative pressure on the ringgit built up, financed by ringgit obtained offshore. This was initially sought to be contained in August 1997 through an offer-side limit on currency swaps (sale of ringgit) with non-resident banks, fairly generously set at \$2 million per bank. This was a very limited response to the speculative pressures of 1997, and the swap limit did very little to contain the slide in the ringgit (which fell to a low of 4.88/\$ in January 1998) or the decline in foreign exchange reserves to \$15 billion by end-December 1997.

Although contagion without any aggravation from weak fundamentals could entirely have led to external crisis, there was an export deceleration in 1997, after sustained export growth since 1990 of about 18 per cent annually in US dollars (figures in table 10). There also appears to have been some structural deterioration in the quality of bank loan portfolios in Malaysia as a result of rapid credit expansion and the collapse of the asset bubble, notwithstanding the controls in the system on loan quality. Table 13 shows that after a long period of monotonic decline in the percentage of

						Table	13								
		MAL	AYSIA:	FINAN	ICIAL \$	SECTC	IR INDI	CATO	RS, 19	90-20(0				
						(Per ce	int)								
	1990	1991	1992	1993	1994	1995	1996	19	67	19	98	19.	66	20	00
				Gross				Net	Adj. gross	Net	Adj. gross	Net	Adj. gross	Net	Adj. gross
Non-performing/ total loans (end-period	<u> </u>														
Commercial banks	20.1	15.7	14.7	12.6	6.9	4.0 0.4	3.6	3.2	10.5	5.9 7	15.3	5.7	16.2	5.5	14.4 4.4
rinance companies Merchant banks	21.0 12.6	0.CI 8.7	0.0 6.9	5.0	9.5 9.5	0.0 7.8	4. / 1. /	3.5 3.5	10.6	10.9	22.5 22.5	o.o 12.3	27.0	o.9 12.5	23.2 27.8
Banking system (overall)	20.0	15.4	14.5	12.3	7.8	5.5	3.7	4.1	9.7	7.5	18.9	6.6	18.4	6.5	16.9
Commercial bank interes rates (average year-en	d) it														
Deposit rate (1 yr.)	7.2	8.2	7.8	6.3	6.2	6.9	7.3		9.3		5.7		4.0		3.9
LIBOR (1 yr.)	8.5	6.3	4.2	3.6	5.6	6.2	5.8		6.1		5.5		5.7		6.9
(Dep. rate - LIBOR)	-1.2	1.9	3.6	2.7	0.6	0.6	1.5	•	3.3	•	0.2	•	-1.7		-3.0
Inflation rate	ю. 1	4 4	4.7	3.6	3.7	3.4	3.5	•	2.7	•	5.3	•	2.8		<u>1</u> .3
(Real deposit rate)	4.1	3.8	3.1	2.7	2.5	3.5	3.8	•	6.6		0.4		1.2		2.6
Lending rates															
Base (BLR)	7.5	8.7	9.3	8.2	6.8	8.0	9.2	•	10.3		8.0		6.8	•	6.8
Average	0.0	9.7	10.3	9.7	8.2	9.3	10.1		11.5		9.7		7.8		7.7
Source: Ibid., tables III.15-III. ⁻ Note: • The NPI figures fo	18, V.1 ar	nd VI.13	for Malay	sia; IMF, ^T he intere	Internation of the second seco	ional Fina for 2000	ancial Sta are for Ju	atistics fo	or LIBOR	average	e January	-May fo	r 2000.		
Beginning Decemb	er 1997, r	non-perfo	rming loa	ins were i	eported	net, as a	percent o	f net loar	ns. To reg	ain comp	arability v	vith earli	er years, t	he adjus	ted gross
snare or gross roar reported figures wa	is is cons is shorten	ed from s	iorn repo six to three	e months	es or pro	d-1998, h	J. Furmer ooth sets	, in the offigure	s are repc	orted. The	i 990, me e figures ir	this tab	le for 1998	8 and su	bsequent
 years are the six-rr The inflation rate is 	s from the	res, to re Consum	tain com	parability Index (C	with ear PI).	lier year	<i>i</i> o								

150 INDIRA RAJARAMAN
non-performing loans (NPLs) in the banking system as a whole, from 20 per cent in 1990 to 3.7 per cent in 1996, there was a rise to 4.1 per cent in the *reported* figure for 1997. This figure, however, understates the true increase because of the switch in the official reporting system from gross to net shares starting in December 1997 (NPLs also saw other definitional volatility over the period; see notes to table 13). Using the officially reported figures for loan provisioning, the adjusted gross share at end-1997 was close to 10 per cent, and by end-1998 this had risen to 19 per cent (see also Ghani and Sood, 1999).

The early effects of depreciation pressures and ringgit selling were felt in the offshore ringgit market. Speculative demand for ringgit for conversion into dollars in anticipation of a crash in ringgit value led to a dramatic rise in offshore ringgit deposit rates, which by April 1998 had risen above 30 per cent. This was transmitted to the domestic market through capital outflows in response to the rise in offshore ringgit rates.

Domestic ringgit interest rates rose in response (table 13). The 12-month deposit rate towards end-1997, at 9.3 per cent, offered a real return to depositors of 6.6 per cent over what remained a low inflation rate, and the excess over the 12-month dollar LIBOR rose to 3.3 per cent. The average lending rate by the end of 1997 had risen to 11.5 per cent, in a country where the average lending rate had not risen above 10 per cent after financial restructuring, and this despite the November 1995 freeing of the BLR of banks subject to a cap (see appendix B). Real contraction followed. The real growth rate of the economy in 1998 worsened steadily to -10.1 per cent in the third quarter. This in turn led to a deterioration in bank loan portfolios. However, the differential impact of recession on the different subsectors of the banking system show that the incidence of structural weakness within the system was not uniform. The increase in NPLs was sharper among merchant banks and finance companies than among commercial banks. By the end of 1998, finance companies and merchant banks had (net reported) NPLs of nearly 12 and 11 per cent respectively, corresponding in gross terms to 29 and 22.5 per cent respectively (table 13, for the extended period up to 2000, see table 14).

Table 14

MALAYSIA: SHARE OF PROPERTY SECTOR IN NON-PERFORMING LOANS, 1998–2000

(Per cent)

	December	December	March
	1998	1999	2000
Commercial banks			
Construction	14.0	14.7	14.8
Purchase of residential property	8.1	10.4	10.6
Purchase of non-resid. property	6.4	6.9	7.1
Real estate	7.0	5.9	6.3
Total property	35.5	37.9	38.8
Finance companies			
Construction	8.6	13.6	16.8
Purchase of residential property	5.5	8.3	9.2
Purchase of non-resid. property	7.2	8.4	9.3
Real estate	9.5	3.8	4.1
Total property	30.9	34.0	39.4
Merchant banks			
Construction	31.7	22.6	26.4
Purchase of residential property	0.0	0.7	0.8
Purchase of non-resid. property	1.3	2.0	2.6
Real estate	8.5	11.1	11.3
Total property	41.6	36.4	41.0

Source: Ibid., tables III.19-III.21.

D. The capital controls of 1998–1999

The measures introduced on 1 September 1998 (see appendix B) were designed to:

• Kill the offshore ringgit market, by prohibiting transfer of funds into the country from externally held ringgit accounts, except for investment in Malaysia (excluding credit to residents) or purchase of goods in Malaysia. Since the offshore ringgit market, like any offshore market, could only function through externally held ringgit accounts in correspondent banks in the territory of the currency, the measure immediately rendered offshore ringgit deposits dysfunctional. Offshore banks required access to freely usable onshore ringgit bank accounts to match their ringgit liabilities, and the new ruling eliminated free usability. Holders of these deposits were given a month within which to repatriate them to Malaysia. But it is important to note that this was not a requirement so much as a consequence of the controls on external ringgit accounts. This eliminated a major source of ringgit for speculative buying of US dollars in anticipation of a ringgit crash. A corollary measure, demonetization of large-denomination ringgit notes was announced, and later followed through, so as to curb the circulation of ringgit outside Malaysia.

- Close off access of non-residents to domestic ringgit sources by prohibiting ringgit credit facilities to them, requiring that all trade transactions be settled in foreign currencies, and mandating authorized depository institutions through which alone transactions in ringgit-denominated financial assets became permissible.
- Close the offshore market in Malaysian shares conducted through a mechanism known as the Central Limit Order Book (CLOB).
- Obstruct speculative outward capital flows by imposing the requirement of prior approval for residents to invest abroad in any form, and setting tight limits on exports of foreign currency by residents for other than valid current account purposes.
- Protect the value of the ringgit and shore up foreign exchange reserves by requiring repatriation of export proceeds within six months of the date of export.
- Drive a further wedge between the foreign exchange market and the imperative need of the hour for monetary easing, and thus regain monetary independence by imposing a 12-month stay on outflows of external portfolio capital (only the principal, interest and dividend payments were freely repatriable).

International rating agencies responded uniformly to the capital control measures by downgrading Malaysia's credit and sovereign risk ratings. As

the success of the package became undeniable, it was attributed to environmental factors, among them:

- · Adequacy of foreign exchange reserves; and
- The underlying strong fundamentals of the Malaysian economy.

What is notable about the package was its thoroughness, and the clever choice of policies designed to control foreign exchange outflows and speculation against the ringgit by non-residents and residents. It was thus the absence of discrimination against foreign investors, the clear evidence of sound economic logic underlying the package, and the effectiveness of its enforcement by Bank Negara, which accounted for the success of the capital controls as much as the enabling environment and the underlying strength of the Malaysian economy.

The severing of the link between domestic interest rates and the external sector was a major motivation underlying the entire exercise. The statutory reserve ratio (SRR) was brought down sharply from 13.5 per cent – to which it had been raised in 1996/1997 to contain liquidity in the system as part of an initially orthodox response to downward pressures on the currency – to 4 per cent in 1998, where it now remains (table 15). The benchmark for setting the ceiling on the base lending rate (BLR) of banks, hitherto the three-month inter-bank rate,³ was further shifted to the BNM intervention rate, with the same formula as before, so as to enhance BNM leverage over lending rates, with the permissible margin above the benchmark reduced from 2.5 to 2.25 percentage points. There was also a reduction in the cap on the maximum lending rate, which was reduced for the first time since financial deregulation, from a spread of 4 per cent above the BLR to 2.5 per cent. The impact of these reductions is clearly visible in table 13. The average lending rate fell from 11.5 per cent at end-1997 to 9.7 per cent by end-1998, and the real one-year deposit rate fell from 6.6 per cent at end-1997 to 0.4 per cent by end-1998. With a further fall in inflation rates in subsequent years from what for Malaysia was a high inflation rate of 5.3 per cent in 1998, the real interest rate has subsequently risen to 2.6 per cent today.

1999 Statutory reserve ratio (SRR) 6.5 Liquidity ratio Commercial banks						•					
199 Statutory reserve ratio (SRR) 6.5 Liquidity ratio Commercial banks) (P	er cent i	at year e	(pue						
Statutory reserve ratio (SRR) 6.5 Liquidity ratio Commercial banks	0 19	91 1:	992	1993	1994	1995	1996	1997	1998	1999	2000
Liquidity ratio Commercial banks	5 7	2	8.5	8.5	11.5	11.5	13.5	13.5	4.0	4.0	4.0
	, 17.	.1	7.0	17.0	17.0	17.0	17.0	17.0	15.0	15.0	15.0
actual 18.4	4 18	0.	8.0	18.0	17.9	17.5	20.3	17.8	17.9	19.6	19.5
Finance companies											
required 10.0	0 10	.0 1	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
actual 12.1	12		2.1	12.0	12.4	12.5	13.1	10.1	14.0	18.7	16.4
Merchant banks											
required 10.0	0 10	.0 1	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
actual 16.5	5 16	<u>ه</u>	7.9	18.3	15.8	15.3	18.9	10.0	20.3	20.2	24.8
New liquidity framework											
Commercial banks											
< 1 week			:	:	:	:	:	:	5.0	3.0	3.0
1 week-1 month	•		:	:	:	:	:	:	7.0	5.0	5.0
Finance companies											
< 1 week	-		:	:	:	:	:	:	5.0	5.0	5.0
1 week-1 month	•		:	:	:	:	:	:	15.0	7.0	7.0
Merchant banks											
< 1 week	:		:	:	:	:	:	:	5.0	3.0	3.0
1 week-1 month	-		:	:	:	:	:	:	15.0	5.0	5.0
Source: Ibid., tables III.26–III.28.											
Note: The 2000 figures pertain to end-June. The SF	R is a sta	itutory ca.	sh reserv	ve to be m	aintained	with Bank	Negara. Ui	nder the (ol	ld) liquidity	ratio, the r	equireme
Note: The 2000 figures pertain to end-June. The SF was an overall nerventane of elinihile lishilitie	R is a st∂ se Bv ∆nr	atutory ca	sh reserv 26 hankin	re to be m	iaintained	with Bank	Negara. Ui er to the Ni	nder the (o	ld) liquidity v Framewo	ratio, th∈ urk Eiour	ٽ ۽

156 INDIRA RAJARAMAN

The reaction of received orthodoxy to the Malaysian package was that the Malaysian recovery was no stronger than that of other East Asian countries. However, the incremental impact of the package can only be assessed with respect to a Malaysian counterfactual, since the other countries differed in terms of their fundamentals at the time of the crisis. A formal counterfactual exercise, which requires a quarterly computational general equilibrium (CGE) model for the Malaysian economy, is beyond the scope of this paper. What is undeniable is the speed of real correction in the economy, from -10.6 per cent in the last six months of 1998 to -1.5 per cent in the first quarter of 1999, and positive growth in all subsequent quarters. Even critics of the Malaysian capital controls had to concede that the reduction in interest rates helped contain the increase in NPLs of the banking system that would surely have been a feature of any counterfactual scenario. Standard and Poor's is reported to have estimated that the NPLs would have risen to 30 per cent if interest rates had not fallen as sharply as they did (IMF, 1999). Also, the Federation of Malaysian Manufacturers is quoted as having reported that the exchange rate peg and reduced interest rates lowered corporate uncertainty and made business planning easier (IMF, 1999).

The measures of September 1998 imposed, inter alia, a 12-month waiting period for repatriation of proceeds from liquidation of external portfolio investments. In order to pre-empt possible large-scale outflows at the conclusion of that period in September 1999, the waiting period was replaced as of 15 February 1999 by a system of graduated exit levies, with separate regimes for capital already in the country and for capital brought in after that date. For capital already in the country, there was a price on exit inversely proportional to duration of stay within the earlier stipulated period of 12 months. Therefore capital that had entered the country more than a year previously, before 15 February 1998, was free to leave at a zero exit price. For capital yet to come in, there was a levy only on profits, defined to exclude dividends and interest, also graduated by length of stay. In effect, profits for the purpose of the new Malaysian rules were defined to equal realized capital gains. Accompanying clarifications were issued in respect of repatriation of funds relating to investment in immovable property and FDI. Also investments in the newly-established, over-thecounter share market, MESDAQ, were exempted.

Although the replacement of the earlier controls with exit levies was internationally welcomed, there was also criticism of the new package. As a levy applicable only at the time of conversion of ringgit proceeds into foreign exchange, and therefore not a capital gains tax, it could not be offset through double taxation agreements. The 10 per cent levy on profits, even on funds invested for a period over 12 months, was seen as generally discouraging portfolio capital inflows, and equity investments in particular, since interest and dividends are exempted. The higher levy of 30 per cent, applicable on gains on investments of less than a year's duration, attracted especially heavy criticism on the grounds that potential investors would apply the higher levy rate of 30 per cent to all investments, regardless of their expected maturity, because of the "last in, first out" rule (IMF, 1999). On 21 September 1999, the higher levy was eliminated, leaving in place only a single rate of 10 per cent on capital gains regardless of duration of investment. In a further relaxation, the 10 per cent levy on capital gains was retained, effective from 1 February 2001, only for capital in the country for a duration of less than one year. This too was done away with on 2 May 2001.

The very criticism directed at the new package helped identify what was good about it and, more importantly, underlined why it could prove of enduring worth in reducing volatility in capital flows. It is true that the levy reduced the expected rate of return on equity to foreign investors, and thus raised the required pre-levy rate of return needed relative to other markets. This was an intended effort to reduce casual entry into Malaysia, and to ensure that capital would enter only when the fundamentals justified the expectation of a higher pre-levy rate of return. By December 1999, international rating agencies had begun restoring the credit rating for Malaysia. The final benediction was bestowed when the Malaysian market was included as a component of the Morgan Stanley Capital International Indices in May 2000.

The institutional origin of the capital control measures is unclear. Bank Negara believes in cooperation with the Government rather than independence, a tradition said to have been laid down by the first Malaysian Governor of Bank Negara, Tun Ismail Mohamed Ali. The facts on record, which show that, effective 1 September 1998, there was a change in the leadership of the team charged with implementing the new package of selective exchange controls, suggest that the measures may not have originated with the central bank.

The exchange control measures of September 1998 (other than the prohibition on portfolio repatriation) remain substantially in place, except for some relaxation in respect of credit facilities in ringgit by residents to non-residents, which are now permissible as long as the credit facility is not used to purchase immovable property in Malaysia, up to a limit of 200,000 ringgit, well below the earlier pre-1998 limit of 5 million ringgit.

E. Financial sector reform

In terms of the institutional requirements of the effort to insulate the country on a long-term basis from recurrences of external volatility, it was clear that financial restructuring would have to come first, given that this was the foremost structural weakness in what was otherwise a soundly managed macroeconomic scenario at the time of the crisis. The weakness of finance companies, and merchant banks in particular as evidenced by the much sharper increase in their non-performing loans (NPLs), was already referred to in section III.C.

Bank Negara has exhibited exemplary awareness of the need for institutional strengthening in the financial sector. Listed below are the avenues along which initiatives have already begun.

(i) Bank restructuring

Begun in early 1998 and continuing under a four-pronged approach:

• *Danaharta*, an asset management company, was established for purchase of NPLs, exchanged against issue of zero-coupon, government-guaranteed bonds with five-year maturity and an additional rollover option of five years; yields are approximately the same as Malaysian Government security yields.

- *Danamodal*, a scheme for recapitalization of banks, was introduced. It was a clearly needed accompaniment to Danaharta purchases of NPLs at a discount from banks. Danamodal itself was financed through the generalized issue of zero-coupon bonds, in the first instance to banking institutions themselves, with secondary tradability among corporate houses, special status as Class-1 liquefiable assets under the new liquidity framework, and zero risk weight for capital adequacy purposes.
- Bank consolidation. Initiated in January 1998 for finance companies alone, this was extended to all banking institutions in July 1999. By 1 September 2000, 54 financial institutions were consolidated into 10 new entities led by hand-picked anchor banks. There was, however, a negative stock market reaction to some of these mergers on news of an element of official coercion (Straits Times, 2000).
- *Corporate Debt Restructuring Agency* (CDRC). This was set up to provide a platform for borrowers and creditors to work out debt restructuring schemes.

(ii) Banks capacities for risk management

Begun as far back as 1995, banks are being nudged towards in-house control mechanisms for management of the additional dimensions of market risk involved in cross-border transactions, and evidence of an appropriate internal control structure is a requirement for banks to use financial derivatives. Since March 1998, banks have been required to conduct monthly stress simulation tests under a variety of scenarios and to report to Bank Negara on a quarterly basis.

(iii) Prudential limits on sectoral exposure

Notwithstanding the effort to shore up banks' internal capacities for risk assessment, there was an unquestioned need for limits on exposure to property lending, given the central role this had played in structural weakening of the financial sector (for an excellent account of the genesis of bank credit flows to the property sector, see UNCTAD, 1998). In October 1995 limits on maximum financing margins on purchase of highend properties were introduced for the first time (see BNM, 1999), while not controlling lending for construction – the supply end. Predictably, margins on purchase had to be abolished in 1998 in a bid to clear the excess supply of high-end properties. A 20 per cent limit on total outstanding loans to the broad property sector was imposed in April 1997, just before the exchange rate crisis (the limit excluded low-end residential properties, infrastructure and industrial projects). It was only in January 1999 that lending for the construction of high-end residential properties including resorts, hotels, golf courses and commercial properties, was prohibited altogether. This response to a serious oversupply problem, if enacted five years earlier, might possibly have averted the exchange rate crisis of 1997 altogether.

(iv) Limits on connected lending

Effective 1 April 1998:

- Single customer credit is limited at 25 per cent of capital funds, down from 30 per cent.
- Country exposure limits are set on a bank-specific basis.
- Credit facilities on large loans, defined as those exceeding 10 per cent of total capital, are limited to 50 per cent in aggregate.
- There is prohibition on lending to directors, officers and employees, and to firms in which such persons have an interest of more than 5 per cent.

Effective 1 April 1999:

Lending to large shareholders with shares of 20 per cent or more in the bank making the loan is prohibited. This was the first time that lending to owners was explicitly prohibited, although it is thought that since sizeable stakeholders are likely also to be directors, the 1998 prohibition went most of the way.

(v) Prudential limits on liquidity risk

Beginning January 1999, a new liquidity framework based on a maturity ladder approach was introduced in place of the earlier overall liquidity requirement, with banking institutions given the freedom to cross over to the new system. By April 2000, 26 institutions had opted for it. In essence, the new liquidity framework breaks down liquid assets by degree of liquidity.

(vi) Prudential limits on cross-border risks

Limits to banks' exposure to foreign currency loans have been set at 50 per cent of equity capital. These are prudential limits without penalties, but are in any case so generously set that they are in no danger of being crossed, and could perhaps be tightened.

(vii) Incorporating risks in loan classification, provisioning, capital adequacy and disclosure

- Off-balance-sheet items have been incorporated in loan classification and provisioning requirements since March 1998.
- The minimum risk-weighted capital requirement is still 8 per cent. Capital adequacy requirements are expected to move towards a bank-specific configuration as a function of internal controls and sectoral exposure.
- Quarterly public disclosure requirements imposed in early 1998 were relaxed in September 1998 along with the capital controls then introduced. A return to tighter disclosure norms was considered necessary for restoration of discipline and market confidence.

F. Conclusions

Malaysia had so free a capital account regime leading up to the 1997 crisis was so free that there was even an offshore market in ringgit, perhaps the only case of an offshore market in an emerging market currency. The advantage the offshore ringgit market gave foreign investors, in terms of fine-tuning risk-management through access to the more diversified financial hedging products and instruments available offshore, paled in comparison with the exchange rate turbulence it facilitated in 1997. Eliminating the offshore market had to be an essential feature of any policy package designed to drive a wedge between the foreign exchange market and the imperative monetary policy need at the time of the crisis, which was to lower interest rates. The rise in ringgit interest rates was transmitted onshore from offshore speculative borrowing of ringgit to fund movement into dollars in anticipation of a crash in the ringgit value, and had potentially devastating consequences for the domestic real economy and for what was already a structurally weak financial sector, overexposed to property lending. The offshore ringgit market has now been wiped out, and thus the principal intent of the capital control measures introduced in September 1998 has been fully achieved. The frozen Central Limit Order Book (CLOB) offshore shares, a residual problem after closure of the offshore ringgit market, is on the way to resolution through an offer menu that accommodates shareholders at all ends of the liquidity spectrum. There remain no loose ends on the offshore front.

The exchange controls introduced in September 1998 remain largely in place with the single exception of the 12-month holding period on repatriation of portfolio principal, which after September 1999 was reduced to just a 10 per cent levy on capital gains. This was further confined, effective February 2001, to capital repatriated after a duration of less than a year in the country. On 2 May 2001, even this vestigial hurdle on financial exit from Malaysia was removed altogether.

The overwhelming need for financial sector consolidation is fully recognized and being addressed. Until that process is complete, Malaysia would be ill-advised to open up its financial borders again. The exchange controls still in place obstruct free access to ringgit for non-residents as part of the effort to prevent resurrection of an offshore ringgit market. Free movement from ringgit into dollars for residents is still possible, but these dollars must be held in foreign exchange accounts in Malaysia. The difference from the point of view of control over the capital account, is that the foreign exchange accounts are held by banking institutions within the regulatory ambit of Bank Negara. What is not permitted is export of dollars outside the country. An officially-approved foreign currency offshore banking centre has been developed in Labuan. Outward portfolio flows, whether from corporates or resident individuals, require approval, which is rarely granted. But as in all approval-driven systems, the barriers could be relaxed over time without a formal change of regime.

The overhang of NPLs is being handled through a set of interconnected agencies. Stepping back from the complexity of the arrangements, what is being attempted is assistance to banks in loan rescheduling and management, offloading of bad loans at a discount to an asset management agency, and recapitalization of the worst-hit banks through bonds subscribed to by stronger banks in the system. Other planks in the financial restructuring programme included the mergers of what were 54 banks into 10 units by 1 September 2000, which provoked negative stock market reactions on account of there having been some measure of official coercion.

The share of gross NPLs has come down somewhat since the worst peak at end-1998 in the banking system as a whole and in all components of it except merchant banks. The property sector continues to account for 40 per cent of NPLs. The controls introduced in the system in 1999 to prohibit lending for construction of high-end properties came five years too late to avert the financial sector softening that was a contributory, if not the precipitating, factor in the 1997 crisis. Controls on connected lending, now in place, again came five years too late.

With the continued dollar peg on the ringgit, the need for developing a domestic market for hedging instruments has taken a back seat, although it is clear that such markets will have to be developed over the long term. It has to be remembered that the offshore ringgit market developed in response to the need of non-residents for hedging instruments at a time when import and export settlements were denominated in ringgit, so that resident importers and exporters were relieved from the need to hedge. With import and export settlements now denominated in dollars, as part of the package of exchange control measures of September 1998, there will eventually be a need for hedging instruments once the peg is removed. Statements by the Malaysian Prime Minister on the occasion of the country's National Day on 31 August 2000 suggest the ringgit peg is here to stay, notwithstanding market estimates that the peg undervalues the ringgit, and that higher import prices lead to lower investment than would be the case under a ringgit float (the 1998 drop of 20 percentage points in the investment rate continued into 1999). The larger need remains for Malaysia to adopt an exchange rate policy that carries greater flexibility and adaptability to monetary policy requirements. While this is recognized, there is little evidence that the ringgit will go off the peg, or even be re-pegged, in the foreseeable future.

IV. CONCLUSIONS

India and Malaysia share a similarity of capital account regimes today that would have been unthinkable a decade earlier. The capital controls introduced in Malaysia in response to the external liquidity crisis of 1997, and the gradual capital account liberalization in India, also motivated by an external liquidity crisis in 1991, have brought about a remarkable convergence between the capital account regimes in the two countries. In both countries non-resident capital inflows enjoy full freedom of repatriation. Outward capital flows for corporate residents are permissible, but controlled within prescribed limits. All other outflows of capital from residents are banned. There is a lesson in this that carries validity beyond the specifics of the two countries studied.

The advantages of free cross-border flows of capital and of access to a global savings pool remain unquestionably valid. However, in emerging markets with institutional weaknesses in the financial sector, it is damaging to focus on the gains of free capital flows without the institutional consolidation that would prevent a recurrence of episodes of volatility. The purpose of this paper is not to deliver a verdict on whether full capital account convertibility should be an eventual world objective, issues in any case already ably addressed in Cooper (1998) and others. Rather, the paper seeks to demonstrate that the transition to full capital convertibility need not necessarily be monotonic at all times, and that retention of rights of sovereign control over policy with respect to resident capital is essential for macroeconomic control over the real sector, especially in developing countries (see also Schneider, 2000).

India in 1990 did not have current account convertibility; the rupee was administered at a moving basket-peg; inward FDI was possible only on a case-by-case approval basis, subject to equity caps, curtailments on freedom of functioning beyond those caps, and dividend repatriation linked to export obligations; portfolio inflows were unknown; and outward FDI by corporates, although not unknown, was subject to an extended case-bycase approval basis. All other outward capital flows were banned, with criminal penalties for contravention of the ban. An informal *hawala* channel for capital outflows thrived, notwithstanding these penalties, with dollar supplies from diverted private remittances.

Malaysia in 1990 had had current account convertibility for over two decades; the ringgit had been a floating currency for 17 years, and there was a flourishing offshore ringgit market in Singapore; inward FDI and portfolio capital inflows were unfettered, with approval needed only for flotation of issues on foreign bourses; and outward capital flows were free for corporates, except those with large domestic borrowings. Outward capital flows from non-corporate residents were further freed in 1994 as part of an attempt to contain an inward capital surge.

The overall policy framework for management of the capital account, the exchange rate and macroeconomic policy

The present Malaysian capital account regime is remarkably similar to the Indian, despite their very diverse historical points of origin. Outward investment for corporate residents is permissible up to a limit, and beyond that with approval, again similar to the newly liberalized Indian regime; although in all approval-driven systems, it is the manner in which the approval is exercised that determines the substance of the regime.

Inward capital flows into Malaysia continue to be free and unfettered, as always, for both FDI and portfolio investment. Flotation of issues on foreign bourses has always required government approval. Thus there remains full capital account convertibility for non-residents. Among the measures introduced in September 1998 was the ban on any use of externally-held ringgit accounts in domestic banks other than towards purchases of Malaysian financial or real assets. This was introduced to curb the flourishing offshore ringgit market, which fuelled speculative movements in exchange markets in 1997 and 1998. To that degree, the freedom earlier enjoyed by non-residents to operate ringgit-denominated accounts outside Malaysia has been curtailed. But non-residents remain free to hold such accounts in Malaysia, subject to the ban on direct credit to residents from such accounts.

The legal regime in India for capital account transactions has seen a major alteration, effective as of 1 June 2000, with the introduction of FEMA, under which contraventions of the ban on capital outflows from residents no longer invite criminal penalties. The Act also grants first-time automatic approval for outward FDI by corporates through stock swap options, subject to sectoral caps and with possible approval beyond those caps. All other outflows of capital from residents remain banned. Non-resident capital inflows enjoy full freedom of repatriation, and effective from March 2000, face very few sector-specific entry barriers. Flotation of shares on foreign bourses remains subject to government approval.

Policy in India towards the capital account over the 1990s has been steady in terms of both direction (liberalization of capital inflows) and pace (gradual). The slow pace of liberalization of inflows in the capital account was undoubtedly an outcome, to some degree, of buoyant inflows of current invisibles, private remittances in particular, in response to the early moves towards current account liberalization. The routing of private remittances through official channels, away from *hawala*, was an outcome, *inter alia*, of lifting the ban on gold imports. Other elements of current account liberalization, by making possible legitimate purchases of foreign

currency, brought back flight capital through the mix of current and capital account channels described in section II. However, no objective estimates of the quantum of returning flight capital are available. With the return of flight capital, current account convertibility more than paid for itself. External reserves are now in the region of \$40 billion (approximately 8 months' import cover), up from \$1 billion, the crisis level in June 1991, immediately preceding reform.

Malaysian policy during the 1990s, from a starting point of free capital account convertibility, has also demonstrated steadiness of purpose. Whether during the 1993 capital surge, or the 1997 capital outflows, Malaysian policy has asserted the sovereign right to impose temporary reversals of freedom of cross-border capital flows, and thus to have capital account convertibility on a reversible, rather than an irreversible, basis. During the 1993 capital inflow surge, which had a large short-term component, restrictions were imposed on external borrowing, portfolio investment in Malaysian securities, and forward and swap transactions by banks. These measures were reversed within a period of 8–12 months as pressures on the ringgit eased, with an outflow of short-term capital. Thus Malaysia rode out the inflow surge without the domestic monetary turbulence of trying to sterilize free inflows.

The measures imposed in September 1998 have had a longer duration, and continue to remain in place, except for the phased reversal over a year of the controls on portfolio repatriation. With the exception of the vestigial 10 per cent levy on profits on portfolio capital in the country for less than one year, which was removed in May 2001, and the successful killing of the offshore ringgit market through limits placed on permissible uses of non-resident accounts, these measures have curbed freedom of cross-border flows for residents rather than non-residents. Although current account transactions do not carry category-specific caps, the tight limit imposed in September 1998 on export of foreign currency by residents functions as a uniform cap on outflows on both current and capital accounts. Malaysia has decisively established its right to manage its capital account in such a way as to impose a wedge if need arises, between the external value of the ringgit and its sovereignty over domestic monetary policy. The exchange value of the ringgit remains at the peg of \$1 = 3.8 ringgit, introduced in September 1998. The paradox is that the ringgit peg was part of a package of measures designed to spur real growth through lower domestic interest rates – which had risen in response to speculative demand for ringgit – and that today the peg undervalues the ringgit, so that prices of imported capital goods are higher and investment lower than would be the case in the absence of the peg. There is clearly a longer-term need to align exchange rate policy with monetary policy. Even if this is recognized within Bank Negara, the central bank is not free to introduce a unilateral change of regime. At the same time, there is no expressed need for such independence. Macroeconomic policy is seen as an interlinked whole, to be worked out in cooperation between the central bank and the executive arm of the Government.

The Indian rupee is market-determined in respect of trends. No other policy is possible, given the inflation differential between India and its major trading partners. However, the foreign exchange market remains thin, and there are anywhere from one to three episodes of volatility in a typical year, in which the Reserve Bank of India (RBI) intervenes actively through alteration of liquidity conditions in the call-money market. With the introduction by the RBI of a Liquidity Adjustment Facility, and its continued efforts to improve depth in the call-money market, these interventions might become less jerky and ad hoc than they have been, noticeably during a major episode in mid-2000.

There is a coherent process of financial sector consolidation in place in India, and official recognition of the need for fiscal tightening, without which no lowering of domestic interest rates can take place. Financial sector reforms remain snagged in the absence of any progress for establishing a legal framework for speedy liquidation of loss-making enterprises, which in turn requires decisions that are difficult in the present political scenario of coalition government.

Financial sector consolidation in Malaysia has received very careful policy attention; it was begun in early 1998, well before the capital control measures that came in September, with a four-pronged approach encompassing asset management, bank recapitalization, loan management and

debt restructuring, and bank consolidation. There is a clear recognition of the damage done by uncontrolled lending to the property sector, which was finally halted in 1999 at the supply end after some unfruitful fumbling with demand-end controls. Controls were also introduced in 1998 and 1999 on connected lending. Impressive attempts are under way to improve banks' in-house capacities for management of credit and market risk, with banks required to conduct monthly stress simulation tests under a variety of scenarios, and to report to Bank Negara at quarterly intervals. All of these would be promising were it not for occasional evidence of coercion in policy implementation, as, for example, in the ongoing process of bank consolidation - where the mergers into 10 consolidated entities may have brought together unwilling partners - and the possibility that enforced subscription to bonds for recapitalization of the worst-hit banks might carry adverse incentives for well-managed banks in the system (for other issues that arise in connection with banking regulation in relation to a new financial architecture, see Cornford, 1999).

The Extent to which the different regimes in recent years have contributed to more stable capital movements

Short-term debt as a percentage of the total debt stock has shown a marked fall over the 1990s in India, particularly after the 1997 changes discouraging short maturities in the deposit schemes offered to non-resident Indians. These deposit schemes, a peculiar feature of the Indian capital account, have now moved to a more sensible configuration of deposit rates, benchmarked to LIBOR for foreign currency deposits, in place of the previous configuration which offered arbitrage opportunities bordering on the scandalous. With the new maturity floors on non-resident Indian deposits and non-trade commercial debt, short-term debt will henceforth be purely trade-related.

To the extent that Indian liberalization of capital inflows has so far moved at a faster pace for portfolio investments than for FDI, the regime has not contributed to stable capital movements as much as if FDI had been more rapidly facilitated. Portfolio capital is inherently volatile, although this has been retarded to some degree in India by the procedural difficulties of entry and exit. However, with dematerialized trading finally having captured the bulk of traded stocks, there has been a dramatic fall in transaction costs of both entry and exit. While this is good in general for reduction of friction in the system, it might lead to greater volatility in portfolio flows, in much the same way in which the liquidity of Malaysian capital markets, both onshore and offshore, facilitated contagion. Fortunately, there was a further liberalization of entry for FDI in March 2000, with the move to a small negative list of sectors needing approval, instead of, as previously, a listing of open sectors.

Malaysian short-term debt as a share of total debt is higher than for India, but normalized to exports it has historically been far lower. However, with the decline in Indian short-term debt, the two are now roughly at par. Malaysia unquestionably stabilized capital inflows during the mid-decade surge, with entry obstructions that reversed the heavy short-term inflows in particular, and with liberalization of portfolio outflows for residents. The regime change in 1998, however, was not directed principally at external capital, since it was introduced in September 1998 after portfolio outflows of \$10 billion had already taken place in 1997. At the time, it was designed principally to stabilize the ringgit and, by imposing barriers to exit of resident capital, to sever the link between exchange markets and the monetary policy need of the hour, which was to lower interest rates. To the extent that lower interest rates succeeded in containing the recession of 1998 and facilitating real growth of 5.6 per cent in 1999, the measures succeeded in stabilizing the macroeconomic system, and, as a corollary, sustained the stability of FDI inflows within the neighbourhood of \$2 billion throughout 1998 and 1999.

Thus the Malaysian regime in place since 1998 has achieved greater stabilization of capital flows than what would have obtained in the counterfactual, but a historically different configuration of policies might possibly have secured greater insulation against contagion in the first place. Thus the development of a market in foreign exchange derivatives in Malaysia would have pre-empted the development of the offshore ringgit market, which arose in response to the hedging needs of counterparties to ringgit-denominated trade with Malaysia; the offshore market was where non-residents were able to obtain ringgit-denominated credit for speculation during the currency crisis outside the reach of controls applicable on credit to non-residents within Malaysia. Again, the controls on lending for construction of upmarket resorts and commercial properties, if enacted in 1994 rather than in 1999, would have prevented the financial sector softening that, along with export deceleration, precipitated capital outflows in 1997. But after the onset of the crisis, the Malaysian response was a well-judged, macro-stabilization package with a focus on the real sector corrective called for at the time.

Likely future direction of policy and major influences

Malaysia is politically stable, with a Prime Minister firmly in control of economic policy, and not due to face parliamentary elections until 2004. It is likely that the capital controls will remain in place until then. On the occasion of Malaysia's National Day on 31 August 2000, the Prime Minister reaffirmed his commitment to the peg, despite widespread consensus that the ringgit is undervalued at the peg. There is worry that FDI may fall off in some years, and that the continuation of inflows at around the \$2 billion level seen right through 1998 and 1999 merely represented a follow-through on projects begun before the crisis. Thus, although the medium-term outlook is stable, both politically and in terms of the capital account regime, there is an underlying apprehension about the peg and the eventual need for a regime that permits mutual compatibility between exchange rate and monetary policy.

The likely economic policy direction in India is somewhat less certain than in Malaysia because of the greater political uncertainty, despite agreement across the political spectrum on the obstacles that must be addressed if economic fundamentals are to be strengthened: the fiscal overhang and the need for investment in infrastructure. There is broadspectrum consensus that external capital must be wooed for infrastructure and other investments, so that the opening up to capital inflows of the 1990s will continue regardless of the political configuration. What remain impaled on the political scenario, however, are the ideologically-sensitive decisions on cutting fiscal subsidies, which are critically necessary for cutting interest rates and thus for facilitating the real growth without which no sustainable financial sector reform is possible. The import liberalization, which will be fully completed according to the WTO timetable by March 2001, has left in its wake defeated domestic competitors, and the legal reform necessary to enable liquidation of loss-making enterprises is a function of the political strength of pro-reform elements in the Government. The national Government, if it lives out its full term, is due for a change only in 2004. Cutting fiscal subsidies on petroleum products, food and electricity will raise cost-push inflation even as it engenders real growth (through reduction in the fiscal deficit and thereby domestic interest rates), so that with or without fiscal reform there is no immediate prospect of achieving the macroeconomic markers necessary for full convertibility on capital account.

APPENDIX A

EXTERNAL POLICY MILESTONES: INDIA

Exchange rate regime/current account

1 March 1992:	Dual exchange rates, administered/market-determined, under the Liberalized Exchange Rate Management System (LERMS).
1 March 1993:	Unification of dual exchange rates into single-market- determined rate.
20 Aug. 1994:	Current account convertibility (IMF Article VIII), with notified, category-specific caps on outflows.
9 Jan. 1997:	Caps on trade-related outflows removed.
31 March 2000:	Quantitative restrictions removed on 714 out of 1,429 imported items; remainder slated for removal by 31 March 2001.

Capital account

Institutional/legal framework

- 30 Jan. 1992: Statutory empowerment of Securities Exchange Board of India (SEBI) for regulation of stock markets.
- 8 Jan. 1993: Major alterations in Foreign Exchange Regulation Act (FERA) of 1973 granting parity of status to foreign and Indian-owned companies, and liberalizing outward investments by Indian companies in joint ventures overseas.

23 July 1996:	Legislation passed in Parliament for setting up of the National Stock Depository enabling first-time paperless trading on the capital market.
30 May 1997:	Report of the (Tarapore) Committee on Capital Account Convertibility (CAC) recommending a three-year phased move to CAC, subject to macro targets: Gross fiscal deficit/GDP 3.5 per cent (1999–2000); inflation rates 3–5 per cent (1997–2000); debt service ratio of 20 per cent (1999–2000).
5 April 1999:	All trading in India's two main stock indices, Nifty (NSE–50 stock index) and Sensex (BSE-30 stock index) dematerialized.
1.1. 2000	

1 June 2000: Replacement of FERA by Foreign Exchange Management Act (FEMA); contraventions hereafter to be dealt with under civil, not criminal, law.

Foreign direct investment

- 24 July 1991: Under new industrial policy, first-time automatic approval (with export obligations) of FDI up to 51 per cent in 34 specified sectors, higher than 51 per cent permissible with approval; in place of earlier case-by-case approval subject to 40 per cent ceiling in all but high-technology or export-oriented projects.
- 13 April 1992:India signs Multilateral Investment Guarantee Agency
Protocol (MIGA) for protection of foreign investments.
- 31 March 2000: All FDI placed under automatic route except for a small negative list for sectors still requiring licensing (for both domestic and foreign investment) or for foreign investment exceeding notified sectoral caps.

Foreign equity inflows

Foreign Institutional Investors (FIIs)

- 30 Jan. 1992: FIIs allowed to invest with full repatriability of principal and income in primary/secondary markets, subject to registration with SEBI; aggregate ceiling of 24 per cent of issued share capital; and individual ceiling of 5 per cent.
- 22 July 1996: Individual ceiling raised from 5 to 10 per cent.
- 4 April 1997: Aggregate ceiling raised from 24 to 30 per cent.
- 24 April 2000: Aggregate ceiling raised from 30 to 40 per cent.

Capital issues on foreign bourses

- 1 April 1992:" Indian companies permitted to issue, subject to government approval, Foreign Currency Convertible Bonds and ordinary shares through Global/American Depository Receipts (GDRs and ADRs) on Overseas Stock/Over the Counter Exchanges, with full repatriation benefits and no lock-in period, but with end-use restrictions.
- 22 May 1998: All end-use restrictions lifted except for ban on use of GDR/ADR issue proceeds for investment in real estate/ stock market.

External commercial borrowing (ECB)

Subject to an overall annual ceiling with preference for infrastructure and export sector financing, and restrictions on utilization for rupee expenditure^b relaxed for:

18 May 1995:	Manufacturing companies: Limit: \$1 million Minimum maturity: 3 years
8 Jan. 1996:	Non-manufacturing companies: Same limits as for manufacturing
19 June 1996:	Limit: \$3 million
31 March 1997:	Long-term limit : \$100–\$200 million Minimum maturity : 10–20 years.
31 March 1997:	Inward remittance of funds for imports permissible with utilization lag of up to one year.
16 June 1998:	Loans with minimum average maturity of 10 years out- side aggregate cap on ECB.
22 May 1998:	No end-use restrictions. Minimum maturity between 3 years (simple) to 5 years (average) varying directly with amount borrowed; 8–16 years for long-term window.

Forex financial^c markets

- 7 April 1997: Scrapping of CRR and SLR on inter-bank borrowings leads to MIBOR.
- 15 April 1997: 1. First-time permission for forward foreign exchange contracts without documentary evidence of underlying exposure, and beyond six months; subject to a declaration of exposure supported by average export/import turnover of last two years.
 - 2. Case-by-case approval of rupee/foreign currency swaps replaced by permission for authorized dealers to operate "swap book" within their open position limits.

- 11 June 1998: First-time permission for forward exchange cover to FIIs to the extent of 15 per cent of outstanding investments as on that date.
- 24 April 1999: Limit for forward cover: 15 per cent of investments as on 31 March 1999 (with utilization, further extension of cover possible); entire incremental investment thereafter.

Foreign currency holdings (banned in general for residents)

- 1 April 1993: Exchange Earners Foreign Currency (EEFC) Scheme under which exporters permitted to retain part of their earnings in accounts held abroad.
- 14 Aug. 2000: Halving of EEFC balances effective 23 August 2000.
- 10 Oct. 2000: EEFC ruling reversed.

Source: RBI, Annual Reports (various).

- *a* The notification was issued on 12 November 1993, but with backdated effect from 1 April 1992.
- **b** As distinct from use for import financing; rupee expenditure on investment in stock markets/real estate is prohibited.
- *c* Deregulation dates for domestic bank deposit rates are given in notes to table 7, along with deregulation details on NRI deposits.

APPENDIX B

EXTERNAL POLICY MILESTONES: MALAYSIA

Exchange rate regime/current account

- 11 Nov. 1968: Current account convertibility (IMF Article VIII).
- 8 May 1973: Currency (Malaysian ringgit) floated. Offshore ringgit market develops over time, mainly in Singapore, as a result of imports and exports denominated in ringgit, to meet hedging needs of non-resident counterparties.
- 2 Sep. 1998: Ringgit pegged at \$1 = 3.8 ringgit

Capital account

1973; 1987:	Capital inflows and outflows liberalized.
27 Feb. 1994:	Relaxation of restrictions on outward portfolio investment.
2 Jan. 1990:	Over-the-counter (CLOB) market in Malaysian shares opens, giving further impetus to offshore ringgit market in Singapore.
1989–1995:	Reforms of financial sector accompanying capital account liberalization:
	Banking and Financial Institutions Act (BAFIA), 1989, extending Bank Negara Malaysia (BNM) prudential regulation to finance companies and merchant banks in addition to commercial banks.
	February 1991

1. Banking institutions free to set deposit rates.

- 2. Base lending rate (BLR) of each bank subject to standardized formula benchmarked on deposit rates.
- 3. Maximum lending rate capped at 4 per cent above BLR.

November 1995

Banks free to set BLR subject to ceiling (benchmarked on 3-month interbank rate + 2.5 per cent margin).

Inward capital controls (temporary)

17 Jan. 1994–	
20 Jan. 1995:	Ceiling on foreign borrowing by domestic banks (excluding trade-related and direct investment).
24 Jan	
12 Aug. 1994:	Restrictions on portfolio investment in Malaysian securities.
23 Feb	
16 Aug. 1994:	Restrictions on forward and swap transactions by banks.

Controls on outward capital/closure of non-resident access to ringgit

- 4 Aug. 1997: Currency swap limit of \$2 million per bank group on offer side (sale of ringgit) on transactions other than current account with non-residents.
- 1 Sep. 1998: 1. Prohibition on transfer of funds from externally-held ringgit accounts except for:
 - i. Purchase of ringgit-denominated assets including immovable property in Malaysia but excluding ringgit credit to residents.
 - ii. Expenditure on administrative expenses/purchase of goods and services in Malaysia. With the consequent immobilization of offshore ringgit deposits, holders of offshore ringgit holdings were permitted

to repatriate to Malaysia freely by 1 October; with permission thereafter.

- 2. Prohibition on ringgit credit facilities by residents to non-residents (previously subject to a limit).
- 3. All transactions in ringgit-denominated financial assets permissible only through authorized depository institutions.
- 4. All trade transactions to be settled in foreign currency.
- 5. Closure, with effect from 16 September 1998 of offshore market in Malaysian equities (CLOB), thus freezing holdings of 172,000 investors, worth 10 billion ringgit, in 112 Malaysian corporations.
- 6. Prior approval beyond a certain limit for all residents to invest abroad in any form (previously applicable only to domestic corporates with domestic borrowing).
- 7. Limits on exports of foreign currency by residents.
- 8. All export proceeds to be repatriated to Malaysia within six months from date of export.
- 9. 12-month waiting period for conversion to dollars of ringgit proceeds from sale of Malaysian securities; no limits on repatriation of interest, dividends.
- 15 Feb. 1999: Ban on portfolio repatriation replaced by graduated exit levies decreasing with duration of investment:
 - 1. Investments made prior to 15 February 1999 (only on principal; no levy on dividends and interest):

Duration of investment	Levy rate (percentage)
< 7 months	30
7–9 months	20
9–12 months	10
> 12 months	0

	2. Investments after 15 Februar gains; no levy on principal, d	y 1999 (only on capital lividends or interest):
	Duration of investment	Levy rate
	< 12 months	30
	> 12 months	10
21 Sep.1999:	Flat 10 per cent exit levy on ca investment irrespective of durate	pital gains on portfolio tion of investment.
1 5 1 2001		

1 Feb. 2001:10 per cent exit levy applicable only on duration of
investment < 12 months removed effective 2 May 2001.</th>

Related changes not directly targeted at capital flows

12 Sep. 1998:	Demonetization of large-denomination ringgit notes (1,000 ringgit and 500 ringgit) effective 1 July 1999.
1 Sep. 1998:	1. Maximum BLR benchmarked on BNM intervention rate in place of inter-bank rate, with 2.25 per cent margin.
	 Maximum margin above BLR of banks lowered from 4 to 2.5 percentage points.
	3. Enactment of Pengurusan Danaharta Nasional Berhad Act to set up Danaharta, an asset management company.

Source: BNM (1999) and BNM, *Annual Reports* (various) supplemented by IMF (1999).

NOTES

- 1 A further one-off \$1 billion inflow into private transfers in 1996/97 was from redemption to residents in India of the India Development Bonds floated in the late 1980s.
- 2 The Resurgent India Bonds (RIB) issued by India in late 1998, which raised in excess of \$4 billion, have not been entered in the BIS aggregate for debt securities.
- 3 The benchmark was actually 0.8 (three-month inter-bank rate)/(1-SRR) as reported by BNM (1999).

REFERENCES

- Athukorala P (1998). Swimming against the tide: Crisis management in Malaysia. *ASEAN Economic Bulletin*, 15: 3 (December): 281–289.
- Bank Negara Malaysia (1999). *The Central Bank and the Financial System in Malaysia: A Decade of Change*, 1989–1999. Kuala Lumpur, Bank Negara Malaysia.
- Bank Negara Malaysia (2000). *Monthly Statistical Bulletin*, June. Kuala Lumpur, Bank Negara, Malaysia.
- Bank Negara Malaysia (various) *Annual Reports*, 1997, 1998 and 1999. Kuala Lumpur, Bank Negara, Malaysia.
- Borgini P, Claessens S and Ferri G (2000). Political economy of distress in East Asian financial institutions. *World Bank Policy Research Working Paper* 2265. Washington, DC, World Bank.
- Brown SJ, Goetzmann WN and Park J (1998). Hedge funds and the Asian currency crisis of 1997. Working paper no. 6427, National Bureau of Economic Research, Cambridge, MA.
- Cole DS, Scott HS and Wellons PA (1995). Asian Money Markets. New York, Oxford University Press.
- Cooper R (1998). Should capital account convertibility be a world objective? In: Kenen P, ed., *Should the IMF Pursue Capital Account Convertibility?* Princeton Essays in International Finance. 207 (May): 11–19.
- Cornford A (1999) Some remarks on banking regulation and supervision and their limitations in relation to a new financial architecture. Paper presented at the Conference on Structure, Instability and the World Economy: Reflections on the Economics of Hyman P. Minsky. The Jerome Levy Economics Institute, Blithewood, NY, 21–23 April.
- Das T (1999). East Asian economic crisis and lessons for debt management. In: Vasudevan A, ed., External Debt Management: Issues, Lessons and Preventive Measures. Mumbai, Reserve Bank of India: 77–95.
- Furman J and Stiglitz J (1998). Economic crises: Evidence and insights from East Asia. *Brookings Papers on Economic Activity*. 2: 1–135.
- Ghani E and Sood V (1999). Productivity growth, capital accumulation and the banking sector: Some lessons from Malaysia. *World Bank Policy Research Working Paper*, 2252.

Government of India (1991) Report of the (Narasimham) Committee on Financial System.

Government of India (1998). Report of the (Narasimham) Committee on Banking Sector Reforms. New Delhi.

Government of India (2000). Economic Survey, 1999-2000. New Delhi.

- International Monetary Fund (various). International Financial Statistics. Washington, DC, IMF.
- International Monetary Fund (1999). Malaysia: selected issues. *IMF Staff Country Report*, 99/86. Mimeo. Washington, DC, IMF, August.
- James H (1999). Is liberalization reversible? Finance and Development, 36: 4, December.
- Radelet S and Sachs JD (1998). The East Asian financial crisis: Diagnosis, remedies, prospects. *Brookings Papers on Economic Activity*, 1: 1–74.
- Rajaraman I (1991). Trade-relevant external value of the rupee: 1974–89. *Journal of Foreign Exchange and International Finance*, 4: 284–299, Oct.–Dec.
- Rajaraman I (1997). A profile of economic reform in India. Development Advisory Group Paper 22, School of Public Policy, University of Birmingham, Birmingham, United Kingdom, July.
- Rajaraman I, Bhaumik S and Bhatia N (1999). NPA variations across Indian commercial banks: Some findings. *Economic and Political Weekly*, XXXIV: 161–168, 3–4:January.
- Reddy, YV (2000). Monetary and Financial Sector Reform in India. New Delhi, UBS Publisher.
- Reserve Bank of India (1997). Report of the (Tarapore) Committee on Capital Account Convertibility. Mumbai.
- Reserve Bank of India (1999). Handbook of Statistics on Indian Economy.
- Reserve Bank of India (various). Annual Reports. Assorted issues.
- Reserve Bank of India (various). Reports on Currency and Finance. Assorted issues.
- Reserve Bank of India (various). Monthly Bulletin. Assorted issues.
- Reserve Bank of India. Report on Trends and Progress of Banking in India, 1999-2000.
- Schneider B (2000). Issues in Capital Account Convertibility in Developing Countries. Mimeo. London, Overseas Development Institute, June.
- Straits Times (2000). KL stocks sink to their lowest this year. 2 September: 4.
- Summers LH (2000). International financial crises: Causes, prevention, and cures *American Economic Review*, 90 (2): 1–16, May.
- UNCTAD (1998) *Trade and Development Report 1998*. New York and Geneva, United Nations, United Nations publications sales no. E.98.II.D.6.
- Williamson J and Mahar M (1998). A review of financial liberalization. South Asia Region Internal Discussion Paper, Washington, DC, World Bank, January.

CHINA: MANAGING FINANCIAL INTEGRATION

Wei Ge

I. FINANCIAL INTEGRATION AND VULNERABILITY

The outbreak of the Asian financial crisis in 1997 and its devastating aftermath have brought to light a host of issues concerning capital account management, liberalization and its implications for overall economic development. As a group of once high-performing, "miracle" economies in Asia¹ – notably Indonesia, Malaysia, the Republic of Korea and Thailand – were suddenly trapped into a sharp economic downturn and suffered the consequences of enormous income and welfare losses. An immediate question raised by policy makers and in academic circles was "What went wrong?" The subsequent contagion effects of the crisis, reaching not only some economies in the Asia-Pacific region but also countries as far away as Brazil and the Russian Federation, extended the inquiry into a closely related question: "What can be done, both domestically and internationally?"

Scholarly investigation of the issues involved has been wide ranging. Concerning the first question, a set of factors attributable to a varying degree to the outbreak of the crisis has been identified. Broadly, these include: macroeconomic management, particularly in the presence of a non-sustainable resource gap, and the manner in which it is financed; the leverage and governance of corporate and financial sectors; accounting and disclosure standards; regulatory and policy transparencies; the relationship between government and businesses, and between financial intermediaries and corporations; the behaviour of alternative types of crossborder capital flows and their implications for a receiving country; exchange rate regimes and their management; the conduct of sectoral policies and resulting structural imbalances; and too fast a pace of financial liberalization in the absence of prudent regulations. Weaknesses in these areas and their interrelationships are considered to be the main reasons why the crisisaffected economies were so vulnerable to external shocks, and they help explain what might have triggered a crisis of this magnitude in the first place. Studies on the second question have thus far focused on several interconnected aspects. What are the policy objectives and instruments needed for a proper handling of the crisis and its contagion effects? How may these policies be coordinated at the micro, macro, and international levels? What are the useful indicators that may signal an impending crisis with some degree of reliability? What forms of institutional infrastructure and monitoring framework, both domestic and international, do we need in order to reduce the potential risks associated with financial liberalization and sustain economic development in the increasingly integrated global economic environment?²

As to individual economies, the answers to these questions rest heavily on the diagnosis of the specific problems at hand, which tend to be highly case-sensitive. Financial and banking difficulties are not new phenomena, and are certainly not limited to developing countries and economies in transition. The banking problems encountered by some industrialized countries,³ as well as by certain newly industrializing economies (NIEs) – such as Hong Kong (China), Singapore and Taiwan Province of China are just a few well-known examples in recent memory. Of the crisis-affected Asian economies, Malaysia, the Philippines and Thailand had all experienced financial and banking difficulties prior to the 1997 crash. Likewise, the problem of external debt and corporate leverage was not unfamiliar to policy makers in the Republic of Korea. By most international standards - and those practised in some NIEs - perhaps none of today's developing countries and transitional economies can be considered free of at least some of the above-cited "vulnerabilities". Many of these economies have, since 1997, either steered clear of the financial storm or managed to weather
its contagion effects fairly well. A closer look at these cases suggests that the presence of vulnerabilities in itself does not necessarily imply that countries will be inevitably dragged into a major crisis. Nor should the "vulnerable" economies forego the benefits of greater financial integration for fear of exposing themselves to too much potential damage. The key lies in how the process of integration and liberalization is managed, which, in its very essence is a country-specific issue. This burden ultimately rests on the policy makers in the economies in question.

China presents an important case in this regard. In many respects, the Chinese economy exhibits characteristics similar to those of the crisisaffected Asian countries, particularly in terms of weaknesses in the financial and corporate sectors.⁴ Nevertheless, China not only survived the crisis, which was the worst external shock since its integration into the world economy – a process that began in 1979 – it actually achieved a very impressive rate of growth. Since 1997, annual rates of real GDP growth in China have exceeded 7 per cent. Although slower than the pace observed in some of the previous years, this is, nevertheless, in sharp contrast to some of the neighbouring economies, where contractions have been observed. The Chinese currency has remained stable, as has the net inflow of foreign capital. An interesting question, therefore, is how China, with an economy as "vulnerable" as that of its Asian neighbours - if not more so - has managed to accomplish this? Put more generally, given all the recognized structural and institutional weaknesses of the developing countries and economies in transition, how can a smoother process of economic integration and liberalization be facilitated, while keeping potential costs to a minimum? This question is especially relevant to individual developing countries and transition economies, given the fact that a well-functioning, developing-country-friendly, international financial architecture is still in the making.⁵

The present study attempts to explore this question, using the Chinese economy as a special reference. The main focus is on the essential issues concerning financial sector reforms and capital account management. To set the stage, section II provides a brief overview of economic transition in China since 1979. Section III examines in more detail the changing pattern of capital flows into China, and highlights some key characteristics. Certain critical elements and mechanisms that have prevented China from being dragged into the Asian financial crisis are discussed in section IV. These include restructuring of the financial sector, the exchange rate system and management, and the structure and operation of equity markets. Section V concludes the study with some final remarks on the potential impacts on China of its entry into the World Trade Organization (WTO). The discussion does not attempt to provide a comprehensive assessment of all the abovementioned areas in every detail, but rather to concentrate on those aspects that best fit the purpose of this study.

II. THE CHINESE ECONOMY IN TRANSITION: A BRIEF OVERVIEW⁶

The founding of the People's Republic on 1 October 1949 marked the beginning of modern economic development in China. Its subsequent development may be divided into two phases, according to the economic system installed, the strategies pursued and the country's economic relationship with the outside world. The first phase covers a 30-year period, from late 1949 to the end of 1978. The second phase began in 1979, when the leadership set out to reform and open up the economy.⁷

The development strategy implemented in the first phase was essentially one that called for rapid industrialization by concentrating on promoting heavy industry and economic independence. Economic activities were organized and managed under a central planning system similar to that of the former Soviet Union. The degree of reliance on foreign markets and assistance was kept low, with an emphasis on economic self-sufficiency. Since 1979, however, dramatic changes have taken place in China: the country is undergoing a period of rapid transition, turning away from the central planning system and moving towards a more market-oriented configuration. The pattern of economic growth has since been more balanced in terms of the sectoral structure of production and the relationship between accumulation and consumption. Equally important, China has become much more outward looking and is increasingly integrating into the international community.

A. Accomplishments in two decades of reform

Reforms introduced in China since 1979 have accelerated the process of industrialization and urbanization, and brought about impressive growth in production, trade and the standard of living. Despite the internal and external difficulties that the country has encountered, as well as the enormous social, political and economic challenges it still faces, the transition process has been, on average, remarkably smooth so far and, judging by most social and economic indicators, outstandingly successful.

During the period 1979–1999, real GDP in China grew at an average rate of about 8 per cent per annum – unmatched in any period in China's history and unparalleled by any other economy in transition. The country emerged as the most dynamic and fastest growing economy in the world and one of the most powerful driving forces in the development of the Asia-Pacific region. During this period, inflation was generally kept in check, productivity growth accelerated, and output and trade soared. As recently as 1996, industrial production was more than seven times higher than in 1978, and total trade 14 times higher. These upward trends have since been strengthened. In two decades, the overall size of the economy has increased more than fourfold.

This dynamic growth has been widely spread across most of the country. It has been estimated that if each of China's 30 municipalities, provinces and autonomous regions⁸ were treated as an individual economy, then the 20 fastest growing economies in the world in the past two decades would have been Chinese (World Bank, 1997a: 3).⁹ The result of this rapid expansion has been a substantial improvement in the standard of living for the population at large. Real income per capita in China has more than quadrupled during the period. In this respect, China has achieved in two generations what took industrialized countries centuries. More than 200 million people – the equivalent of about 4 per cent of the total world population – have been lifted out of absolute poverty during this short period (World Bank, 1997a: footnote 9). At the same time, the economy has largely avoided the unsustainable swings that are common to the developing countries that have undergone rapid economic expansion.

B. Economic reforms and systemic transformation

The robust growth over the past two decades has been both a cause and a consequence of China's ongoing process of economic reform and systemic transformation. China has made remarkable progress in reshaping its once highly centralized economic management system: the scope of central planning has been greatly reduced and market forces are playing an increasingly significant role in the country's economy. Less than 5 per cent of industrial production is now under central government planning, down drastically from more than 70 per cent in 1978. Virtually all consumer goods are sold at market prices, compared to less than 5 per cent two decades ago.

In the rural area, the commune system of collective farming was abolished in the early 1980s and replaced by the household production/ responsibility system, which later developed into the household contract system. The reform has boosted agricultural production and productivity growth. Sweeping reforms have also been carried out in a wide range of areas, including taxation, investment financing, banking, foreign exchange management and trade, wages, prices and in various social security and welfare systems. Private ownership is encouraged; the private sector has been playing an increasingly important role in the economy. Small and medium-sized, collectively-owned enterprises flourish in both rural and urban areas. The non-State-owned sector now contributes more than 50 per cent to the country's total industrial production, and commands a significant share in tertiary markets. Reforms in large-scale, State-owned sectors are well under way. Markets for capital, labour, raw materials and real estate, as well as for bonds, stocks, futures trading and insurance, are developing at an accelerating pace. Macroeconomic management has shifted from depending heavily on administrative controls to increasingly relying on indirect, market-oriented methods. The financial and banking sectors have been restructured and enhanced, and the legal and institutional framework has been formulated and strengthened.

C. Opening up to the outside world

The reforms have gone hand-in-hand with promotion of greater economic openness, bringing the country's foreign trade and exchange rate system closer in line with international practice, and substantially helping to promote foreign trade. On 1 January 1994 the practice of multiple exchange rates was abolished and a unitary exchange rate system put in place. Strict controls over foreign exchange transactions have been relaxed, trade in foreign exchange on the current account is now permitted,¹⁰ and extension to liberalized items on the capital account is on the agenda. More and more tariffs and quotas, once levied on traded goods, have either been lifted or are being reduced. To meet conditions for entry into WTO, China has slashed tariffs on imported items four times since the end of 1992, lowering the country's average tariff rate to 17 per cent from the previous average of 43.2 per cent.¹¹ Progress has also been made in removing nontariff barriers. Regulations and procedures concerning foreign transactions are being clarified and simplified. With the accession of China to WTO, the scope and depth of its opening-up efforts are expected to be even more far-reaching.12

China's degree of openness has increased significantly since 1979. Total merchandise trade (exports plus imports) surged to \$323.9 billion in 1998 from a mere \$20.6 billion in 1978, and accounted for more than 35 per cent of China's GDP. While it ranked thirty-second in 1978, China emerged in 1993 as the eleventh largest trading nation in the world, and now, just a few years later, it has advanced further to figure among the top 10. Its booming economy has attracted investors from all over the world. In 1998, for example, FDI in China stood at \$45.5 billion, having grown more than 10 times since 1986, and even more significantly from its negligible level of \$6 billion for the period 1978–1982, when the process of economic reform and opening had just begun. In 1993 China already ranked as the second largest FDI recipient in the world after the United States. That ranking has since remained unchanged.

Since the mid-1980s (and especially the early 1990s) more sectors and geographical regions in China have been opened up to foreign investment and participation. The sectors include those that were previously prohibited, such as energy exploration and production, infrastructure construction, telecommunications and banking and financial services. Geographically, FDI has expanded from a few designated small areas in the south-east provinces of Guangdong and Fijian in the late 1970s to the country's vast hinterland. The number of foreign-funded firms established in China has increased substantially over the past 20 years. The investing firms have brought not only the physical capital, but also technical, managerial and marketing know-how, thus enhancing China's efficiency in production and competitiveness in the world marketplace.

While active in attracting FDI, China has exercised greater caution in managing foreign commercial borrowing and portfolio investment inflows. As detailed in sections III and IV below, this is reflected both in its external debt management and in the way in which the Chinese equity markets operate. Nevertheless, capital inflows from these sources have increased. In addition, significant funds have been raised in foreign stock and bond markets, including Hong Kong (China), in recent years. Apart from private sources, loans obtained from foreign governments have contributed to capital inflows to China. This is in addition to the funds furnished by international financial institutions, such as the World Bank and the Asian Development Bank. As the process of opening up continues, Chinese enterprises are becoming more actively involved in investing overseas. The significantly greater economic openness has reinforced efforts towards systemic reforms as well as deepened and accelerated the pace of overall economic transition.

III. THE CHANGING PATTERN OF CAPITAL INFLOWS

Table 1 provides information on actual (paid-in) utilization of foreign capital in China, with a breakdown by category, for the period 1983–1998. Several observations may be made on the changing pattern of foreign capital inflows.

A. The predominance of foreign direct investments

The amount of total inflows has grown significantly during the period. As the second column of table 1 shows, the total amount of actual utilized foreign capital increased nearly 30 times during this period, from a mere \$2 billion in 1983 to \$58.6 billion in 1998, and the upward trend of foreign capital inflows was fairly smooth. This was the case not only for total inflows, but also for foreign loans, and especially for FDI. These two categories are shown in the third and fifth columns respectively, of table 1.

Interestingly, the relative importance of each category shifted during the period. The change in the share of foreign loans, as opposed to that of FDI, is particularly noteworthy. Foreign loans accounted for more than half of total foreign capital inflows to China throughout the 1980s, and reached a peak in 1986 at 68.5 per cent. The situation did not take a noticeable turn until 1992, when the share of foreign loans fell to 41.2 per cent of the total. The decline in percentage shares in this category continued thereafter, ending the period at 18.8 per cent – which is comparable to the lowest share of 18.6 per cent posted in 1997. In contrast, FDI gained enormous momentum, especially after 1992. In that year, the share of FDI in total inflows exceeded, for the first time, that of foreign loans. Thereafter, there was a surge in FDI to the extent that it accounted for more than 70 per cent of total inflows each year.

Other foreign investment inflows were rather small in absolute terms, and their share declined during much of the period. This is shown in the last two columns of table 1. The foreign investments that fall into this

Table 1 CHINA: ACTUAL UTILIZATION OF FOREIGN CAPITAL BY TYPE, 1983–1998

(\$ billion; percentage)

		Foreign loans			FDI	Othe inve	r foreign stment
	Total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total
1983	2.0	1.1	55.0	0.6	30.0	0.3	15.0
1984	2.7	1.3	48.2	1.3	48.2	0.2	3.6
1985	4.7	2.7	57.5	1.7	36.2	0.3	6.3
1986	7.3	5.0	68.5	1.9	26.0	0.4	5.5
1987	8.5	5.8	68.2	2.3	27.1	0.3	4.7
1988	10.2	6.5	63.7	3.2	31.4	0.6	4.9
1989	10.1	6.3	62.4	3.4	33.7	0.4	3.9
1990	10.3	6.5	63.1	3.5	34.0	0.3	2.9
1991	11.6	6.9	59.5	4.4	37.9	0.3	2.6
1992	19.2	7.9	41.2	11.0	57.3	0.3	1.5
1993	39.0	11.2	28.7	27.5	70.5	0.3	0.8
1994	43.2	9.3	21.5	33.8	78.2	0.2	0.3
1995	48.1	10.3	21.4	37.5	78.0	0.3	0.6
1996	54.8	12.7	23.2	41.7	76.1	0.4	0.7
1997	64.4	12.0	18.6	45.3	70.3	7.1	11.1
1998	58.6	11.0	18.8	45.5	77.7	2.1	3.5

Source: Author's calculations, based on State Statistical Bureau (1994: 527; 1997: 605; 1999: 577).

category include international leasing, compensation trade, and processing and assembling. From the Chinese standpoint, these types of investments are less useful in terms of acquiring more advanced foreign technologies, but are beneficial in terms of job creation, particularly for the unskilled labour force. Relative to its diminishing weight in the later part of the period (with the exception of 1997 and, to a lesser extent, 1998), this category played a somewhat greater role during the preliminary stage of China's economic opening, when domestic and overseas investors were still getting to know to each other.

Interestingly, the upward movement of foreign capital inflows was not interrupted to any significant degree by the social unrest in 1989 and the subsequent economic sanctions that were imposed on China by some western countries. This event had some impact on the inflow of foreign loans, notably those from foreign governments. It might also have scared away some small investors. However, the impact was only marginal. The amount of foreign loans in 1989 declined to \$6.3 billion from \$6.5 billion in the previous year, and that of other foreign investments fell to \$0.4 billion in 1989 from \$0.6 billion in 1988. In contrast, the inflow of FDI continued: it reached \$3.4 billion in 1989, up by more than 6 per cent from 1988. This increase in FDI offset most of the losses incurred in other categories. As a result, the total amount of foreign capital inflow in 1989 declined only slightly from the previous year: down by less than 1 per cent, as the table indicates. Driven largely by the continued increase in FDI, total inflows recovered quickly in 1991, and have since shown a strongly upward trend. Thus, as far as foreign capital inflow is concerned, the political event of 1989 apparently did very little harm to China, and the economic sanctions that followed were completely ineffective.

One of the possible reasons for this somewhat surprising observation may have to do with the structure of foreign capital inflows into China. FDI, especially by multinational firms, tends to be forward-looking and motivated by long-term business considerations. This type of inflow may thus be less volatile, and comparatively less sensitive to a one-off, shortlived political shock. A relatively greater reliance on FDI, among other factors, appears to have enabled China to sustain a smooth stream of foreign capital inflows during this difficult period. The same argument applies to the period covering the Asian financial crisis and its contagion. As the table shows, the level of FDI in both 1997 and 1998 exceeded that of 1996, thus preventing a marked decline in total inflows.

The increase in "other foreign investments" between 1997 and 1998 was due mainly to a surge of inflows from Taiwan Province of China and the United States. This category of inflows from these economies jumped in 1998 by 157 per cent and 23.9 per cent respectively, from their corresponding 1997 levels. The moderate decrease in foreign loans in 1998 from their level of the previous year was primarily a result of the decline in

intergovernmental loans (-20 per cent), commercial loans (-26 per cent), and in China's overseas bond issuance (-59 per cent). In contrast, loans from international financial institutions and export credits provided by foreign entities increased in 1998 by 84 per cent and 43 per cent respectively, from their 1997 levels, offsetting the above-mentioned loan declines (State Statistical Bureau of China, 1999: 596–8).

B. Growing significance of joint ventures and foreign-owned firms

Over time, joint ventures and wholly foreign-owned enterprises have emerged as the dominant types of FDI in China, as table 2 suggests. In the upper portion of the table, we compute, on a contracted base, the shares of FDI under alternative arrangements between 1992 and 1998 – the period during which the surge in FDI inflows was strongest. As the table shows, FDI under the arrangements of joint ventures and wholly foreign-owned enterprises, taken together, typically accounted for nearly 80 per cent of the total during the period. In comparison, the share of co-production in the total was relatively small. Of the three types of arrangements considered, joint ventures were the most popular for most of the period, accounting for more than 40 per cent of the total. But the significance of this form of FDI declined, as its share fell from 50.1 per cent in 1992 to 33.2 per cent of the total in 1998. Meanwhile, the share of wholly foreign-owned enterprises gained considerable strength, rising from 27 per cent in 1992 to 41.8 per cent in 1998.

Despite varying degrees of importance, the average size of FDI per project in all three kinds of FDI has increased significantly, as seen in the lower portion of table 2. A comparison of the figures for 1992 with those for 1998 shows that the average size per project under joint ventures increased to \$2.13 million in 1998 from a mere \$0.85 million in 1992, more than double. Similarly, the average size of wholly foreign-owned enterprises also increased strongly, up from \$1.81 million per project in 1992 to \$2.25 million in 1998. And the co-production category saw an increase in average project size from \$2.32 million in 1992 to \$5.82 million

1992	1993	1994	1995	1996	1997	1998
50.1 22.8 27.0	49.5 22.9 27.3	48.6 24.6 26.6	43.5 19.5 36.9	43.5 19.5 35.2	40.6 23.6 34.6	33.2 22.4 41.8
0.85 2.32 1.81 1.19	1.02 2.44 1.61 1.34	1.44 3.06 1.69 1.74	1.94 3.72 2.86 2.47	2.52 5.02 2.96 2.98	2.30 5.09 1.84 2.43	2.13 5.82 2.25 2.63
	1992 50.1 22.8 27.0 0.85 2.32 1.81 1.19	1992 1993 50.1 49.5 22.8 22.9 27.0 27.3 0.85 1.02 2.32 2.44 1.81 1.61 1.19 1.34	1992 1993 1994 50.1 49.5 48.6 22.8 22.9 24.6 27.0 27.3 26.6 0.85 1.02 1.44 2.32 2.44 3.06 1.81 1.61 1.69 1.19 1.34 1.74	1992 1993 1994 1995 50.1 49.5 48.6 43.5 22.8 22.9 24.6 19.5 27.0 27.3 26.6 36.9 0.85 1.02 1.44 1.94 2.32 2.44 3.06 3.72 1.81 1.61 1.69 2.86 1.19 1.34 1.74 2.47	1992 1993 1994 1995 1996 50.1 49.5 48.6 43.5 43.5 22.8 22.9 24.6 19.5 19.5 27.0 27.3 26.6 36.9 35.2 0.85 1.02 1.44 1.94 2.52 2.32 2.44 3.06 3.72 5.02 1.81 1.61 1.69 2.86 2.96 1.19 1.34 1.74 2.47 2.98	1992 1993 1994 1995 1996 1997 50.1 49.5 48.6 43.5 43.5 40.6 22.8 22.9 24.6 19.5 19.5 23.6 27.0 27.3 26.6 36.9 35.2 34.6 0.85 1.02 1.44 1.94 2.52 2.30 2.32 2.44 3.06 3.72 5.02 5.09 1.81 1.61 1.69 2.86 2.96 1.84 1.19 1.34 1.74 2.47 2.98 2.43

Table 2CHINA: CONTRACTED FDI BY TYPE AND SIZE, 1992–1998

Source: Author's calculations, based on State Statistical Bureau (various years).

Note: The sum of each column is not equal to 100 due to the omission of FDI inflows that are classified as "co-developments" and "foreign investment share enterprises" in the Chinese statistics. The categories, which are rather insignificant, account for about 2 per cent of the total in the period under consideration.

in 1998, again more than double. Taking FDI as a whole, the average amount per project rose some 2.2 times during this period, from \$1.19 million in 1992 to \$2.63 million in 1998.

The growth in average size of foreign-invested projects suggests, among other things, that there might have been a shift in investor mix. Over time, small and medium-sized, sometimes foot-loose, investors, were increasingly replaced by larger-scale, multinational firms with longer-term investment and business development strategies. An increase in capital and technology intensities accompanied the expansion of FDI and the enlarged average size of investment projects. Simple processing and assembling, labour-intensive projects gradually gave away to more capitalintensive ones with higher technology content, ranging from automobile and aircraft production to computer software development. The sectoral destination of FDI was also extended, from agricultural and manufacturing undertakings to projects in energy, transportation, communications and infrastructure development from the secondary sector, and to such tertiary activities as retailing, accounting, banking, insurance, financial and business consulting, and foreign trade and investment-related services. In the process, China has become much more sophisticated in screening foreign investment projects. Before the late 1980s, practically all types of foreign investment projects were welcomed. In more recent years, however, much attention has been paid to the quality, and not just quantity, of foreign investments. Foreign investment projects that fail to meet certain technical and environmental standards, that fall into the category of sunset industries, and that are inconsistent with the country's overall industrial policies are most likely to be rejected.

C. Managing the external debt

The external debt has grown significantly since 1979, from being nearly non-existent to \$146 billion at the end of 1998.¹³ Despite the surge in absolute amounts, the composition of the external debt, as well as debt-related risk indicators, appears to be quite manageable, suggesting a fairly conservative attitude towards the handling of the external debt.

As shown in table 3, loans from foreign governments and international financial institutions remained fairly stable, at about 30 per cent of the total between 1988 and 1998, and increased moderately from the early 1990s. Commercial loans accounted for about 50 per cent of the total, and loans from other sources made up the remaining 20 per cent, on average. Of the total loans made during the period, more than 86 per cent, on average, were long-term loans (i.e. with a maturity date of one year or longer), as indicated in the last two columns of table 3.

Table 4 shows three risk indicators of external debt for the period 1985–1998. The debt service ratio (shown in the second column of the table) is defined as the ratio of the payment of principal and interest on foreign debt to the foreign exchange receipts from foreign trade and non-

Table 3 CHINA: COMPOSITION OF EXTERNAL DEBT BALANCE, 1988–1998

(Percentage)

		By type (Total deb	By repaym (Total deb	ent terms t = 100.0)		
	Loans from foreign governments	Loans from international financial institutions	International commercial loans	Other	Long-term debt	Short-term debt
1988	16.6	10.6	47.5	25.3	81.7	18.3
1989	16.8	12.9	52.5	17.8	89.7	10.3
1990	16.0	12.0	55.5	16.5	87.1	12.9
1991	15.7	11.7	52.1	20.5	83.0	17.0
1992	16.6	12.1	51.2	20.1	84.4	15.6
1993	17.1	12.5	49.2	21.2	83.8	16.2
1994	21.1	14.0	51.0	13.9	88.8	11.2
1995	20.7	13.9	49.4	16.0	88.8	11.2
1996	19.1	14.4	49.0	17.5	87.9	12.1
1997	15.9	14.7	49.4	20.0	86.1	13.9
1998	15.4	15.7	46.7	22.2	88.1	11.9

Source: State Statistical Bureau (various years).

trade services. Liability ratio is the balance of foreign debt as a percentage share of GDP. Foreign debt ratio refers to the ratio of the balance of foreign debt to foreign exchange receipts from foreign trade and non-trade services. Clearly, all three indicators have been kept very much in line with the commonly perceived "safety" ranges.¹⁴

It is important to note that, in spite of the rising foreign capital inflows over the past two decades, China has relied much more on domestic sources for funding its vast investment needs. As table 5 indicates, the contribution of foreign investment to the development of fixed assets in China since 1981 has been relatively minor. It accounted for less than 10 per cent per annum of the total investment in fixed capital for most of the period under consideration, except 1995–1997 when it exceeded 10 per

Table 4 CHINA: RISK INDICATORS OF FOREIGN DEBT, 1985–1998

	Debt service ratio	Liability ratio	Foreign debt ratio
1985	2.7	5.2	56.0
1986	15.4	7.3	72.1
1987	9.0	9.4	77.1
1988	6.5	10.0	87.1
1989	8.3	9.2	86.4
1990	8.7	13.5	91.6
1991	8.5	14.9	91.9
1992	7.1	14.4	87.9
1993	10.2	13.9	96.5
1994	9.1	17.1	78.0
1995	7.6	15.2	72.4
1996	6.0	14.2	67.7
1997	7.3	14.5	63.2
1998	10.9	15.2	70.4

Source: State Statistical Bureau (various years).

cent. The same observation also applies to the public-sector debt structure. This is shown in table 6, which computes the share of foreign borrowing in total government debt, and the share of principal and interest payments on foreign debt by the Chinese Government during the period 1981–1998. These shares declined substantially in the second half of the 1990s. By 1998 the Government's foreign debt obligation was negligible.

The information provided in tables 5 and 6, combined with the characteristics of the capital inflow structure outlined above, suggests that even if there were to be a sudden massive withdrawal of short-term "hot"

capital, its impact on the Chinese economy would probably be insignificant. But are there institutional mechanisms and regulatory frameworks that could prevent the economy from being exposed to such a possibility in the first place, and that would protect it if a sudden flight of capital were to occur? We turn to these questions in the next section, which deals with some relevant features of the financial sector and capital account management in China.

D. The role of the "greater Chinese economy"

Definitions of the "greater Chinese economy" vary. The narrowest one covers the mainland, Hong Kong (China) and Taiwan Province of China; whether Macao (China) is included depends on the purpose of the

Table 5 CHINA: TOTAL INVESTMENT IN FIXED ASSETS BY SOURCE OF FINANCING, 1981–1998

	State budgetary appropriation	Domestic Ioans	Foreign investment	Self-raised funds
1981	28.1	12.7	3.8	55.4
1982	22.7	14.3	4.9	58.1
1983	23.8	12.3	4.7	59.2
1984	23.0	14.1	3.9	59.0
1985	16.0	20.1	3.6	60.3
1986	14.6	21.1	4.4	59.9
1987	13.1	23.0	4.8	59.1
1988	9.3	21.0	5.9	63.8
1989	8.3	17.3	6.6	67.8
1990	8.7	19.6	6.3	65.4
1991	6.8	23.5	5.7	64.0
1992	4.3	27.4	5.8	62.5
1993	3.7	23.5	7.3	65.5
1994	3.0	22.4	9.9	64.7
1995	3.0	20.5	11.2	65.3
1996	2.7	19.6	11.8	66.0
1997	2.8	18.9	10.3	67.7
1998	4.2	19.3	9.1	67.4

(Percentage of total investment)

Source: State Statistical Bureau (1999: 185).

study.¹⁵ The broader classification extends the coverage to the overseas Chinese business communities in the rest of the Asia-Pacific region, and sometimes also includes those in the rest of the world. Hong Kong (China) has played the most significant role since 1979 as the financier of the economic boom on the mainland. Its highly visible, long-standing function is as China's major gateway to the world commodity markets.

Table 7 shows the source of foreign capital inflows to China between 1992 and 1998 on a paid-in basis. The figures provided in the table combine the three categories considered in table 1. Hong Kong (China) stands

Table 6 CHINA: GOVERNMENT DEBT FINANCING, 1981–1998

(Percentage)

	Share of foreign borrowing in total government debt	Share of foreign debt servicing in total government debt payment
1981	60.0	92.1
1982	47.7	89.4
1983	47.6	86.1
1984	45.0	78.7
1985	32.5	82.4
1986	54.8	68.8
1987	47.6	65.1
1988	51.2	55.5
1989	35.3	63.3
1990	47.5	35.8
1991	39.0	32.5
1992	40.9	18.3
1993	48.4	26.5
1994	12.5	21.5
1995	2.5	8.2
1996	6.1	4.6
1997	2.6	3.7
1998	2.5	3.3

Source: Author's calculation, based on State Statistical Bureau (1999: 284). out as the largest source of capital inflows throughout the entire period (except 1996), contributing more than 40 per cent, and sometimes much higher, to the total. When Hong Kong (China), Macao (China), and Taiwan Province of China are grouped together, they account, on average, for about 50 per cent of total inflows during the period considered. Annual shares vary within a range of 46-58 per cent. This has surpassed the shares of inflows from Japan, Singapore and the United States combined - the other three main sources - by a considerably large margin for each year during the seven-year period. Most of the investments on the mainland by the three Chinese-speaking territories fall into the categories of FDI and other foreign investments. The trends have been fairly stable,¹⁶ with 1998 as the

only exception, when a noticeable decline from its peak level of 1997 was recorded.

It is useful to note that the sources of foreign capital inflows to China have become more diversified in recent years. A comparison of the figures in 1998 with those in 1992 shows that inflows from non-traditional countries, both within and outside the Asia-Pacific region, have gained strength, albeit varying from country to country. For example, the shares of the Netherlands, Singapore, the United Kingdom and the United States in 1992 accounted for 0.7 per cent, 1.1 per cent, 0.2 per cent, and 3.0 per cent of the total, respectively. By 1998, the corresponding shares had

	1992	1993	1994	1995	1996	1997	1998
Asia							
Hong Kong (China)	8 416.5	18 893.0	19 835.7	20 401.8	20 873.0	21 551.1	19 399.8
Indonesia	20.2	65.8	115.7	111.6	93.5	80.0	69.0
Japan	3 179.9	4 906.0	3 060.9	5 113.3	6 097.0	4 390.4	3 444.1
Macao (China)	273.4	624.4	509.4	439.8	606.3	403.3	439.2
Malaysia	24.7	91.4	201.0	259.0	460.0	381.8	340.6
Philippines	19.1	122.5	140.4	105.8	55.1	155.6	179.3
Republic of Korea	120.3	384.5	794.9	1 190.5	1 566.1	2 227.6	1 804.3
Singapore	140.7	674.8	1 179.6	1 860.6	2 247.2	2 607.0	3 404.0
Taiwan Prov. of China	1 053.4	3 139.1	3 391.3	3 165.2	3 482.0	3 342.3	3 051.2
Thailand	84.3	234.4	234.9	288.2	328.2	194.0	205.4
Europe							
France	777.0	774.8	733.8	716.3	920.7	475.9	714.9
Germany	256.7	274.5	583.7	527.5	1 130.5	1 008.6	736.7
Netherlands	37.5	134.2	122.9	147.0	154.6	413.8	718.8
Russian Federation	16.3	41.9	35.8	22.9	19.8	18.0	19.4
United Kingdom	215.5	570.7	1 085.8	1 009.3	1 400.2	1 857.6	1 174.9
North America							
Canada	275.0	361.8	640.7	619.7	479.7	344.1	316.5
United States	581.1	2 662.5	3 026.9	3 134.7	5 050.7	3 461.2	4 173.6
Total	19 202.3	38 959.7	43 212.8	48 132.7	54 804.2	52 387.3	47 557.5

Table 7

CHINA: MANAGING FINANCIAL INTEGRATION 203

reached 7.2 per cent, 2.5 per cent, 1.5 per cent, and 8.8 per cent, as seen in table 7. The more diversified pattern helped to prevent overall foreign capital inflows from falling too fast when the Asian financial crisis hit. As table 7 indicates, with the onset of the crisis, investments by the crisis-affected economies in China decelerated, while other countries picked up the pace. As a result, the total capital inflow in 1997 and 1998 declined, on a year-on-year basis, by 4.4 per cent and 9.2 per cent, respectively; the figures would otherwise have been larger.

E. Capital outflows and the issue of "round-tripping"

Discussion of the capital account thus far has centred on capital inflows. Outflows also exist, as table 8 suggests. Two types are worthy of comment. The first has been a direct result of China's increased economic openness over the past two decades. In their attempt to diversify trade flows and to secure regional markets for both inputs and outputs, an increasing number of Chinese enterprises have sought to engage in overseas production and related activities. The Government has encouraged such activities, and the intensity of Chinese overseas undertakings has surged markedly in recent years. In 1998, for example, the number of such contracts reached about 26,000, with a total value approaching \$11.8 billion (State Statistical Bureau of China, 1999: 603). This activity is often carried out in the form of FDI, with funds being furnished either at home or abroad under the authorization and supervision of the concerned government entities.

The second type of capital outflows tends to be more irregular, and, in some cases, illegal. These may either include foreign bank deposits or purchases of foreign equity shares by domestic entities, mainly institutions. Foreign exchange is sometimes obtained by the institutions through illegal channels, including through corrupt bank officials, as news reports have periodically revealed.

"Round-tripping" is another issue that has complicated capital account management in China. Typically, a domestic entity may obtain foreign

Table 8
CHINA: BALANCE OF PAYMENTS - SELECTED ITEMS, 1990-199

(\$ billion)

	1990	1991	1992	1993	1994	1995	1996	1997
Net direct investment	2.7	3.5	7.2	23.1	31.8	33.8	38.1	41.7
Net long-term borrowing	6.3	4.5	11.3	12.8	9.8	12.9	10.8	12.5
Net short-term capital	-3.2	0.4	-0.9	-3.9	-3.1	0.4	0.1	-11.4
Capital flows not								
included elsewhere	-3.0	-0.8	-17.8	-8.6	-5.9	-8.5	-9.1	-20.0
Errors and omissions	-3.2	-6.8	-8.2	-10.1	-9.1	-17.8	-15.5	-16.8
Change in net reserves	-12.1	-14.1	2.1	-1.8	-30.5	-22.5	-31.7	-35.9
Nominal official exchange rates								
(average yuan per \$)	4.8	5.3	5.5	5.8	8.6	8.4	8.3	8.3
Index of real effective								
exchange rates	37.3	32.4	31.3	30.7	33.5	35.3	37.0	41.4
Resource balance	10.7	11.5	5.0	-11.8	7.7	12.0	17.6	40.5

Source: IMF (various years).

exchange by overstating invoices of its trade transactions, use the funds to register a dummy company outside China – often in Hong Kong (China) – and then re-enter the country as a "foreign investor". These round-tripping activities are estimated by some sources to comprise about 20 per cent of total inflows (World Bank, 1997b). The preferential treatment of foreign investments is a key motive behind round-tripping flows, and the magnitude of these flows is expected to shrink as China extends its recent experiment with granting national status to foreign-invested firms.

These complications are reflected in table 8, in particular under the items "capital flows not elsewhere included" and "errors and omissions". Since 1998, the authorities have stepped up measures to tighten control over irregular capital outflows, in addition to cracking down decisively on faulty reporting on items under current account transactions. Since 1979 China has enacted numerous laws and regulations governing activities in

financial, banking and trade areas. The loopholes that have permitted the above-mentioned irregularities are mainly a result of inadequate enforcement of the law and regulations. Developing a competent law enforcement institution is one of the keys to eliminating these irregularities.

IV. FINANCIAL SECTOR RESTRUCTURING AND MANAGEMENT

Financial sector reforms began in the early 1980s, and recently have taken the centre stage in China's overall economic transition. The reforms instituted thus far have been broad based, placing the financial sector in a much more advanced and complex system than it was two decades ago. Three main aspects are considered below: (i) the exchange rate system and its management, (ii) operation of equity markets, and (iii) elements of financial sector restructuring relevant to management of the capital account. Focus is placed on those elements of the system that might have sheltered the Chinese economy from major external shocks. The shocks considered here take the form of speculative currency attacks, massive reversal of short-term capital inflows, and the collapse of equity prices under the weight of changing foreign sentiments – the crucial factors that contributed to the derailing of the crisis-affected economies in Asia.

A. The exchange rate system and management

When economic transition was initiated, the exchange rate system in China was subject to tight government controls. The conduct of foreign exchange transactions was limited to authorized institutions and administered in such a way as to protect those transactions from market influences and to adhere closely to foreign exchange plans. The official exchange rate of the Chinese currency, the yuan, was derived as a weighted average of a basket of internationally traded currencies, with weights chosen to reflect the relative values of these currencies in the international markets and their relative importance in China's external settlements. The Bank of China, the only authorized financial body at the time, served as the clearing house and broker for settling foreign-currency-denominated transactions among State-owned foreign trade corporations and other concerned entities.

To break away from the State monopoly of foreign trade, selected domestic enterprises engaging in the production of exportables were soon allowed to market their products directly overseas and to retain a certain percentage of their foreign exchange earnings. This was intended to provide an incentive to exporters as retained funds could be used to finance their import requirements. The experiment with the foreign exchange retention system, which began as early as January 1981, proved to be quite a success in boosting foreign trade, and the practice was subsequently adopted nationwide. The reform, however, necessitated an adjustment of foreign exchange holdings among participating enterprises, and this need further increased as foreign-invested firms in China started to grow. To meet demand, Foreign Exchange Adjustment Centres (sometimes referred to as "swap centres") were established in November 1986 at various locations, allowing foreign exchange transactions to be conducted at rates agreed upon between buyers and sellers. The swap centres' prevailing rates were not required to be the same as officially-determined ones. As a result, a "dual-track" exchange rate system emerged.

From the second half of the 1980s, foreign exchange retention quotas were gradually liberalized, and swap centres bloomed. By the early 1990s, the majority of foreign exchange transactions taking place through the swap centres were at market-determined rates. Transactions based on official rates, which were substantially lower than the swap market rates, lost their attractiveness and were limited to non-trading official settlements. On 1 January 1994, the monetary authority unified exchange rates at the prevailing swap market rates and terminated the issuance of retention quotas. The regional swap centres were integrated into a nationwide single market, known as the China Foreign Exchange Trade System. The exchange rate system in China has since been characterized as a managed float.

Under the current exchange rate regime, domestic entities are required to conduct their sales and purchases of foreign exchange through authorized financial institutions, mainly banks. Following the guidelines issued by the monetary authority – in particular the State Administration for Exchange Control – banks are responsible for verifying that proper documentation is provided by the domestic entities to justify the purchase of foreign exchange. Financing of items under the current account are approved under normal circumstances, including the currency requirements of individual residents for touring overseas and income repatriation by foreign-invested firms. For purposes of servicing external debt, domestic borrowers with foreign-currency-denominated loans may obtain the foreign exchange needed to fulfil their debt obligations when the principal or interest payment becomes due. Foreign-invested firms in China may choose either to retain their entire foreign exchange with banks or to enter the foreign exchange market, provided that the trading is in line with their pre-submitted foreign exchange plans. This applies to both initially invested funds and subsequent foreign-currency-denominated earnings.

Domestic banks may sell and buy foreign currencies for their clients in the foreign exchange market. Selling is permitted if the banks have foreign exchange holdings in excess of a required minimum. This requirement compels the banks to assume a foreign exchange risk position, since they have to hold liquid funds in order to meet unforeseen contingencies arising from retail transactions.¹⁷ Foreign banks may conduct currency transactions in the foreign exchange market on behalf of foreign-invested firms and they can sell foreign currencies against the yuan in the market. Their yuan accounts have to be maintained with the central bank, the People's Bank of China. Foreign banks, however, are not permitted to enter the domestic money market, either to borrow from domestic residents or to offer yuan-denominated loans to domestic entities.

Interventions by the central bank are triggered when the market rates of the yuan against major foreign currencies (particularly the US dollar), fluctuate beyond a pre-determined, narrow band and when the rates begin to show signs of appreciating. The action taken by the central bank is not visible to other market participants.¹⁸ The set-up of the exchange rate management system effectively precludes currency speculation, since it leaves little room for market participants to act on their own expectations concerning the future value of the yuan, or to assume short positions. Furthermore, foreign banks and foreign-invested firms tend to act as sellers, not buyers, in the foreign exchange market.

B. Operation of equity markets

In line with its market-oriented economic transition, China opened two stock exchanges in the early 1990s: one located in Shanghai and the other in the Shenzhen Special Economic Zone. Soon after, qualified Chinese State-owned enterprises (SOEs) (known as "red chip" companies) began to list in the Hong Kong (China) stock exchanges ("H shares"), while others listed in overseas stock markets, including New York ("N shares").

In the Chinese stock exchanges, domestic companies are listed separately under the so-called "A share" and "B share" categories. A shares are issued to domestic investors and priced in the local currency, whereas B shares are reserved for foreign investors and priced in foreign currencies (US dollar-denominated issuance in Shanghai, and Hong Kong dollardenominated shares in Shenzhen). In some cases, Chinese companies may choose to be listed jointly under the A and B share categories (thus labelled A&B shares), but accounts under the two categories must be maintained separately. Table 9 provides information on shares issued and capital raised in the two Chinese stock exchanges since their establishment. Figures concerning H shares are also given in the table. By and large, a rapid expansion is evident, as are large swings recorded under nearly all of the share categories.

Three interesting observations may be made here. First, both the shares issued and capital raised under the B share category were insignificant during the period under consideration, indicating rather limited foreign participation. Second, since B shares are traded in foreign currencies by foreign investors, market exit is considerably limited by market entry: that is, a would-be seller under the B share category cannot exit the market unless there are potential buyers who are willing to hold the foreign-currency-denominated shares (Lardy, 1998). Third, a changing market sentiment in B share trading has no direct impact on that of A shares, and

	1991	1992	1993	1994	1995	1996	1997	1998	
Shares issued									
(Billions of shares)	5.0	20.8	95.8	91.3	31.6	86.1	267.6	105.6	
A shares	5.0	10.0	42.6	11.0	5.3	38.3	105.7	82.8	
H shares	-	-	40.4	69.9	15.4	31.8	136.9	12.9	
B shares	-	10.8	12.8	10.4	10.9	16.1	25.1	9.9	
Capital raised (Millions of yuan)	5.0	94.1	375.5	326.8	150.3	425.1	1 293.8	841.5	
A shares	5.0	50.0	194.8	49.6	22.7	224.5	655.1	443.1	
H shares	-	-	60.9	188.7	31.5	83.6	360.0	38.0	
B shares	-	44.1	38.1	38.3	33.4	47.2	80.8	25.6	
A&B shares	-	-	81.6	50.2	62.8	69.9	198.0	335.0	

Table 9 CHINA: STOCK ISSUANCE, 1991–1998

Source: State Statistical Bureau of China (1999: 628).

Note: The sum of the sub-categories may not be equal to the total owing to rounding.

thus yuan-denominated equity transactions are insulated from outside influences. Although trading under A&B shares has grown significantly since 1997, a large portion of the shares is still yuan-denominated. These characteristics of equity market operation, together with the exchange rate management system discussed above, help to explain why the Chinese currency and equity markets have tended to be much less sensitive to changing external conditions.

C. Financial sector reform and regulation

China had a mono-banking system in the pre-reform era, when the People's Bank of China functioned as both a central and commercial bank. It carried out the traditional functions of a central bank in issuing currency, managing foreign exchange reserves and allocating credits. It also played the role of a commercial bank in terms of receiving deposits, making loans and providing clearance services to its institutional and individual customers. Since the early 1980s, the banking sector has been undergoing numerous changes, and, as a result the overall financial system in China has emerged as a bank-centred multifunctional complex. The structure of the Chinese financial management system is highlighted in figure 1. Working closely together, the People's Bank of China, the Ministry of Finance, the Committee on Monetary Policies, and other designated commissions (for example, the Securities Regulatory Commission and the State Administration for Exchange Control) implement policy directives set forth by the State Council, and supervise and monitor the activities of policy banks, State and shareholding commercial banks, investment banks, non-bank financial institutions and credit cooperatives.

Aimed at tightening the so-called "soft" budget constraint of SOEs, the enterprise-funding source was shifted in the early 1980s from government budgetary appropriation to interest-bearing bank loans. To facilitate this development, four State-owned commercial banks were established, which took over the commercial banking business from the People's Bank of China. This also paved the way for the People's Bank of China to be transformed into a real central bank. Since the mid-1980s, shareholding commercial banks, both at the national and regional levels, began to surface along with various non-bank financial institutions. To meet the financial needs of collectively-owned, small and medium-sized enterprises, credit cooperatives also mushroomed in both the rural and urban areas. To further liberalize State-owned commercial banks and to allow them to perform banking functions on more commercial terms, three policy banks were set up in 1994 to assume the responsibility of carrying out policy loans, as well as to manage funds obtained from international financial institutions. The policy banks, like the State-owned commercial banks, were structured to specialize in certain types of financial dealings. However, the distinction between the business territories of these financial institutions - both bank and non-bank, State-owned and non-State-owned - has become increasingly vague in more recent years, as competition among these institutions is encouraged. The operation of foreign banks has so far been limited to certain business lines and confined to specified geographic regions. As a result, head-on competition between domestic and foreign financial institutions

212 WEI GE

Figure 1
THE FINANCIAL MANAGEMENT SYSTEM IN CHINA



Source: National authorities.

tends to be, at best, very weak. The situation, however, is expected to change as a result of China's accession to WTO. According to the bilateral WTO agreement of 1999 between China and the United States, for instance, foreign banks will be allowed to handle business in local currency with Chinese enterprises two years after the accession, and with residents five years after. Within designated areas and for servicing certain customer groups, foreign banks will be granted domestic status; but the geographic and customer restrictions will be removed only five years after accession.

The domestic banks command a rather large proportion of total financial assets, with the four State-owned commercial banks dominating the Chinese banking sector. For example, during the period 1993–1997 the assets of the State-owned commercial banks amounted, on average, to 78 per cent of the total assets held by all financial institutions in China. The shares of other banks, credit cooperatives and non-bank financial institutions were only 6.6 per cent, 14.5 per cent and 0.7 per cent respectively, during the same period. In terms of the holding of foreign assets, the four State-owned commercial banks captured 87.7 per cent of the total during that period, with the remaining 12.3 per cent going to other banks. Foreign assets held by non-bank financial institutions were negligible, and there were no such holdings by credit cooperatives. Household savings are the largest liability of the banking sector, and have grown enormously since the economic transition began in 1979, as shown in table 10. Enterprises, particularly State-owned ones, make up the largest group among bank borrowers; consumption loans did not exist until very recently.

To strengthen the legal framework for financial sector operation and monetary management, in 1995 China enacted a set of laws, including the Law of the People's Bank of China and the Law of Commercial Banks. The former provides the legal ground for the People's Bank of China to act as a fully-fledged modern central bank, while the latter sets detailed standards for commercial banking.¹⁹ These standards include, for example, capital adequacy requirements, consisting of the Bank for International Settlements' Basel Standards, entry criteria, and asset diversification requirements. The law also separates commercial banking from investment banking; commercial banks are not allowed to engage in securities trading and underwriting or to invest in non-bank financial institutions and trust

	Year-end outstanding as percentage of GDP (GDP = 100.0)	Annual increase as percentage of GDP (GDP = 100.0)	Annual rates of real GDP growth (Percentage)
1985	18.1	4.6	13.5
1986	21.9	6.0	8.8
1987	25.7	7.0	11.6
1988	25.5	4.9	11.3
1989	30.4	8.0	4.1
1990	37.9	10.2	3.8
1991	42.1	9.6	9.2
1992	43.3	9.2	14.2
1993	42.6	9.3	13.5
1994	46.0	14.5	12.6
1995	50.7	13.9	10.5
1996	56.8	13.1	9.6
1997	62.2	10.4	8.8
1998	67.3	9.6	7.8

Table 10CHINA: HOUSEHOLD SAVINGS, 1985–1998

Source: Author's calculations, based on State Statistical Bureau (1999: 55, 57 and 318).

funds. The separation reduces the risks associated with overexposure to speculative lending, and thus improves the quality of bank assets.

D. Financial sector weakness and policy responses

The close ties between the banks and their corporate borrowers give rise to some serious concerns about the health of the banking sector. For instance, the lending policy of the State-owned commercial banks is subject to the influence of government policies, instead of being based solely on commercial considerations. To replace the mandatory credit plans under central planning, a credit quota system has been put in place since the late 1980s for financial resource allocations. Through credit rationing, the system promotes priority projects, sectors and regions in accordance with overall industrial policies. It also provides the authority with a powerful tool for controlling broad money. However, the system tends to increase the banks' lending risks, as pre-set credit quotas may not be adjusted quickly in response to a changing economic environment. As many SOEs continue for various reasons to suffer losses, their ability to repay loans has been greatly undermined; this adds to the burdens on the banks. Even so, bank loans continue to be directed towards these enterprises in order to keep them afloat so as to prevent unemployment from rising too fast and threatening social and political order. Briefly, the resulting high ratio of non-performing and under-performing loans, coupled with inadequate loan classifications, low loan-loss reserves, and collateral rather than cash-flowbased lending practices, are just a few factors contributing to the financial weakness of the Chinese banking sector.²⁰ The situation in the non-bank financial institutions tends to be more serious owing to a weaker supervisory framework and regulation-enforcement mechanism.

Since 1998 the Chinese monetary authority has introduced a set of policy measures and made a series of institutional changes to tackle these problems. In the banking sector, national financial accounting standards have been introduced, and a risk-based loan classification system adopted. Credit quotas are non-binding and indicative. A system of asset and liability management has been established; several asset management companies have been set up to clean up the non-performing loans of banks and other financial institutions. Billions worth of funds, raised through the issuance of long-term, non-tradable Treasury bonds, have been injected into the State-owned commercial banks, boosting their capital base to meet the requirements of the Chinese Commercial Bank Law and the Basel Standards. The State banks can now write off an increased amount of bad loans. Troubled regional commercial banks are either being closed or merged with stronger ones. The recent closure of the Hainan Development Bank is a good example. It shows that the authorities are taking decisive steps in addressing the issue of moral hazard that has afflicted the Chinese banking sector, and signals that the days of unconditional government bailout are about to come to an end. To enhance competition, certain foreign banks have recently been allowed to carry out domestic currency-based operations and to participate in the Chinese inter-bank market. To improve the

effectiveness of monetary management, the institutional set-up has also been strengthened. The central bank has been restructured along the lines of the United States Federal Reserve to reduce the influence of local authorities in monetary policy-making and implementation.

Many non-bank financial institutions have suffered losses in recent years as a result of unregulated expansion and overreaching in speculative investments. To clean up the loss-making institutions, mergers and acquisitions have become more frequent and a decision to shut down the insolvent ones has been forcefully implemented. This includes the closure of the Guangdong International Trust and Investment Corporation, the second largest foreign, debt-issuing international trust and investment company in China,²¹ which reportedly had incurred an estimated 2 billion shortfall in repayments before shutting down. In addition, the supervision of credit cooperatives has been strengthened as has the legal framework governing the operation of equity markets, as demonstrated by the passage of the Security Law in December 1998. Steps are also being taken to promote long-term institutional investment; including the recent licensing of mutual funds.²²

V. CONCLUDING REMARKS

The above discussion leads to several important observations. First, in spite of the remarkable progress that has been made in achieving greater economic openness over the past two decades, the Chinese economy remains largely domestically based. A high proportion of foreign trade consists of import processing. Foreign capital inflows have played only a minor role in meeting domestic investment needs. The complications resulting from capital outflows have further undermined the significance of net external financing. The domestic financial sector is fairly insulated from foreign influence and competition. A heavy reliance on domestic private savings, which have been among the highest in the world, prevents the economy from being overly exposed to the risks of a sudden change in external influences; it also eases the burden of conducting monetary policies, as changing interest rates in the international markets have only a limited impact on the domestic economic environment.

Second, the composition of foreign capital inflows provides additional protection to the domestic economy. Large inflows of FDI and the avoidance of excessive exposure to short-term commercial flows contribute to a steady capital inflow. The stable pattern of the inflow is also attributable to China's reasonably sound macroeconomic fundamentals and its orderly, evolutionary process of economic opening.

Third, the system of exchange rate management and the operation of equity markets tend to insulate the domestic currency and stock prices from external impacts, and leave little room for foreign speculation in these markets. It also provides a mechanism through which potential outflows can be monitored and, if necessary, curbed. This set-up, however, has not undermined foreign trade and trade-related service activities, nor has it affected capital inflows.

Fourth, in the context of the Asian financial crisis and its contagion effects, China did not run an unsustainable resource gap. Unlike some of the crisis-affected economies, the current account balance in China has been positive in recent years (see table 11), precluding the need for sizeable net external financing. The foreign exchange reserve position has been fairly strong, allowing the country to cover more than 10 months of its imports in 1997, and external debt services have remained manageable (table 12).

Fifth, the pattern of China's economic integration and liberalization has an interesting feature. The process began with the opening up of the trade account, together with allowing FDI inflows. The opening of the rest of the current account followed, as did the entry of foreign commercial and portfolio flows. In this respect, the pattern represents an alternative sequence to economic liberalization from the one that calls for the opening up of the current account to precede that of the capital account, as often cited in the literature and within policy-making circles.²³ The evolving pattern has been the result of trial and error, and the process has been accompanied by careful monitoring. Policies, instruments, the regulatory

	1992	1993	1994	1995	1996	1997	1998	1999
China	1.3	-1.9	1.3	0.2	0.9	3.3	3.1	1.6
Indonesia	5.3 -2.2	-1.5	-1.7	-4.3 -3.3	-1.4	-3.6 -2.3	4.2	5.0 3.5
Japan Malaysia	3.0 -3.7	3.1 -4.6	2.8 -7.6	-9.7	1.4 -4.4	-5.6	3.2 12.9	2.5 15.3
Philippines Rep. of Korea	-1.6 -1.3	-5.7 0.3	-4.3 -1.0	-4.5 -1.7	-4.8 -4.4	-7.2 -1.7	1.9 12.4	10.0 5.5
Singapore Taiwan Prov. of China	12.0 4.0	7.3 3.1	16.3 2.7	17.3 2.1	15.2 3.9	17.9 2.4	25.4 1.3	25.3 2.0
Thailand	-5.5	-4.9	-5.4	-7.9	-7.9	-2.1	12.6	8.7

CHINA AND SELECTED ASIAN ECONOMIES: CURRENT ACCOUNT BALANCE AS PERCENTAGE OF GDP, 1992–1999

Table 11

Source: Based on IMF and national authorities. See Sachs (2000: 154).

framework and institutional mechanisms are not extended economy-wide until they have proved to be effective in a limited area and after going through various controlled experiments. In this regard, the special economic zones have played a central role as the testing ground for new reform initiatives (Ge, 1999a).

Based on various indicators derived from Western standards, many observers have viewed Chinese SOEs and the financial and banking sector in China as inefficient. With China's entry into WTO, concerns have arisen, understandably, as to whether the weak and vulnerable sectors will be able to withstand the intense foreign competition that will arise from sweeping market opening measures. If SOEs are unable to do so, their failure could lead to a massive increase in unemployment, and there could be a serious run on domestic banks that are unable to match the services provided by their more sophisticated foreign counterparts. If this triggers social unrest, the course of China's economic transition – in the worst-case scenario – could be jeopardized, and its implications for the world economy could be profound. Following this logic, some commentators had warned Western trade negotiators not to push too hard for greater market opening during

Table 12

CHINA AND SELECTED ASIAN ECONOMIES: EXTERNAL DEBT-RELATED INDICATORS, 1995–1997

(Percentage)

	China	Indonesia	Malaysia	Philippines	Rep. of Korea	Thailand
Debt-GDP ratio						
1995	15.2	61.6	38.6	50.9	16.0	49.5
1996	14.2	56.7	39.5	50.6	31.6	49.8
1997	14.5	62.2	44.8	55.2	33.2	62.0
Debt-exports ratio						
1995	71.6	262.4	48.0	216.5	62.9	149.3
1996	77.0	257.0	51.8	203.9	126.4	165.6
1997	71.7	238.0	57.9	180.0	114.1	164.7
Short-term debt-GDP ratio						
1995	1.7	12.8	8.2	7.1	9.2	24.5
1996	1.7	14.2	11.0	8.7	17.9	20.7
1997	2.0	18.0	13.0	10.2	13.3	23.1
Short-term debt-export ratio						
1995	8.0	54.8	10.2	30.3	36.4	73.8
1996	9.3	64.2	14.4	35.1	71.5	68.8
1997	9.9	68.7	16.8	33.3	45.6	61.4
Short-term debt-foreign exchange reserve ratio						
1995	16.2	177.0	28.6	69.5	138.5	111.1
1996	13.4	168.5	39.8	62.1	280.1	97.2
1997	13.0	221.8	62.2	97.7	309.8	129.0
Import coverage of foreign exchange reserves (months)						
1995	6.7	4.0	4.3	3.4	3.0	6.3
1996	9.1	5.1	4.6	4.4	2.7	6.6
1997	11.8	4.8	3.4	2.8	1.7	5.3

Source: HSBC (2000).

negotiations for China's entry into WTO. Such views were not uncommon, both within and outside China, as often aired in news reports. A fuller discussion of the related issues is beyond the scope of this study. However, several points may briefly be made in this regard.

Overstaffing and the excessive burden of various social responsibilities have long been recognized as key factors undermining the performance of China's SOEs. Allowing these enterprises to rationalize their input structure and to remove non-business responsibilities could, in principle, improve their performance indicators. This, in turn, would lighten the burden of non-performing and underperforming loans should ered by the State-owned commercial banks, consequently enhancing their solvency. Taking the economy as a whole, the pace at which SOEs may be revitalized is constrained by the development of social safety nets and the expansion of non-State sectors. These issues need to be tackled in a coordinated manner. Given the complexities involved, it is unrealistic to expect either SOEs or the State banks to meet international best practices in the near future. Owing to the time and resources required to build up adequate human capital in these sectors, upgrading cannot take place overnight; thus the "vulnerability" of SOEs and the State banks is likely to persist for some time to come.

How serious, then, is the potential impact of WTO membership? As speculative as it is, the following is useful to keep in mind. First, the business performance indicators used in Western market economies may not be appropriate for assessing SOEs. For example, these enterprises typically provide employees with housing at subsidized rates; many also provide childcare, medical service, training and schooling, and cultural and entertainment facilities, to name a few. These services are provided not only to employees but also to their extended families. These outlays count as expenditures and, as such, do not reflect the value of the social benefits they provide. Similarly, a considerably large proportion of SOE operating costs incurred consists of wage payments to redundant workers, who, depending on the sectors, account for an estimated 30 to 50 per cent of the current employees on the payroll. In the absence of a well functioning social safety net, the "cost" to SOEs may be better understood, from a social viewpoint, as welfare benefits. These social returns generated by SOE operations need to be taken into consideration when evaluating the "true" efficiency of these enterprises. The same argument applies to the State banking sector as well. Viewed in this light, concluding that the State sector in China is grossly underperforming may be an overstatement.

Second, a successful business venture requires, among other things, proper adaptation to local market conditions, taking into account consumer preferences and expectations, which tend to differ from location to location. What might have worked, say, in Switzerland, does not guarantee that it will work equally well in Barbados. Learning to adapt is a time-consuming process, and requires deliberate efforts and real resources. Recognizing this, the extent to which foreign firms and banks may pose a threat to their Chinese counterparts needs to be discounted, and their superiority in competing successfully on the Chinese market may have been exaggerated. Evidently, even after a long period of operation, some foreign-invested firms in China are still making losses. The fear that the State's weak sectors – SOEs and banks alike – may collapse under the weight of forthcoming intense foreign competition is pure speculation.

It is worth pointing out that the State banking sector in China is large; its operation covers a wide range of businesses and a vast geographical and customer base. The confidence of domestic savers in the banks has been and continues to remain high. It is very unlikely that the entry of foreign banks and other financial institutions will substantially alter the situation, especially within a short time frame. Instead of forcing the domestic banks to go out of business, the intensified competition brought about by further market opening may serve as a strong force in motivating the State banks, which are still in their infancy, to upgrade and mature. The overall positive picture of economic transition and development, as depicted in the past two decades, is unlikely to turn negative following China's entry into WTO. The resilience and adaptability of Chinese society, as demonstrated in its long history, should not be underestimated, nor should the competence of Chinese policy makers in managing the economy.

China's experience has shown that adapting a pragmatic, step-by-step approach, suitable to local conditions, is critical in managing a smooth process of economic integration and liberalization. The criterion used in assessing the success of its integration and liberalization should be the extent to which these contribute to overall economic development, and not the reverse.

NOTES

- 1 The use of the term "miracle" to describe the progress in certain Asian economies in the 1990s was made popular following the publication of a policy research report by the World Bank. The study provided a comprehensive assessment of the contributing factors underlying the remarkable accomplishments of Hong Kong (China), Indonesia, Malaysia, the Republic of Korea, Singapore, Taiwan Province of China, and Thailand, among others (World Bank, 1993). Alternative views exist. For more recent studies, for instance, see Akyüz (1999).
- 2 There are many studies on various aspects of the Asian financial crisis. See, for example, Akyüz (1998); Fischer (1998); Klein (1997); Stiglitz (1998a and 1998b); Sugisaki (1998); UNCTAD (1998, chaps. III and IV: 53–110); UNCTAD and ICC (1998); and World Bank (1998).
- 3 These include, for instance, the cases of Finland, Japan, Norway, Sweden and the United States.
- 4 For a more detailed discussion on the "vulnerabilities" of the financial sector and Stateowned enterprises in China see Lardy (1998). Assessments of various financial markets and institutions in China are provided, among others, by Chen et al. (2000).
- 5 Related issues have been the subject of heavy debate in recent years, prompted, in part, by the outbreak of the Asian financial crisis. For some recent discussion see, for example, Akyüz and Cornford (1999); and Akyüz (2000).
- 6 A detailed overview of economic developments in China since 1949 is provided by Ge (1999a).
- 7 The beginning of the second phase is usually considered to be the Third Plenum of the Central Committee of the Chinese Communist Party, held in December 1978. At that meeting, economic development was made the top national priority, and economic reform and opening up were established as complementary long-term policies. It should be noted, however, that efforts to reform and open up the economy actually began in 1977, within limited areas and sectors.
- 8 The 30 municipalities, provinces and autonomous regions considered here do not include: Chong Qing municipality, which was established on 1 July 1997; Hong Kong and Macao Special Administrative Regions (returned to China in 1997 and 1999 respectively); and Taiwan Province of China.
- 9 Note that certain other Asian countries, such as the Republic of Korea, also registered impressive growth during this period; hence the term "high-performing economies".
- 10 As noted in an official announcement, since 1 December 1996 China has assumed obligations under Article VIII of the IMF Agreement and made the Chinese currency convertible in current account transactions.
- 11 See People's Daily, 26 September 1997: 1.
- 12 For details on market opening, interested readers are referred to the bilateral WTO agreement between China and the United States reached in November 1999. Since the signing of the agreement, the Chinese authorities have been busy re-examining related
policies, regulations and legislation so as to bring them more closely in line with international norms and WTO rules.

- 13 The changing attitude in China towards debt financing and foreign investment has been profound since the economic transition began in 1979, as evidenced by the following official statement reported in the *People's Daily*, the official newspaper of the Chinese Communist Party, on 2 January 1977: "We never permit the use of foreign capital to develop our domestic resources as the Soviet revisionists do, never run undertakings in concert with other countries and also never accept foreign loans. China has neither domestic nor external debts". See Kleinberg (1990: 1).
- 14 For example, the debt service ratio falls consistently below the creditworthy gauge of 20 per cent, and the liability and foreign debt ratios are well below 100 per cent.
- 15 For studies on the greater Chinese economy, and the economic relationships between China and Hong Kong (China), and between China and Taiwan Province of China, see, *inter alia*, Naughton (1997) and Klein and Yu (1994).
- 16 Macao (China) is less so, when compared with Hong Kong (China) and Taiwan Province of China.
- 17 The point is well made by Mehran et al. (1996).
- 18 Ibid. for a detailed discussion of earlier developments in these areas. Details of more recent developments may be obtained from various country reports and studies published by the World Bank and IMF, in addition to research reports and releases by the Chinese monetary authority.
- 19 For a comprehensive review of the laws and international comparisons, see Mehran et al. (1996: 18–23).
- 20 A detailed analysis of these weaknesses is provided by, for example, Lardy (1998).
- 21 A more detailed discussion on the development of trust and investment companies in China is provided, among others, by the World Bank (1997c).
- 22 See World Bank (1999) and various issues of country updates.
- 23 For discussions on related issues, see Woo, Parker and Sachs, eds. (1997); Ge (1999b); and Feng (2000: 87–107).

REFERENCES

- AKYÜZ Y (1998). *The East Asian Financial Crisis: Back to the Future?* Geneva, UNCTAD, March.
- AKYÜZ Y, ed. (1999). East Asian Development: New Perspectives. London, Frank Cass Publishers.
- AKYÜZ Y (2000). The debate on the international financial architecture: Reforming the reformers. *UNCTAD Discussion Papers*, No. 148. Geneva, UNCTAD, April
- AKYÜZ Y and CORNFORD A (1999). Capital flows to developing countries and the reform of the international financial system. *UNCTAD Discussion Papers*, No. 143. Geneva, UNCTAD, November.

- CHEN B, DIETRICH JK and FENG Y, eds. (2000). Financial Market Reform in China: Progress, Problems, and Prospects. Boulder, CO, Westview Press.
- FENG Y (2000). Capital account liberalization: Sequencing and implications. In: Chen B, Dietrich JK and Feng Y, eds. *Financial Market Reform in China: Progress, Problems,* and Prospects. Boulder, CO, Westview Press: 87–107.
- FISCHER S (1998). The Asian crisis: A view from the IMF. Paper presented at the Midwinter Conference of the Bankers' Association for Foreign Trade, Washington, DC, 22 January.
- GE W (1999a). Special economic zones and the economic transition in China. In: Klein LR, ed. *Economic Ideas Leading to the 21st Century*, Vol. 5. (University of Pennsylvania) Singapore, World Scientific Publishing Co.
- GE W (1999b). Special economic zones and the opening of the Chinese economy: Some lessons for economic liberalization. *World Development*, 27(7): 1267–1285.
- HSBC (2000). *The View: Asia's Bond Markets*. London, Hong Kong and Shanghai Banking Corporation, April.
- IMF (various years). *International Financial Statistics*. Washington, DC, International Monetary Fund.
- KLEIN LR (1997). Financial liberalization and world trade. Invited lecture, United Nations 1997 Fall Conference of Project LINK, Kuala Lumpur, 22–26 September.
- KLEIN LE and YU CT, eds. (1994). *Economic Development of ROC and the Pacific Rim in the 1990s and Beyond*. Singapore, World Scientific Publishing Co.
- KLEINBERG R (1990). China's "Opening" to the Outside World: The Experiment with Foreign Capitalism. Boulder, CO, Westview Press.
- LARDY NR (1998). *China's Unfinished Economic Revolution*. Washington, DC, The Brookings Institution.
- MEHRAN H, QUINTYN M, NORDMAN T and LAURENS B (1996). Monetary and exchange system reforms in China: An experiment in gradualism. *IMF Occasional Paper*, No. 141. Washington, DC, International Monetary Fund, September.
- NAUGHTON B, ed. (1997). The China Circle: Economics and Technology in the PRC, Taiwan, and Hong Kong. Washington, DC, Brookings Institution Press.
- SACHS J (2000). Emerging Markets Economics Quarterly, March.
- STATE STATISTICAL BUREAU OF CHINA (various years). *Statistical Yearbook of China*. Beijing, China Statistical Publisher.
- STIGLITZ J (1998a). Sound finance and sustainable development in Asia. Keynote address to Asian Development Forum, Manila, 2 March.
- STIGLITZ J (1998b). *The East Asian crisis and its implications for India*. Commemorative lecture for the Golden Jubilee Year Celebration of Industrial Finance, New Delhi, 19 May.
- SUGISAKI S (1998). *Economic Crises in Asia*. Address to the Harvard Asia Business Conference, Harvard Business School, Cambridge, MA, 30 January.
- UNCTAD (1998). *Trade and Development Report, 1998.* United Nations publication, sales no. E.98.II.D.6, New and Geneva.
- UNCTAD and ICC (1998). *The Financial Crisis in Asia and Foreign Direct Investment*. Geneva, United Nations, June.
- WOO WT, PARKER S and SACHS JD, eds. (1997). *Economies in Transition: Comparing Asia and Europe*. Cambridge, MA, The MIT Press.

- WORLD BANK (1993). *The East Asian Miracle: Economic Growth and Public Policy*. New York, Oxford University Press.
- WORLD BANK (1997a). China 2020: Development Challenges in the New Century. Washington, DC, World Bank.

WORLD BANK (1997b). China Engaged. Washington, DC, World Bank.

WORLD BANK (1997c). China's Non-Bank Financial Institutions: Trust and Investment Companies. Washington, DC, World Bank.

WORLD BANK (1998). East Asia: The Road to Recovery. Washington, DC, World Bank.

WORLD BANK (1999). *China: Weathering the Storm and Learning the Lessons*. Washington, DC, World Bank, July.

POST-CRISIS FINANCIAL REFORMS IN THE REPUBLIC OF KOREA: PROBLEMS AND PROPOSED REMEDIES

Chon Pyo Lee

I. INTRODUCTION

This paper considers changes in economic policy measures undertaken over time by the Government of the Republic of Korea to conform with global standards. It draws a few lessons from the Korean experience that warn against an excessively rigid application of such standards, as discussed in the literature on sequencing of economic liberalization. The paper deals with the question of the optimal order of financial transformation, of particular relevance to the discussions about the Asian financial crisis. It suggests alternative policy options for structural adjustment by the Korean Government that have been presented in a number of academic and journalistic circles.

It is now evident that the Republic of Korea recovered from the crisis better than the other crisis-hit Asian economies: its growth rate was 10.9 per cent in 1999 and was estimated to be 8.8 per cent in 2000; its inflation rate was about 3 per cent and its foreign exchange reserves stood at more than US\$ 96.2 billion at the end of 2000 – the largest in its history. Its present rate of economic growth resembles its remarkable pre-crisis performance - for more than 35 years the country had experienced rapid growth with an average growth rate of 8 per cent.

Many observers have sought to determine whether the crisis was caused by some fundamental factors inherent in the Korean economy or by unfavourable consequences of changes, especially financial ones, in the international economic system. Earlier, the Republic of Korea had been performing well in terms of traditional fundamentals such as growth rates, inflation rates and balance of payments. However, its economic system, involving excessive investments by its *chaebol* and the latent sociocultural institutions associated with them, was considered unsound. In addition, it suffered from the contagion effects of the South-East Asian financial crisis.

Some observers may attribute the Republic of Korea's recent strong recovery and the return to its previous high growth performance to its various adjustment efforts. In fact, however, there have been serious indications of some undesirable side effects of its recovery efforts, which have prompted suggestions that there might be better alternatives. This paper discusses possible lessons from the Republic of Korea's reform process. It argues that some aspects of the global standards as norms for reform are insufficiently defined to be operational, while others are too rigid and lead to a credit crunch and a vicious circle. It points out pitfalls in the rigid application of global standards arising from the dynamics of the reform process. Although the reform programmes have comprised multidimensional changes, this paper focuses on only one dimension, namely that of financial reform, which is a central element in the overall reforms.

Two building blocks of the financial structure of society are direct financing based on the capital market, and indirect financing based on banking. An economy may lean, in relative terms, towards either direct or indirect financing. For example, the United States economy, with a welldeveloped capital market, is primarily based on direct financing, while most other economies are mainly dependent on indirect financing. Each has its advantages and disadvantages. Since no economy can drastically change its financial structure within a short period of time, it is best to proceed incrementally whenever there is a shift of emphasis between the two. It can be observed that many late-starters among developing economies relied heavily on indirect financing.

Alan Greenspan, Chairman of the United States Federal Reserve, in his speech at the annual meeting in 1999 of the International Monetary Fund (IMF) and World Bank, stressed the importance of a well-developed capital market. He observed that almost all economies which had recently experienced a financial crisis had an underdeveloped capital market and a financial structure that depended heavily on banking. He stressed the importance of capital markets, particularly when the banking sector underperformed.

We concur with Greenspan that an economy, particularly a developing one, should have a balanced mix of direct and indirect financing, so that a situation of non-performing loans may be improved by funds from the capital market. It would do better to change from a structure of dominantly indirect financing to one of diversified financing from both the capital and the banking market. Indeed, a report issued in December 1999 by the Korean Institute of Finance on financial restructuring agreed on the need for more direct financing with the aim of increasing the relative share of the capital market to 60 per cent from its current level of 30 per cent (Korea Institute of Finance, 1999).¹

However, such a balanced mix of direct and indirect financing cannot easily be achieved. Especially for late-starters of economic development, it is hard to build the infrastructure necessary for supporting a balanced financial structure, as many institutional factors cannot be put in place over a short period of time. Within a limited period of time, what can be done is to make the best use of the resources mobilized to expand the relatively smaller area of direct financing. Hence the short-term outcome would at best be more direct financing schemes on the way to a more balanced financial structure.

The effort towards more direct financing does not necessarily imply that the banking system, thus far extensively utilized, should be suppressed and a capital market artificially created. Social custom, which cannot be changed rapidly, would tend to deter a drastic overhaul of the existing system, if not preventing it altogether. Society needs time to accept a new system, however desirable it may be. Hence, in conceptualizing the mix of the two financing mechanisms, there should be some optimal sequence and speed in transforming the existing financial structure. Moreover, the schedule of the transformation process should be realistic, bearing in mind the internally available resources and the conditions of the external environment. Otherwise the transitory period would involve considerable welfare losses that would harm many creditors and debtors, both internal and external.

Immediately after the outbreak of the Asian financial crisis in 1997 the Government of the Republic of Korea tried to restructure its economy on all fronts. Its main thrust was to rapidly secure a balanced financial reform – the very point made by Greenspan – but it did not give due attention to its various inherent limitations in the transformation process.

The Government has so far placed considerable emphasis on global standards. The major causes of the crisis were said to be so-called crony capitalism involving the *chaebol*, and non-transparent corporate governance in the Korean economy, along with many other features associated with moral hazard. The business practices through crony capitalism were seen as deviating from the global standards. Consequently, it was proposed that the undesirable practices be reduced by adopting these standards. However, what constitutes global standards was not made explicit. More fundamentally, insufficient attention was given to the question of whether global standards exist for every economic aspect, and whether the Korean economy had the ability to conform with the global standards and correct the supposedly undesirable elements within a specified short adjustment period.

Various kinds of global standards were suggested, but not all of them have been enforced with equal strength. Some of them have been strongly and consistently implemented, while others have been merely discussed. The two most distinctive global standards selected by the Government are the Bank of International Settlements (BIS) ratio and the leverage ratio. Both are intimately related to the financial structure. The Republic of Korea's financial firms were required to attain the BIS ratio of over 8 per cent within a year following the outbreak of the financial crisis, and all conglomerate groups were to reduce their leverage ratio to below 200 per cent by the end of 1999. The aim of these measures was make the financial structure of the firms concerned consistent with the global standards. However, the announcement of these standards came as a shock to all the firms targeted for reform, as their attainment appeared to be extremely difficult – if not impossible – within the specified period imposed by the authorities. Moreover, there was no guarantee that governance and management would change in parallel with the changes in the financial structure. These standards also induced an economy-wide financial crunch: there was a drastic contraction in bank lending, and a significant number of bankruptcies of illiquid firms, with only a moderate increase in share issuing and trading.

At times of unfavourable external shocks, such as an oil price hike or a deterioration in the terms of trade, policy measures should be altered to mitigate their adverse effects. When new internal factors are identified as additional elements that exacerbate the effects of a crisis (such as huge non-performing loans to major companies belonging to the Daewoo group), the policy stance also needs to be modified. When the policy measures undertaken turn out to have unexpected effects, additional measures are needed to address these.

As with economic liberalization, financial transformation, to be successful, should be pursued progressively. In the light of the Korean experience with the recent crisis, this paper suggests some lessons that favour a gradual and sustainable transformation for a small economy, such as the Republic of Korea, with a large indirect financing scheme at the beginning of the transformation. Section II sketches the plans that aimed at resolving the crisis facing the Republic of Korea. Section III evaluates the global standards proposed as the norms and the adjustment efforts undertaken for the resolution of the crisis. Section IV discusses public funding and labour market reform. Section V examines the changes that took place till the end of 2000. And finally, section VI suggests overall lessons.

II. CRISIS RESOLUTION IN THE REPUBLIC OF KOREA: FOUR REFORMS

Numerous studies on the Korean financial crisis of 1997 have identified its principal causes: the increase in labour costs outpacing that of productivity; the appreciation of the Korean won, partly due to capital inflows resulting from capital account liberalization; the excessive buildup of short-term foreign currency liabilities on the balance sheets of companies; and the contagion effects from the crisis-ridden South-East Asian countries.

The causes of the crisis can be grouped into external and internal factors. The external factors included: massive and volatile capital movements in recent years; inadequacies in the global financial architecture for avoiding systemic risks; an inappropriate system for determining the exchange rate; and self-fulfilling expectations and the herding behaviour of international bankers and investors. The internal factors included structural ones such as insufficient transparency, endemic moral hazard, and lack of market discipline, reportedly prevalent in the non-financial sector of the Korean economy. Specifically, these were identified as excessive corporate leverage, poor corporate governance, an inadequate monitoring mechanism to impose accountability and transparency on management, improper practices associated with cross-holdings and crosssubsidization within the *chaebol*, and the misconceived notion that these companies were "too big to fail". All these were seen to result in encouraging high-risk businesses and excessive investments away from market-based logic. Other internal factors in the financial sector seen to have precipitated the crisis included commercial bank operations implicitly guided by the Government rather than by profit-oriented management principles, and lending practices based on collateral instead of strict project evaluation.

Korean corporate establishments, whether in the financial or nonfinancial sector, have lacked adequate governance and thus the transparency associated with a good accounting system. And they have not necessarily been oriented towards profit maximization. Prior to the crisis, the de facto public role of financial institutions in assisting the Government's commercial policies, together with the latter's inappropriate macro management, resulted in an overvalued local currency. The existing supervisory system was improper: it allowed large short-term liabilities and caused massive maturity mismatching.

As a small country with little influence on its external environment, the Republic of Korea, particularly its financial sector, is vulnerable to the moods of international lenders. Since all possible remedies to rectify external factors were beyond its reach, its only option was to correct its internal weaknesses. The Government also decided to dispense with moralhazard-driven lending that often led to excessive investments motivated by hidden subsidies.

In order to obtain immediate liquidity, the Korean Government extended the maturity of short-term external debts with de facto government guarantee of commercial bank debts, and then issued global bonds to ensure the country's access to international financial markets. Subsequently, the Government launched reform programmes for each of the financial, corporate, public and labour sectors (Ministry of Finance and Economy, 1999). The following sections describe these reform programmes in both the financial and non-financial corporate sectors.

A. Financial sector

For the financial sector, 15 legislative reform measures were introduced to make the Korean financial system conform to the norms set by the Organisation for Economic Co-operation and Development (OECD), supposedly for enhancing its efficiency, transparency and soundness.² A new Financial Supervisory Commission (FSC) was established for more effective financial supervision. Disclosure was strengthened by obliging financial firms to comply with the disclosure requirements of international accounting standards, especially those regarding off-balance-sheet transactions, asset classification and special disclosures such as those related to unusual losses and contingent liabilities. Governance-related corporate reforms for financial firms were also introduced. For establishing a sound banking system, many critical measures were undertaken. Weak institutions were either closed or consolidated with stronger ones. The Basel Committee's Core Principles were adopted, with emphasis on the guidelines for transparency and disclosure. In addition, more stringent loan classification standards and provisioning requirements were adopted. Public funds were utilized to rehabilitate troubled institutions and to help them attain a capital adequacy ratio above the Basel norm of 8 per cent. Banks were advised to seek foreign investments. The private sector made serious attempts, with the Government's guidance, to find foreign strategic partners who could inject both new capital and management expertise.

The reform drive was extended to the capital market, following the diagnosis that bank-dominated indirect financing had contributed to the crisis. The shallow investment base was seen as inhibiting structural improvements in corporate finance, and the weakness in the domestic bond market was considered an impediment to the improvement of corporate debt. High priority was therefore given to the advancement of the national capital market, and, in parallel, new financial commodities such as asset-based securities and mutual funds were introduced.

B. Corporate sector

High corporate debt and weak governance had resulted in excessive debt-financed expansion by Korea's conglomerates, and this had raised the country's vulnerability to a financial crisis. Implicit risk-sharing by the Government, together with inadequate corporate governance, had led bank borrowers to become overly dependent on debts (the mirror image of over-burdened lenders with non-recoverable loans) and to make excessive investments. The overall situation had made both the banks and businesses extremely vulnerable to bad shocks.

In order to overcome the syndrome of over-borrowing, the Government saw the need to conform to international standards. Specific provisions to this end included: (i) strengthening the accountability of controlling shareholders and management to improve corporate governance; (ii) enhancing the transparency of management; (iii) eliminating cross-debt guarantee between firms affiliated with *chaebol*; (iv) improving the capital structure of firms, focusing on their core competences; (v) introducing outside directors to participate in important corporate decision-making to protect the interests of general shareholders against the controlling shareholders who monopolized decisions; (vi) recommending the utilization of economic value-added and cash flows in business operations; (vii) strengthening the legal rights of small shareholders to detailed information on corporate operations; and (viii) augmenting internal auditors' functions.

For carrying out the corporate restructuring, the creditor banks were assigned a catalytic role. Three different approaches were adopted corresponding to the restructuring requirements of three groups differentiated by size: the top five *chaebol* and their affiliates, other smaller conglomerates, and small and medium-sized enterprises (SMEs). The top five were allowed to pursue their self-designed restructuring, as they were believed to have the capacity to absorb any resulting losses. Other conglomerate groups, ranked from 6 to 65, were made to enter into "debt work-out" arrangements with financial institutions, based on the principle of burden-sharing. The SMEs were supported with restructuring funds by financial institutions.

To facilitate rehabilitation, additional measures were taken. All forms of mergers and acquisitions (M&As), including hostile takeovers, were liberalized, and the 25-per-cent ceiling on equity investments by *chaebol*affiliated companies in other companies within the group were also lifted. It was recommended that private firms adopt the Code of Best Practices of Corporate Governance, established by the Committee on Improving Corporate Governance composed of private experts.

It is useful to remember that, as a byproduct of the indirect financing tradition, Korean firms, in general, had high debt leverage. To reduce their excessive leverage, thereby improving their balance sheets, a phased reduction of their debt-to-equity ratio was contemplated. Specifically, in December 1998 the top five *chaebol* reached an agreement that they would

reduce their debt-to-equity ratio from 400 per cent to 200 per cent on a consolidated basis by the end of 1999.

Another reform programme was business swaps, with the goal of enhancing core competence. The business swaps, commonly called "Big Deal", were extended to semiconductors, oil refining, aircraft, railroad rolling stocks, power generation facilities and vessel engines, and petrochemicals. The restructuring programmes also involved selling off subsidiaries to more competitive companies, or spinning off the subsidiaries to independent companies. It was hoped that these measures would contribute to enhancing international competitiveness in those sectors by not only eliminating overlapping and excessive capacities, but also achieving economies of scale.

III. GLOBAL STANDARDS AND EVALUATION OF THE POST-CRISIS ADJUSTMENTS

At the end of 1999 the Republic of Korea's foreign exchange reserves amounted to more than US\$ 73 billion, compared to less than US\$ 9 billion at the end of 1997. With this remarkable improvement in exchange reserves, the country's President proclaimed, "... in less than two years since the outbreak of the financial crisis, Korea has reemerged more quickly and strongly than anyone expected, demonstrating its resolve and resilience to overcome such a huge adverse shock ...".

The Korean adjustment sketched above has been claimed to be a process of adapting previous practices to so-called "global standards". However, the question is whether there are global standards for all aspects of economic life. Even where such standards exist, it is one thing to talk about them and another to adopt and implement them. As some global standards are foreign to Korean business tradition, they cannot be applied rapidly in the adjustment process without causing difficulties.

Some global standards are quantitative, but others are qualitative and not easily quantifiable. Quantitative standards, such as the BIS ratio and the leverage ratio, are easily measured, and therefore can be objectively monitored. However, in the absence of a good yardstick for the qualitative or unquantifiable standards, monitoring and regulation concerning their implementation becomes difficult. Indeed, this distinction is very significant in the case of the Republic of Korea, since, in practice, the quantitative standards have been aggressively enforced.

A. Qualitative standards and their effects

Some qualitative standards do not have definite norms or criteria to adopt and follow, while others are in the process of revision and modification in the global community in the light of new developments made during last few years following the East Asian crisis. This implies that the mechanical enforcement of qualitative global standards, some of which are subject to somewhat arbitrary interpretation, cannot be implemented exactly and might not produce the intended results.

(i) Accounting standards

In the name of international accounting standards the Korean Government has demanded that all conglomerates present combined financial statements of all related firms. However, it is well known that there is no single international accounting standard; it is, at present, under discussion in the OECD. Moreover, its main contents seem somewhat different from those of the American Accounting Standard, and these differences need to be resolved, an exercise that is likely to take some time. Therefore, it sounds hollow to talk about a single global standard in accounting, not to mention the mechanical and stringent enforcement of its implementation.

(ii) Transparency

To serve the customers of global markets more successfully, suppliers need to be much more transparent than before. However, it is not clear whether there is a yardstick to measure the degree of transparency of individual firms or that of a national economy consisting of numerous firms. As noted above, Korean firms, especially those belonging to *chaebol*, have been not very transparent, as they have been engaged in internal trading mingled with transfer pricing, cross-dealing, cross-subsidization and crossholding of shares. While often criticized, the old practice of creating economic rents through interest-rate controls and allocating them to designated areas was accepted as normal. It is now generally agreed that more transparency is needed in the Republic of Korea. However, the patterns of corporate behaviour cannot be overhauled in one day; they can be improved, but only incrementally. How can firms be expected to attain a certain level of transparency within a certain period of time when the required level is not made clear to them or when they know they cannot attain it? In the United States, the failed Long Term Capital Management (LTCM) fund, which had two Nobel laureates as advisers and a successful Wall Street fund manager as its chairman, demonstrated a probable lack of transparency and adequate risk-prevention measures. The fact that achieving transparency still remains an enormous task in the Republic of Korea, after three years of vigorous adjustment efforts, implies that it cannot be attained within a short period of time.

(iii) Corporate governance

Corporate governance is an issue of considerable concern, particularly after witnessing the past behaviour of firms in terms of excessive investments. The factors generally identified as contributing to the failure of corporate governance include: (a) issues relating to control and ownership; (b) inadequate financial information; (c) no credible exit policy; (d) lack of monitoring of financial institutions; (e) few legal rights or protection for minority shareholders; and (f) no substantial role for directors. Moreover, until 1997 there were no well-recognized bankruptcy procedures, with few, if any, insolvency procedures for large firms.

Many measures have been taken to address these deficiencies. Information disclosure requirements have been made more extensive and frequent; firms now have to report on more items, and accountability is being enforced with the requirement that independent accountants be responsible for the credibility and accuracy of their financial statements. To facilitate the exit of non-viable firms, the Company Reorganization Act was amended to add an economic test, a time test and a mandatory reduction of shares.³ A cumulative voting system for boards of directors – together with more outside directors playing an enhanced role – in all listed firms was instituted, and the controlling shareholders were made de facto directors legally accountable in case of mismanagement. Consequently, many firms have installed outside directors who work for the shareholders, although their influence is not particularly satisfactory. As with transparency, it will take more time for this qualitative standard to become well established.

B. Quantitative standards and their effects

Many elements associated with the qualitative global standards are neither clearly defined nor expected to produce the desirable results rapidly if and when implemented. Requirements for such standards have been of a rhetorical nature, and their implementation has proved impractical. They have been neither strictly observed nor have they been able to substantially transform Korean business practices, even though they have been frequently and strongly stressed by the Government.

As for the quantitative standards, the Korean Government introduced the BIS capital adequacy ratio for financial firms and the debt-to-equity ratio for non-financial firms. As mentioned above, the Government demanded that banks raise the BIS ratio to over 8 per cent and that nonfinancial firms lower the debt-to-equity ratio below 200 per cent, and it has closely monitored the attainment of these targets.

(i) The BIS ratio

The BIS ratio was devised by the international community in 1988, originally as an operational yardstick in order to level the playing field for all internationally active banks from diverse traditions and customary practices. Moreover, it was designed to take care of credit risk. It was not associated with market risk, let alone counter-party risk or systemic risk. In other words, it aims at preventing these banks from taking excessive risks in their lending activities. In a strict sense, this ratio does not have to be uniform for all banks; it can differ among institutions depending on their history, business strategy, line of business and size. Recently, various countries have begun to allow their banks to have their own riskmanagement models in place of the BIS ratio. This may be an indication that the BIS ratio has limitations in handling all kinds of risks faced by financial firms.^{4, 5}

Yet in the Republic of Korea, the BIS ratio was enforced uniformly for all Korean banks, including those not involved in international business activities. In the implementation process the Korean banks were advised to raise their ratio above 8 per cent.⁶ Those failing to meet this requirement were threatened with closure. It was believed that the higher the ratio of the bank, the better equipped it would be to allay foreigners' fears about the Korean economy. In any case, in order not to lose their licence, all Korean banks had to satisfy the ratio requirement at all costs.

The Korean financial situation turned worse with the surfacing of sudden and substantial increases in bad debts owing to the work-out decisions of firms belonging to the Daewoo conglomerate and by the adoption of more stringent guidelines for discerning bad debts through the introduction of so-called "forward looking criteria". These increased the number of non-performing loans and/or considerably worsened the creditworthiness of many outstanding loans of banks and other institutions, thereby causing them additional hardship in meeting the required BIS ratio.

The 1997 IMF structural reform programme that prescribed, among others, high interest rates and strengthened prudential regulation, caused a credit crunch, made worse by the enforcement of the BIS ratio. Every bank, struggling to survive at the worst time during the crisis, was forced to reduce its lending at whatever cost. Furthermore, ill-timed work-out decisions and the sudden introduction of the "forward looking criteria" further intensified the credit crunch. In retrospect, insufficient consideration was given to the issue of timing in introducing reform measures. Recently, some measures have been introduced to modify the mechanical application of the BIS ratio. These will be discussed later.

(ii) Debt-to-equity ratio

A similar inadequacy was observed with respect to the debt-to-equity ratio requirement for business firms. As noted above, all conglomerate firms were required to reduce their leverage ratio to below 200 per cent by the end of 1999. However, the reasons for this numerical target were unclear. Firms that could not meet the target were under threat of work-out or closure.⁷ Consequently, in view of the difficulties in raising new money in the crisis situation, they were forced to reduce their liabilities, and, correspondingly, to rearrange their asset items.

In general, firms can reduce their debt-to-equity ratio by selling off subsidiaries or assets (e.g. closing failing businesses) or by issuing new stocks. Of these options, the most natural reaction is to eliminate various assets, preferably with the less indispensable items being removed first. But if these cannot be sold, the more valuable assets have to go. Sometimes highly liquid assets must be abandoned, resulting in a shortage of cash, despite the fact that they might have been maintained at their minimum levels. As a result, the lack of liquid assets can interrupt normal business operations. The credit crunch and interruptions in business operations can considerably intensify the liquidity squeeze. Consequently, many firms, faced with difficulties in securing working capital, are forced to sell their most valuable assets, thereby reducing their prices and values of collateral. Such a situation is likely to result in a further increase in bad loans.

Indeed, in the Republic of Korea, not all bad loans encountered *ex post* were bad loans *ex ante*; most were merely outcomes of the crisis, associated with the currency depreciation and liquidity squeeze. A number of projects could not be completed due to falling investments as a result of the recession, currency depreciation and interest-rate hikes. A number of financial intermediaries liquidated their instruments prematurely, affected as they were by a self-fulfilling loss of confidence. This caused a further fall in investments and worsened the liquidity squeeze, thereby intensifying

the recession and leading to a further currency depreciation and another increase in interest rates. An attempt to limit real currency depreciation caused a decline in output, which only served to validate the collapse of confidence, thereby accelerating the vicious circle.

Along with the pressure to meet the BIS and leverage ratios, the sale of shares or firms to foreigners was emphasized as a top priority. However, the possibility of "fire sales" caused considerable anxiety among many Koreans, as such sales would have caused welfare losses. As it turned out, no substantial fire sales took place owing to a boom in the stock market in 1999 which provided an easier way out through the issue of stocks. Thus the *chaebol* managed to meet the debt-to-equity ratio requirement by the end of 1999, not through a major reduction of debts, but rather through new issues of equities. The stock market boom contributed to increasing direct financing, but did not significantly lower the level of debts or alter the business practices of indirect financing institutions to make them more prudent than before. As a result, the subsequent burst of the stock market bubble and the decline in equity prices throughout 2000 caused the firms with large debts to once again experience difficulties in satisfying the required ratio.

IV. PUBLIC FUNDS AND OTHER ADJUSTMENT EFFORTS

In addition to the application of global standards to two carriers of production – firms and financial institutions – other reforms were introduced in the form of "Big Deal" and work-out measures related to the factors of production (i.e. labour and capital) and direct intervention, although emphasis on them was weak.

A. Labour

The Republic of Korea has achieved some progress in labour market reform by revising the Labour Standards Act, which legalized layoffs by management. In January 1998 the Tripartite Commission was established to enhance labour market flexibility, and cooperation between labour, management and the Government. Intended to resolve difficult problems through consensus, it resulted in employment reduction immediately after the crisis. But its long-term usefulness remains to be seen, as the mere existence of the institution does not necessarily ensure cooperation between labour and management. In addition, manpower-leasing businesses were introduced in July 1998 to provide workers with a broader range of jobs through the "worker dispatch scheme".⁸

B. Capital: foreign capital

New resources (external and internal) needed to be injected into the troubled banks and firms for meeting the targets of the BIS ratio and the debt-to-equity ratio respectively. The Korean Government initially intended to rely mainly on external resources. The principal strategy was to be the sale of companies, particularly good ones, despite complaints over possible "fire sales". The Government argued that this was because bad companies could not be sold. Confronted with unfavorable comments by foreigners on the credibility of Korean firms, sometimes related to the very sale of the companies, and, without any objective criterion, the sale price of firms was decided almost entirely by foreigners. Thus a buyers' market for Korean firms was created as a result of the Korean Government's desperate need for foreign capital.

This need prompted the Government to allow hostile takeovers, for the first time in the country's history, as part of the terms of the standby agreement reached in 1997 with the IMF. Prior to that, hostile M&As were considered a taboo; they were seen as being harmful to the entrepreneurs who had nurtured companies in a difficult environment. However, foreign investment banks advised that hostile M&As were indispensable for obtaining the needed foreign capital.

Some of the M&As were initiated not by demand in the market place, but as a result of pressure from the Regulatory Commission, with what appears to have been government guidance reminiscent of its industrial restructuring attempts of the 1970s and 1980s. However, not much attention was paid to the diversity of the different *chaebol* groups and to the differences among industries. The restructuring policies seem to have been superficial, lacking in detail and inconsistent, with an emphasis on market mechanisms, particularly evidenced in the many M&As that took place. Table 1 shows the recent trends in capital inflows. The absolute magnitudes increased over the three years immediately following the crisis, but their ratios to GDP were still smaller than those of such economies as the United Sates, the United Kingdom, China and some South-East Asian countries. The shares of the foreign capital inflows (FDI and portfolio investments) in gross investments in the Republic of Korea were 9.6 per cent in 1997, 4.9 per cent in 1998, 16.2 per cent in 1999 and 17 per cent in 2000.

It seems optimistic to have expected the Republic of Korea to attract even the same amount of foreign capital as the Nordic countries managed

	1997	1998	1999	2000
Foreign direct investment: Reported Arrivals	69.7 30.9	88.5 52.2	155.4 106.1	156.9 102.6
Foreign indirect investment	122.9	-2.9	69.9	119.6
Foreign capital inflows	153.8	49.3	176.0	222.2
Gross investments (Billion won)	15 177.3	94 054.8	128 771.2	148 202.5
Year-average exchange rate	951.1	1 398.9	1 189.5	1 130.6
Gross investments (US\$100 million)	1 595.7	672.4	1 082.6	1 330.8
Foreign capital inflows/ gross investments <i>(Per cent)</i>	9.6	4.9	16.2	17.0

 Table 1

 FOREIGN CAPITAL INFLOWS AND GROSS INVESTMENTS

Source: Ministry of Industry and Resources for FDI; Bank of Korea for indirect investments.

during their crises in the early 1990s (the proportion of foreign capital in these countries was estimated to be about 20 per cent),⁹ given that the latter are regarded as very transparent, while the Republic of Korea has been criticized for its lack of transparency. At best, foreign capital might have amounted to about 20 per cent of the total new resources needed. Assuming that all gross investments made at that time were utilized exclusively for purposes of structural adjustment, the calculated ratios above suggest that the extent of contributions of foreign capital for Korean restructuring did not deviate from what could be expected based on the experience of the Nordic economies. There is an obvious limit to the amount of foreign resources that can be attracted for restructuring, especially by developing economies, and therefore, new and effective ways of mobilizing underemployed internal resources need to be developed.

C. Public funds

In the Republic of Korea, given the difficulty in mobilizing underutilized internal private resources, the easier option was to use public resources. Thanks to fiscal soundness inherited from the pre-crisis era, the Korean Government was able to mobilize sizeable public resources to shore up the capital adequacy position of major financial institutions. The injection of public funds was carried out in a front-loaded manner in the hope of quickly restoring confidence in the market, thereby raising most banks' BIS ratio well above 10 per cent. This also provided the Government with room to lower the interest rate and thus mitigate a credit crunch.

The main vehicles for the injection of public funds for restructuring are the Korea Asset Management Corporation (KAMCO) and the Korea Deposit Insurance Corporation (KDIC). The KAMCO purchased and disposed of impaired assets from financial institutions, while the KDIC's function was to create a system of deposit insurance based on limited guarantees for depositors, with the premium linked to prudential soundness of each insured institution. But it also participated in the restructuring process by providing recapitalization funds to targeted banks and reimbursing depositors in other institutions.¹⁰ With the help of public funds, banks were transformed into a vehicle used extensively as the main corporate creditor for corporate sector reform. However, the injection of public funds created new problems. First of all, it changed the former private banks into de facto public entities. When the liabilities of banks were guaranteed in 1997 for maturity extension, this resulted in the "socialization of private debts". Many banks were in a sense nationalized, despite outside pressure to rely on the market mechanism and private initiative. Thus with the injection of public funds, the trend towards nationalization of private enterprises was further intensified.

These public funds were expected to be paid back. The shares purchased in exchange for the KDIC debt certificate to raise the capital adequacy ratio were required to be sold, and the money from the sale used to pay for liquidating the debt certificate. However, in reality it is not clear when the money will be repaid. In the meantime, the financial injection implies an increase in public expenditure to finance the interest payments on the debt certificates, possibly risking inflation. Moreover, the debt certificates exchanged for banks' shares are valuable assets for the banks to further utilize, as they can issue new liabilities based on those certificates. However, their utilization may amplify the inflationary potential. So far this kind of potential danger has been averted.

The Government initially projected that the total amount of public funds to be injected would be 64 trillion won,¹¹ for recapitalizing financial firms and paying the banks' depositors on their behalf. However, after the injection of the public funds, there appeared to be a further financial need for recapitalizing financial firms whose non-performing loans had increased due either to bankruptcies of their borrowers, or to a deterioration of the quality of the loans. In October 2000, the Ministry of Finance and Economics requested the National Assembly to authorize an additional 40 trillion won. The planned use of this new money was not very different from that of previous funds: investments into banks to strengthen their capital base and the BIS ratio, and investments into the Seoul Guarantee Company, several credit unions and credit cooperatives to augment their respective loss provisions. Moreover, many feared that the 40 trillion won would not be the final injection of this kind. Indeed, by the end of 2001, the total amount of public funds injected was reportedly 156 trillion won. This included not only the original funds of 64 trillion won and the additional 40 trillion won, but also other special purpose public funds and the reused funds from the repayment by the institutions that had used the original public funds for restructuring purpose.

At around the same time, it was revealed that 45 trillion won of the initial 64 trillion won was unlikely to be recovered, and the net interest payments accumulated during the past four years on the total public funds was estimated to be 44 trillion won. As a result, the congressional hearing on this matter disclosed that the total national burden from the operation of the public funds amounted to 89 trillion won. In order to avoid the problems associated with such use of public funds, it is obvious that there needs to be a more active utilization of private money.

D. "Big Deal" and work-out programmes

A "Big Deal" was introduced through which production facilities of big firms were supposed to be swapped and their overcapacity curtailed. However, the Government determined which businesses would have to be swapped without any consultation with the firms involved, and it offered no room for compromise. But the swaps required many conditions and compromises on the part of the *chaebol* groups concerned. The conditions were hard to meet and compromises even harder, in spite of pressure from the Government. Hence, the "Big Deal" turned out to be a failure in the sense that the initial plan was not implemented as intended, and the problem of overcapacity resulting from the past excessive investments has never been resolved.

There have also been work-out programmes for several firms, with somewhat favourable aid packages offered to them. The rationale for these programmes was to provide liquidity to those firms deemed solvent but experiencing temporary liquidity problems. In other words, if short-term liquidity was provided, the firms under the work-out programmes were expected to become normal. Even with the good intention of the work-out programmes not many firms returned to normal even with the rescue financing, and some of them had to be either liquidated or financed further. The work-out programmes therefore have been criticized as having been too lenient in the sense that they included too many firms (including nonviable ones) and that the aid packages discriminated against other good firms that were not part of the work-out programmes.

V. AN ASSESSMENT OF THREE YEARS OF RESTRUCTURING EFFORTS

Upon entering 2001, three years after the Republic of Korea initiated its restructuring efforts, the evaluation by foreigners of the outlook of the Korean economy differs from that of many Koreans. According to a survey of 2000 foreign firms running businesses in Korea, conducted by the Korea Trade and Investment Corporation in the first half of December 2000, 53 per cent of foreign firms were optimistic about the Korean economy and intended to increase their investments in the country. In contrast, Koreans were less optimistic, according to other surveys done by various newspapers; Koreans expected a further deterioration not only because of worsening external conditions, but also because of the discrepancies between the restructuring plan and its actual implementation.

In this context, we examine a few new developments since the end of 2000. First, many quarters of the economy, including the Korean Chamber of Commerce and Industry, have severely criticized the Government's obsession with the BIS ratio. Even the Bank of Korea has argued that the BIS ratio should be applied differently to different banks (especially depending on whether they are from an advanced economy or not). In addition, the Financial Supervisory Commission (FSC) revealed that it might not be preoccupied with the BIS ratio per se, and would be more concerned with other yardsticks, including profitability indicators such as the rates of return on assets and on equities. These changing views, that banks should not be too tightly constrained in lending so as to mitigate the prevailing financial crunch and serious financial dis-intermediation, seem quite different from three years earlier when the authorities were preoccupied with the BIS ratio.

As explained earlier, the task of reducing the debt-to-equity ratio for the *chaebol* to below 200 per cent by the end of 1999 was met, not by reducing debts but by increasing equities, helped by the stock market boom in 1999. However, with the decline in stock prices during the second half of 2000, firms with a satisfactory debt-to-equity ratio began to suffer due to the remaining obligation of interest payments. Indeed, the absolute size of debts on which the interest was paid had not been reduced even with the improvement of the ratio in 1999. This suggests an urgent need to find more direct ways of lowering cash outflows and debt liabilities rather than using indirect ways of lowering the debt-to-equity ratio (and thereupon the debt burden).

The experience with the work-out programmes indicates that simple channelling of liquidity to loosely selected firms does not always transform them for the better. The point is that firms' debts should be dealt with by reducing their interest payment obligations in addition to the removal of moral-hazard-inducing misdemeanors. Thus before the injection of liquidity, there should be an assurance that their debts will be cleaned before their resumption of normal operation. The cleaning would better precede any injection of funds, irrespective of whether these are provided by workout programmes or public funds. Hence, a debt-equity swap, which compels the reduction of debts, could be an effective solution.

As a response to the criticism that even insolvent firms were kept alive because of the lenient criteria in the loose work-out programmes, the creditor institutions have, since November 2000, applied more stringent criteria for discerning firms for credit supply, especially those firms regarded by the earlier lenient criteria as normal or "too big to fail". They have been pressured to identify as candidates for exit the firms that have had interest compensation ratios of under one for the last three consecutive years and the firms that are unable to pay the normal operating bills in their main trading areas. This surely has served to distinguish viable firms from the others and to facilitate a few experiments in debt-equity swaps. However, such experiments cannot be sufficient unless debts are substantially decreased or the swaps are extended to a wide range of firms, with each undergoing a market test for determining the swap rate.

250 CHON PYO LEE

Since the strengthening of the criteria, however, a few firms have been forced out of the work-out programmes, and many others have managed to receive liquidity by remaining in the work-out programmes, even against the will of creditor banks. Actually these banks have often been forced to finance aid packages. In such cases, the Government's involvement in and domination over the banks' decision-making have not been consistent with its proclamation of encouraging private initiative. The Government has justified its intervention on the grounds that this prevents market disruptions. Some officials have argued that the intervention has been indispensable since some markets would have collapsed without it. Recently, such cases have increased substantially. In the corporate bond market, the FSC has forced banks, even against their will, to underwrite the corporate bonds of liquidity-short companies. In the market of investment trusts, the Government has allocated to banks, irrespective of their preferences in portfolio selection and management, bonds issued by corporations that are of virtual junk bond status. The Government has also strongly encouraged bank mergers on the grounds that the enlarged banks would be able to handle the existing non-performing loans more effectively. Indeed, the bank mergers had become a symbol of financial restructuring even before the public could clearly understand and accept the rationale behind this approach. For the first bank merger, the Government selected two banks engaged mainly in retail banking and with relatively negligible non-performing loans, as they had not been involved in wholesale financing in the past. This initiative prompted a strike by bank employees. Since then, forced mergers have been severely criticized, especially in the academic community, as an improper way of restructuring.

All these cases of government intervention have deviated from the principle of market mechanism and global standards. Apart from the mergers, the privatization of banks, as the fundamental task for financial stabilization and restructuring, has been set aside. Critics have strongly upheld the idea of removing undue government influence with the aim of improved corporate governance. In fact, such interference renders the previous insistence on global standards rather weak.

VI. LESSONS FOR BETTER RESTRUCTURING

The attention to qualitative standards and the rather rigid enforcement of two quantitative standards have contributed remarkably to economic recovery in the Republic of Korea, as mentioned in the introductory section. However, the strict adherence to the quantitative standards has also brought about undesirable side effects, including a credit crunch, resulting in an economy-wide vicious circle. Consequently, the Korean business community has complained that governmental involvement has created unnecessary hardship as well as being largely inconsistent with the proclaimed market principles and global standards. The misgivings about financial restructuring could have been avoided if the rigid enforcement of a few ratios had been a little flexible. In this context, the following section discusses a few lessons learned from the restructuring.

(i) The dynamics of transformation should to be taken into account in securing qualitative and quantitative objectives of restructuring.

The qualitative objective can be attained over time only when there is an appropriate infrastructure, while the attainment of the quantitative objectives can better be managed flexibly according to developments in the market and other relevant measures. It should be remembered that an adequate balance should be maintained between the formal legal structure and the realities of governance and management.

For nurturing a deficient, if not a missing, capital market in emerging economies, the Government should, in addition to various qualitative factors associated with it, encourage the participation of well-developed institutional investors, such as mutual funds, pension funds, insurance companies, and, most importantly, investment banks. These institutions should form a system enabling reliable credit evaluation and reasonable portfolio allocation. Securing an exchange rate system with due regard to capital flows suited to such emerging economies should also be a prerequisite.

But all these elements require an ability for constant adjustment. Indeed, the underlying dynamics of financial transformation are very complex; they are affected by such factors as the changes in external conditions, government policies, the conduct of numerous private entities and expectations. The injection of public funds, for example, is just one government policy along with all these elements. Even if they are disbursed as scheduled, the dynamics could shift in unexpected directions as a result of variations in the other factors. In other words, the dynamics cannot be fully controlled. In the Republic of Korea, besides the sudden liquidation of loans due to the abrupt imposition of the BIS ratio, the collapse of confidence, continuous currency depreciations and interest rate alterations invoking balance sheet difficulties all contributed to the vicious circle discussed above. And once the vicious circle appears, it is not easy to overcome due to the difficulty in forecasting all elements affecting it. Hence, in order to adequately respond to these uncertain dynamics, government responses need to be flexible. One or a few drastic measures that could partially and temporarily break the inherent dynamics cannot be relied upon completely in an uncertain dynamic environment, even if the measures, for all their good intentions, retain the convenience of easy and objective monitoring, such as the application of the BIS ratio or the injection of public funds.

(ii) New resources need to be injected along with the cleaning up of bad assets and liabilities in the balance sheet.

The Korean Government pursued, as a practical approach, the option of injecting public funds rather than mobilizing private funds. However, this prompted the criticism that the Government preferred a simple but ineffective solution that failed to achieve its intended goal.¹² The failed outcome suggests that simply injecting public funds into banks without cleaning up the sources of their loan portfolio and without considering the possibility of newly-arising bad assets in corporations that are confronted with a worsening economic situation, cannot normalize the financial sector.

In the Republic of Korea, the initial injection of 64 trillion won was determined on the assumption that this would take care of 50 per cent of the then existing bad assets on the balance sheets of firms, provided that the remaining 50 per cent would be absorbed by the firms themselves from other external resources. However, as noted above, the actual funds injected turned out to be 156 trillion won, including the addition of 40 trillion won to take care of the new criteria for non-performing loans and the unexpected bankruptcy of Daewoo. This demonstrates that even the injection of huge amounts of public funds failed to control the uncertain dynamics of the Korean financial reform process.

In order to halt the dynamics associated with bad assets in firms and financial institutions, such assets have to be written off, with a corresponding reduction of their capital base. Thereafter, in order to restore a good portfolio balance, the liabilities should also be reduced, and at the same time the capital base should be strengthened. The most appropriate and direct means of accomplishing this is through debt-equity swaps, as explained below. Indeed, the best short cut to breaking the vicious circle is by cleaning the balance sheets of the widest range of firms and financial companies to the maximum extent possible. The restructuring of firms in the financial sector should be accompanied by the restructuring of firms in the real sector.

In passing, it should be pointed out that the implementation of debtequity swaps is more difficult when the stock market is booming than when it is depressed. Also, it is important to avoid too much reliance on foreign capital. Foreign capital is an attractive new financial source for development and/or restructuring, but it has its own logic in international movements. As the Feldstein-Horioka puzzle explains, there need to be limits to the contribution of foreign capital to domestic capital formation, say up to 20 per cent, although the limit would differ depending on the stage of development and restructuring.

(iii) Debt-equity swaps need to be tried in parallel with the establishment of a junk bond market.

As mentioned above, in 1998 the Korean Government, in addition to the policy of attracting foreign capital, introduced measures to mobilize internal resources especially by activating direct financing channels. Mutual funds are now allowed to mobilize savings withdrawn from bank deposits due to their low interest compensation or to investors' lack of confidence in directly investing on their own in the securities market. Mutual funds are, indeed, a new financial product in the Korean economy. However, they have been limited to the closed-end type, which puts a limit on their growth. Also, pension funds have been encouraged to invest in the securities market, which is less conservative than mutual funds. Vulture funds were discussed, but so far there do not seem to have been any noticeable activities by such funds.

None of these means have been sufficient to mobilize capital and channel it to capital-strapped companies. Hence new ways must be devised for mobilizing those internal resources that are regarded as underutilized. Owing to the inadequacy of public funds, underutilized private domestic resources need to be mobilized for corporate restructuring of both the financial and real sectors. For achieving this objective, first of all underutilized private domestic resources need to be identified. Since the credit-rating of most firms would consider them not "investment-worthy", the activation of a junk bond market was suggested as an instrument for mobilizing domestic resources. This market was expected to widen the portfolio selection for idle liquidities. For the same purpose, in parallel with the junk bond market, the debt-equity swaps could be employed. Indeed, the swap of banks' liabilities (i.e. deposits by the depositors) with their capital (i.e. bank shares) could reduce their liabilities, thereby easing the pressure on them to meet the required BIS ratio. Similarly, the swap of liabilities of firms (i.e. bank loans to firms) with the firms' capital (i.e. firms' shares) could reduce their liabilities, and thus ease the pressure on them to reduce their leverage ratio.

However, incentives are needed to encourage such debt-equity swaps. In the process of providing such incentives, the share prices of both firms and banks would have to be discounted.¹³ Indeed, the discount implies a virtual cleaning up of troubled companies. The extent of the discount (and thereupon the swap rate) must be determined by the market. In order to create a market for numerous debt-equity swaps, investment banks, together with vulture funds and corporate restructuring companies, have to be activated.

Debt-equity swaps have a number of merits (relevant in the light of the misgivings expressed in the Korean reform process). First of all, they rely mainly on internal resources, thereby allaying the fear of "fire sales" to foreigners. Secondly, they rely on private resources mobilized through the market mechanism, which reduces the potentially undesirable effects of using public funds. Thirdly, they contribute to the cleaning up process, since they improve the financial state of the companies concerned by reducing the size of their liabilities. They are a more direct way of resolving the debt trap than the indirect way using the BIS ratio or the debt-to-equity ratio. Fourthly, by increasing the proportion of direct financing, they address the problem of an unbalanced financial mix of the kind associated with the 1997 financial crisis. Fifthly, they make investment banks more conscious of the need for securitization of their finance.

Debt-equity swaps do not directly improve corporate governance or uphold the quality of management in troubled firms. Yet with the various swaps, the shares of firms are more widely distributed and the excessive influence of dominant owners is thus reduced. Similarly, through the processes of investment banking deals and auctions, an increasing number of stockholders will take an interest in the operation and management of their companies, necessitating greater information disclosure, which in turn will enhance the degree of transparency.

Recently, there appear to have been movements in this direction in the Republic of Korea, with strong pressure for the establishment and development of a junk bond market and aggressive attempts at corporate restructuring of companies.

NOTES

- 1 There is no indication of how the figures of 30 per cent and 60 per cent are obtained, but it does suggest that the role of the capital market needs to be considerably increased.
- 2 These include: the Bank of Korea Act, the Act for Establishing a Financial Supervisory Commission, the Bank Act, the Depositor Protection Act, the Act for Restructuring of the Financial Industry and others.
- 3 The economic test is an examination of profit-making in the short-run, whereas the time test examines whether profitability can be sustained over time. These tests were introduced in response to the recognition that many firms did not care much about short-term profitability.
- When the BIS ratio equivalents were calculated for the first class banks that have their own risk management model, the results reportedly indicated a range between 1 per cent and 30 per cent (*The Economist*, 1–7 May 1999, "Banking regulation; Basle brush"). As this range is rather wide, the 8 per cent ratio may not be the most representative one. Even the BIS has discussed a possible revision of the ratio. One key issue is that the ratio does not properly reflect the alternative phases of the business cycle such that it remains the same across booms and recessions; it must be bigger to contain credit expansion in boom times and smaller to stimulate credit during recessions. Furthermore, the fact that the risk-weight for government agencies of lower-tier OECD countries is lower than that for the first class firms of upper-tier OECD countries has been pointed out as another sign of its inadequacy. Another shortcoming noted is the requirement that short-term lending be associated with less capital provisioning than long-term lending.
- 5 Barry Johnson of the IMF emphasized in his unpublished paper, *Use and Liberalization* of *Capital Control*, presented at the Sogang Institute of International and Area Studies, that the establishment of a risk management system with constant attention to risks was much more important than adhering to the BIS ratio.
- 6 It was reported that the average BIS ratio for deposit banks was 7.04 per cent at the end of 1997, and it increased to 10.83 per cent at the end of 1999, reflecting the obsession to achieve a higher BIS ratio.
- 7 Work-out programmes are less formal, less costly and speedier than liquidation and bankruptcy procedures, and thus they usually lead to maturity extension, deferred payment and/or a reduction of the principal and interest. During informal work-out programmes, the debtor firm and its creditors can negotiate rescheduling or restructuring in a flexible fashion.
- 8 Before the introduction of this scheme, all employees who had undergone two or three months of training in companies were considered de facto lifetime employees.
- 9 Personal communication with an economist of the Swedish central bank at the seminar, Banking Crisis Resolution Issues: International Lessons for Korea, organized by the World Bank and the Korea Institute of Finance, 15–16 May 1998.
- 10 Malaysia, which voluntarily carried out reforms without IMF loans, has similar institutions. The Danharta, which bought non-performing loans and assists banks to make their assets more sound, is equivalent to the KAMCO; the Dadamodal, which provided public funds for recapitalization, is equivalent to the KDIC; and the role of

the Corporate Debt Restructuring Committee, which led the restructuring of corporations, is similar to the de facto role played by the Financial Supervisory Commission.

- 11 US\$ 1 billion is approximately 1.2 trillion Korean won.
- 12 Almost three years after the initial injection of public funds in early 1998, the Korean restructuring policy stance changed: a debt-equity swap was arranged for firms identified as being viable based on various criteria. This implied an injection of private funds, instead of public funds, to those firms.
- 13 It was realized that when the public resources were utilized for those banks that had non-performing loans in troubled companies – thus leaving such loans untouched – the banks would not necessarily become clean unless the companies themselves were cleaned up. Hence, two-and-a-half years after the start of the reforms it was recognized that both financial firms (lenders) and non-financial firms (borrowers) needed to be cleaned simultaneously.

BIBLIOGRAPHY

- Edwards S (1984). The order of liberalization of the external sector in developing countries. *Essays in International Finance*, No. 156.
- Eichengreen B (1999). *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*. Washington, DC, Institute for International Economics.
- Feldstein M (1999). Self-protection for emerging market economies. Working paper No.6907, National Bureau of Economic Research, Cambridge, MA.

Frenkel J (1982). The order of economic liberalization: a comment. In: Brunner K and Meltzer A, eds., *Economic Policy in a World of Change*. Amsterdam, Elsevier Science Publishers BV (North-Holland).

- Garten J (1998). In this economic chaos, a global central bank can help. *International Herald Tribune*, September 25.
- Kaufman H (1998). Preventing the next global financial crisis. Washington Post, January 28.
- Kindleberger C (1987). *International Capital Movements*. Cambridge, United Kingdom, Cambridge University Press.
- The Korea Institute of Finance (1999). *Measures for Restructuring of the Korean Financial System* (in Korean). Seoul.
- Krugman P (1987). The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic scale economies. *Journal of Development Economics*, 27: 41–56.
- Lee C (1992). Preconditions for a successful financial liberalization and a feedback process of managing progressive liberalization. In: Ow-Taylor CH, *Korea-U.S. Financial Issues*. Washington, DC, Korean Economic Institute of America.
- McKinnon R (1982). The order of economic liberalization: Lessons from Chile and Argentina. In: Brunner K and Meltzer A, eds., *Economic Policy in a World of Change*. Amsterdam, Elsevier Science Publishers BV (North-Holland).

- McKinnon R (1991). *The Order of Economic Liberalization*, Baltimore, MA, Johns Hopkins University Press.
- Michealy M (1986). The timing and sequencing of a trade liberalization policy. In: Choksi A and Papageorgiou D, eds., *Economic Liberalization in Developing Countries*, New York NY, Basil Blackwell.
- Sachs J (1995). Do we need and international lender of last resort? *Frank Graham Memorial Lecture*, Princeton University.
PUBLIC DEBT AND MACROECONOMIC MANAGEMENT IN SUB-SAHARAN AFRICA

Delphin G. Rwegasira and Francis M. Mwega

I. INTRODUCTION

This paper analyses the nature of public debt in Africa. It explores differences between external and domestic public debt, the factors that contribute to their accumulation, and associated problems that arise from the opening up of the capital account and the removal of impediments to asset substitution. The paper focuses on the problems that government debt causes in macroeconomic management, including policies on exchange rates and interest rates, and the impact of debt on an economy's vulnerability to external shocks. One important factor in public debt accumulation that receives some attention in the paper is the shift from central bank financing of public deficits to financing via private markets, including the question of whether this shift has brought about greater fiscal discipline and better monetary control as intended.

The analysis is undertaken for sub-Saharan Africa (SSA) in general, with examples drawn from a group of 10 African countries: Cameroon, Côte d'Ivoire, Ghana, Kenya, Malawi, Nigeria, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe, from the mid-1980s to the late-1990s. Except for Kenya and Zimbabwe, which the World Bank classifies as moderately externally indebted, the remaining eight countries are classified as severely externally indebted countries (World Bank, 1999).

The remainder of the paper is organized as follows. Section II describes the public debt problem in SSA. Section III discusses the linkages between external and domestic debt as well as the factors that contribute to their accumulation. Section IV analyses the financing of budget deficits, and Section V presents the limitations and trade-offs of the various financing methods in SSA. Section VI discusses the implications of public debt for macroeconomic management and monetary policy in SSA, and section VII concludes.¹

II. THE DEBT PROBLEM IN SUB-SAHARAN AFRICA

A. External debt

External debt imposes a heavy burden in much of SSA. Table 1 shows SSA's external indebtedness in both current US dollars and in relation to gross national product (GNP) and exports. Africa's debt about doubled, from US\$ 107 billion in 1985 to US\$ 226 billion in 1998. Relative to the size of the regional economy, external debt increased from 56.3 per cent of GNP in 1985 to 68.3 per cent of GNP in 1998. Relative to the region's debt servicing capacity, it increased from 171.0 per cent of exports in 1985 to 232.1 per cent in 1998. The table shows that the external debt burden reached a peak in 1993–1994, with some welcome decline thereafter. This was partly due to improved growth, leading to an improvement in the standard debt indicators. After nearly two decades of poor performance there has been some recovery in Africa since the mid-1990s. However, the recovery has been hesitant, weak and patchy. The improvement in the external debt indicators in the second half of the 1990s may also be explained by provisions of debt relief, for example, under Paris Club debt reschedulings, some commercial debt buy-backs, and the more recent Heavily Indebted Poor Countries (HIPC) Debt Initiative of the World Bank and International Monetary Fund (IMF). The overall decline in aid levels

Table 1
SUB-SAHARAN AFRICA: EXTERNAL DEBT AND SERVICING, 1985-1998

Year	Total debt stocks (\$ billion)	Total debt/ GNP (Per cent)	Total debt / exports of goods and services (Per cent)	External debt service ratio (Per cent)	Arrears: principal and interest (\$ billion)	Principal rescheduled (\$ billion)
1005	407.0	50.0	474.0	47 5	40 7	4.0
1985	107.3	56.3	171.0	17.5	10.7	1.6
1986	121.0	58.0	213.5	17.2	8.2	3.2
1987	148.1	62.4	226.2	13.5	12.2	4.5
1988	150.6	60.9	220.7	14.8	19.6	1.5
1989	157.4	62.7	217.8	13.1	21.0	4.8
1990	177.4	64.7	209.8	12.9	26.9	4.0
1991	184.0	65.9	225.6	12.5	32.2	2.7
1992	183.2	66.3	222.5	12.2	38.8	2.0
1993	195.4	73.8	246.0	9.2	48.7	0.5
1994	219.7	83.9	272.7	14.7	54.1	3.1
1995	233.8	80.9	242.7	15.4	62.0	1.7
1996	229.6	74.4	215.4	14.2	60.4	2.8
1997	219.4	68.0	201.7	12.8	56.4	2.1
1998	225.8	68.3	232.1	14.9		

Source: World Bank (1999).

(discussed later) has also meant a slowing down in the build-up of indebtedness (and consequently in the obligations to repay).

The evolution of the external debt in SSA is reproduced in table 2 for selected African countries. By the mid-1980s, only Côte d'Ivoire and Nigeria faced a problem (Azam, 1997), but thereafter the problem spread to other countries in the region. Relative to the size of the economies as measured by the external debt-GNP ratio, only Uganda and Zimbabwe maintained their external debt levels below the average for SSA during the period 1985–1997. Cameroon and Ghana, which started with relatively low ratios, accumulated debt to levels above the average for the region. The remaining countries in the sample, both at the beginning and at the end of the period under study (i.e. 1985 to 1998) (except Uganda and

		S	UB-S	AHAR.	AN AF	FRICA:	: EXTI	ERNAI	- DEB	T/GN	P AND	DOM	ESTIC	DEB	T/GNF	, 1985	-1999	_		
									Ц)	er cen	<i>t</i>)									
	Cam	eroon	d'iv	ôte oire	Ghé	ana	Ker	iya	Mal	awi	Nige	eria	Ugai	nda	United of Tan:	Rep. zania	Zaml	bia	Zimba	рме
Year	EXT	DOM	EXT	DOM	EXT	DOM	EXT	DOM	EXT	DOM	EXT	ром	EXT	DOM	EXT	DOM	EXT	DOM	EXT I	WOC
1985	40.2	3.5	153.4	:	51.0	15.7	70.7	12.0	94.6	23.4	68.1	114.3	35.5	5.2	:	18.3	230.4	6.5	43.9	27.3
1986	39.6	4.8	135.2	2.0	49.4	6.0	65.7	16.0	103.3	24.7	118.2	86.3	36.4	3.8	:	23.8	423.0	5.5	43.6	29.7
1987	39.3	6.4	147.6	6.0	67.1	6.7	75.1	27.8	123.8	30.4	137.9	43.5	30.8	<u>1</u> .8	:	12.5	346.0	3.9	43.6	33.3
1988	39.3	4.2	143.4	6.0	61.8	9.0	70.9	27.1	106.1	19.7	132.6	46.4	29.8	0.8	122.0	10.3	206.8	3.4	35.1	32.7
1989	49.8	4.8	177.0	7.2	66.2	6.0	73.3	26.0	95.8	13.0	138.4	35.6	42.0	1.0	128.0	8.1	187.6	0.2	34.6	31.6
1990	61.0	4.7	187.3	10.2	67.1	5.3	87.2	24.6	88.6	8.0	130.7	40.9	61.1	0.7	160.6	7.3	241.5	0.1	38.2	30.7
1991	56.8	10.4	199.2	8.9	67.5	3.0	98.3	26.9	77.2	7.2	134.9	48.0	85.1	0.8	151.2	6.4	245.1	0.0	41.1	27.4
1992	68.9	13.3	189.1	:	71.3	7.0	91.3	25.9	97.1	8.3	97.5	31.2	105.6	2.4	142.9	4.8	243.1	0.0	62.9	24.2
1993	66.8	11.8	211.0	:	83.3	2.8	133.4	33.5	90.0	8.1	161.5	60.3	95.5	1.2	156.3	3.9	225.0	0.0	68.1	22.2
1994	114.0	29.1	252.4	34.5	102.4	3.8	106.1	27.2	179.2	9.7	155.3	63.2	85.6	:	178.7	4.9	211.6	0.7	68.8	24.0
1995	125.7	38.3	209.9	27.4	92.5	9.6	84.8	24.9	158.2	13.7	131.7	43.9	62.8	:	141.2	11.3	210.7	0.8	74.2	41.9
1996	112.0	:	199.5	22.7	90.4	6.3	76.8	21.5	103.6	1.1	95.0	33.7	60.5	:	113.7	8.8	232.3	0.7	60.7	38.4
1997	109.3	:	165.3	19.4	88.6	11.4	64.7	22.4	89.0	9.5	75.6	43.6	56.5	1.3	97.2	4 4	184.6	0.6	58.5	30.1
1998	:	:	:	17.2	:	14.8	:	21.2	:	:	:	63.8	:	1.7	:	4. 4	:	0.4	:	:
1999	:	:	:	:	:	:	:	20.4	:	:	:	:	:	:	:	:	:	:	:	:
Source	For e: dome Repor Tanza	xternal c stic deb <i>rt</i> , variou ania, <i>Ec</i> u	debt: W ot were (us issue onomic	orld Ban derived f ∋s; Mala Bulletin,	ik (1999 from cou wi, <i>Fina</i>); for do Intry put <i>ncial an</i> nd 1999;	mestic c blication <i>d Econo</i> ; and Bæ	debt: IMF s (these mic Rev ank of Uç	 (1999 include iew, 31 janda, 1) and IN Ghana (1) 1999 Econom	IF, Gove , Quarte); Centr ic and F	ernment rrly Ecor al Bank inancial	<i>Finance</i> <i>iomic Bu</i> of Niger <i>Indicat</i> c	, Statist Illetin, v ia, Annu ors, Nov	ics (vari arious is <i>ual Repc</i> ember 1	bus issu isues; C nt, vario 999).	es). Son entral B us issue	ne data ank of k ss; Unite	to fill ga (enya, ∡ id Repu	lps on Innual blic of

262 DELPHIN G. RWEGASIRA AND FRANCIS M. MWEGA

Zimbabwe, and Kenya in the latter half of the period), experienced a worse external burden than that for the region as a whole.² Kenya's external debt, for example, peaked at US\$ 7.5 billion in 1993, but has since declined to US\$ 6.9 billion in 1996, with much of the debt being aid-related (O'Brien and Ryan, 1999).

The external debt as a proportion of GNP and exports in Africa was nearly double the average for all developing countries, as shown by the following data for 1998 (World Bank, 1999):

	Africa	Developing countries
Debt as a percentage of GNP	68	37
Debt as a percentage of export earnings	232	146
Debt service as a percentage		
of export earnings	15	18

The external debt service ratio was, however, lower in Africa (by 3 percentage points) due to the concessionary terms of much of its borrowing. Table 1 shows that this ratio declined from 17.5 per cent in 1985 to 14.9 per cent in 1998.

The stock of external debt and its servicing therefore poses a major problem in many SSA countries. This is for three major reasons. First, as seen above, the external debt stock is large relative to the size of the SSA economies. The large debt overhang creates uncertainties and reduces incentives for investment. Second, as debt servicing constitutes a large proportion of export earnings and government expenditures, it reduces the resources available for imports, investment and socioeconomic development.³ Third, large external debt and its servicing undermines the credibility of domestic policies. It causes, for example, a deterioration in the relations between African countries and creditors, hence reducing the amount of trade financing that could be obtained. It also increases macroeconomic uncertainty, causing investors to exercise their option of waiting until the uncertainty is resolved or the returns are high enough to compensate for the risk of investing. The outcome is that capital formation tends to be dominated by short-term investments in trading activities with quick returns rather than long-term physical investment (Elbadawi, Ndulu and Ndung'u, 1997). Further, countries in the region have experienced problems meeting their external debt obligations, reflected in accumulating payment arrears and debt reschedulings (table 1). By 1997, payment arrears on the principal and interest amounted to US\$ 56.4 billion, while scheduled loans amounted to US\$ 2.1 billion.

There is substantial evidence that a large external debt and its servicing have a negative impact on investment and growth (Greene and Villanueva, 1990; Elbadawi, Ndulu and Ndung'u, 1997; and Serven, 1997). For example, Fosu (1996), using data on a sample of 29 countries covering the period 1970–1986, found that annual economic growth declined by an average of 1.1 percentage points if a country was classified as highly externally indebted, via reduced productivity of investment. In a more recent study, Fosu (1999) estimated that SSA's economic growth rate would have been 50 per cent higher without the net external debt burden.

B. Public domestic debt

Some SSA countries have also accumulated substantial public domestic debt (see table 2), although this is not as large as the external debt. Reasons for this accumulation include increasing budget deficits and a greater reliance on domestic financing to compensate for the shortfall caused by the decline (cut-off) in the supply of foreign aid. In Kenya, for example, real foreign aid flows in the late-1990s fell to below the levels prevailing in the second half of the 1980s following suspension of programme support in 1991–1993 and in 1997–1999 (O'Brien and Ryan, 1999). In general, accumulation of domestic debt has reflected the size of the budget deficit (table 10) and the extent to which SSA countries have been able to borrow externally (table 11).⁴

Country experiences vary with respect to the evolution of the stock of domestic debt in the study period. As table 2 shows, some have experienced fairly systematic increases in domestic debt (e.g. the CFA economies of Cameroon and Côte d'Ivoire, which have been constrained in the use of the nominal exchange policy to restructure their economies); others have experienced a U-pattern of domestic debt accumulation since the mid-1980s (e.g. Ghana and Nigeria that reversed some of their structural adjustment policies); and yet others have experienced an inverted U-pattern of domestic debt accumulation (e.g. the on-off reformers in Kenya and Zimbabwe). Some countries that have undertaken systematic reforms have experienced a fairly consistent reduction in the domestic debt burden (e.g. Malawi, Uganda, the United Republic of Tanzania and Zambia).

Cameroon's domestic debt, for example, increased from 3.5 per cent of GNP in 1985 to 38.3 per cent in 1995, while that of Côte d'Ivoire increased from 2.0 per cent in 1986 to 17.2 per cent in 1998. Among SSA countries with a U-pattern of domestic debt accumulation since the mid-1980s, Ghana's domestic debt, for example, declined from 15.7 per cent of GNP in 1985 to 3.0 per cent in 1991 before it increased again to 14.8 per cent in 1998; that of Nigeria declined from 114.3 per cent in 1985 to 31.2 per cent in 1992 before increasing to 63.8 per cent in 1998.

Among countries with an inverted U-pattern of domestic debt accumulation, Kenya's domestic debt rose from 12.0 per cent of GNP in 1985 to a peak of 33.5 per cent in 1993 before declining to 20.4 per cent in 1999; that of Zimbabwe increased from 27.3 per cent in 1985 to 33.3 per cent in 1987 to 41.9 per cent in 1995 and then declined to 30.1 per cent in 1997. A number of countries have substantially reduced their domestic debt burden: Malawi's domestic debt declined from 23.4 per cent of GNP in 1985 to 9.5 per cent in 1997, Tanzania's declined from 18.3 per cent of GNP in 1985 to 4.4 per cent in 1998, Uganda's declined from 5.2 per cent of GNP in 1985 to 1.7 per cent in 1998, and Zambia's declined from 6.5 per cent of GNP in 1985 to 0.4 per cent in 1997.

With domestic debt generally more expensive to acquire than external debt,⁵ the impact has been an increase in debt service payments in total government expenditures, thereby worsening the budget deficit. In Kenya's 1999/2000 budget, for example, funds allocated for servicing the domestic debt (21.5 billion Kenya shillings) were more than double those allocated for servicing the external debt (9.5 billion Kenya shillings), even though the stock of external debt was about three times the stock of domestic

EVOLUTION OF THE SHARE OF PUBLIC DEBT SERVICING IN TOTAL GOVERNMENT EXPENDITURES IN KENYA IN THE 1990s

(Per cent)

	1990	1991	1992	1993	1994	1995	1996	1997
Domestic debt	6.9	8.3	6.6	13.9	18.3	10.5	10.8	5.8
Foreign debt	3.3	3.7	3.6	2.4	4.2	3.8	3.9	3.2
Total	10.2	12.0	10.2	16.3	22.5	14.3	14.7	9.0

Source: Kenya, Budget Speeches (various issues).

debt; 16 per cent of total government expenditure was allocated for servicing the public debt (table 3).

Interest payments on domestic debt in the government budget have become more important than those on external debt for many African countries, as seen in the table 4.

Table 4

SHARE OF INTEREST PAYMENTS IN GOVERNMENT EXPENDITURE FOR SELECTED AFRICAN COUNTRIES

	(F	Per cent)	
Country	Year	Domestic debt	External debt
Cameroon Côte d'Ivoire Ghana Kenya Malawi Nigeria Uganda United Rep. of Tanzania Zambia	1994 1998 1993 1999 1999 1999 1999 1999 1998	1.7 2.2 8.4 15.4 6.1 5.7 5.5	20.1 18.4 9.3 13.9 7.2 2.4 3.4 3.4 6.5
Zambia Zimbabwe	1998 1997	5.5 14.1	6.5 8.4

Source: Economist Intelligence Unit Reports; IMF, Government Financial Statistics and International Financial Statistics (various issues); and World Bank (1999).

Note: .. = not available.

III. THE LINKAGES BETWEEN EXTERNAL AND DOMESTIC DEBT

There is a close linkage between accumulation of external debt and domestic debt, as economic agents borrow to fill the private savingsinvestment gap, the fiscal gap and or the foreign-exchange gap. The application of this gap-filling approach was most evident during the 1960s and 1970s, when governments were encouraged by donors to prepare development plans that provided estimates of exogenous savings needed to achieve given rates of economic growth.

The external debt crisis in SSA is largely a fiscal problem; a major cause of external debt accumulation is the large fiscal deficits incurred by the public sector. An overwhelming proportion of these debts is owned by the public sector, either directly or indirectly through public sector guarantees. Public finances and external debt are closely linked, as foreign aid – the largest component of the SSA debt – has been growing faster than all other financial flows, to the extent that by 1985 it accounted for 90 per cent of all net flows, and it has grown more rapidly than in other parts of the world (Roe and Griggs, 1990). To the extent that many African countries draw on external grants and loans to finance their activities, most of the loans of their private sectors, so that some part of the negative net transfers associated with these loans have found their way into the total fiscal or quasi-fiscal deficits.

Table 5 shows the composition of outstanding external debt: private non-guaranteed, public and publicly-guaranteed, and short-term. Much of the external debt in SSA (unlike Latin America) is public and publicly-guaranteed, with private non-guaranteed debt generally accounting for less than 5 per cent of the total debt during the period 1985–1999. The external debt is primarily owed to governments and multilateral organizations. A large proportion of the debt is therefore obtained from official sources – national governments or their agencies – and from multilateral agencies such as the World Bank and the IMF. Only a small proportion is obtained

Table 5	
COMPOSITION OF EXTERNAL DEBT IN SUB-SAHARAN AFRICA,	1985–1998

(Per cent)

Year	Private non-guaranteed	Public and publicly-guaranteed	Short-term debt outstanding
1985	5.35	76.92	17.72
1986	4.04	84.18	11.78
1987	3.41	86.95	9.64
1988	3.35	86.39	10.26
1989	3.29	85.76	10.94
1990	3.09	84.64	12.27
1991	3.05	84.55	12.41
1992	2.88	82.69	14.43
1993	2.70	81.65	15.65
1994	4.81	78.09	17.09
1995	4.44	77.39	18.17
1996	3.81	76.81	19.38
1997	3.68	77.00	19.33
1998	3.41	77.17	19.42

Source: World Bank (1999).

from private creditors, including the euro-dollar loans, suppliers' credit and loans from private commercial banks.

Table 6 (last column) shows that on average the net flows from official sources accounted for nearly 85 per cent of the aggregate net resource flows between the mid-1980s and mid-1990s, although the share declined from 90 per cent in 1985 to an average of 68 per cent over the period 1996–1998. Table 6 also shows other terms of external borrowing. The average grace period was 6 to 7 years, the average grant element was 30–50 per cent, the average interest rate was 3–6 per cent (it generally declined during the period 1985–1997) and the average maturity period was 22–27 years. Sub-Saharan Africa is not an undifferentiated whole; terms of external borrowing vary significantly from country to country (tables 7 and 8). For example, Nigeria and Côte d'Ivoire have borrowed substantially from commercial sources so that their shares of concessionary

	AVERA IN S	GE TERMS O UB-SAHARAI	F THE EXTER N AFRICA, 19	RNAL DEBT 85–1998	
Year	Average grace period (Years)	Average grant element (Per cent)	Average interest (Per cent)	Average maturity (Years)	Official net resource flows (Per cent of total)
1985	57	31 5	5.8	22.3	89.7
1986	5.8	35.7	5.0	23.0	90.1
1987	6.3	40.4	4 4	20.0	84 1
1988	6.6	43.5	4 1	24.2	84.8
1989	7.0	43.9	4.2	24.9	79.4
1990	6.9	43.5	4.3	25.1	93.0
1991	6.9	44 4	4.2	26.1	88.5
1992	7.4	49.9	3.5	27.4	94.3
1993	7.6	51.3	3.2	26.9	84.4
1994	6.1	42.1	4.0	22.0	76.3
1995	5.4	42.1	3.8	22.2	60.3
1996	6.9	49.1	3.3	25.7	73.8
1997	6.2	39.7	3.9	22.1	64.5
1998					66.8

Table 6 AVERAGE TERMS OF THE EXTERNAL DEBT IN SUB-SAHARAN AFRICA, 1985–1998

Source: World Bank (1999).

debt have been relatively low: less than 5 per cent for Nigeria throughout 1985–1997. Nigeria received virtually no grants during the period 1995–1997.

As seen in table 9, foreign aid intensity in Africa (the size of aid flows relative to the various activity levels) is the highest among the major developing regions. According the O'Connell and Soludo (1998), median foreign aid levels doubled between the 1970s and 1980s. Foreign aid intensity continued to increase in the 1980s in response to the structural adjustment programmes which many countries in the continent adopted. It began to drop in the 1990s with an overall decline in aid levels and a shift in aid flows to the "transitional" economies of Eastern Europe. The downward trend in aid flows, falling from a high of US\$ 18 billion in 1994 (in 1997 US dollars) to US\$ 13 billion in 1998, combined with an improved growth performance in much of the region, led to a reduction of intensity.⁶

	Cameroon	Côte d'Ivoire	Ghana	Kenya	Malawi	Nigeria	Senegal	Uganda	United Rep of Tanzania	Zambia	Zimbabwe
1985	34.0	7.0	41.1	30.2	47.9	1.9	37.5	38.5	38.1	26.6	15.7
1986	30.2	15.9	44.5	33.6	55.0	1.8	42.5	41.5	52.9	25.3	19.7
1987	29.6	16.5	49.0	32.5	59.0	1.5	47.1	44.3	49.7	26.3	25.0
988	28.1	14.7	52.0	35.1	63.7	1.5	52.1	46.4	53.1	26.2	27.9
989	29.5	14.6	53.8	33.8	65.2	1.5	52.9	52.9	54.2	23.6	28.2
066	27.4	17.9	54.8	34.1	67.5	1.6	52.7	56.2	53.8	31.2	27.9
1991	27.0	18.7	54.5	36.7	73.7	2.9	54.5	58.5	54.5	36.6	27.7
992	31.5	18.9	57.2	40.7	76.7	3.3	56.7	61.7	57.5	37.5	27.0
1993	33.2	19.4	59.3	43.7	82.2	3.6	55.5	70.3	59.0	41.2	28.4
994	42.0	22.3	61.2	47.3	83.0	3.9	57.5	72.8	60.1	47.9	32.0
995	43.9	24.2	63.6	52.5	84.6	4.0	58.3	77.5	59.8	50.2	30.1
966	43.5	24.6	63.9	56.8	84.0	4.3	62.4	78.3	60.5	53.2	28.7
997	42.5	28.9	66.5	57.5	88.2	4.6	65.2	79.5	70.9	56.2	28.2

Source: World Bank (1999).

	Zimbabwe	32.2	34.2	28.2	23.6	19.1	21.0	21.7	41.2	52.4	22.2	35.4	53.5	29.1
	Zambia	62.1	26.1	50.9	30.6	21.9	13.0	76.0	72.6	74.6	73.1	70.8	80.5	64.2
	United Rep. of Tanzania	32.2	62.6	57.1	58.1	51.6	72.0	74.5	65.8	67.1	73.8	48.3	72.7	79.0
	Uganda	49.0	19.5	42.8	68.8	46.3	68.7	63.3	68.5	67.0	78.5	80.4	80.5	82.8
	Senegal	34.7	52.3	53.1	66.4	68.8	66.1	49.2	67.5	65.9	76.8	76.0	61.5	75.6
nt)	Nigeria	6.9	7.3	7.5	13.1	20.2	23.6	27.8	40.2	48.4	16.0	0.0	0.0	0.0
(Per ce	Malawi	70.5	50.5	71.8	67.3	73.2	73.4	60.6	80.5	70.5	60.2	78.2	75.9	81.3
	Kenya	24.0	34.1	38.2	44.8	52.6	46.0	44.2	71.1	63.6	62.0	39.0	75.2	81.0
	Ghana	54.8	39.3	59.2	70.2	54.8	58.5	57.7	65.3	54.5	45.1	55.6	80.4	54.9
	Côte d'Ivoire	2.0	14.6	22.8	20.2	19.1	27.4	31.5	30.6	38.5	64.0	63.7	65.1	65.8
	Cameroon	14.9	18.2	24.7	26.5	19.7	21.2	25.5	37.7	36.2	63.7	58.7	71.6	81.5
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997

AVERAGE TERMS OF THE EXTERNAL DEBT: AVERAGE GRANT ELEMENT, 1985–1997

Public Debt and Macroeconomic Management in Sub-Saharan Africa 271

Source: World Bank (1999).

AID INTENSITY IN DEVELOPING REGIONS (REGIONAL MEDIANS OF COUNTRY AVERAGES), 1990–1995

Region or country	Real \$ ODA per capita	Net ODA as per cent GNP	Net ODA as per cent imports ^a	Net ODA as per cent government expenditures	Technical cooperation as per cent of government wages
Latin America	24.30	1.66	1.70	3.19	12.62
South Asia	15.89	6.96	21.24	20.49	28.09
HPAE ^b	4.10	0.22	0.23	1.70	5.68
SSA	51.59	14.41	28.38	49.70	37.25

Source: O'Connell and Soludo (1998).

Note: All Official Development Assistance (ODA) is net of interest payments. The data are drawn from the World Bank and OECD and do not include private funding by non-governmental organizations (NGOs). However, government aid through NGOs is captured in these data.

a Excluding technical assistance.

b High Performing Asian Economies

In Kenya, for example, net official development assistance, excluding debt relief, declined from a peak of US\$ 1,053 million in 1990 to US\$ 606 million in 1996 (O'Brien and Ryan, 1999).

Concessional borrowing or grants in SSA are used to finance programmes for macroeconomic and sectoral reforms as well as technical assistance, discrete investment projects, and external debt relief. In Kenya, for example, official development assistance for budgetary and balanceof-payments support was about US\$ 960 million in 1990–1996; technical assistance was about US\$ 1,579.4 million (or 35.8 per cent of total grants); and debt relief was US\$ 150 million (O'Brien and Ryan, 1999).

However, distinguishing programme from project aid is misleading because foreign aid is "fungible" as it can be used to fund activities that the recipient government intended to finance in the absence of aid. Devarajan, Rajkumar and Swaroop (1998), based on a panel data of 18 SSA countries for the period 1971–1995, found that foreign aid (excluding technical assistance) boosted government expenditure by nearly the same amount as the foreign aid (90 per cent), of which about a third was used to fund external debt repayments. The balance was divided equally between funding new capital projects and current government expenditures. Nearly a third of the foreign aid flows were used, in effect, for external debt repayments. Thus much of the debt involved a "ponzi" process, whereby governments sought new foreign aid mainly to service the existing stock of debt.⁷

In country case studies, Saasa and Mwanawina (1998) found that foreign aid was highly fungible in Zambia except for the agriculture, education and transport sectors; a quarter of it was used to finance recurrent spending. Ssemogerere and Kalema (1998) found that a 1 per cent increase in ODA growth led to a 0.8 per cent increase in government spending, with aid becoming more fungible over time. They attribute this to an increase in the share of programme aid in overall foreign aid flows and to an increase in the number of donors involved, making it difficult for individual donors to monitor how their aid is spent.

Conceptually, the linkage between fiscal deficits and accumulation of external debt can be seen from the national accounts identity: (Sp-Ip) + (M-X) = (G+Ig-T), where Sp is private savings, Ip is private investment, M is imports, X is exports, G is government consumption expenditure, Ig is government investment expenditure and T is tax revenue. According to this identity, the private sector deficit (Ip-Sp) plus public sector deficit (G+Ip-T) is a reflection of the country's current account deficit (M-X) in the balance of payments. An increase in the fiscal deficit will therefore be reflected in: (i) an increase in the balance of payments' current account deficit (this is postulated to be a one-for-one relationship under the socalled fiscal approach to the balance of payments, if the private sector balance is assumed to be small and stable); (ii) an increase in private savings (which may be a one-for-one relationship under Ricardo Equivalence); and/or (iii) a decrease in private investment. Which of the three components bear the burden of higher budget deficits depends on the flexibility and sophistication of the domestic financial markets, the source of domestic financing (money or bonds), the future expectations of economic agents, access to external finances and the composition of the deficit. Empirical evidence suggests that fiscal deficits mainly spill over into the external account deficit and also reduce private investment by raising real interest

rates (Easterly and Schmidt-Hebbel, 1993). Some estimates suggest that about 75 per cent of any increase in the fiscal deficit feeds through into the current external account, irrespective of the method of finance chosen (Balassa, 1988). Fiscal deficits result in increased external borrowing or they force the private sector into increased borrowing, leading to an accumulation of external debt over time.⁸

There is likely to be a two-way relationship between the fiscal and current account deficits. Reduction in the availability of external financing will force either a fiscal contraction or inflationary financing. Conversely, a government receiving external resources is likely to spend it, adjusting its budget accordingly. When external resources are spent on goods and services within the country, they generate multiplier effects which have a positive impact on the fiscal balance. Large amounts of these external flows are also likely to change economic behavior in ways that may lead to a widening of the fiscal gap to be filled. Large foreign aid inflows have for example led many SSA governments to expand their activities without expanding the domestic economy or their tax revenues.⁹

Table 10 shows the evolution of budget deficits/surpluses and table 11 shows the proportion of foreign financing of budget deficits in selected African countries.¹⁰ Cameroon has maintained fairly modest fiscal deficits, which accounted for less than 3 per cent of GDP in 1985–1997 (except for 1990–1991 when they were slightly more than 5 per cent of GDP) with the budget deficits in the early 1990s mainly financed from foreign sources. The Government of Cameroon has been praised for having bought foreign assets with its oil revenues to smooth its investment over time and to avoid Dutch disease, although some observers postulate that such resources would have earned higher returns if invested domestically (Azam, 1997).

Côte d'Ivoire, which was regarded as exemplary for adjustment performance, with most performance indicators being met (Azam, 1997), had a low budget deficit during the period 1985–1987. The adjustment, however, was achieved by a reduction in public investment, and was followed by a commodity crash in 1987 that reflected a sharp decline in the terms of trade, and it was further compounded by a decision not to sell the 1988 cocoa crop. This was followed by multi-party elections in 1990

	FI	SCAL DEF	ICIT OR SU	IRPLUS IN	SELECTED	AFRICAN	COUNTRII	ES, 1985–199	60	
				<u>д</u>)	er cent of GL	(H)				
	Cameroon	Côte d'Ivoire	Ghana	Kenya	Malawi	Nigeria	Uganda	United Rep. of Tanzania	Zambia	Zimbabwe
1985	0.8	-0.2	-2.2	-8.7	-8.4	-4.2	-2.5	-7.5	-15.2	-5.6
1986	0.6	0.6	0.1	-5.7	-9.9	-11.3	-2.5	-5.8	-21.4	-6.2
1987	-3.6	0.2	0.5	4.4-	-8.6	-5.4	-2.5	-4.7	-12.9	-8.7
1988	1.1	-14.6	0.4	-1.1	6.0	-8.4	-0.9	-2.4	-11.6	-7.2
1989	-3.2	-16.6	0.7	-4.9	-2.8	-6.7	-2.5	-2.3	-10.6	-6.4
1990	-6.0	-12.0	0.2	-5.5	-1.6	-8.5	-3.9	-1.9	-8.6	-5.3
1991	-5.4	-12.9	1.6	-3.7	-330.0	-10.9	-2.7	-4.4	-45.1	-7.1
1992	-2.6	-11.3	-5.2	-1.2	-10.5	-6.4	-7.2	0.7	:	-11.3
1993	-1.7	-11.9	-2.5	-8.0	-6.8	-11.1	-2.8	-4.2	:	-6.2
1994	-2.6	-6.5	2.2	-4.2	-31.8	-5.7	-3.3	-4.5	-3.7	-3.8
1995	0.2	-3.7	0.9	0.6	-10.8	:	-2.2	-2.1	-6.8	-9.4
1996	-1.7	-2.1	-3.0	1.2	-3.8	:	-1.7	-0.6	0.7	-6.1
1997	-0.9	-2.0	-2.1	-1.4	-5.8	:	:	1.6	-9.5	-5.1
1998	:	:	:	-0.8	-4.5	:	:	-1.2	:	:
1999	:	:	:	-0.7	:	:	:	:	:	:
ource	 IMF, International Figaps were derived fr Annual Report, vario 	inancial Statist om country pu vus issues; Re	tics (1999); IMF iblications (thes serve Bank of	^c , <i>Government</i> se include Bank Malawi, <i>Finan</i> c	Financial Statis tof Ghana, Eco sial and Econor	stics, and Econ momic Bulletin, mic Review, 19	omist Intellige , 1999; Centra)98 and 1999;	<i>Ince Reports</i> (vari Il Bank of Kenya, Bank of Tanzani	ious issues). Statistical Bu ia, Economic	Some data to f <i>lletin</i> , 1998; an <i>and Operatior</i>
Note	Report, 1999). : = not available.									

	Cameroon	Côte d'Ivoire	Ghana	Kenya	Malawi	Nigeria	Uganda	United Rep. of Tanzania	Zambia	Zimbabw
ى م	:	:	46.5	-25.6	41.8	34.4	21.4	5.0	70.1	95.2
G	:	:	:	-29.7	122.9	8.6	28.9	0.1	85.1	40.7
7	46.5	:	:	-31.6	69.3	14.1	24.5	20.1	74.4	21.7
œ	:	52.1	:	-10.1	171.6	15.7	10.1	122.9	34.9	17.5
6	86.8	63.3	:	17.0	64.9	37.8	65.6	-44.2	55.6	11.6
0	88.7	95.8	:	48.7	293.7	7.1	147.3	19.4	12.2	17.7
-	80.7	84.5	:	33.8	109.1	0.8	104.8	37.4	48.8	28.7
2	131.5	86.7	0.2	32.5	45.7	30.0	533.0	:	0.2	65.8
e	111.7	63.0	53.3	35.0	95.6	15.7	176.9	38.8	67.1	51.6
4	122.0	156.6	:	-53.9	28.9	11.9	143.2	61.2	267.7	17.1
ю	:	113.2	:	:	27.9	84.1	160.9	4.6	356.7	17.1
ю	17.6	141.8	58.3	:	103.6	:	185.5	-164.1	194.8	22.8
2	33.3	50.0	144.6	-76.0	52.2	267.7	192.5	63.6	158.1	-1.8
8	:	418.4	35.9	-135.8	58.4	124.5	161.6	94.6	84.8	2.2
6	:	1 047.3	22.8	112.5	:	:	:	:	:	-54.5

and the suspension of World Bank disbursements in 1993, all resulting in large budget deficits between 1988 and 1993. A more effective stabilization was achieved during the period 1994–1997, following the January 1994 devaluation along with other measures such as debt relief and the adoption of new structural adjustment agreements with the Bretton Woods institutions.

Compared with the other SSA countries, Ghana's fiscal performance has been exemplary, with budget surpluses during most of the period under study. The adjustment programmes begun in 1983 relied mainly on external finances, much of this provided in grant form. Omitting interest expenditures, the so-called primary budget balance was in surplus from the mid-1980s, averaging about 2.4 per cent of GDP. This situation, however, may be misleading as suggested by the occurrence of high and unstable inflation rates (which declined to 10 per cent in 1992 and increased to about 70 per cent in 1995), persistent current account deficits (which increased to a peak of 12 per cent of GDP in 1993), nominal exchange rate depreciation and accumulation of public debt (Amoako-Tuffour, 1999). A study by Amoako-Tuffour found that the conventional budget balance in Ghana understated the broad deficit, on average by about 4 per cent of GDP between 1983 and 1995, by including programme grants and divesture receipts as regular government revenue. This obscured the reality, that primary expenditures needed for basic government functions had become unsustainable by conventional tax revenues since 1992.

After macroeconomic stabilization in 1982–1984 following a military coup attempt, Kenya's fiscal management weakened in the second half of the 1980s and the early 1990s, with the fiscal deficit averaging about 5 per cent of GDP, but the deficit declined to an average of about 1.2 per cent in 1995–1998. Uganda and the United Republic of Tanzania experienced fairly modest deficits since the beginning of their economic reform programmes after the mid-1980s, with fiscal deficits generally less than 5 per cent of GDP in the period 1987–1998. Zambia experienced generally higher budget deficits (of more that 10 per cent of GDP in the late 1980s and early 1990s) which declined in the second half of the 1990s. In Zimbabwe, deficits fluctuated between 5 and11 per cent of GDP throughout the period under study.¹¹

	Cameroon	Côte d'Ivoire	Ghana	Kenva	Malawi	Nigeria	Uqanda	United Rep. of Tanzania	Zambia	Zimbabwe
						•)			
1985	-3.99	0.97	-2.97	-1.88	-11.17	9.16	-2.53	:	-17.55	-1.14
1986	-3.26	-3.25	-1.49	-0.62	-7.19	1.04	00.0	:	-20.89	0.27
1987	-7.59	-9.60	-1.93	-6.30	-5.22	-0.31	-2.24	:	-10.84	0.86
1988	-3.47	-12.08	-1.29	-5.53	-6.51	-1.30	-4.53	-7.02	-7.87	1.60
1989	-0.35	-9.90	-1.79	-7.08	-3.37	4.57	-6.87	-7.02	-5.47	0.20
1990	-2.03	-11.25	-3.79	-6.18	-4.78	17.52	-9.97	-13.24	-18.08	-1.59
1991	-0.13	-10.24	-3.82	-2.65	-10.33	4.40	-13.52	-15.53	-9.05	-5.29
1992	-1.76	-9.08	-5.88	-2.27	-15.83	6.93	-11.81	-14.57	:	-8.94
1993	-5.21	-8.57	-9.38	1.24	-8.00	-3.65	-11.82	-19.66	:	-1.76
1994	-4.17	-0.17	-4.68	1.37	-38.32	-8.99	-6.62	-15.13	:	-6.17
1995	-0.79	-4.93	-2.24	-4.42	:	-9.17	-7.73	-12.75	:	:
1996	-2.39	-0.63	-4.67	-0.80	:	9.93	-8.17	-7.05	:	:
1997	-1.32	0.34	:	-3.68	:	1.38	-7.91	-7.87	:	:

There is a large body of empirical literature on the causes of external debt accumulation. For example, Ajayi (1991) and Mbire and Atingi (1997) found terms of trade, the effective real exchange rate and the fiscal position of the governments significantly correlated with the evolution of the external debt-GNP ratios in Nigeria and Uganda. They found fiscal performance to be one of the most important determinants (based on beta coefficients) of external indebtedness, along with changes in the real effective exchange rate and terms of trade. Other factors postulated as being important by empirical studies include overlending by banks, high foreign interest rates and a decline in world demand (Greene and Khan, 1990).

Table 12 shows the evolution of current account deficits. The panel data in tables 10 and 12 show a strong statistical correlation between budget deficits and current account deficits, with a significant causality from the former to the latter.¹²

IV. FINANCING BUDGET DEFICITS

Reducing a budget deficit calls for restriction on government expenditure and an increase in tax revenue. To contain the growth in government expenditure, the government needs to identify high-priority projects for funding and implementation, postpone or cancel low-priority projects, and ensure that recurrent resources are available in the future to operate and maintain completed priority projects and generally to improve the utilization of completed facilities. New projects should be funded only if they pass stringent tests of high productivity and cost effectiveness.

The budget deficit can also be reduced through an increase in government tax revenue and appropriations-in-aid.¹³ Tax revenue can be increased by improving the tax administration and reforming the tax structure. Non-tax revenue can be boosted by the policy of "cost-sharing": the charging of fees for the services provided by the public sector, notably in education and health. Since the 1980s, many African countries have undertaken tax modernization programmes to broaden the government revenue base and to increase the elasticity of the tax system. This has

entailed changes in tax rates, tax bands and coverage of taxation, as well as the revamping of the major collection departments, especially through the setting up of independent tax authorities.

Expansionary fiscal policy, which is not accompanied by a reduction in resources used by the private sector, affects output, prices and the balance of payments. The extent to which these variables are affected depends on the conditions in the country as well as the way the deficit is financed. There are three main ways of financing a fiscal deficit (Roe and Griggs 1990): (i) through money creation ("inflationary" financing); (ii) through sales of government securities; and (iii) through external borrowing. Financing from these three sources is combined to derive a "financiable deficit" compatible with the targets for inflation, output growth and sustainable internal and external debts (Wijnbergen, 1989).

The government may also finance a budget deficit through proceeds from the sale of assets, such as foreign exchange reserves and privatization proceeds. It might also flexibly borrow by building up arrears through deferred payment to its employees and the private sector and parastatals for goods and services provided. This delayed payment of outstanding obligations, either to employees or to suppliers of goods and services, may be an important source of government financing. In Kenya, for example, pending bills (arrears) increased from an estimated 3.0 per cent to an estimated 4.6 per cent of the stock of domestic debt between 1990 and 1998 (O'Brien and Ryan, 1999). In Ghana, unpaid bills to suppliers of goods and services amounted to about 4.6 per cent of total expenditures in 1995 (Amoako-Tuffour, 1999). Building payment arrears imposes an implicit tax as interest is not paid on outstanding balances. However, government delinquency on bills sets a bad example, undermining respect for the law of contract; it may also lead to economic agents not making the payments required of them, such as payment of tax obligations, with adverse effects on revenue collection (Roe and Griggs, 1990). Moreover, suppliers may bid up prices knowing that delays will take place, which in turn could increase the budget deficit. Parastatals may also incur deficits that are supported by the budget, thus increasing inflationary pressures.

V. THE LIMITATIONS AND TRADE-OFFS OF THE VARIOUS FISCAL DEFICIT FINANCING METHODS

A. Inflationary financing versus other domestic borrowing

Another means of financing is through the government borrowing from the central bank to finance a budget deficit, which directly increases money supply. Furthermore, the central bank could extend credit to parastatals at concessionary rates, which also increases money supply indirectly. Financing through monetary expansion creates excess liquidity in the hands of the public, increasing the demand for goods and services as well as assets. The extent to which the government can use seignorage (a claim on real resources from financing a budget deficit by printing money) therefore depends on the level and evolution of the demand for high-powered money. If the supply of money exceeds demand, this will lead to an increase in prices or to a deterioration in the balance of payments. If the exchange rate is allowed to vary, this will also lead to its depreciation. The inflation thus generated in turn reduces the demand for money, resulting in an inverted-U "Laffer curve" in the relationship between the seignorage tax revenue and the inflation rate.

There are clear limits to "inflationary finance". Empirical evidence strongly suggests that monetary financing of a budget deficit will accelerate inflation (Easterly and Schmidt-Hebbel, 1993). Excessive use of the inflation tax therefore reduces the demand for high-powered money on which that tax is based. At low rates of money supply growth, seignorage will increase as the impact on inflation will be small. This is because the economy initially adjusts only slowly to monetary growth due to inertia and the differing expectations among economic agents on how the fiscal deficit will be financed. As monetary growth is accelerated, seignorage revenue reaches its optimal level and then declines (Roe and Griggs, 1990). First, high inflation rates (20–30 per cent) are accompanied by increased volatility, discouraging investment and economic growth, and hence reducing the demand for money. Second, the Olivera-Tanzi effect may come into play, widening the budget deficit, and hence accentuating the inflationary process by reducing the conventional tax revenues due to lags in tax collection, with expenditures more responsive to inflation than tax revenues. Third, inflation has an adverse effect on the distribution of income, which may retard growth. Fourth, governments, until recently, have repressed their financial systems (through such measures as taxes and controls on interest rates, credit ceilings and directed credit programmes), which has reduced the demand for money and has thus limited the amount of seignorage revenue that can be generated.

There have been a few estimates of seignorage revenue in SSA countries. Adam, Ndulu and Sowa (1996) estimated average seignorage revenues of 0.4 per cent of GDP in 1986–1990 and -0.2 per cent of GDP in 1991–1993 for Kenya; 0.6 per cent and 0.4 per cent respectively, for the United Republic of Tanzania; and 0.3 per cent and 0.8 per cent respectively, for Ghana. Adam (1992) estimated the seignorage-maximizing rate of inflation of 13.5 per cent for Kenya over the same period.^{14, 15} If governments are severely limited in the size of the deficits that they can finance using the inflationary method, the question arises as to whether non-inflationary domestic borrowing offers an alternative to this method.

Domestic borrowing mainly occurs through the sale of securities to the public. The extent to which this mechanism is utilized depends on the size and sophistication of the country's capital market and the interest rate policy being followed. The small capital and money markets in many SSA countries (with a few exceptions such as Côte d'Ivoire, Kenya, Nigeria and Zimbabwe) implies that only limited deficits can be financed in this way. Due to the high interest rates required to place domestic debt, liberalizing the financial system in the presence of large budget deficits will increase the stock of domestic debt, especially when economic growth is sluggish. As a consequence, the share of interest payments in government expenditure will increase, with the deficit feeding itself. Therefore financial liberalization needs to be accompanied by a reduction in budget deficits.

Financing the fiscal deficit excessively through borrowing from the domestic financial sector may also adversely affect the balance of payments if this undermines the credibility of domestic financial assets because of increased risk of government default, leading to a substitution from domestic to foreign bonds (Tanzi and Blejer, 1984). Moreover, expectations

of exchange rate depreciation may lead to capital flight, worsening both the capital and current accounts. This need not occur if domestic interest rates increase to restore portfolio equilibrium, although this may reduce investment and growth. If government bonds are treated as net wealth, a larger budget deficit will increase consumption and imports and worsen the balance of payments. The demand for foreign bonds may also increase, worsening the capital account.

For a given budget deficit, a shift from central-bank financing of public deficits to financing through private markets entails, to a large extent, a shift from a high inflation regime to a high real interest rates regime. Whether this shift would bring about greater fiscal discipline and better monetary control depends on the political economy of the two outcomes. Since the losers from inflation (general public) are likely to be less vocal and politically weaker than the losers from high real interest rates (borrowers and their lobby groups), the shift may bring about greater fiscal discipline and better monetary control, reflected in lower fiscal deficits.

Many SSA governments have used compulsory mechanisms in order to facilitate domestic borrowing. To the extent that these mechanisms involve interest rates below market levels, they entail a tax on the holders of the debt instruments, particularly the financial system, causing financial repression. These compulsory mechanisms may take various forms (Roe and Griggs, 1990) such as cash reserve requirements with zero or very low interest rates paid on these reserves (which is an important instrument of a country's monetary policy), application of ceilings on growth of credit by financial institutions, and purchase of government securities by captive institutions at market or controlled interest rates. The captive institutions, such as national social security funds, are required by law to buy government securities, and, to the extent that interest rates are below market rates, this constitutes a tax on them. These institutions, however, may incur deficits that are financed by the State, which amounts to receiving a subsidy.

Consider the use of cash reserve requirements to reduce the inflationary effects of borrowing from the central bank. Based on the standard money multiplier model, an increase in the required reserves ratio reduces the ability of financial institutions to create credit, and hence reduces the inflationary effects of a given government borrowing from the central bank. Reserve requirements, however, are in effect a tax on financial institutions and cause financial repression. An increase in the required reserves ratio increases the excess reserves held by financial institutions. It thus requires higher lending-deposit margins to compensate for reduced profitability, and hence a reduction in the tax base for inflation tax (Roe and Griggs, 1990).

Initially, an increase in the required reserves ratio will enable a given budget deficit to be financed using less money creation. However, as the cash reserve ratio is increased, the lending-deposit rates which financial institutions need in order to achieve a given profit margin also rise. This causes the public to reduce its demand for loans in response to the higher costs, and to reduce its supply of deposits. Beyond some level, further increases in the required reserves ratio are self-defeating as far as efforts to raise seignorage revenue is concerned. Beyond this level inflation rises for a given budget deficit, thus limiting the amount of funds that can mobilized.

Financial repression will worsen this trade-off. Control on interest rates on lending results in a reduction in deposit rates or an increase in excess reserves, thereby reducing the base for monetary creation. Access to foreign financing by the government will also lower the U-relationship between the inflation rate and the required reserves ratio, as there is now a lower residual deficit to be financed. However, increased access to external financing by the private sector may shift the trade-off relationship upwards as it further reduces the demand for domestic loans. This would also reduce the supply for deposits (and demand for money) and hence result in higher inflation for a given budget deficit.

B. Inflationary financing versus external borrowing

Direct borrowing from abroad to finance a budget deficit, if fully monetized, will have a similar effect as a central-bank-financed budget. However, foreign borrowing permits imports of goods and services to increase. Hence such borrowing is likely to be less inflationary if used by the government to purchase tradable goods or for direct imports. External borrowing, however, may be for the purpose of increasing foreign exchange reserves and strengthening domestic confidence. The government may also borrow on behalf of the private sector because it can obtain better access and better terms (hence this borrowing is similar to the acquisition of trade and suppliers' credit). In any case, the accumulation of external debt is likely to cause the foreign savings supply function to shift upwards, reducing the availability of funds and worsening the terms of external borrowing (Roe and Griggs, 1990).¹⁶

The trade-off between inflationary financing versus external borrowing can be seen from the national income identity discussed above. For a given fiscal deficit, a reduction of borrowing would mean a reduced current account deficit, implying increased dependence on inflationary tax for achieving equilibrium. Conversely, a lower reliance on inflation tax implies a greater reliance on external borrowing to finance a given fiscal deficit. Thus, for a given budget deficit, there is a conflict between reducing inflation and improving the balance of payments current account deficit. It is therefore imperative to reduce the budget deficit if the two are to be achieved in an adjustment programme. To replace the inflation tax, it is necessary to increase tax revenues, reduce expenditures or increase external borrowing. This implies acceptance of a higher balance-of-payments current account deficit. The size of this trade-off is an issue for further research.

C. External borrowing versus domestic borrowing

Many African countries finance payments of their external debt by issuing much more expensive domestic debt, through, for example, debt swaps whereby domestic debts are sold to retire an equivalent amount of external debt. This substitution of one debt instrument with another has budgetary implications. If the domestic interest rates are higher than the average cost of external debt, increasing the interest rate burden worsens the budgetary situation, hence calling for a fiscal adjustment or inflationary financing. This substitution need not be a straight asset swap; it can occur as a result of policies that improve the private or government savingsinvestment balance. Improving the private sector balance requires an increase in real interest rates, but increasing the cost of servicing domestic debt may be bad for the budget deficit. As mentioned above, such a substitution therefore requires a fiscal adjustment, but this may be bigger than for a straight asset swap (Wijnbergen, 1989).

VI. IMPLICATIONS OF PUBLIC DEBT FOR MACROECONOMIC MANAGEMENT AND MONETARY POLICY IN AFRICA¹⁷

Here we discuss the problems that government debt causes for macroeconomic management, including exchange-rate and interest-rate policies. We also discuss the feedback effects of exchange rate depreciation and financial liberalization on fiscal deficits, and hence on public debt. While fiscal deficits make it difficult to implement appropriate policies in these directions, failures in the same areas may adversely affect the size of the budget deficit that needs to be financed. We also look at the implications for public debt management from opening up the capital account and the impact of the large public debt on the economy's vulnerability to external shocks.

A. Exchange-rate policy

The exchange rate in SSA has increasingly become an important tool for economic management and stabilization. Non-CFA countries have liberalized their exchange rate regimes and have typically moved from a fixed exchange rate regime to a crawling peg/floating rate regime, resulting in a more depreciated real effective exchange rate (table 13). In most of the countries that have opted for the floating rate regime, however, the float has been supplemented by interventions in the market to smooth out adverse exchange rate movements. During the period 1967–1980, for example, the United Republic of Tanzania adhered closely to maintaining a stable nominal exchange rate (Ndulu and Kimei, 1996). With the advent of stabilization programmes in 1981–1986, the government focused on

	Cameroon	Côte d'Ivoire	Ghana	Kenya	Malawi	Nigeria	Uganda	United Rep. of Tanzania	Zambia	Zimbabwe
1985	130.7	108.3	342.8	129.1	177.8	568.7	177.5	501.9	125.1	164.2
986	144.7	130.2	197.0	113.0	159.6	310.5	186.5	347.4	61.3	151.2
987	161.9	144.6	151.6	104.5	148.2	0.06	238.0	170.9	66.9	144.1
988	157.8	147.9	145.7	99.3	158.0	99.5	217.0	134.0	101.5	133.6
989	145.5	139.6	136.8	97.7	167.1	88.6	183.1	117.3	129.3	126.8
066	149.6	141.3	136.1	90.1	165.8	82.2	112.4	90.1	106.8	111.0
991	143.1	136.3	139.2	88.2	171.7	70.0	82.9	96.4	99.8	92.7
992	144.3	142.4	123.0	92.6	158.1	58.0	76.9	82.2	95.7	83.5
993	134.5	140.4	108.0	80.0	161.4	63.6	82.2	78.1	108.6	88.4
994	86.6	86.5	86.9	100.5	114.6	118.0	102.2	91.6	104.5	83.7
995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
966	101.5	100.5	109.0	97.9	137.6	123.7	99.7	97.9	104.6	92.7
997	96.9	98.9	115.6	88.0	152.9	142.0	107.0	88.0	125.3	91.7
866	102.2	105.5	125.1	:	111.2	155.7	94.6	:	114.5	:
666	109.9	103.5	125.9	:	110.4	82.0	88.1	:	112.0	:

correcting the accumulated misalignment of the real exchange rate. Since 1993, the exchange rate has been determined by the market, with the unification of the various sections of the foreign exchange market.

For the countries of the Communauté financière africaine (CFA), which use a common currency guaranteed by the French Treasury, the exchange rate was fixed at 50 CFA francs = 1 French franc from 1948 to 1994 when there was a 100 per cent devaluation of the CFA franc. Before the 1980s, the CFA franc zone member countries performed well (M'Bet, 1996). With limited exchange controls, the zone experienced low inflation and large net inflows of capital. However, from the early 1980s up to the devaluation of 1994 the region's performance deteriorated as the real exchange rate appreciated in the context of deteriorating terms of trade and other shocks leading to a loss in competitiveness (see table 13).

Policy makers can potentially manage the exchange rate to achieve two different objectives. First, the exchange rate can be directed at achieving a real target, such as maintaining external competitiveness. Second, it can be used domestically as a nominal anchor to contain inflation at low levels. These two objectives present a policy dilemma in terms of how a country can maintain a competitive exchange rate and at the same time avoid a high rate of inflation. Nominal devaluation, for example, is an effective instrument for correcting real exchange misalignment but it may adversely affect the inflation rate.

Large fiscal deficits undermine these two objectives and fiscal rules in the CFA zone have not prevented the countries from generating fiscal deficits. Budget deficits lead to increased inflation, which is compounded by exchange rate liberalization. Further, exchange rate liberalization changes the inflation profile, leading to higher inflation as the economy loses a nominal anchor to tie down prices. Mwega and Ndung'u (1996), for example, show that moving from a fixed exchange rate regime to a crawling peg/floating rate regime increases the inflationary consequences of a given budget deficit and raises the inertial (underlying) inflation.

Large budget deficits tend to lead to misalignments of the real exchange rate, undermining the competitiveness of economies. Sustained

misalignment undermines economic performance and generates internal and external imbalances. M'Bet (1996), for example, found that overvaluation of the real exchange rate had a significant negative impact on GDP and exports, while it significantly increased the demand for imports in both Côte d'Ivoire and Burkina Faso.

Large budget deficits cause misalignment of the real exchange rate in various ways. In a number of African countries (e.g. Kenya and the United Republic of Tanzania), empirical evidence shows government expenditures (both on consumption and investment), which are mainly expended on non-tradables, appreciate the real exchange rate and thus undermine external competitiveness (Mwega and Ndung'u, 1997). More specifically, expansionary macroeconomic policies in Africa have led to an appreciation of the real exchange rate (see, for example, Mlambo and Ncube, 1996, concerning Zimbabwe), so that the goal of a competitive exchange rate has a bearing on the government's policy of fiscal restraint.

Budget deficits may also increase short-term capital inflows by raising domestic interest rates relative to foreign interest rates. Short-term capital flows, attracted by this interest rate differential, put pressure on the exchange rate to appreciate and this complicates exchange rate management and the goal of a stable exchange rate. In francophone countries, convertibility and a fixed exchange rate have led to capital flight when the macroeconomic environment has worsened and indebtedness and inflation rates have increased.

Therefore the implications of large public debts on exchange rates and interest rates call for better policies aimed at improving the financial system in general. In order to contain inflation and enhance external competitiveness, overly expansionary policies must be avoided through better planning and changes in public debt and money supply consistent with pre-determined exchange rate targets. It is also necessary to reverse the financial repression of the past, in part through containing public deficits, in order to allow, in particular, positive real deposit rates. Financial liberalization should, however, be undertaken in a sequenced manner, initially emphasizing macroeconomic balance and the development of a supportive institutional framework.

Exchange-rate depreciation (real or nominal), on the other hand, may affect the size of the budget deficit in various ways (Roe and Griggs 1990, Amoako-Tuffour 1999). First, exchange rate depreciation, by raising the relative price of tradables vis-à-vis non-tradables, will affect the government budgetary position depending on the extent it is a net buyer or seller of tradable goods. If the government is a net importer, it will incur higher local currency expenditures following a depreciation. If the share of government imports is large, the burden from a currency depreciation on the government may be quite high, with large budgetary implications. Second, currency depreciation will increase the debt-income ratio and the expenditures associated with external debt servicing, thereby worsening the fiscal deficit. Third, depreciation could be accompanied by policies that reduce the budget deficit, such as replacing non-tariff barriers by tariffs and/or imposing or increasing taxes on exporters who benefit from the depreciation. Improved resource allocation arising from an exchange-rate realignment to reduce overvaluation (e.g. improved export performance) may also boost growth and hence government revenues (Wijnbergen, 1989). Fourth, overvaluation may induce a shift from formal to informal/illegal activities, which shrink the country's tax base and reduce government revenues. Currency depreciation and liberalization of markets may bring these activities into official channels and into the tax net, thereby increasing government revenues.

All in all, it is therefore difficult to predict, a priori, the fiscal consequences of a currency depreciation. Focusing on the impact of currency depreciation on external debt servicing, Amoako-Tuffour (1999) found that if the government had met all its foreign interest payments, currency depreciation would have added, on average, 0.5 per cent of GDP annually to Ghana's budget deficit in the 1983–1995 period, accounting for about 34 per cent of total foreign interest payments for this period. The deficit increased from 0.17 per cent of GDP in 1984, when there were tight exchange controls, to nearly 1 per cent in 1987, when the exchange rate regime was substantially liberalized, before stabilizing at an average of 0.3 per cent of GDP in 1988–1992 and 0.7 per cent in 1993–1995.

B. Interest-rate policy

In the past, large budget deficits have induced African governments to repress their financial systems in order to contain the cost of domestic debt. This financial repression has been characterized by low or negative real interest rates, high reserve requirements (sometimes of 20–25 per cent compared to 5–6 per cent in developed countries), mandatory credit ceilings, and heavy government ownership and management of financial institutions, with considerable credit given on the basis of political rather than commercial considerations. That has given rise to a relatively large pile of non-performing loans in banks' portfolios. There has also been limited competition, with government and parastatals remaining the major borrowers.

Since the early 1990s, countries have liberalized their financial systems. An important component of financial sector reforms has been interest rate liberalization. Other components have included: (i) reducing direct and indirect taxation of financial institutions through changes in reserve requirements, mandatory credit ceilings and credit allocation guidelines; (ii) reducing barriers to competition in the financial sector by scaling down government ownership through privatization, and facilitating entry into the sector by domestic and foreign firms; and (iii) restructuring and liquidation of solvent banks (Inanga, 1995).

According to the World Bank (1994), however, the actual experience of many African countries with financial reforms has been of limited success. This has been mainly because of failure of real deposit rates to remain consistently positive, and continued repression as a result of the relatively high fiscal deficits which have characterized these countries and accelerated inflation when financed mainly by borrowing from the central bank.¹⁸ The situation has not changed much since the early 1990s. The World Bank study (1994), for example, judged a country to have a "good" fiscal stance if it had a budget deficit of less than 1.5 per cent. It can be seen from table 10 that it was only Cameroon, Kenya and the United Republic of Tanzania in our sample that could be judged to satisfy this criterion in the second half of the 1990s. It was therefore difficult for most of the countries to raise real deposit interest rates. Financial sector reforms in African countries have therefore been undertaken in the context of pervasive macroeconomic instability, contrary to the advice that "postponing the removal of interest rate regulation may be appropriate until ... the situation has been stabilized and banking supervision strengthened (Villanueva and Mirakhor, 1990)". The successful sequencing of financial liberalization requires macroeconomic stability (control of inflation) and fiscal discipline (reduction of fiscal deficit) in addition to improved legal, accounting and regulatory systems for the financial sector, a tax system that does not discriminate against the sector, and the management of sequencing so that, for example, capital inflows from liberalization do not offset macroeconomic stability (World Bank, 1989).¹⁹

When interest rates are controlled, the government reaps substantial revenue from the implicit tax on financial assets arising from repressing the financial system. Such revenue depends on its tax rate as measured by the difference between the domestic cost of borrowing and the shadow cost of the funds; and its tax base as measured by the stock of domestic debt outside the central bank. Therefore, financial liberalization may have adverse effects on the budget deficit (Roe and Griggs, 1990). When budget deficits are large, financial liberalization will entail very high nominal interest rates, including a premium for expected inflation, with adverse effects on the productive sectors. This may widen the budget deficit because of the increased interest payments on government borrowing, but also because of the increased need for expenditures to support the distressed productive enterprises. In a sample of 10 developing countries, Easterly and Schmidt-Hebbel (1993), for example, found a high correlation between domestic debt financing and interest rates. Osei (1995) also attributed the rapid accumulation of domestic debt to the high nominal interest rates in Ghana in the 1980s and 1990s. However, Amoako-Tuffour (1999) found that while interest payments on domestic debt increased markedly in Ghana, inflation also substantially reduced the value of outstanding debt; he estimated that about 30 per cent of interest payments between 1991 and 1997 represented compensation, rather than income, to debt holders for the nominal capital losses due to inflation.

Realistic interest rates, however, may reduce or reverse capital flight, making more funds available for government domestic borrowing (at lowered inflation rates and lower implicit tax on the financial system). High interest rates on real deposits (arising from increased debt financing) may also increase financial savings and expand the base for the inflation tax.

C. Opening up of the capital account

The linkage between the fiscal deficit and the current account deficit increases the more open the capital account. According to UNCTAD (2000), capital outflows to Africa have increased as countries in the region have liberalized their capital account and become more integrated into the global financial system. By liberalizing outward capital flows, African countries have facilitated the acquisition of assets abroad.²⁰ However, capital account liberalization has also increased the volatility of net capital inflows, not their magnitude, with attendant consequences for exchange rate instability. This has also induced countries to build up foreign exchange reserves as a safeguard against a discontinuation or reversal of capital flows and speculative attacks on the currency (thus tying up resources that could be utilized to finance growth). According to UNCTAD (2000), while SSA imports increased by 8 per cent between 1995 and 1998, foreign exchange reserves increased by 50 per cent. This was most pronounced in countries such as Kenya and Uganda, which have liberalized their capital account. For the above reasons, less than 60 per cent of each dollar mobilized abroad for Africa had been allocated to real resource transfers.

As discussed earlier, the extent to which the government can use seignorage revenue depends on the demand for high-powered money. Opening up of the capital account increases the elasticity of the demand for money with respect to open economy variables such as the exchange rate and foreign interest rates, thus reducing the base for seignorage revenues.

Similarly, since domestic borrowing is limited by the small size of SSA countries' capital markets, governments have utilized capital controls to facilitate such borrowing. Opening up of the capital account therefore increases the degree of substitution between domestic and foreign bonds, leading to a potential deterioration in balance of payments and limiting the amount that can be borrowed for given interest rates and current account deficits (Tanzi and Blejer, 1984). Lastly, openness facilitates foreign borrowing and hence accumulation of external debt.

As indicated earlier, the financial openness that characterized the domestic "official sector" in SSA countries translated portions of the public deficit into growing official external indebtedness. Simply put, this resulted in the problem of an unsustainable debt situation, which not only complicated the formulation and implementation of future public policy but also introduced serious uncertainties as to the external viability of the economies. The uncertainties would remain significant even if the proportion of concessional debt in the total were comparatively high, as it has been in SSA.

The main problems due to the opening up of the capital account in the context of high country debt ratios (as in SSA) revolve around the issues of uncertainty and related expectations (Roe and Griggs, 1990). First, the enlarged external public debt may generate expectations of higher future taxation and thus encourage transfers of wealth abroad. Second, the same enlarged debt might generate expectations of currency devaluation for boosting export revenues, which in turn would also encourage capital flight. Third, high debt ratios, particularly in an environment of weak domestic policies, may convince economic agents that the public sector has, in effect, lost access to external funds; this would provoke both capital flight and reduced investment, as economic agents seek ways to protect their incomes and wealth abroad. For these and related reasons, it has been argued that debt-reduction initiatives for the highly indebted poor countries are justified not only on humanitarian (poverty reduction) grounds but also from the viewpoint of counteracting the undesirable incentives to capital flight and reduced investment. Conducive domestic policies are, of course, a critical component of debt-reduction efforts if poverty alleviation and aggregate growth have to be sustained (in part by reasonable investment expansion).

Opening up of the capital account also renders the economy financially vulnerable to adverse external developments. As has been observed in recent studies on increased global financial integration, in developing countries
there were wide swings from the 1970s to the 1990s in the volume of international capital flows and in the terms and conditions on which external finance was made available. Given this instability and the associated economic damage, questions have been raised about the wisdom of undeterred liberalization of capital flows. And although there is broad consensus, supported by empirical research, about the positive outcome of pro-trade policies, the same cannot be said with equal conviction about liberalization of capital flows (Eichengreen and Mussa, 1998). This may be attributed to economic distortions arising from problems of asymmetric information (thought to be typically more severe in financial markets vis-à-vis product markets), such as adverse selection, moral hazard and herding behaviour (Mussa, 2000).

For an average African country with typical debt ratios, the swings in the volume of incoming external capital flows are, arguably, likely to be associated with changes in official flows, given the past pattern of borrowing. Thus, for various reasons, an economy may suffer from dependence on official external capital through unanticipated reductions in such capital. The reasons may range from changes in donor sentiments or on the aid system in general (vis-à-vis supporting a given country) to disagreements on conditionality, or policy prescriptions. In addition to this rather straightforward source of instability, however, swings in private capital flows may have significant implications on key macroeconomic variables, notably the exchange rate and interest rate. Private capital flows are relatively small for an average African country; however, they are large in terms of domestic private transactions in the foreign exchange and money markets. Thus a significant reduction in external private flows is likely to lead to domestic currency depreciation and to exert upward pressure on interest rates. These two developments may not be consistent with the underlying conditions or desirable macroeconomic directions.

The changing cost of external capital may also affect an economy in undesirable ways, particularly if the changes are not related to changes in export prices or the terms of trade. Although most countries in SSA now rely on concessional financing, upward changes in the cost of official capital (for whatever reasons) may strain the balance of payments and worsen the public sector deficit. Some governments and their public sectors in general have also been borrowing from the external private sector, often on a shortterm basis, thus further exposing their economies to strains from that source. Indeed interest-rate shocks from external financial markets could have significant effects on domestic interest rates and the exchange rate.

It may be concluded in respect of an opening up of the capital account, given the circumstances in Africa, that particular policy attention would have to be paid to the potential risks of a worsening capital flight problem and of depressing investments. In practical terms, that implies the opening of the account in a phased and measured manner: it is estimated that 70 per cent of Africa's non-land wealth is already held abroad (Collier and Gunning, 1998). Beyond this, public deficits would need to be carefully planned, given the overall macroeconomic context, and their specific sources of financing (including desirable external funding) determined. Short-term external borrowing, whether by the public or private sector, would need to be contained - given the recent experiences of crises in Asia and elsewhere – and closely related to levels of foreign reserves for a given country. In addition, proper regulation and supervision of the domestic financial system would have to remain a central priority of public policy, given the general experience with private capital flows in developing countries and the fact that the government has to serve as ultimate guarantor of the solvency of a country's financial system.

VII. SUMMARY AND CONCLUSIONS

This paper has analysed the relationship between external and domestic public debt in SSA, factors that contributed to the accumulation of both types of debt, their impact on macroeconomic management – including exchange-rate and interest-rate policies – as well as those problems arising from the opening up of the capital account in the context of a large public debt burden, among them increased vulnerability to external shocks.

SSA's external debt about doubled between 1985 and 1998. The external debt burden reached a peak in 1993–1994 and declined thereafter, partly due to improved growth, debt relief and rescheduling, commercial

debt buy-backs and a decline in overall aid levels. By the late1990s, external debt as a proportion of GNP and exports in SSA was nearly double the average for all developing countries although the external debt service ratio was lower in Africa due to the concessionary terms of much of its borrowing.

The stock of external debt and its servicing therefore poses a major problem in SSA countries, and there is substantial empirical evidence that this has had a negative impact on investment and growth. The debt stock is large relative to the size of the SSA economies, with the debt overhang discouraging investment. Debt servicing is a large proportion of export earnings and government expenditures, which reduces the resources available for imports, investment and socioeconomic development. The capacity to service the debt has been low, as reflected in the substantial accumulation of arrears. Large external debt and its servicing have also undermined the credibility of domestic policies and contributed to macroeconomic instability.

Some SSA countries have accumulated substantial domestic debt since the mid-1980s (e.g. Cameroon and Côte d'Ivoire) due to large budget deficits and reduced access to external finance. In contrast, other reforming SSA countries have substantially reduced their domestic debt burdens (e.g. Malawi, Uganda and the United Republic of Tanzania). Yet in other countries domestic debt declined and then increased (e.g. Ghana and Nigeria) due to slippage in budgetary discipline, while in the late-reformers it increased and then declined (e.g. Kenya and Zimbabwe). With domestic debt generally more expensive to acquire than external debt, heavy domestic borrowing has resulted in an increase in the share of interest payments in total government expenditure, thus causing a vicious cycle with a worsening of the budget deficit.

A major cause of external debt accumulation in SSA has been the large fiscal deficits incurred by the public sector. Fiscal deficits resulted in increased external borrowing, or they forced the private sector into increased borrowing from that source. An overwhelming proportion of these external debts is owed by the public sector. And, overall, foreign aid intensity in Africa is the highest of any major developing region. The impact of the budget deficits on external debt accumulation in SSA is supported by empirical literature, which finds the fiscal position of the government significantly correlated with the evolution of the external debt ratios, along with other factors such as the real effective exchange rate and the terms of trade. Given this evidence, therefore, it can be concluded that policies aimed at improved macroeconomic management must address the question of the appropriate level of the fiscal deficit and external debt for a given economy.

SSA governments have financed budget deficits in three main ways: through money creation, through sales of government securities, and through external borrowing. Deficits have also been financed in part by proceeds from the sale of assets (e.g. foreign exchange reserves and privatization proceeds) and through payments arrears (delayed payments for goods and services).

There are, however, clear limitations and trade-offs with the various methods of financing the fiscal deficit. Borrowing from the central bank may be inflationary, and empirical studies have shown that the amount of seignorage revenue that can be generated relative to the national income in a typical African country is quite modest. Inflation in turn reduces the demand for money, generating an inverted-U "Laffer curve" in the relationship between the seignorage tax revenue and the inflation rate. This is exacerbated by other factors. For example, high inflation rates (20–30 per cent) may be more volatile, discouraging investment and economic growth. Inflation also tends to adversely affect conventional tax revenues due to lags in tax collection, with expenditures more responsive than tax revenues to inflation (the Olivera-Tanzi effect). And of course, inflation may have an adverse effect on the distribution of income, which may retard growth.

Domestic borrowing through sale of securities to the public, on the other hand, is constrained by the small capital and money markets in many SSA countries (with a few exceptions, such as Côte d'Ivoire, Kenya, Nigeria and Zimbabwe). Liberalizing the financial system in the presence of large budget deficits, therefore, could tend to unduly raise interest rates. As a consequence, the share of interest payments in government expenditure would increase, with the deficit feeding on itself. For a given budget deficit, a shift from central bank financing of a public deficit to financing via private markets entails, to a large extent, a shift from a regime of high inflation to one of high real interest rates. Whether this shift would bring about greater fiscal discipline and better monetary control is an empirical question. Since the losers from inflation (general public) are likely to be less vocal and politically weaker than losers from high real interest rates (borrowers and their lobbying groups), the shift may bring about greater fiscal discipline and better monetary control, reflected in lower fiscal deficits.

Given the limitations of both inflationary finance and domestic borrowing in the African context, it is clear that appropriate levels of public debt for a given country must reckon with those constraints if a stable macroeconomic environment is to be achieved and maintained.

Public debt has further specific implications for macroeconomic management and monetary policy. Large fiscal deficits, for example, undermine the two objectives of exchange rate policy: the maintenance of a nominal anchor to control inflation and improvement in external competitiveness. Empirical evidence shows that large budget deficits tend to lead to increased inflation, which may be compounded by exchange rate liberalization. Exchange rate liberalization changes the inflation profile, leading to higher inflation as the economy loses a nominal anchor to tie prices down. Moving from a fixed exchange rate regime to a crawling peg/ floating rate regime increases the inflationary consequences of a given budget deficit and raises the inertial (underlying) inflation.

Budget deficits also increase the possibilities of real exchange rate misalignment. In a number of African countries (e.g. Kenya and the United Republic of Tanzania), empirical evidence shows that government expenditures (both on consumption and investment), which are mainly expended on non-tradables, tend to lead to a real exchange rate appreciation. More specifically, expansionary macroeconomic policies tend to lead to an appreciation of the real exchange rate. Budget deficits may also increase short-term capital inflows by raising domestic interest rates, and the inflows may lead to exchange rate appreciation. Exchange rate depreciation (real or nominal), on the other hand, may affect the size of the budget deficit in various ways. First, exchange rate depreciation, by raising the relative price of tradables vis-à-vis nontradables, would affect the government budgetary position, depending on the extent to which it is a net buyer or seller of tradable goods. Second, depreciation would increase the debt-income ratio and the expenditures associated with external debt servicing, tending to worsen the fiscal deficit. Third, depreciation is likely to eliminate the revenues from use of high tariffs for managing the balance of payments. That, however, could be accompanied by policies that compensate for the losses. Fourth, currency depreciation and liberalization of markets may bring informal/illegal activities into official channels and into the tax net, thereby increasing government revenues.

With respect to interest rates, it may be noted that since the late 1980s, SSA countries have liberalized their financial systems, with an important component being the liberalization of interest rates. However, the actual experience of many countries with financial reforms has been one of limited success. This is mainly because of the failure of real deposit rates to remain consistently positive due to the relatively high fiscal deficits that have characterized these countries. The situation has not changed much since the early 1990s. Financial sector reforms in African countries have also been undertaken in the context of pervasive macroeconomic instability, contrary to the emerging consensus on appropriate sequencing of such reforms.

When budget deficits are large, financial liberalization entails high nominal interest rates, including a premium for expected inflation; this has adverse effects on the productive sectors. The high rates may widen the budget deficit not only because of increased interest payments on the government borrowing, but also because of the need for expenditures to support the distressed productive enterprises. Realistic interest rates, however, may reduce or reverse capital flight, making more funds available for government domestic borrowing (at lowered inflation rates and a lower implicit tax on the financial system). Positive real deposit interest rates (arising from increased debt financing) may also increase financial savings and expand the base for the inflation tax. The implications of large public debts on the exchange rate and interest rates therefore call for better policies aimed at improving the financial system in general. In order to contain inflation and enhance external competitiveness, overly expansionary policies should be avoided through better planning and changes in public debt and money supply consistent with pre-determined exchange rate targets. It is also necessary to reverse the financial repression of the past, in part through containing public deficits in order to allow, in particular, positive real deposit rates. Financial liberalization should, however, be undertaken in a sequenced manner, initially emphasizing macroeconomic balance and the development of a supportive institutional framework.

Turning to public debt and the problems that may arise from the opening up of the capital account, it should be noted that the linkage between the fiscal deficit and the current account deficit increases as the capital account becomes more open. Opening up of the capital account increases the elasticity of the demand for money with respect to open economy variables such as exchange rate and foreign interest rates, thus reducing the base for seignorage revenues. Similarly, opening up the capital account increases the degree of substitution between domestic and foreign bonds; this leads to a deterioration in balance of payments and limits the amount that can be borrowed for given interest rates and current account deficits. The main problems due to opening up of the capital account in the context of high country debt ratios (as in SSA) revolve around the issues of uncertainty and related expectations. First, the enlarged external public debt may generate expectations of higher future taxation and thus encourage transfers of wealth abroad. Second, the same enlarged debt might generate expectations of a currency devaluation for boosting export revenues, which in turn would also encourage capital flight. Third, debt ratios that are too high, particularly in an environment of weak domestic policies, may convince economic agents that the public sector has in effect lost access to external funds; this would provoke both capital flight and reduced investment as economic agents seek ways to protect their incomes and wealth abroad.

Moreover, opening up of the capital account renders the economy vulnerable to adverse external developments. As has been observed in recent

studies on increased global financial integration, for developing countries there have been wide swings through the 1970s and the 1990s in the volume of international capital flows and in the terms and conditions on which external finance has been available.

In the circumstances of an average SSA African country with typical debt ratios, the reasons for these swings may range from changes in donor sentiments (towards supporting a given country) or the aid system in general, to disagreements on policy conditionalities. In addition to these rather straightforward sources of instability, however, swings in private capital flows may have significant implications on key macroeconomic variables, notably the exchange rate and interest rate. Private capital flows are relatively small for an average SSA African country; however, they are large in terms of domestic private transactions in the foreign exchange and money markets. Thus, a significant reduction in external private flows or an increase in their cost is likely to lead to domestic currency depreciation and to exert upward pressure on interest rates. These developments may not be consistent with the underlying conditions or with desirable macroeconomic directions.

The key point to emphasize in respect of an opening up of the capital account in the context of SSA is that particular policy attention should be paid to the potential risks of exacerbating the capital flight problem and of depressing investment.

1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.0 8.5 20.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1987 8.0 8.5 20.5 12.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 17.3 1990 11.0 11.0 21.0 20.0 18.5 55.0 14.5 17.3 1991 10.8 11.0 20.0 20.5 20.0 10.3 1992 12.5 30.0 20.5 20.0 17.5 24.0 14.5 72.5 28.5 1992 11.5 10.5 24.0	1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 90.0 1987 8.0 8.5 20.5 12.5 14.0 10.0 36.0 8.0 30.0 90.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 90.0 1989 10.0 11.0 26.0 16.0 11.0 18.5 55.0 14.5 16.0 90.0 1990 11.0 11.0 20.0 20.3 13.0 18.5 55.0 14.5 10.3 1991 10.8 11.0 21.0 20.3 20.3 13.3 17.0 15.5 10.2 25.0 25.5 10.2 10.3 1991 10.8 10.0 20.3 20.3	19859.010.518.512.511.010.0 24.0 5.0 25.0 9.0 19868.08.520.512.511.010.0 36.0 8.0 30.0 9.0 19878.08.523.512.511.011.0 12.8 31.0 12.5 15.0 9.0 19889.59.526.016.011.0 12.8 31.0 12.5 15.0 9.0 198910.011.028.0 16.0 11.0 12.8 45.0 14.5 12.5 10.0 199011.011.020.0 20.3 13.0 12.8 45.0 14.5 12.6 9.0 199110.811.020.0 20.3 13.0 15.5 46.0 \ldots \ldots \ldots \ldots 199110.811.020.0 20.3 13.0 15.5 46.0 \ldots \ldots \ldots \ldots \ldots 199212.5 30.0 20.5 25.0 27.0 13.5 14.0 14.5 27.0 29.5 199311.5 10.6 33.0 20.5 28.0 13.5 14.7 27.5 28.5 19947.8 10.0 33.0 21.5 47.0 14.5 22.5 28.5 19957.8 6.0 45.0 24.5 28.5 14.1 14.5 27.5 29.5 19957.8 6.0 45.0 24.5 28.0 13	1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 9.0 9.0 1987 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 9.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 1990 11.0 11.0 20.0 16.5 14.0 18.5 55.0 14.5 15.0 9.0 1991 10.8 11.0 20.0 20.3 13.0 18.5 56.0 14.5 15.0 9.0 1991 10.8 11.0 20.0 20.3 13.0 15.5 4.10 14.5 47.0 29.5 1992 12.5 33.0 20.5 26.0 17.5 4.10 14.5 47.0 28.5 <		Cameroon	Côte ď' Ivoire	Ghana	Kenya	Malawi	Nigeria	Uganda ^a	United Rep. of Tanzania	Zambia	Zimbabwe ^b
1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 24.0 5.0 20.0 9.0 1987 8.0 8.5 20.5 12.5 11.0 10.0 36.0 30.0 9.0 9.0 <td< th=""><th>1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 24.0 5.0 29.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 1988 10.0 11.0 26.0 16.0 11.0 12.8 45.0 14.5 16.0 9.0 1991 11.0 11.0 20.0 20.3 13.0 18.5 50.0 17.3 9.0 1992 12.0 17.0 18.5 56.0 14.5 17.3 47.0 29.5 1992 12.5 30.0 20.5 26.0 17.5 41.0 14.5 72.5 28.5 1993 11.5</th><th>19859.0$105$$18.5$$12.5$$11.0$$10.0$$24.0$$5.0$$25.0$$9.0$1986$8.0$$8.5$$20.5$$12.5$$11.0$$10.0$$36.0$$5.0$$25.0$$9.0$1987$8.0$$8.5$$23.5$$12.5$$12.5$$11.0$$10.0$$36.0$$30.0$$9.0$1988$9.5$$9.5$$25.0$$16.0$$11.0$$11.0$$12.8$$31.0$$12.5$$15.0$$9.0$1980$10.0$$11.0$$11.0$$26.0$$16.0$$11.0$$12.8$$45.0$$14.5$$12.6$1990$11.0$$11.0$$21.0$$26.0$$16.5$$11.0$$12.8$$55.0$$14.5$$12.6$1991$11.0$$11.0$$20.0$$20.0$$16.5$$11.0$$12.8$$55.0$$14.5$$15.0$$9.0$1991$11.0$$11.0$$20.0$$20.0$$17.5$$14.0$$18.5$$55.0$$14.5$$10.0$1991$10.8$$11.0$$20.0$$20.0$$17.5$$16.0$$17.5$$17.5$$20.0$1992$11.5$$12.0$$20.0$$20.0$$17.5$$16.5$$17.5$$20.5$$20.5$1993$11.5$$10.6$$20.0$$20.0$$17.5$$20.5$$20.5$$20.5$1995$7.5$$8.6$$7.5$$20.5$$22.5$$22.5$$20.5$$20.5$1997$7.5$$6.0$$27.$</th><th>1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1990 11.0 11.0 11.0 18.5 55.0 14.5 10.3 1991 10.8 11.0 18.5 50.0 14.5 10.3 1991 10.8 11.0 20.0 20.5 20.0 14.5 10.3 1991 10.8 11.0 20.0 20.5 20.0 14.5 17.0 23.6 1992 12.5 30.0 20.5 26.0 14.5 72.5 28.5 16.0 26.0</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 24.0 5.0 29.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 1988 10.0 11.0 26.0 16.0 11.0 12.8 45.0 14.5 16.0 9.0 1991 11.0 11.0 20.0 20.3 13.0 18.5 50.0 17.3 9.0 1992 12.0 17.0 18.5 56.0 14.5 17.3 47.0 29.5 1992 12.5 30.0 20.5 26.0 17.5 41.0 14.5 72.5 28.5 1993 11.5	19859.0 105 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 5.0 25.0 9.0 1987 8.0 8.5 23.5 12.5 12.5 11.0 10.0 36.0 30.0 9.0 1988 9.5 9.5 25.0 16.0 11.0 11.0 12.8 31.0 12.5 15.0 9.0 1980 10.0 11.0 11.0 26.0 16.0 11.0 12.8 45.0 14.5 12.6 1990 11.0 11.0 21.0 26.0 16.5 11.0 12.8 55.0 14.5 12.6 1991 11.0 11.0 20.0 20.0 16.5 11.0 12.8 55.0 14.5 15.0 9.0 1991 11.0 11.0 20.0 20.0 17.5 14.0 18.5 55.0 14.5 10.0 1991 10.8 11.0 20.0 20.0 17.5 16.0 17.5 17.5 20.0 1992 11.5 12.0 20.0 20.0 17.5 16.5 17.5 20.5 20.5 1993 11.5 10.6 20.0 20.0 17.5 20.5 20.5 20.5 1995 7.5 8.6 7.5 20.5 22.5 22.5 20.5 20.5 1997 7.5 6.0 $27.$	1985 9.0 10.5 18.5 12.5 11.0 10.0 24.0 5.0 25.0 9.0 1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1990 11.0 11.0 11.0 18.5 55.0 14.5 10.3 1991 10.8 11.0 18.5 50.0 14.5 10.3 1991 10.8 11.0 20.0 20.5 20.0 14.5 10.3 1991 10.8 11.0 20.0 20.5 20.0 14.5 17.0 23.6 1992 12.5 30.0 20.5 26.0 14.5 72.5 28.5 16.0 26.0											
1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1990 11.0 11.0 26.0 16.0 16.0 17.5 46.0 20.0 1991 10.8 11.0 20.0 20.3 13.0 18.5 50.0 20.0 1992 12.5 35.0 20.5 20.5 17.5 41.0 14.5 72.5 28.5 1992 11.5 10.5 20.0 21.5 24.5 26.0 21.5 27.6 28.5 28.5 28.5 28.5	1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.	19868.08.520.512.511.010.036.08.030.09.019878.08.523.512.514.012.831.012.515.09.019889.59.526.016.011.012.831.014.515.09.0198910.011.026.016.011.012.845.014.515.09.0199011.011.026.016.011.018.556.014.515.09.0199110.811.020.020.313.018.556.014.510.3199110.811.020.020.313.017.546.010.3199212.012.535.020.520.526.020.6199311.510.817.618.550.020.019947.810.020.020.520.526.017.541.0199311.510.535.020.520.617.547.026.519947.86.033.021.540.013.514.647.026.519957.86.033.021.540.013.514.760.520.519957.86.024.550.013.513.514.720.520.519957.76.033.024.526.614.714.520.	1986 8.0 8.5 20.5 12.5 11.0 10.0 36.0 8.0 30.0 9.0 1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 1989 10.0 11.0 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1990 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 16.0 9.0 1991 10.8 11.0 20.0 20.5 20.1 17.5 40.0 17.5 9.0 1992 12.0 12.5 30.0 20.5 26.0 17.5 41.0 14.5 72.5 28.5 1993 11.5 10.5 24.5 26.0 14.5 16.3 20.5 1994 7.8	1985	9.0	10.5	18.5	12.5	11.0	10.0	24.0	5.0	25.0	9.0
1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 9.0 1989 9.5 26.0 16.0 11.0 18.5 55.0 14.5 15.0 9.0 1980 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 28.0 19.4 14.0 18.5 50.0 20.0 1992 12.5 30.0 20.3 13.0 17.5 46.0 20.0 1992 11.5 10.6 20.5 20.0 17.5 47.0 23.5 23.5 1992 7.8 10.0 33.0 21.5 20.0 14.5 72.5 28.5 1993 7.8 6.6 24.5 25.0 13.5	1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 9.5 26.0 16.0 11.0 12.8 31.0 12.5 15.0 9.0 1989 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1980 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 20.0 20.3 13.0 18.5 50.0 20.0 1992 12.5 30.0 20.5 20.0 17.5 41.0 14.5 77.0 29.5 1993 11.5 10.5 35.0 20.5 26.0 24.0 14.5 47.0 29.5 1993 17.5 45.0 13.5 15.0 67.5 20.5 29.5 29.5 1993 7.8 7.5	19878.08.52.3.512.514.012.831.012.515.09.019889.59.59.52.6.016.011.012.845.014.515.09.0198910.011.011.026.016.511.018.555.015.515.09.0199011.011.026.016.514.018.550.015.515.09.0199111.011.020.020.319.414.018.550.014.520.0199211.511.020.020.313.015.546.020.0199311.510.535.026.520.017.541.014.520.519947.810.033.020.525.024.014.520.520.519958.67.545.024.550.013.514.116.221.520.519967.86.545.024.550.013.514.116.220.520.519977.56.026.927.013.513.514.116.217.721.519987.06.337.013.513.514.116.217.721.519977.56.026.927.013.514.116.217.721.519987.06.337.017.143.013.514.1 <td< td=""><td>1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.0 11.0 18.5 55.0 15.5 15.0 9.0 1990 11.0 11.0 28.0 16.5 11.0 18.5 55.0 15.5 10.0 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.5 30.0 20.5 20.0 17.5 41.0 14.5 72.5 28.5 1993 11.5 10.5 33.0 20.5 26.0 17.5 47.0 29.5 1994 7.8 10.0 21.5 40.0 17.5 20.5 28.5 1995 7.5 46.0 17.5 47.9 47.6</td><td>1986</td><td>8.0</td><td>8.5</td><td>20.5</td><td>12.5</td><td>11.0</td><td>10.0</td><td>36.0</td><td>8.0</td><td>30.0</td><td>0.6</td></td<>	1987 8.0 8.5 23.5 12.5 14.0 12.8 31.0 12.5 15.0 9.0 1988 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.0 11.0 18.5 55.0 15.5 15.0 9.0 1990 11.0 11.0 28.0 16.5 11.0 18.5 55.0 15.5 10.0 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.5 30.0 20.5 20.0 17.5 41.0 14.5 72.5 28.5 1993 11.5 10.5 33.0 20.5 26.0 17.5 47.0 29.5 1994 7.8 10.0 21.5 40.0 17.5 20.5 28.5 1995 7.5 46.0 17.5 47.9 47.6	1986	8.0	8.5	20.5	12.5	11.0	10.0	36.0	8.0	30.0	0.6
1988 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1990 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 33.0 19.4 14.0 18.5 50.0 20.0 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.5 30.0 20.5 20.0 17.5 41.0 14.5 77.0 29.5 1993 11.5 10.5 35.0 20.5 26.0 24.0 14.5 27.5 28.5 1994 7.8 10.0 33.0 21.5 26.0 13.5 14.1 16.5 20.5 29.5 1995 7.5 45.0 23.5 26.0	1988 9.5 2.6.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 17.0 90 1990 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 20.0 20.3 19.4 14.0 18.5 50.0 20.0 1992 11.5 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.6 35.0 20.5 20.0 17.5 41.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 14.5 72.5 29.5 1995 8.6 7.5 45.0 13.5 13.5 13.5 14.5 20.5 29.5 29.5 29.5 29.5 29.5 29.5 <td>19889.59.526.016.011.012.845.014.515.09.0198010.011.026.016.511.018.555.015.519.0199011.011.028.016.511.018.555.015.519.0199111.011.020.020.319.414.018.550.0$\ldots$$\ldots$10.3199110.811.020.020.313.015.546.0$\ldots$$\ldots$$\ldots$20.0199211.510.535.020.520.017.541.014.520.0199311.510.623.020.520.017.541.014.520.519947.810.033.021.540.013.547.047.029.519958.67.545.023.526.013.515.047.940.229.519967.86.545.023.323.323.013.514.116.217.731.519977.56.045.026.927.013.514.116.217.731.519977.35.827.013.513.514.116.217.731.519987.06.327.013.513.514.116.217.731.519987.06.327.013.513.514.116.217.7</td> <td>1988 9.5 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 1.0.3 1990 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 20.0 20.3 13.0 18.5 50.0 10.3 1992 11.5 10.6 20.0 20.5 20.0 17.5 46.0 20.0 1992 11.5 10.5 33.0 20.5 25.0 26.0 24.6 7.5 47.0 29.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 14.1 14.5 72.5 28.5 1995 7.5 6.0 33.3 23.3 23.0 13.5 14.1 16.0 77.5<td>1987</td><td>8.0</td><td>8.5</td><td>23.5</td><td>12.5</td><td>14.0</td><td>12.8</td><td>31.0</td><td>12.5</td><td>15.0</td><td>0.6</td></td>	19889.59.526.016.011.012.845.014.515.09.0198010.011.026.016.511.018.555.015.519.0199011.011.028.016.511.018.555.015.519.0199111.011.020.020.319.414.018.550.0 \ldots \ldots 10.3199110.811.020.020.313.015.546.0 \ldots \ldots \ldots 20.0199211.510.535.020.520.017.541.014.520.0199311.510.623.020.520.017.541.014.520.519947.810.033.021.540.013.547.047.029.519958.67.545.023.526.013.515.047.940.229.519967.86.545.023.323.323.013.514.116.217.731.519977.56.045.026.927.013.514.116.217.731.519977.35.827.013.513.514.116.217.731.519987.06.327.013.513.514.116.217.731.519987.06.327.013.513.514.116.217.7	1988 9.5 9.5 9.5 26.0 16.0 11.0 12.8 45.0 14.5 15.0 9.0 1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 1.0.3 1990 11.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 20.0 20.3 13.0 18.5 50.0 10.3 1992 11.5 10.6 20.0 20.5 20.0 17.5 46.0 20.0 1992 11.5 10.5 33.0 20.5 25.0 26.0 24.6 7.5 47.0 29.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 14.1 14.5 72.5 28.5 1995 7.5 6.0 33.3 23.3 23.0 13.5 14.1 16.0 77.5 <td>1987</td> <td>8.0</td> <td>8.5</td> <td>23.5</td> <td>12.5</td> <td>14.0</td> <td>12.8</td> <td>31.0</td> <td>12.5</td> <td>15.0</td> <td>0.6</td>	1987	8.0	8.5	23.5	12.5	14.0	12.8	31.0	12.5	15.0	0.6
1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 90 1990 11.0 11.0 33.0 19.4 14.0 18.5 55.0 15.5 10.3 1991 10.8 11.0 33.0 19.4 14.0 18.5 50.0 10.3 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 77.0 29.5 1993 11.5 10.5 35.0 21.5 20.0 13.5 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 24.0 14.5 72.5 29.5 1995 8.6 7.5 45.0 24.5 26.0 13.5 14.1 16.2 29.5 1996 7.8 6.0 45.0 26.0 13.5 14.1 16.0 27.0 1997 7.5	1989 10.0 11.0 26.0 16.5 11.0 18.5 55.0 15.5 9.0 1990 11.0 11.0 33.0 19.4 14.0 18.5 56.0 15.5 10.3 1991 10.8 11.0 33.0 19.4 14.0 18.5 50.0 10.3 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.6 30.0 20.5 20.0 17.5 41.0 14.5 77.0 29.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 14.5 72.5 28.5 1994 7.8 10.0 33.0 24.5 26.0 13.5 14.5 72.5 29.5 1996 7.8 6.0 24.5 28.5 13.5 15.0 67.5 20.5 29.5 29.5 29.5 29.5	198910.011.026.016.511.018.555.015.51.51.0199011.011.033.019.414.018.550.0 \ldots \ldots 10.3199110.811.033.019.414.018.550.0 \ldots \ldots \ldots 20.0199211.020.020.313.015.546.0 \ldots \ldots \ldots 20.0199212.012.530.020.520.017.541.014.520.019947.810.633.020.526.024.014.572.528.519947.810.033.021.540.013.514.014.527.528.519958.67.524.525.026.013.514.114.572.528.519967.86.545.024.550.013.513.347.940.229.519977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.514.116.217.731.519987.06.337.017.143.013.59.117.731.519987.06.327.026.547.013.59.117.731.519987.06.327.013.513.59.117.731.5 <tr< td=""><td>198910.011.026.016.511.018.555.015.515.516.01199011.011.033.019.414.018.550.0$\ldots$$\ldots$10.3199110.811.020.020.313.019.414.018.550.0$\ldots$$\ldots$10.3199212.612.620.020.313.017.546.0$\ldots$$\ldots$$\ldots$$20.0$199311.510.620.020.520.017.541.014.572.528.519947.810.033.021.540.017.541.014.572.528.519947.810.033.021.540.013.515.067.520.528.519958.67.545.024.550.013.514.116.227.528.519957.86.545.026.927.013.513.347.940.229.519977.56.033.013.513.514.116.277.027.619977.35.827.026.913.59.117.731.519977.35.827.013.513.59.117.731.519987.35.827.026.526.726.727.027.027.519987.35.827.013.513.59.117.731</td><td>1988</td><td>9.5</td><td>9.5</td><td>26.0</td><td>16.0</td><td>11.0</td><td>12.8</td><td>45.0</td><td>14.5</td><td>15.0</td><td>0.6</td></tr<>	198910.011.026.016.511.018.555.015.515.516.01199011.011.033.019.414.018.550.0 \ldots \ldots 10.3199110.811.020.020.313.019.414.018.550.0 \ldots \ldots 10.3199212.612.620.020.313.017.546.0 \ldots \ldots \ldots 20.0 199311.510.620.020.520.017.541.014.572.528.519947.810.033.021.540.017.541.014.572.528.519947.810.033.021.540.013.515.067.520.528.519958.67.545.024.550.013.514.116.227.528.519957.86.545.026.927.013.513.347.940.229.519977.56.033.013.513.514.116.277.027.619977.35.827.026.913.59.117.731.519977.35.827.013.513.59.117.731.519987.35.827.026.526.726.727.027.027.519987.35.827.013.513.59.117.731	1988	9.5	9.5	26.0	16.0	11.0	12.8	45.0	14.5	15.0	0.6
1990 11.0 11.0 11.0 33.0 19.4 14.0 18.5 50.0 10.3 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 29.5 1992 11.5 10.5 35.0 20.5 20.0 17.5 41.0 14.5 29.5 1993 11.5 10.5 35.0 20.5 20.0 17.5 24.0 14.5 29.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 14.1 16.2 29.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 77.7 31.5	190 11.0 11.0 11.0 33.0 19.4 14.0 18.5 50.0 10.3 1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 77.0 29.5 1993 11.5 10.6 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 14.0 14.5 72.5 28.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.0 45.0 28.5 13.5 15.0 67.5 20.5 29.5 1997 7.5 6.0 24.5 0.0 13.5 14.1 16.2 17.7 31.5	199011.011.033.019.414.018.550.0 \dots \dots 10.3199110.811.020.020.313.015.546.0 \dots \dots 20.0199212.012.530.020.520.017.546.0 \dots \dots 20.0199311.510.530.020.520.520.017.541.014.527.519947.810.033.021.540.013.515.014.572.528.519958.67.535.024.526.013.515.067.520.528.519967.86.545.024.526.013.515.919.047.029.519977.56.045.026.013.514.116.217.731.519977.56.045.026.927.013.514.116.217.731.519977.56.045.026.927.013.514.116.217.731.519987.06.337.017.143.013.514.116.217.731.519987.06.327.013.513.59.117.731.531.519987.35.827.013.513.59.117.731.519987.35.827.013.513.517.731.531.51998 </td <td>199011.011.011.033.019.414.018.550.0$\ldots$$\ldots$10.3199110.811.020.020.313.015.546.0$\ldots$$\ldots$$\ldots$20.0199212.012.530.020.520.017.541.014.57.720.0199311.510.535.020.520.526.024.014.572.529.519947.810.033.021.540.013.515.067.520.529.519947.810.033.021.540.013.515.067.520.529.519958.67.545.024.550.013.515.067.520.529.519977.56.045.027.013.515.919.047.027.019977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.515.920.529.529.519987.06.337.017.143.013.515.920.2\ldots</td> <td>1989</td> <td>10.0</td> <td>11.0</td> <td>26.0</td> <td>16.5</td> <td>11.0</td> <td>18.5</td> <td>55.0</td> <td>15.5</td> <td>:</td> <td>0.6</td>	199011.011.011.033.019.414.018.550.0 \ldots \ldots 10.3199110.811.020.020.313.015.546.0 \ldots \ldots \ldots 20.0199212.012.530.020.520.017.541.014.57.720.0199311.510.535.020.520.526.024.014.572.529.519947.810.033.021.540.013.515.067.520.529.519947.810.033.021.540.013.515.067.520.529.519958.67.545.024.550.013.515.067.520.529.519977.56.045.027.013.515.919.047.027.019977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.515.920.529.529.519987.06.337.017.143.013.515.920.2 \ldots	1989	10.0	11.0	26.0	16.5	11.0	18.5	55.0	15.5	:	0.6
1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 26.5 20.0 17.5 41.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.0 45.0 26.9 27.0 13.5 14.1 16.2 29.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 13.5 14.1 16.2 17.7 31.5	1991 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 295 1992 11.5 10.5 35.0 26.5 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.6 6.3 37.0 26.9 23.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 32.3 23.0 13.5 9.1 17.7 31.5 1998	199110.811.020.020.313.015.546.0 \dots \dots 20.0199212.012.530.020.520.017.541.014.547.029.5199311.510.535.020.525.026.024.014.572.528.519947.810.033.021.540.013.515.067.520.528.519958.67.545.024.550.013.515.067.520.529.519967.86.545.024.550.013.515.947.940.229.519977.56.045.026.927.013.514.116.217.731.519977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.514.116.217.731.519987.06.327.013.513.59.117.6 \dots 39.519987.06.327.013.513.59.117.731.519987.35.827.013.513.59.117.731.519997.35.827.013.513.517.731.519987.06.327.013.513.59.117.731.519997.35.827.013.5	191 10.8 11.0 20.0 20.3 13.0 15.5 46.0 20.0 192 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 193 11.5 10.5 35.0 25.5 26.0 17.5 41.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 28.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 15.0 67.5 20.5 29.5 1996 7.8 6.5 45.0 28.9 27.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 14.1 16.2 17.7 31.5 1998 7.3 5.8 27.0 13.5 9.1 17	1990	11.0	11.0	33.0	19.4	14.0	18.5	50.0	:	:	10.3
1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1997 7.5 6.0 45.0 26.9 27.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 37.0 13.5 0.4 17.7 31.5 1997 7.0 6.3 37.0 13.5 0.4 17.7 31.5 <td>1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 14.1 16.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.7 31.5 1998 7.0 6.3 37.0 17.1 47.0 17.7 <</td> <td>199212.012.530.020.520.017.541.014.547.029.5199311.510.535.045.525.026.024.014.572.528.519947.810.033.021.540.013.515.067.520.529.519958.67.545.021.540.013.515.067.520.529.519967.86.545.024.550.013.513.347.940.229.519967.86.545.024.550.013.514.116.217.729.519977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.59.117.639.519987.05.827.013.513.59.117.731.519987.35.827.013.515.920.239.519987.35.827.013.515.820.239.519987.35.827.026.547.013.515.820.219987.35.827.013.513.59.117.731.519987.35.827.013.515.820.239.519997.35.827.013.515.820.5</td> <td>1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 28.5 28.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 13.3 47.9 47.0 27.0 1997 7.5 6.0 45.0 28.9 27.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 14.1 16.2 17.7 31.5 1998 7.3 5.8 27.0 26.5 47.0 13.5 14.1 16.2 17.7 31.5 1998 7.3 5.8 27.0 13.5 9.1 <</td> <td>1991</td> <td>10.8</td> <td>11.0</td> <td>20.0</td> <td>20.3</td> <td>13.0</td> <td>15.5</td> <td>46.0</td> <td>:</td> <td>:</td> <td>20.0</td>	1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 14.1 16.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.7 31.5 1998 7.0 6.3 37.0 17.1 47.0 17.7 <	199212.012.530.020.520.017.541.014.547.029.5199311.510.535.045.525.026.024.014.572.528.519947.810.033.021.540.013.515.067.520.529.519958.67.545.021.540.013.515.067.520.529.519967.86.545.024.550.013.513.347.940.229.519967.86.545.024.550.013.514.116.217.729.519977.56.045.032.323.013.514.116.217.731.519987.06.337.017.143.013.59.117.639.519987.05.827.013.513.59.117.731.519987.35.827.013.515.920.239.519987.35.827.013.515.820.239.519987.35.827.026.547.013.515.820.219987.35.827.013.513.59.117.731.519987.35.827.013.515.820.239.519997.35.827.013.515.820.5	1992 12.0 12.5 30.0 20.5 20.0 17.5 41.0 14.5 47.0 29.5 1993 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 28.5 28.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 13.3 47.9 47.0 27.0 1997 7.5 6.0 45.0 28.9 27.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 14.1 16.2 17.7 31.5 1998 7.3 5.8 27.0 26.5 47.0 13.5 14.1 16.2 17.7 31.5 1998 7.3 5.8 27.0 13.5 9.1 <	1991	10.8	11.0	20.0	20.3	13.0	15.5	46.0	:	:	20.0
1933 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 21.5 50.0 13.5 15.0 67.5 20.5 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 32.3 23.0 13.5 0.1 17.6 31.5	1933 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 26.5 39.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17	1933 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 26.9 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.3 5.8 27.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 47.0 13.5 9.1 17.7 31.5 <	1933 11.5 10.5 35.0 45.5 25.0 26.0 24.0 14.5 72.5 28.5 1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 14.1 16.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.7 31.5 1998 7.3 5.8 27.0 26.5 47.0 13.5 14.1 16.2 39.5 1999 7.3 5.8 27.0 13.5 9.1 17.7 3	1992	12.0	12.5	30.0	20.5	20.0	17.5	41.0	14.5	47.0	29.5
1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 37.0 17.1 43.0 13.5 0.1 17.6 30.5	1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1990 7.3 5.8 27.0 24.5 47.0 13.5 9.1 17.6 39.5	1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1997 7.5 6.0 45.0 26.9 27.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 31.5 1998 7.0 5.8 27.0 26.5 47.0 13.5 14.1 16.2 31.5 1999 7.3 5.8 27.0 13.5 13.5 9.1 17.6 30.5 1999 7.3 5.8 27.0 13.5 15.8 20.2	1994 7.8 10.0 33.0 21.5 40.0 13.5 15.0 67.5 20.5 29.5 1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1997 7.5 6.0 45.0 26.9 27.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.7 31.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1993	11.5	10.5	35.0	45.5	25.0	26.0	24.0	14.5	72.5	28.5
1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 37.0 17.1 33.0 13.5 0.1 17.6 30.5	1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1908 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1909 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 27.0 1997 7.5 6.0 45.0 26.9 27.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2 39.5	1995 8.6 7.5 45.0 24.5 50.0 13.5 13.3 47.9 40.2 29.5 1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 26.9 27.0 13.5 14.1 16.2 17.7 31.5 1997 7.0 6.3 37.0 17.1 43.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1994	7.8	10.0	33.0	21.5	40.0	13.5	15.0	67.5	20.5	29.5
1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 37.0 13.5 0.1 17.6 30.5	1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.0 5.8 27.0 26.5 47.0 13.5 9.1 17.6 39.5	1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.3 5.8 27.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1996 7.8 6.5 45.0 26.9 27.0 13.5 15.9 19.0 47.0 27.0 1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1995	8.6	7.5	45.0	24.5	50.0	13.5	13.3	47.9	40.2	29.5
1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1008 7.0 6.3 37.0 17.1 32.0 13.5 0.1 17.6 30.5	1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1998 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1997 7.5 6.0 45.0 32.3 23.0 13.5 14.1 16.2 17.7 31.5 1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1996	7.8	6.5	45.0	26.9	27.0	13.5	15.9	19.0	47.0	27.0
1008 7.0 6.3 3.7.0 17.1 13.0 13.5 0.1 17.6 30.5	1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1998 7.0 6.3 37.0 17.1 43.0 13.5 9.1 17.6 39.5 1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1997	7.5	6.0	45.0	32.3	23.0	13.5	14.1	16.2	17.7	31.5
	1000 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2	1998	7.0	6.3	37.0	17.1	43.0	13.5	9.1	17.6	:	39.5
1999 7.3 5.8 27.0 26.5 47.0 13.5 15.8 20.2				1999	7.3	5.8	27.0	26.5	47.0	13.5	15.8	20.2	:	:
Source: IMF (1999).	<i>Source:</i> IMF (1999).	Source: IMF (1999).		Note:	= not available.									
Source: IMF (1999). Note: = not available.	Source: IMF (1999). Note: = not available.	Source: IMF (1999). Note: = not available.	Note: = not available.	й с	ank rate.									
Source: IMF (1999). Note: = not available. a Bank rate.	Source: IMF (1999). Note: = not available. a Bank rate.	Source: IMF (1999). Note: = not available. a Bank rate.	Note: = not available. a Bank rate.	Ϋ́ Ω	ediscount rate.									

Table A.1

	1999		5.00	200 : 1			4.95	3.50	0.79		26.37	23.67	÷		13.87		9.55	22.38	2.64	/
	1998		5.00	0.10			4.81	3.50	4.69		34.33	32.05	14.62		22.83		18.40	29.49	5.81	
-1999	1997		5.04	1.04			:	:	4.02		42.77	35.76	27.89		22.87		16.72	30.25	12.02	
	1996		5.38	4.67			:	:	2.48		41.64	34.50	46.56		22.25		17.59	33.79	8.82	
	1995		5.50 16.00	13.92			:	:	14.30		35.38	28.73	59.46		18.29		13.60	28.80	0.79	
	1994		8.08 17 50	35.09			:	:	26.08		27.72	23.15	24.87		23.32		:	36.24	29.01	
	1993		7.75 17.46	-3.21			:	:	2.16		30.95	23.63	24.96		49.80		:	29.99	45.80	
	1992		7.50	-0.02			11.44	7.75	4.23		19.38	16.32	10.06		16.53		:	21.07	29.55	
	1991		7.50 18.15	0.06			10.94	7.00	1.68		29.23	21.32	18.03		16.59		:	19.00	19.82	
	1990		7.50 18 50	1.10			10.98	7.00	-0.81		21.78	:	37.26		14.78		13.67	18.75	15.59	
	1989		7.50	-1.67			10.07	6.42	1.05		19.84	:	25.22		13.86		12.00	17.25	12.94	
	1988		7.21 13.46	1.68			8.72	5.25	6.93		19.76	16.50	31.36		13.48		10.33	15.00	11.20	
	1987		7.15	13.14			8.37	5.25	6.94		21.71	17.58	39.82		12.86		10.31	14.00	7.62	
	1986		7.35	7.77			8.58	6.08	9.68		18.47	17.00	24.57		13.23		11.25	14.00	4.80	
	1985		7.50	8.51			10.66	7.25	1.86		17.13	15.75	10.31		13.90		11.25	14.00	13.01	
		Cameroon	Deposit rate	Inflation	Côte d'Ivoire	Money market rate:	overnight advances	Deposit rate	Inflation	Ghana	Treasury bill rate	Deposit rate (3 months)	Inflation	Kenya	Treasury bill rate	Deposit rate	(max. 3–6 months)	Lending rate (maximum)	Inflation	

	1985–1999
	OUNTRIES,
	AFRICAN C
continued)	SELECTED
Table A.2 (LATION IN
	ES AND INF
	EREST RAT
	OTHER INTE

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Malawi															
Treasury bill rate Deposit rate	12.31	12.75	14.25	15.75	15.75	12.92	11.50	15.62	23.54	27.68	46.30	30.83	18.31	32.98	42.85
(CB 3 months fixed rate) Lending rate	12.50	12.75	14.25	13.50	12.75	12.10	12.50	16.50	21.75	25.00	37.27	26.33	10.21	19.06	33.21
(max. CB rate)	18.38	19.00	19.50	22.25	23.00	21.00	20.00	22.00	29.50	31.00	47.33	45.33	28.25	37.67	53.58
Government bond yield	11.50	11.50	11.50	11.50	11.50	11.50	11.50	:	:	23.50	38.58	42.67	39.25	:	:
Inflation	10.52	14.05	25.18	33.88	12.46	11.81	12.62	23.75	22.77	34.65	83.33	37.60	9.14	29.75	:
Nigeria															
Deposit rate (3 months) Lending rate	9.12	9.24	13.09	12.95	14.68	19.78	14.92	18.04	23.24	13.09	13.53	13.04	7.31	:	:
(first class advances)	9.43	96.6	13.96	16.62	20.44	25.30	20.04	24.76	31.65	20.48	20.23	20.32	20.41	:	:
Inflation	7.44	5.72	11.29	54.51	50.47	7.36	13.01	44.59	57.17	57.03	72.81	29.29	8.21	10.32	:
Uganda															
Treasury bill rate	22.00	30.67	30.50	33.00	42.17	41.00	34.17	:	21.30	12.52	8.75	11.71	10.59	7.77	7.43
Deposit rate	20.00	23.33	20.00	21.50	32.17	31.25	31.17	35.83	16.26	9.99	7.61	10.62	11.84	11.36	7.83
Lending rate															
(exports and															
manufacturing)	24.00	33.33	34.67	35.00	40.00	38.67	34.42	:	:	:	20.16	20.29	21.37	20.86	21.57
Inflation	157.65	160.98	200.03	196.12	61.44	33.12	28.07	52.44	6.08	9.73	8.59	7.22	6.93	-0.02	6.35

.../...

OTHER	INTERE	EST RA	TES A	ND INF	LATIO	N IN S	ELECT	ED AF	RICAN	COUN	TRIES	, 1985-	-1999		
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Unit. Rep. of Tanzania															
Treasury bill rate	:	:	:	:	:	:	:	:	34.00	35.09	40.33	15.30	9.59	11.83	10.05
Deposit rate	1 50	0 EO	1E 7E	17 16	17.00						24.63	12 50	7 83	7 75	7 75
	2007	000	2		202	:	:	:	:	:	00.1	200	20.		
(CB lending upper															
margin)	12.29	18.50	27.50	29.63	31.00	:	:	:	31.00	39.00	42.83	37.21	29.23	26.67	29.83
Inflation	33.28	32.43	29.95	31.19	25.85	35.83	28.70	21.85	25.28	33.09	28.38	20.98	16.09	12.80	7.89
Zambia															
Treasury bill rate	13.21	24.25	16.50	15.17	18.50	25.92	:	:	124.03	74.21	39.81	52.78	29.48	24.94	36.22
Deposit rate															
(time 3–6 months)	15.33	17.74	13.23	11.44	11.44	25.65	:	48.50	:	46.14	30.24	42.13	34.48	13.08	20.27
Lending rate	18.60	27.40	21.20	18.39	18.39	35.10	:	54.57	113.31	70.56	45.53	53.78	46.69	31.80	40.36
Inflation	:	55.83	47.05	51.00	123.40	107.02	93.21	169.05	88.05	53.61	34.20	46.27	24.81	:	:
Zimbabwe															
Money market rate	8.80	9.10	9.30	9.08	8.73	8.68	17.49	34.77	34.18	30.90	29.64	26.18	25.15	37.22	:
Treasury bill rate	8.48	8.71	8.73	8.38	8.35	8.39	14.44	26.16	33.04	29.22	27.98	24.53	22.07	32.78	:
Deposit rate (3 months)	10.04	10.28	9.58	9.68	8.85	8.80	14.20	28.63	29.45	26.75	25.92	21.58	18.60	29.06	:
Lending rate	17.17	13.00	13.00	13.00	13.00	11.71	15.50	19.77	36.33	34.86	34.73	34.23	32.55	42.06	:
Government bond yield	13.26	13.20	13.87	14.00	14.00	15.24	17.27	17.40	:	:	:	:	:	:	:
Inflation	8.49	14.33	12.47	7.42	12.88	17.36	23.34	42.06	27.59	22.26	22.59	21.43	18.74	31.82	:

Table A.2 (concluded)

Source: IMF (1999). Note: .. = not available.

306 Delphin G. Rwegasira and Francis M. Mwega

NOTES

- 1 In our analysis, we did not use new or original data; we relied mainly on the IMF/ World Bank databases. It was not possible to obtain from local sources national statistical publications and data (in series covering the period since the mid-1980s) for all the 10 sample countries we selected for our detailed analysis. We used information and data from the *Economist Intelligence Unit* and other country reports, where available.
- 2 There are obviously major practical problems in analysing external debt (Ajayi, 1991). First, currency changes can significantly influence the dollar amount of debt outstanding. Second, the composition of debt, which is not captured by these data, is important for debt management. Third, there are large inconsistencies in debt figures across the various sources. For convenience, we rely mainly on the World Bank (1999).
- 3 In this paper, we do not discuss in detail the issue of the extent to which rising public debt servicing has crowded out real spending on government services.
- 4 Overall, data on domestic public debt and budget deficit financing (both mainly from the IMF's *International Financial Statistics*) are weak and contain major gaps. The data, for example, only distinguish between domestic and foreign financing (the basis of table 11) but do not distinguish between the various types of domestic financing, which makes it difficult to tell a complete story on shifts in the structure of the financing of government deficits.
- 5 For the nominal domestic discount rates in selected countries, see table A.1; for the average interest rates on external debt, see table 6.
- 6 UNCTAD (2000) has called for a massive increase in foreign aid to Africa to accelerate and maintain growth at levels higher than in the past (about 6 per cent per annum) for a sufficiently long period (10–12 years). Combined with appropriate policies that include enhancing market incentives, streamlining the role of the State, and building institutions, this would reduce aid dependence by increasing savings and by attracting private capital, thereby gradually reducing the reliance on foreign aid.
- 7 This ponzi scheme is seen clearly in Kenya where the Government planned to make principal repayments of public debt over 1999/2003 from new external debts (41.6 per cent), new domestic debt (33.9 per cent), fiscal surplus (8.4 per cent), and privatization proceeds (16.2 per cent) (Kenya, *Fiscal Strategy Paper, 2000–2003*, 2000). Hence a very large proportion of new debts were to be utilized to repay existing public debt.
- 8 UNCTAD (2000) has argued that these gaps have widened since the early 1980s because of, among other factors, adverse terms of trade and increased imports due to trade liberalization.
- 9 Foreign aid is usually intended to augment investment and to improve the policy environment through conditionalities. Recent literature on foreign aid, however, has suggested that foreign aid is translated mostly into consumption, not investment (Boone, 1994; Obstfeld, 1995). This means that foreign aid will, on average, act as a substitute for domestic savings by easing liquidity constraints or by inducing Dutch disease effects. Elbadawi and Mwega (2000) found foreign aid to Granger-cause (in the precedence sense) a reduction in both savings and investment rates in SSA. The investment rate,

however, Granger-caused an increase in foreign aid, so that countries that increased their investment rates received more foreign aid inflows. In a structural pooled panel model, the study found that the foreign aid-income ratio had a negative impact on the private savings rate, with an almost one-for-one offset relationship. Dollar (1992) also found no significant relationship between foreign aid and the quality of policies.

- 10 These data are mainly from the IMF (1999) which defines the fiscal deficit as: (revenue + grants) minus (expenditure on goods and services + transfer payments + net lending). The definition, therefore, emphasizes cash flow rather than accrual concepts of revenues and expenditures. This is the definition most relevant in a discussion of the connection between the fiscal deficit and the balance of payments. The definition, however, has various shortcomings (Tanzi and Blejer,1984). First, cash flows may not reflect the underlying trends, making it difficult, for example, to link the size of budget deficits and the degree of external financing (as in tables 9 and 10). For example, if a government incurs payment arrears, this cash concept may not reveal that expenditures are taking place. Second, the classification of grants as revenues (rather than a financing item) is problematic as grants may not be a permanent way of financing deficits, and they may fluctuate from year to year. Third, inflation makes it difficult to distinguish, in an economic (rather than legal) sense, interest payments from amortization charges.
- 11 It is important to distinguish the actual from the structural (or core) deficit. The structural deficit is derived by correcting the actual deficit for the effects of economic fluctuations and temporary measures. These temporary measures include: (i) expectations of future taxes from some taxpayers; (ii) use of occasional tax amnesties that allow tax payers who have evaded taxes in the past to "clean their slate" by making a once-for-all payment equal to some fraction of tax due; (iii) campaigns to collect tax arrears; (iv) use of temporary taxes or surcharges; (v) postponement of payments to suppliers; (vi) postponement of paying wages to workers and of increasing their wages; (vii) temporary taxes or surcharges; and (viii) an increase in the sale of public properties, including exploration rights. Even though the fiscal policy should be geared towards the structural rather than the actual deficit, we focus on the latter as it is easier to measure.
- 12 The analysis is based on Granger-causality tests utilizing three lags and random effect estimation. The sum of coefficients of causality from budget to current account deficits (0.006) was significant, at the 1 per cent level (p-value = 0.000), while the sum of coefficients of causality from current account to budget deficits (0.057) was insignificant, at least at the 20 per cent level (p-value = 0.397).
- 13 Appropriations-in-aid are levies charged and collected by government ministries and departments to at least partly finance their activities (e.g. user charges in government hospitals and schools).
- 14 The seignorage-maximizing rate of inflation is estimated in the following manner. Suppose the seignorage revenue is given by $r = \pi$.m, where π is the rate of inflation (tax rate) and m is the real demand for high powered money (tax base). Suppose the demand for money is given by $m = \varphi e^{-\delta \pi}$. The seignorage-maximizing rate of inflation is therefore $\pi^* = 1/\delta$. Adjusting for growth of income which increases the generated seignorage revenue, we get $\pi^* + m_y g_y = 1/\delta$, where m_y is the income elasticity of money demand and g_y is the average real growth rate.

- 15 Based on estimates of $\delta = 6.5$, $m_v = 1$ and $g_v = 0.03$.
- 16 It is important to distinguish between grants and concessional financing on the one hand, and commercial credit on the other. The deleterious effects of grants and concessional financing on the economy are likely to be relatively small. These resources can be used to finance imports or government expenditure. The authorities, however, should be concerned about the implications of these expenditures (e.g. pensions, consumer subsidies and a larger bureaucracy) on the future budget in the event of the provision of concessional funds being reduced or terminated.
- 17 Little research has been done on the issues addressed in this and the previous section. More research is required on the direct implications for the SSA economies, and the validity of the theoretical analyses, within the African context, of the various deficit financing mechanisms and their trade-offs. The implications of public debt for macroeconomic management and monetary policy, including the impact of capital liberalization on the domestic financial system and the cost of servicing the public debt also require further research. This may entail country-specific studies from which general lessons for the region can be drawn. What we do in the paper is basically to hypothesize on possible relationships and impacts and to summarize the empirical evidence (if any) that is available.
- 18 A major problem in many African countries (e.g. Kenya, Uganda and the United Republic of Tanzania) is that in the 1990s they switched to an indirect monetary policy where budget deficits were mainly financed by the sale of securities, which pushed real interest rates very high, with nominal rates generally much higher than the inflation rate (see table A.2).
- 19 In this paper, we do not delve into the debate on the merits or otherwise of a high interest rate policy. While a moderately positive real interest rate may be good for resource mobilization and efficiency, a highly positive real interest rate may be problematic for the economy. Very high interest rates, for example, may be stagflationary by increasing the cost of working capital and by reducing real wages, aggregate demand and investment. They may also induce capital inflows and an overvaluation of the real exchange rate, with consequent Dutch-disease effects. They may also increase bank losses and distress of the financial system as clients become unable to service loans, leading to curtailment of bank credit (African Development Bank, 1994). Because of information asymmetry between lenders and borrowers (information possessed by the borrowers, but not availed by the lenders), higher rates would tend to attract more risky projects, worsen the portfolio of financial institutions and increase the cost of monitoring the loans.

Experience with intervention and liberalization policies suggests that while financial repression has retarded the development of financial sectors in Africa and Latin America, such repression and directed credit schemes, advocated by the imperfect information paradigm, have been skillfully utilized to promote economic growth and transformation in South-East Asia. The outcomes therefore depend on the nature of interventions and implementation; they can have positive and welfare-enhancing effects or negative and deleterious effects (Nissanke et al., 1995).

20 The UNCTAD report, however, cautions that such outflows can also take place under controlled capital account regimes, particularly when such controls are ineffective and incentives for capital flight are strong.

REFERENCES

- Adam CS (1992). On the dynamic specification of money demand in Kenya. *Journal of African Economies*, 1(1): 233–270, August.
- Adam CS, Ndulu B and Nii Sowa (1996). Liberalization and seignorage revenue in Kenya, Ghana and Tanzania. *Journal of Development Studies*, 32 (4): 531–553.
- African Development Bank (1994). African Development Report 1994. Abidjan, Côte d'Ivoire.
- Ajayi SI (1991). Macroeconomic approach to external debt: the case of Nigeria. *AERC Research Paper, No. 8.* Nairobi, Kenya, African Economic Research Consortium. December.
- Amoako-Tuffour J (1999). Government fiscal deficits: how small or how large? *Journal of African Economies*, 8(1): 1–30, March.
- Azam J-P (1997). Public debt and the exchange rate in the CFA franc zone. *Journal of African Economies*, 6(1): 45–85 March.
- Balassa B (1988). Public finance and economic development. *PPR Working Paper 31*, Washington DC, World Bank.
- Boone P (1994). The impact of foreign aid on savings and growth. Mimeo. London, London School of Economics, June.
- Collier P and Gunning JW (1998). Globalization: implications for Africa. In: Iqbal Z and Khan MS eds., *Trade Reform and Regional Integration in Africa*. Washington, DC, International Monetary Fund: 147–181.
- Devarajan S, Rajkumar AS and Swaroop V (1998). What Does Aid Finance? Framework Paper for the AERC Collaborative Research Project, Managing Transition from Aid Dependence in Sub-Saharan Africa. Mimeo. Nairobi, Kenya.
- Easterly W and Schmidt-Hebbel K (1993). Fiscal deficits and macroeconomic performance in developing countries. *The World Bank Research Observer* 8(2): 69–94. Washinton, DC, World Bank.
- Eichengreen B and Mussa M (1998). Capital account liberalisation: Theoretical and practical aspects. International Monetary Fund *Occasional Paper* No. 172, Washington, DC, IMF.
- Elbadawi IE and Mwega FM (2000). Can Africa's saving collapse be reverted? *The World Bank Economic Review*, 14 (1).
- Elbadawi I, Ndulu B and Ndung'u N (1997). Debt overhang and economic in sub-Saharan Africa. In: Iqbal Z and Kanbur, R, eds., *External Financing for Low Income Countries*, Washington DC, IMF: 49–76.
- Fosu AK (1996). The impact of external debt on economic growth in sub-Saharan Africa. Journal of Economic Development, 21(1): 93–118. June.
- Fosu AK (1999). The international dimension and African growth. Background paper for the AERC Collaborative Research Project, Explaining African Economic Growth Performance. Nairobi, Kenya, African Economic Research Consortium.

- Greene JE and Khan MS (1990). The African Debt Crisis. *AERC Special Paper* No. 3. Nairobi, Kenya, African Economic Research Consortium.
- Greene J and Villanueva D (1990). Private investment in developing countries: an empirical analysis. *IMF Staff Working Paper*, No. WP/90/40. Washington, DC, IMF.
- International Monetary Fund (IMF) (1999). International Financial Statistics. Washington, DC, IMF.
- Inanga EL (1995). Financial sector reforms in sub-Sahara Africa. Paper presented at the XI World Congress of the International Economic Association in Tunis, December 18–22.
- Mbire B and Atingi M (1997). Growth and Foreign Debt: the Ugandan Experience. *AERC Research Paper* No. 66. Nairobi, Kenya, African Economic Research Consortium.
- Mlambo K and Mthuli Ncube (1996). Real Exchange Rate and Economic Performance in Zimbabwe. Report of an AERC/ICEG Collaborative Project on Macroeconomic Policies and Exchange Rate Management in African Countries. Nairobi, Kenya, African Economic Research Consortium.
- Mussa M (2000). Meeting the challenges of globalisation. Paper prepared for the plenary session of the AERC Biannual Research Workshop, Nairobi, May.
- Mwega FM and Ndung'u NS (1996). Macroeconomic Policies and Exchange Rate Management Kenya. Report of an AERC/ICEG Collaborative Project on Macroeconomic Policies and Exchange Rate Management in African Countries. Nairobi, Kenya, African Economic Research Consortium.
- Mwega FM and Ndung'u NS (1997). Macroeconomic Policies and Exchange Rate Management in African Economies. Report of an AERC/ICEG Collaborative Project on Macroeconomic Policies and Exchange Rate Management in African Countries, prepared for the Third AERC Senior Policy Seminar in Accra, Ghana, 27–29 October 1997.
- M'Bet A (1996). Macroeconomic Policies and Exchange Rate Management in African Economies: Côte D'Ivoire and Burkina Faso. Report of an AERC/ICEG Collaborative Project on Macroeconomic Policies and Exchange Rate Management in African Countries. Nairobi, Kenya, African Economic Research Consortium.
- Ndulu BJ and Charles Kimei (1996). Macroeconomic and Exchange Rate Policies in Tanzania. Report of an AERC/ICEG Collaborative Project on Macroeconomic Policies and Exchange Rate Management in African Countries. Nairobi, Kenya, African Economic Research Consortium.
- Nissanke M, Aryeetey E, Hettige H, and Steel WF (1995). *Financial Integration and Development in Sub-Saharan Africa*. Washington DC, World Bank.
- Obstfeld M. (1995). Effects of foreign resource inflows on saving: a methodological overview. Mimeo. Washington, DC, World Bank.
- O'Brien FS and TCI Ryan (1999). Aid and reform in Africa: Kenya case study. Mimeo. Washington, DC, World Bank.
- O'Connell S and Charles Soludo (1998). Aid intensity. Framework Paper for the AERC Collaborative Research Project, Managing Transition from Aid Dependence in Sub-Saharan Africa. Nairobi, Kenya, African Economic Research Consortium.
- Osei B (1995). Ghana: The Burden of Debt Service Payments Under Structural Adjustment. AERC Research Paper No. 33. Nairobi, Kenya, African Economic Research Consortium.

- Roe AR and Griggs J (1990). Internal debt management in Africa. *AERC Special Paper* No. 4. Nairobi, Kenya, African Economic Research Consortium.
- Saasa O and Mwanawina I (1998). Zambia Country Case Study for the AERC Collaborative Research Project, Managing Transition from Aid Dependence in Sub-Saharan Africa. Nairobi, Kenya, African Economic Research Consortium.
- Serven L (1997). Irreversibility, uncertainty and private investment: Analytical issues and some lessons from Africa. *Journal of African Economies*, Supplement to Vol 6(3): 229–268.
- Ssemogerere G and Kalema W (1998). Uganda Country case study for the AERC Collaborative Research Project, Managing Transition from Aid Dependence in Sub-Saharan Africa. Nairobi, Kenya, African Economic Research Consortium.
- Tanzi V and Blejer Mario I (1984). Fiscal deficits and balance of payments disequilibrium in IMF Adjustment Programmes. In: Joaquin M, ed., *Adjustment, Conditionality and International Financing*. Washington, DC, IMF.
- UNCTAD (2000). *Capital Flows and Growth in Africa*. UNCTAD/GDS/MDPB/7. Geneva, United Nations.
- Villanueva D and Mirakhor A (1990). Strategies for financial reforms. *IMF Staff Papers*, 37(3). Washington, DC, International Monetary Fund.
- Wijnbergen SV (1989). External debt, inflation and the public sector: Toward fiscal policy for sustained growth. *The World Bank Economic Review*, 3(3): 297–320.
- World Bank (1994). *Adjustment in Africa: Reforms, Results and the Road Ahead*. New York, Oxford University Press.
- World Bank (1989). *World Development Report 1989*. New York, Oxford University Press. World Bank (1999). *Global Development Finance*, Washington, DC, World Bank.

CAPITAL FLOWS, CAPITAL ACCOUNT REGIMES AND FOREIGN EXCHANGE REGIMES IN AFRICA

Léonce Ndikumana*

I. INTRODUCTION

Until recently, the economics literature had paid relatively little attention to international private capital flows to Africa; most of the discussions focused on official aid (Kasekende, Kitabire and Martin, 1999). However, recent studies have revealed important empirical and policy issues associated with private capital flows to Africa, but research in this area is still severely constrained by the scarcity of data. The existing data on capital inflows to Africa are fragmented and inconsistent, which makes it difficult to assess the nature, the term structure (long-term versus short-term) and the sectoral distribution of foreign capital (Bhinda et al., 1999). As a result, it is still difficult to formulate consistent policy recommendations.

^{*} The author is grateful for constructive comments from Kamran Kousari and S.C. Kasahara. He also appreciates research assistance from Ayman Taha.

This paper investigates a number of issues related to capital account regimes in Africa over the past two decades. First, recent studies have pointed to a "surge" of private capital inflows to Africa, especially in the 1990s (Bhinda et al., 1999). However, the volume of private capital flows is still small relative to domestic capital formation. Unlike in other developing regions, private capital flows to Africa have not increased enough to offset the recent decline in grants and official lending. This study discusses some of the factors that constrain private capital inflows to African countries.

Second, to varying degrees, African countries have pursued liberalization of their capital accounts. In some countries, capital account transactions have been fully liberalized (see appendix). However, liberalization has not been accompanied by improvement in macroeconomic performance. The economic situation in some countries (such as Kenya) has actually deteriorated under liberalization due to excessive speed and poor sequencing of liberalization. While liberalization can attract international capital, the process can also have adverse effects on the economy in the presence of structural macroeconomic imbalances.

Third, the exchange rate regime shifts around the world have been characterized by a "hollowing out" of the middle of the exchange-regime spectrum, where countries are moving from intermediate exchange rate regimes (pegged but managed, or "soft pegs") to either hard pegs or independently floating regimes. For African countries, however, the transition has been asymmetric, mostly involving countries moving from soft pegs to independently floating regimes with virtually no movement from soft to hard pegs. Most countries still have a relatively weak economic base, including an underdeveloped financial system, and a weak regulatory environment. Given these conditions, the transition by African countries to independently floating regimes is puzzling.

Fourth, the establishment of the European Monetary Union (EMU) and the adoption of the euro as the common currency in most of Europe have revived the debate over currency regimes. Some scholars have suggested that given the increasing globalization of finance and trade, countries should abandon exchange rate management and adopt a strong currency as legal tender (Berg and Borensztein, 2000; Calvo and Reinhart, 1999). For African countries, this could involve dollarization, or – with the creation of the euro – "euroization", or possibly the adoption of a strong African currency (e.g. the South African rand) or a regional currency. This study discusses the benefits and costs such a regime shift would entail on capital mobility and macroeconomic stability.

Fifth, an important aspect of capital movements in Africa is the high level of capital flight. According to recent studies, Africa as a region has the highest proportion of private assets held abroad (as a percentage of total assets or GDP) compared to other developing regions (Collier, Hoeffler and Pattillo, 1999). Capital flight has been pervasive in the severely indebted low-income countries, exacerbating a situation already overburdened by high levels of debt (Boyce and Ndikumana, 2001; Ndikumana and Boyce, 2002). Capital flight has imposed high costs on African economies, and it must be regarded as an urgent matter of concern. Capital flight can be interpreted as the outcome of international portfolio choice, as private actors seek to maximize returns on assets and minimize risk. It can also arise from illegal acquisition and use of national resources for private enrichment by private individuals and public officials. Controlling capital flight will require not only the improvement of the macroeconomic conditions to ameliorate incentives for domestic investment, but also the reform of the political and legal systems to improve accountability.

The remainder of the paper is organized as follows. Section II presents the trends and patterns of capital flows to Africa over the past two decades, and discusses the constraints to private capital inflows. Section III highlights recent reforms of capital account regimes and discusses motivations for capital account restrictions in Africa. Section IV discusses exchange rate regime transitions, their implications for capital mobility and economic performance. Section V examines the motivations, advantages, and disadvantages of dollarization for African countries. Section VI presents some estimates of capital flight, and discusses the conduits, causes and consequences of capital flight, as well as implications of capital account liberalization for capital flight. And finally, section VII summarizes and discusses some policy implications.

II. CAPITAL FLOWS: RECENT TRENDS AND PATTERNS

A. FDI "surge" in Africa: an illusion?

From 1990 to 1999, private net resource flows to all developing countries increased almost sixfold, from \$42 billion to about \$239 billion (World Bank, 2000a). Private capital flows increased substantially, bypassing official capital flows. This "surge" in flows to developing countries has been interpreted as a by-product of global financial integration (World Bank, 1997b). International investors penetrate markets in the developing world in search of investment opportunities that can yield higher returns and as a way of minimizing risk through portfolio diversification. At the same time, recent economic reforms undertaken by developing countries have contributed to attracting private capital (Singh, 1999; Singh and Weisse, 1998). Financial integration is supposed to benefit developing countries by allowing them to tap the pool of global capital and achieve higher economic growth from improved resource allocation through financial markets (Fischer, 1999).

At first glance, capital account movements in Africa share some similarities with these global trends. The volume of foreign direct investment (FDI) has increased substantially over the past decade. Annual FDI flows to Africa, excluding South Africa, increased from an average of \$1.2 billion in the 1981–1985 period to \$2.9 billion in 1986–1991, and \$5.3 billion in the 1992–1998 period (UNCTAD, 1995a; 1998; 2000). However, a closer look at the recent increase in FDI flows to Africa shows that it is not as substantial as it appears; it appears to be a "surge" only because the initial levels of flows to most African countries until the early 1980s were extremely low (table 1). For example, the average annual FDI inflows to Zimbabwe were only \$0.2 million in 1981–1985, increasing to \$125 million in 1992–1998; over the same periods, in Zambia they increased from \$19 million to \$108 million, and in Ghana from \$8.5 million to \$107 million.

Moreover, FDI still makes a relatively small contribution to capital formation in African countries. In the 1992–1998 period, FDI as a

Table 1

FDI INFLOWS: VOLUME AND SHARE OF GROSS DOMESTIC INVESTMENT, 1981–1998

(\$ million and per cent)

	(aı	FDI inflow	s age)	FDI a don	ns per cent o nestic inves	of gross tment
Country	1981– 1985	1986– 1991	1992– 1998	1981– 1985	1986– 1991	1992– 1998
Algeria	-7.9	8.0	9.0	0.0	0.0	0.1
Angola	278.0	169.0	420.0	22.5	14.4	33.3
Benin	0.5	3.0	16.0	0.3	1.3	4.6
Botswana	49.8	59.0	4.0	14.3	7.2	0.3
Burkina Faso	1.3	2.0	12.0	0.5	0.4	2.2
Burundi	0.5	1.0	1.0	0.3	0.6	0.9
Cameroon	158.9	-16.0	23.0	8.1	-0.7	1.6
Central African Republic	5.5	2.0	0.0	6.9	1.3	0.2
Chad	n.a.	12.0	15.0	n.a.	11.2	7.9
Congo, Dem, Rep. of	-17.8	-10.0	2.0	-1.7	-1.0	0.3
Congo	34.0	15.0	26.0	3.9	3.3	3.2
Côte d'Ivoire	33.7	49.0	187.0	2.4	4.9	14.5
Eavpt	688.7	932.0	772.0	8.5	8.7	7.0
Ethiopia	na	na	62.0	na	na	6.6
Gabon	64.3	53.0	67.0	5.0	4 1	5.3
Ghana	8.5	11.0	107.0	3.5	1.6	7.8
Guinea	0.2	18.0	12.0	na	4.3	17
Kenva	15.9	35.0	20.0	1.3	2.2	1.4
esotho	3.9	11.0	198.0	2.8	3.8	32.0
iberia	20.8	200.0	15.0	15.5	190.5	n a
ibva	-272.2	45.0	-39.0	-3.3	na	n a
Madagascar	22	12.0	13.0	0.7	3.7	3.3
Malawi	7.6	15.0	26.0	3.4	5.3	8.7
Mali	4.3	na	38.0	22	na	6.8
Vauritania	8.9	3.0	6.0	4.2	1.3	3.0
Mauritius	3.4	24.0	25.0	1.5	3.8	2.4
Vorocco	50.4	132.0	509.0	1.4	2.6	7.4
Mozambique	na	8.0	70.0	na	24	13.7
Namibia	n.a.	26.0	102.0	n.a.	6.8	16.2
Niger	3.1	16.0	14.0	1.2	5.9	8.9
Nigeria	400.3	728.0	1 352.0	5.8	17.0	23.6
Rwanda	15.9	14.0	3.0	6.7	4.3	1.4
Senegal	8.2	13.0	54.0	2.7	2.1	6.8
Sevchelles	10.1	20.0	34.0	25.2	28.1	20.4
Sierra Leone	-2.2	-10.0	-1.0	-5.6	-12.3	-1.1
South Africa	n.a.	-27.0	965.0	n.a.	-0.2	4.5
Sudan	n.a.	-4.0	94.0	n.a.	-0.1	n.a.
Swaziland	6.9	53.0	22.0	4.4	37.0	6 7
Tanzania, United Rep. of	8.8	n.a	102.0	n.a.	n.a.	8.9
Тодо	6.9	10.0	21.0	4.3	3.8	10.4
Tunisia	207.6	83.0	474 0	7.6	2.9	10.4
Uganda	 n a	n a	111 0	n a	n.a	14.2
Zambia	19.2	100.0	108.0	3 7	24.3	22.6
Zimbabwo	0.2	10.0	125.0	0.0	0.7	8.6

Source: UNCTAD (1995a, 1998 and 2000).

percentage of gross domestic investment was less than 5 per cent for 17 of the 41 countries in the sample in table 1 or less than 10 per cent for 30 of those countries (excluding countries with missing data). The notable exceptions were Nigeria, Seychelles and Zambia with ratios over 20 per cent, and Angola and Lesotho with ratios over 30 per cent. These countries also had high gross investment rates. For instance, the share of gross domestic investment in GDP for the 1992–1998 period was 23 per cent for Angola, 77 per cent for Lesotho and 39 per cent for Seychelles (World Bank, 2000b).

(i) Africa's shrinking share of FDI flows to developing countries

Africa's share in total FDI flows to developing countries has been declining since the second half of the 1980s, while the absolute volume has been increasing (figure 1 and table 2). In 1999, sub-Saharan Africa (SSA) received only 4.3 per cent of total FDI inflows to the developing world, down from an average of 10.5 per cent in the 1981–1989 period. It is clear that Africa has not benefited substantially from this global increase in capital flows as much as other developing countries. The low levels of FDI to Africa cannot be fully explained by rates-of-return considerations, as such rates have been comparable to or even higher than those in other developing regions (figure 2).

(ii) The changing distribution of FDI in Africa

FDI flows to Africa have traditionally been concentrated in extractive industries. The top 10 beneficiaries of FDI inflows accounted for 82 per cent of total FDI inflows to Africa (excluding South Africa) in the 1992–1998 period (figure 3). Oil exporters have been the main beneficiaries. However, their share has declined over the years, from 70 per cent of total inflows into Africa in the second half of the 1980s to 59 per cent in the 1990s.

While the initial drive behind FDI flows to Africa was the extraction of primary resources, especially oil and minerals, the destination for foreign capital seems to be changing slowly. Capital inflows are low, stagnating,

Figure 1 CAPITAL FLOWS TO AFRICA: VOLUME AND SHARE IN DEVELOPING COUNTRIES



Source: World Bank (1997a and 2000a); for FDI: UNCTAD (1995a,1998, 2000). Note: SSA = sub-Saharan Africa; DC = developing countries.

-	VOLUME	ATIONAL E AND SF	. CAPITA HARE IN (Millions	Table NL FLOW DEVELC	e 2 /S TO SL DPING C Int 1995 di	IB-SAHA OUNTRII ollars)	RAN AFI ES, 1989-	RICA: -1999			
Indicator	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Long-term debt ^a Volume Share <i>(per cent)</i>	7 055 17.3	4 306 9.2	3 705 7.8	3 709 5.8	5 245 6.8	4 520 6.9	3 973 4.8	821 0.8	2 246 2.0	-428 n.a.	1 347 3.0
Grants (excl. tech. cooperation) Volume Share (<i>per cent</i>)	10 711 49.8	13 048 41.7	11 893 29.7	12 091 36.0	10 890 36.6	12 396 36.6	11 414 34.9	9 989 36.5	9 464 37.3	10 274 37.8	10 127 38.3
FDI Volume Share (<i>per cent</i>)	5 335 16.8	2 361 6.5	2 998 6.9	3 377 6.2	3 826 5.0	5 835 5.4	4 699 4.2	5 399 3.8	6 743 3.9	7 540 4.2	8 974 4.3
Portfolio equity investment Volume Share (<i>per cent</i>)	0.0	0.0	0.0	153 1.3	183 0.3	891 2.4	4 868 13.5	1 967 4.1	1 474 5.0	681 4.4	493 1.8
Net private resource flows Volume Share <i>(per cent)</i>	п.а. п.а.	1 377 3.0	n.a. n.a.	л.а. п.а.	2 887 1.7	5 087 2.8	9 501 4.6	5 424 1.9	9 396 3.2	3 461 1.3	7 264 3.0
Source: World Bank (1997a, 2000a); Note: Nominal values are converte a Net flows of long-term debt,	UNCTAD (id into real v excluding In	1998; 2000) /alues using AF credit.	g the United	d States pro	oducer price	index.					



(Per cent)



Source: UNCTAD (1995a, and 1998).

a The rate of return is net income of United States foreign affiliates divided by the average of the beginning-of-year and end-of-year FDI stock.

and even declining in some oil exporters such as Cameroon, Congo and Gabon (table 3). At the same time, some "newcomers" are attracting increasing attention from international investors (figure 4). Noteworthy cases are Mozambique, Uganda, the United Republic of Tanzania, Zambia,



DISTRIBUTION ON FDI INFLOWS IN AFRICA^a

Figure 3

Source: UNCTAD, World Investment Report (various). a Excluding South Africa.

and Zimbabwe. These are also among the African countries that have made significant progress in economic policy reforms over the last decade, which have contributed to price stability, fiscal discipline, improvement of the economic infrastructure, and the creation of a better environment for private investment. There is also evidence that the returns to investment in the extractive sectors are not higher than those in the manufacturing sector (figure 2), which may partly explain the increasing sectoral diversification of FDI.

Other capital flows to Africa В.

Private capital flows to developing countries have increased significantly relative to official capital flows over the last two decades. The share of private capital flows in total net resource flows to all developing countries increased from 58 per cent in 1980 to 82 per cent in 1999. By

		FDI FL	OWS T	O SELE (Milli	ons of co	AFRICA onstant	1995 dol	lars)))					
Country	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Oil exporting countries														
Angola	78	112	153	222	-360	712	307	317	176	472	177	403	1 117	1 803
Cameroon	24	15	78	0	-67	-16	31	5	ဝု	7	8	44	50	40
Congo	27	52	10	ო	8	5	4	156	5	e	8	ი	4	5
Egypt	1516	1 150	1 388	1 389	788	271	489	517	1 301	596	623	868	1 080	1491
Gabon	137	109	155	-34	79	-59	135	-120	-104	-113	305	140	212	199
Nigeria	208	732	440	2 092	631	762	955	1411	2 030	1 079	1 558	1 505	1 054	1 392
Tunisia	78	112	71	88	80	134	560	485	586	378	343	358	672	366
Others														
Botswana	87	138	47	47	41	ဓု	-2	-301	-15	70	69	98	06	11
Côte d'Ivoire	88	107	61	21	23	17	-246	92	122	268	295	440	315	277
Kenya	41	52	0	69	61	20	9	2	4	32	13	39	42	42
Lesotho	0	7	24	4	18	6	ი	16	283	275	280	263	263	135
Mauritius	0	21	28	40	44	20	16	16	21	19	36	54	12	49
Mozambique	0	0	9	ო	10	25	27	34	36	45	71	63	214	382
Seychelles	17	23	27	26	29	21	10	20	31	40	29	53	55	60
South Africa	-66	-91	514	1 517	1 883	227	-45	-20	394	1 241	800	3 732	563	1 368
Tanzania, United Rep. of	-10	7	ß	7	ကု	ო	13	21	52	150	146	155	172	182
Uganda	0	0	ς	-7	-16	-	ი	58	91	125	117	171	211	179
Zambia	35	91	108	182	218	36	48	55	41	97	114	202	199	162
Zimbabwe	10	-38	-21	<u>-</u>	-13	ო	21	40	42	118	79	132	445	59

Table 3



(Million constant 1995 \$)



Source: UNCTAD, World Investment Report (various issues, 1992 to 2000). Note: Nominal values are deflated to real values using the US PPI index (base 1995=100).

comparison, over the same period, the ratio for sub-Saharan Africa (SSA) increased only slightly, from 37 per cent to 41 per cent (figure 1).

The volume of official capital inflows to SSA has also decreased since the 1980s. Net long-term lending has declined both in absolute volume and as a share of total net lending to all developing countries. SSA's share in grants has slightly declined, although not as markedly as long-term lending. The decline in official long-term lending and grants has not been compensated by any increase in private lending. Sub-Saharan Africa's share in long-term lending to developing countries declined from 17 per cent in 1989 to just 3 per cent in 1999. The increase in FDI flows to Africa in recent years has been lower compared to other regions, and other private capital flows, such as equity portfolio investments, have declined after reaching a peak in 1995 (figure 1 and table 2). In 1999, portfolio equity investment in SSA was only \$493 million in nominal terms, compared to \$1.1 billion for South Asia and \$3.6 billion for Latin America and the Caribbean (World Bank, 2000a). After increasing substantially from 1992 to 1995 (from \$153 million to \$4.9 billion in constant 1995 dollars), the volume of portfolio investment in SSA declined sharply thereafter. Private net resource flows declined between 1980 and 1990 and then increased, while official net resource flows declined. This explains the increase in the share of private net resource flows after 1990 (figure 1).

C. Constraints on private capital inflows into Africa

Among the many constraints on the expansion of private capital inflows into Africa are the weakness of the macroeconomic environment, underdeveloped financial systems, high country risk, and exchange rate misalignment.

(i) The weak macroeconomic environment

The weakness of the macroeconomic environment in African countries is the result of a range of factors including low resource endowment, exogenous shocks, and misguided macroeconomic policies that have accentuated the adverse effects of exogenous shocks. Economic performance has been dismal in many countries, especially since the 1980s (Collier and Gunning, 1999a; 1999b). However, evidence shows that countries that have consistently pursued economic reforms aimed at redressing economic imbalances have experienced an improvement in economic performance, which has increased investor confidence. This may explain the recent increase in foreign capital inflows into countries such as Mozambique, Uganda and the United Republic of Tanzania (table 3).

(ii) Underdeveloped financial systems

The level of sophistication of the financial system is an important determinant both of the ability of a country to attract international capital and the ability of the financial system to withstand shocks to global capital flows. With the exception of a few countries, such as South Africa, Egypt, Morocco, and probably Kenya, Mauritius and Nigeria, most African countries still have an underdeveloped financial system.¹ The following features are especially worth emphasizing:

- *Size and depth:* In most African countries, financial systems are still shallow. With the exception of South Africa, African financial markets offer a limited range of financial products. Bank lending is predominantly short term, government securities are mostly of short maturity, banks in many countries do not issue credit cards (issued in only 15 sub-Saharan countries in 1997), and inter-bank lending is still underdeveloped (Gelbard and Leite, 1999).
- Low stock market development: The majority of African countries do not have active stock markets; most of them, where they exist, including the long-established stock markets such as the Egyptian Stock Exchange, are still small and illiquid (Ndikumana, 2001).
- *Poor performance:* The banking sector in African countries is still characterized by inefficiencies in credit allocation and poor loan repayment enforcement mechanisms, which result in a high proportion

of non-performing loans. Gelbard and Leite (1999) reported an average share of non-performing loans of over 20 percent in a sample of 38 sub-Saharan countries in 1997.

• Weak regulatory and supervisory framework: Some of the basic institutional requirements for effective banking supervision (e.g. modern banking laws, central bank autonomy) and prudential regulation (e.g. establishment and enforcement of minimum bank capitalization ratios, deposit insurance) are still non-existent in many countries (Gelbard and Leite, 1999; Mehran et al., 1998; Nissanke and Aryeetey, 1998).

In the context of adjustment programmes, some countries have made significant progress in reforming their banking systems, in particular, by establishing new banking laws or reforming existing ones to improve supervision and prudential regulation. Moreover, the participation of the State in the banking sector has decreased as a result of the privatization of State-owned banks and the easing of licensing requirements, which have accelerated the creation of new private banks. To the extent that these reforms are supported by market-friendly macroeconomic policies (especially fiscal discipline and non-inflationary monetary policy), they will enhance investor confidence and attract more foreign private capital.

(iii) High country risk

Africa has traditionally been considered as being "atypically risky" with a "capital-hostile environment" (Collier and Pattillo, 2000: 3). Surveys reveal that investors (foreign as well as local) view the main obstacles to investment as being fear of political instability and the risk of policy reversal. High country risk is also attributable to weak and volatile macroeconomic fundamentals, such as variable inflation rates, exchange rate instability and chronic fiscal deficits. Another important factor of high investment risk in Africa is *effective distance* as perceived by international investors, which is influenced by geographic distance, transactions costs and cultural/psychological distance.

African countries can improve their risk ratings through sustained economic reform. It should be noted, however, that international rating agencies tend to rate Africa as being riskier than is warranted by objective conditions (Haque, Mark and Mathieson, 2000). As a result, the impact of economic reforms on risk rating for a particular country may be retarded by a "bad neighbourhood" effect.

III. CAPITAL ACCOUNT REGIMES: OPENNESS AND RELATED ISSUES

A. Recent developments in capital account policies

(i) Towards greater openness

In the context of the macroeconomic reforms initiated in the 1980s, which accelerated in the 1990s, many African countries moved towards greater capital account openness by abolishing or relaxing existing capital controls. The text in the appendix and table A.1 provide a summary of important recent reforms for some countries. The following is a non-exhaustive list of samples of recent reforms in the current account regimes.

- Limits to foreigners' participation in domestic investment have been relaxed and even abolished in some countries. However, governments have maintained controls in strategic sectors, such as crude oil and gas in the case of Nigeria.
- Countries have relaxed or abolished restrictions on non-residents' ability to repatriate dividends, interest income, and proceeds of sales or liquidation of the initial investments.
- Investment by residents in foreign-currency-denominated assets locally and abroad is now allowed in a number of countries. However, even in countries with relatively liberal regimes, some limitations are maintained for strategic reasons. For example, in South Africa, the

Government maintains a limit on the amount of investment abroad by residents. Corporations can invest up to 250 million rand within the Southern African Development Community (SADC) region (there are no limits for Lesotho, Namibia, and Swaziland) and 50 million rand elsewhere. Domestic/resident institutional investors are allowed to invest abroad up to 15 per cent of their assets, while the maximum allowed for individuals is 750,000 rand.

• Recent reforms have allowed non-residents to purchase stocks and government securities. Kenya and South Africa are the leading reformers in capital account liberalization.

(ii) Liberalization in the context of regional arrangements

Liberalization of capital account regimes has also accelerated in the context of new or existing regional arrangements. With the exception of the Communauté financière africaine (CFA), which is an integrated monetary union, African regional arrangements have traditionally emphasized trade integration. Recently, countries have pursued greater capital mobility. A noteworthy example is the Cross-Border Initiative in Eastern and Southern Africa (CBI) (Fajgenbaum et al., 1999). However, in the case of overlapping regional arrangements, economic incentives can be distorted when obligations under the various bodies are inconsistent. For example, it is not clear how countries that belong to both the CBI and SADC can reconcile discrepancies in tariff arrangements, since some of these are different between the two bodies. Harmonization of obligations across regional entities is necessary to allow countries to take full advantage of regional integration.

(iii) Scope, speed and sequencing of liberalization

Three important points are worth emphasizing with respect to recent capital account liberalization in Africa. First, despite the visible trend towards liberalization, there is still a wide diversity in capital account openness across the continent. Some countries have very open capital accounts, such as Kenya and South Africa, with few restrictions on FDI and other capital account transactions by individuals and firms. In other countries, transactions are tightly controlled, including restrictions based on the sectoral allocation of FDI (table A.1).

Second, countries must pay serious attention to the scope, speed and sequencing of capital account liberalization to minimize potential adverse effects of openness. Evidence shows that speedy liberalization results in macroeconomic instability, generating effects that are opposite to the intended objectives of liberalization. A compelling example is Kenya. Facing an imminent crisis at the end of the 1980s, the Kenyan Government embarked on a set of aggressive reforms, including the opening up of the capital account and liberalization of the foreign exchange market. However, the crisis continued throughout the 1990s as a result of severe macroeconomic imbalances. Capital account liberalization ultimately increased the country's vulnerability to fluctuations in capital flows, especially by providing "legal" channels of capital flight (Ariyoshi et al., 2000: 67).

Third, to attract foreign capital, capital account openness must be supported by broad-based macroeconomic reforms aimed at improving the investment environment. In particular, countries need to pursue fiscal discipline, responsible monetary policy committed to price stability,² and institutional reforms aimed at fostering a legal and regulatory environment that is conducive to financial intermediation. There is evidence that countries that have made progress in economic and institutional reform and have improved the credibility of their macroeconomic policy are also attracting greater attention among international investors.

B. Motivations for capital account restrictions in Africa

(i) Why liberalize the capital account?

Proponents of capital account liberalization have advanced two main arguments in its favour (Fischer, 1999). The first is that capital account liberalization is an "inevitable step on the path of development which cannot
be avoided and should be embraced" (Fischer, 1999: 2). Historical evidence demonstrates, so the argument goes, that the most advanced economies have open capital accounts. The second, and arguably more powerful, motivation for capital account liberalization is that the potential benefits of liberalization outweigh the costs. Potential benefits include increased access to a larger and more diversified pool of funds by investors (local and foreign), resulting in greater opportunities for portfolio diversification.

However, even proponents of capital account liberalization acknowledge important risks associated with it (Fischer, 1999: 2–3). International capital flows – especially short-term flows – tend to be highly volatile and capital reversals are costly. Capital markets tend to react erratically following shocks to the economy. Through contagion and spillover effects, capital market shocks tend to spread quickly across countries, often irrationally, reflecting herd behaviour among investors. The risks associated with capital account openness are particularly high for countries with weak macroeconomic fundamentals, underdeveloped financial systems and poor banking regulatory institutional infrastructure. African countries should therefore exercise great caution in liberalizing their capital accounts.

(ii) Capital controls versus capital restrictions

The literature on the management of international capital flows has focused primarily on the desirability and effects of capital controls. However, as Cooper (1999) points out, capital controls are a subset of a larger set of policy options for managing international capital flows. Such controls are typically quantitative limitations on capital flows. There are, however, administrative and price penalties on capital movements that may have similar effects as capital controls. These include differential reserve requirements on assets, and tax preferential treatment of certain categories of capital deemed favourable for economic growth (such as FDI, as opposed to short-term portfolio equity investment). Therefore, countries have more than the option of imposing or not imposing capital controls. They can also select and sequence various strategies in order to manage the volume and distribution of capital inflows and the volume of capital outflows. The debate over capital restrictions is almost ironic in the context of African countries. Because capital inflows are still low, one may argue that African countries need to attract them, not control them. However, there are good reasons for a proactive approach to capital account management in African countries. The conditions for full liberalization of capital movements are very hard to meet, and they are largely lacking in most African countries. These conditions include low barriers to international trade, a well-developed, well-diversified and well-regulated financial system, and no large differences between a country's and the world's tax regime relating to capital (Cooper 1999: 124). The following are some of the reasons why African countries should selectively impose certain restrictions on capital flows.

Argument 1: Protecting domestic financial systems

A surge in international capital inflows can destabilize domestic financial systems. This is particularly the case for short-term capital and other forms of capital flows that have a high propensity for quick and sudden reversal. Given that financial systems are still underdeveloped in most African countries and that the regulatory framework is still weak, it may be necessary to adopt a selectively proactive approach to capital account management. For example, South Africa suffered from the contagion effects of the Asian financial crisis in 1997–1998, whereby shaken investor confidence caused large capital outflows and a depreciation of the rand.

Argument 2: Shaping industrial growth

Evidence shows that private capital inflows to African countries still primarily target extractive activities, which contributes to perpetuating the dependence on the primary sector. Because extractive activities are predominantly capital-intensive, capital inflows in those areas have little contribution to employment creation. It is desirable to design policies that can redirect foreign capital into new, growth-promoting activities. Such policies include imposing a minimum stay requirement on foreign capital, establishing differential reserve requirements in favour of growth-promoting capital, and providing preferential tax treatment to foreign capital that is directed to new employment-creating and growth-promoting activities.

Argument 3: Redistributive capital restrictions

In Africa, as in other developed and developing countries, participation in capital markets is heavily skewed in favour of the wealthiest segments of the population. The majority of citizens are bystanders who seldom benefit from financial market booms, yet they often bear disproportionately high costs of financial fragility. African countries can devise policies aimed at redistributing the gains from expansion of the capital market, which can contribute to improving the living standards of the population. For example, taxation of capital gains with the aim of increasing funding for socially productive public investment (e.g. health, education and nutrition) can induce significant progressive effects.

Argument 4: Protecting export performance

Unregulated capital flows can result in sharp fluctuations in exchange rates that can damage export performance. High capital inflows that result in an appreciation of the national currency will discourage international demand for national exports while encouraging imports of foreign goods; this will depress the current account balance. For emerging market economies in Africa and others that have experienced a substantial increase in capital inflows, national authorities must consider options for active management of capital flows to minimize the potential adverse effects of those flows on trade.

IV. EXCHANGE RATE REGIMES: TRANSITIONS AND IMPLICATIONS FOR CAPITAL MOBILITY

A. The global context: regime shifts and the "hollowing-out" of the middle ground

Recent studies have observed marked shifts in exchange rate regimes around the world. These shifts are characterized by a "hollowing out" of the middle of the exchange rate regime spectrum; countries are moving from intermediate regimes ("soft pegs") to very hard pegs and independently floating regimes (Fischer, 2001; Mussa, et al., 2000; Calvo and Reinhart, 2000).³ These developments have been interpreted as the natural outcome of the increasingly global integration of finance and trade. The recent crises experienced by emerging market economies have motivated research on the connections between the chances and severity of capital account crises and the exchange rate regimes. Some scholars have concluded that, with few exceptions, the effects of these crises were the worst in those emerging market economies that had either explicitly fixed exchange rate pegs or where movements in exchange rates were artificially constrained. In contrast, the argument goes, emerging market economies that allowed flexibility of exchange rates fared better during crises (Mussa et al., 2000: 21).

Whether the recent experiences of crises in emerging market economies constitute evidence for a causal relationship between financial crises and exchange rate regimes remains unclear. Nonetheless, the nature of the exchange rate regime is relevant because it can determine the ability of a country to hedge against a crisis, and the magnitude of the crisis may depend on the particular exchange rate regime in place. In practice, however, sorting out the effects attributable to the exchange rate regime is difficult, partly because in many cases financial market disturbances only amplify the effects of shocks that originate from the real side or from fundamental domestic policy misalignments. Recent experiences show that the main causes of financial crises are: the weakness of the domestic financial system (as in the Russian Federation and Brazil) and excessive foreign-currency-denominated borrowing in the corporate sector (as in the Republic of Korea and Thailand), the loss in competitiveness of the export sector, and other changes in the fundamental aspects of the economy. Nevertheless, for countries that are significantly integrated in the global financial markets, the choice of the exchange rate regime matters. In particular, such countries may find it costly to maintain rigidly fixed exchange rates.

B. Exchange rate regime shifts in Africa: asymmetric transition

Many African countries have liberalized their foreign exchange markets and moved away from soft pegs towards independently floating or managed floating exchange rate regimes (table A.2). However, these transitions have been asymmetric. While countries have moved out of the middle of the exchange regime spectrum, there has been virtually no movement out of or into the category of hard-peg regimes (table A.2 and figure 5). Out of 51 African countries, 53 per cent were classified as having soft-peg regimes in 1991. In 1999, only 24 per cent of the countries are in this category. In contrast, while the category of independently floating exchange rates counted only 9 countries (or 18 per cent of the sample) in 1991, the number had increased to 24 (or 47 per cent of the sample) in 1999. Only Guinea-Bissau moved from the intermediate category to the hard-pegs category. The transition matrix in table 4 indicates that over 55 per cent of the countries (15 out of 27 countries) that were in the softpegs category in 1991 had adopted an independent floating regime by 1999. In contrast, no shifts - with a single exception of Namibia which shifted from a hard peg to a soft peg – occurred among countries in both extremes of the exchange regime spectrum. The countries in the hard-pegs category in 1999 are older members of the CFA zone, again except for Namibia, and Guinea-Bissau which joined the CFA zone in 1997. Similarly, all nine countries in the independent-float category in 1991 were still in the same category in 1999. The existing evidence on African countries is inconclusive as to the relative advantages and disadvantages of alternative exchange rate regimes. Some of the findings are discussed below.

Figure 5

EXCHANGE RATE REGIME TRANSITION IN AFRICA AND OTHER REGIONS FROM 1991 TO 1999



(Number of countries by regime and share in the sample)

Source: Fischer (2001).

Note: Figures in square brackets indicate the number of countries in the corresponding exchange rate regime category.

a Excluding emerging markets.

b Excluding developing countries and emerging markets.

Table 4

EXCHANGE RATE REGIME SHIFTS IN AFRICA: TRANSITION MATRIX FOR 1991 AND 1999

			1999	regime	
		Hard pegs	Soft pegs	Independent floats	Total
	Hard pegs	14 (93.3%)	1 (6.7%)	0 (0%)	15 (29%)
egime	Soft pegs	1 (3.7%)	11 (40.7%)	15 (55.6%)	27 (53%)
1991	Independent floats	0 (0%)	0 0%)	9 (100%)	9 (18%)
	Total	15 (29%)	12 (24%)	24 (47%)	51 (100%)

Note: The cells contain the number of countries (and percentage of the sample) belonging to different currency regimes in 1991 and 1999. The "hard peg" category includes regimes with a currency board or arrangements with no special legal tender; the "soft peg" category includes other conventional fixed pegs, pegged rates in horizontal bands, crawling pegs, and rates with crawling bands; the "independent floats" category includes independently floating and managed float with no pre-announced exchange rate path.

C. Exchange rate regimes and economic performance: some casual observations

It is difficult to establish a definitive relationship between economic performance and exchange rate regimes in Africa for many reasons. First, the classification of countries along the spectrum of exchange rate regimes, from very hard pegs to independently floating regimes, is not arbitrary. Second, while the level and fluctuations in exchange rates can affect economic performance, it is only one of many interrelated factors that determine a country's economic outcomes. Therefore, sorting out the effects that are attributable to shifts in exchange rate regimes is difficult. Sophisticated econometric analysis can help to address this issue, but such an exercise is not attempted in this study; for this reason, the following observations are rather casual and should not be interpreted as based on definitive empirical observations. Tables 5 and 6 present some indicators of economic performance for African countries classified by exchange rate regime. The results show that performance indicators have varied widely within different regime categories. The information is summarized in table 7, which presents the percentage of countries in each category whose economic indicators improved in the 1990s compared to the 1980s.

For the majority of countries in the hard-peg category (CFA zone members), there was little improvement in the growth of per capita GDP from the 1980s to the 1990s. While 50 per cent of the countries in this group had a positive growth rate in the 1990s, the growth rate was higher than in the 1980s for only 36 per cent of these countries. Furthermore, inflation was higher and trade lower in the 1990s compared to the 1980s for 71 per cent of the countries in this group. However, two important empirical facts are worth emphasizing for the CFA zone. First, countries in this group experienced much lower inflation rates than countries in the other groups, both in the 1980s and the 1990s. Virtually all the countries in the hard-peg group had single-digit inflation rates (except for Guinea-Bissau, which joined the CFA zone in 1997). Second, as the data in table 8 show, countries in the CFA zone experienced some improvement in economic performance following the devaluation of the CFA franc in 1994.⁴ The average annual growth rate of GDP per capita for the group was higher in 1995–1998, at 2.3 per cent, than in 1990–1994, at -2.8 per cent. Exports also were higher in 1995–1998 for all the countries in the group, with the export-to-GDP ratio averaging 36 per cent in 1995–1998 compared to 28 per cent in 1990-1994. No similar patterns are observed in other regional groupings on the continent (see table 9 for the SADC group).⁵

In the soft-pegs category, a larger proportion of countries (82 per cent) achieved positive GDP growth, although growth was positive and higher in the 1990s than in the 1980s for only 36 per cent of these countries. This group also experienced improvement in inflation (lower in 82 per cent of the countries), in the current account balance (which improved in 60 per cent of the countries) and in international reserves (with a higher stock of reserves in 80 per cent of the countries).

The proportion of countries showing improvements in GDP growth was lowest in the independent floats category. Inflation was higher in more

			Tabl	e 5				
INFI	GDP GROWTH	H, CURRENT RICAN COU	- ACCOUNT NTRIES BY	, INTERNAT EXCHANGE	'IONAL RES E RATE REG	ERVES ANG IME, 1980–1	С 1998	
	Growth of pe	r capita GDP	Current accc	ount balance	Net internatic	onal reserves	Infla	ntion
	(Annual pe	rcentage) ^a	(Percentaç	ge of GDP)	(Percentaç	je of GDP)	(Average ann change in G	iai percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group I – Hard pegs								
Benin	-0.5	1.7	-6.6	-2.2	0.7	11.4	2.9	7.9
Burkina Faso	1.4	1.1	-2.1	-4.6	8.9	14.3	4.6	4.8
Cameroon	1.6	-2.1	-4.2	-2.7	1.3	0.1	6.2	4.8
Central African Republic	-0.8	-0.6	-4.6	-5.6	7.5	14.4	9.3	4.2
Chad	3.9	6.0-	-0.6	-4.8	3.2	7.0	2.7	7.5
Congo	0.9	-1.9	-13.1	-24.5	1.5	1.4	4.4	4.4
Côte d'Ivoire	-2.9	0.6	-9.7	-5.4	0.1	3.1	3.5	6.2
Djibouti	n.a.	-5.3	n.a.	-10.0	15.5	17.1	n.a.	4.1
Equatorial Guinea	-1.4	14.3	-17.3	-37.0	3.4	2.1	-0.8	9.3
Gabon	-2.9	0.7	-3.6	1.8	4.0	3.2	3.5	6.2
Guinea-Bissau	1.7	-1.2	-41.0	-21.1	6.2	6.7	57.7	41.3
Mali	-1.8	0.8	-10.4	-8.7	1.7	13.1	5.3	7.6
Niger	-3.6	-1.3	-7.7	-8.3	7.1	6.7	3.3	4.8
Senegal	0.3	0.2	-11.4	-5.4	0.3	4.0	6.7	4.4
Togo	-1.5	-0.7	-4.9	-8.5	23.1	12.7	5.6	7.5
								/

L	LATION IN AF							
	Growth of pe	r capita GDP	Current acco	ount balance	Net internatio	onal reserves	Infla	tion
	(Annual pe	rcentage) ^a	(Percentaç	ge of GDP)	(Percentag	je of GDP)	(Average annu change in G	iai percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group II – Soft pegs								
Botswana	6.4	1.7	0.3	6.8	56.9	102.0	12.7	9.2
Cape Verde	4.4	2.7	-1.2	-6.8	27.7	13.9	5.4	4.0
Comoros	0.3	-3.2	-9.8	-7.5	6 .0	17.5	7.6	3.6
Egypt	2.8	2.2	-5.8	2.1	3.1	22.1	12.8	10.8
Lesotho	1.3	4.7	3.4	-9.8	15.4	42.2	13.8	8.1
Libyan Arab Jamahiriya	n.a.	n.a.	-1.8	n.a.	23.7	n.a.	n.a.	n.a.
Morocco	2.0	0.4	-5.4	4.1-	1.5	11.7	7.2	3.7
Namibia	-1.8	0.8	n.a.	3.4	n.a.	6.0	13.6	9.0
Seychelles	2.6	4.1	-13.6	-7.9	6.2	5.7	4.2	1.6
Swaziland	3.3	-0.2	-6.5	-0.1	20.2	25.3	10.5	11.2
Tunisia	0.6	2.7	-4.8	4.5	6.2	8.0	8.4	4.9
Zimbabwe	-0.1	0.0	-2.0	-4.8	1.8	4.3	12.4	22.4
Group III – Independent flo	oat							
Algeria	0.0	-1.0	-0.7	3.7	4.2	6.9	7.9	23.3
Angola	0.8	-3.2	-0.6	-4.3	n.a.	4.9	4.2	1 254.1
Burundi	1.6	-5.6	-4.5	-4.0	5.3	14.7	4.3	11.1
Congo, Dem. Rep. of	-1.2	-8.4	-4.4	-8.4	1.8	1.7	63.8	4 010.7
Eritrea	n.a.	2.4	n.a.	-5.6	n.a.	n.a.	n.a.	11.2
Ethiopia	-2.1	2.6	-5.4	-6.4	2.2	7.2	5.4	8.2
Gambia	0.0	-1.0	-5.1	6.0-	4.5	24.5	16.6	5.3

	Growth of pe	r capita GDP	Current accc	nunt balance	Net internatio	inal reserves	Infla	tion
	(Annual pe	rcentage) ^a	(Percentaç	je of GDP)	(Percentag	ie of GDP)	(Average annu change in Gi	ial percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Ghana	-0.7	1. 5	-2.7	-5.2	5.6	7.8	47.2	27.1
Guinea	1.7	1.5	-6.2	-5.5	n.a.	2.8	24.0	0.0
Kenya	0.5	-0.5	4.9	-2.2	4.8	5.2	9.3	14.6
Liberia	n.a.	n.a.	-0.9	n.a.	0.5	n.a.	n.a.	n.a.
Madagascar	-1.9	-1.6	-7.2	-7.4	3.6	4.4	18.6	19.1
Malawi	-0.8	1.0	-9.0	-15.4	4.5	7.0	15.3	29.0
Mauritania	-2.8	1.3	-16.4	-1.8	10.6	9.4	9.8	5.1
Mauritius	5.0	3.8	-3.4	-1.7	9.3	22.5	9.6	6.7
Mozambique	-2.6	3.2	-12.6	-16.0	4.3	10.9	41.7	38.2
Nigeria	-2.3	-0.3	-1.6	0.9	6.0	11.3	18.9	33.9
Rwanda	-0.7	-4.2	-4.4	-3.4	8.3	5.8	4.2	16.3
São Tome and Príncipe	-1.0	-1.0	-33.9	-24.1	n.a.	18.6	30.2	53.4
Sierra Leone	-2.1	-7.2	-3.3	-6.4	1.0	3.4	59.2	43.4
Somalia	n.a.	n.a.	-15.5	n.a.	1.4	n.a.	n.a.	n.a.
South Africa	-1.6	-0.2	0.8	0.1	0.7	1.5	15.1	11.4
Sudan	-2.1	5.6	-5.7	-17.6	0.2	0.8	40.0	72.5
Tanzania, United Rep. of	0.7	0.0	-7.0	-13.0	1.3	6.4	31.3	24.0
Uganda	-0.1	3.9	-4.6	6.6-	1.6	6.2	116.5	20.1
Zambia	-2.1	-1.7	-12.2	-13.6	3.3	5.8	39.0	75.0

CAPITAL FLOWS, CAPITAL ACCOUNT REGIMES AND FOREIGN EXCHANGE REGIMES IN AFRICA 341

Table 5 (concluded)

	Nominal ex (Nat. cu	<pre>cchange rate urr./US\$)</pre>	Real exci (Index 15	hange rate 395=100) ^a	Ex _i (Percenta	ports ige of GDP)	Averaç (Percentaç	ge trade ge of GDP) ^b
Countries/regime 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group I – Hard pegs								
Benin	334.3	426.9	n.a.	100.7	26.2	24.5	33.2	29.0
Burkina Faso	334.3	426.9	140.4	118.0	10.4	12.1	20.7	19.6
Cameroon	334.3	426.9	113.1	112.7	26.4	22.2	26.3	20.8
Central African Republic	334.3	426.9	154.3	111.5	20.5	16.7	26.5	20.8
Chad	334.3	426.9	132.9	116.7	14.3	15.8	21.0	23.1
Congo	334.3	426.9	91.3	98.8	52.0	57.4	52.3	60.7
Côte d'Ivoire	334.3	426.9	117.6	109.7	37.1	38.2	35.5	35.5
Djibouti	177.7	177.7	n.a.	n.a.	n.a.	44.9	n.a.	56.6
Equatorial Guinea	334.3	426.9	n.a.	n.a.	35.9	59.1	50.2	82.2
Gabon	334.3	426.9	152.3	118.8	53.3	53.8	48.5	45.0
Guinea-Bissau	6.3	267.5	146.9	112.5	9.9	12.0	26.4	24.6
Mali	334.3	426.9	152.6	116.6	15.8	20.0	24.6	27.6
Niger	334.3	426.9	183.7	113.9	21.0	16.1	25.0	19.1
Senegal	334.3	426.9	136.8	113.3	28.7	29.6	34.7	32.7
Togo	334.3	426.9	130.5	106.3	46.1	31.6	49.7	35.3
Group II – Soft pegs								
Botswana	1.4	2.8	99.2	93.4	58.9	48.3	52.6	43.7
Cape Verde	69.8	80.3	77.9	94.5	15.5	17.4	30.0	34.7
Comoros	334.3	350.8	n.a.	n.a.	14.7	18.5	31.3	30.1

Table 6

EX								
	Nominal e. (Nat. c	xchange rate urr./US\$)	Real exci (Index 19	hange rate 995=100) ^a	Ext (Percenta	oorts ge of GDP)	Averaç (Percentaç	ge trade ge of GDP) ^b
ountries/regime 1999;	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
gypt	0.7	3.1	153.1	98.1	22.2	23.0	28.8	26.0
esotho	1.7	3.7	96.3	95.8	15.6	23.0	75.0	74.9
ibyan Arab Jamahiriya	0.3	0.3	n.a.	n.a.	54.7	n.a.	44.5	n.a.
lorocco	7.5	8.9	95.7	91.5	17.8	19.1	23.2	23.4
amibia	1.7	3.7	104.8	93.0	58.6	53.8	62.2	57.3
eychelles	6.3	5.1	90.2	94.4	62.1	59.7	63.3	63.9
waziland	1.7	3.7	101.6	91.4	70.7	83.0	77.5	85.2
unisia	0.7	1.0	91.4	93.3	36.9	42.4	40.0	44.7
imbabwe	1.3	8.9	156.7	96.3	21.4	33.1	21.8	34.6
roup III – Independent fl	oats							
lgeria	5.1	36.3	245.1	117.2	23.8	26.0	23.0	25.4
ngola	0.0	83 633.9	n.a.	55.1	34.7	59.2	30.2	56.9
urundi	114.0	267.7	135.2	96.0	10.4	9.2	17.1	16.8
ongo, Dem. Rep. of	0.0	1 370.2	220.9	120.2	21.4	22.6	21.8	21.8
ritrea	n.a.	n.a.	n.a.	n.a.	n.a.	27.8	n.a.	54.1
thiopia	2.1	4.9	189.0	139.2	9.3	10.5	13.0	15.1
iambia	4.4	9.4	107.3	96.9	47.8	53.7	54.4	60.8
ihana	82.3	1 104.3	589.4	108.6	11.2	21.3	12.7	26.7
iuinea	196.2	952.9	n.a.	n.a.	29.7	22.3	29.5	23.9

	Nominal e) (Nat. cı	cchange rate ırr./US\$)	Real exci (Index 19	hange rate 995=100)ª	Ex _l (Percenta	oorts ge of GDP)	Avera; (Percentaç	ge trade _J e of GDP) ^b
Countries/regime 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Kenya	14.3	47.1	103.9	92.3	24.7	31.4	26.9	32.7
Liberia	1.0	1.0	n.a.	n.a.	47.3	n.a.	46.0	n.a.
Madagascar	725.8	3 226.0	178.6	106.1	13.6	19.6	17.2	23.5
Malawi	1.6	11.2	146.6	130.1	23.9	24.8	27.3	31.2
Mauritania	64.8	122.4	128.9	110.9	42.2	42.8	52.9	48.4
Mauritius	12.3	18.0	98.7	93.9	54.6	62.0	56.2	64.1
Mozambique	183.2	6 503.2	218.4	116.3	6.8	12.8	15.9	26.0
Nigeria	2.2	18.5	117.9	79.8	21.4	40.9	20.9	38.7
Rwanda	89.8	208.5	123.8	100.3	10.4	6.0	15.5	16.1
São Tome and Príncipe	54.9	1 250.6	n.a.	n.a.	29.8	23.4	56.2	55.9
Sierra Leone	15.5	702.4	125.4	94.4	11.5	23.1	14.0	23.3
Somalia	93.7	n.a.	n.a.	n.a.	15.5	9.8	33.0	23.8
South Africa	1.7	3.7	96.7	94.3	28.3	23.3	25.9	21.9
Sudan	2.1	663.7	185.1	195.7	8.2	n.a.	12.8	n.a.
Tanzania, United Rep. of	40.9	450.9	255.9	106.7	10.0	16.7	19.5	26.6
Uganda	39.9	978.8	334.5	88.9	11.6	9.6	14.7	15.4
Zambia	4.8	737.5	79.7	100.7	34.4	34.0	35.4	36.9

Table 6 (concluded)

a The real exchange rate is computed as: (country's CPI) / (United States' CPI) × Official exchange rate. *b* Average trade is the average of exports and imports as a percentage of GDP.

				(Percentage)					
			Growth in	1990–1998	Inflation in	1990–1998	Trade	Current accoun balance	t Reserves
Category	Regimes		Positive growth	Higher than 1980–1989	Below 10 per cent	Lower than 1980–1989	Higher	Improved	Higher
Non-shifters	Hard pegs		50.0	35.7	92.9	28.6	28.6	50.0	57.1
	Soft pegs		81.8	36.4	72.7	81.8	54.5	60.0	80.0
	Independent	Group	47.8	30.4	21.7	43.5	72.7	47.8	85.0
	liudis	(willibut commut countries) ^a	(57.9)	(36.8)	(26.3)	(20.0)	(72.2)	(47.4)	(88.2)
Shifters	Shifting from	Group	53.8	38.5	15.4	23.1	83.3	46.2	90.9
	son pega to independent floats	(without commut countries) ^a	(0.0)	(50.0)	(20.0)	(30.0)	(88.9)	(40.0)	(100.0)
Source: World Note: This ta this tal a "Confil	Bank (2000b). ble summarizes info ole. Djibouti, Eritrea ct countries" in the 1	ormation from tables 5 au , Liberia, Libyan Arab Ja floating regimes categor	nd 6. Table A.3 amahiriya and y are Angola,	2 presents inforn Somalia are not Burundi, Rwand	nation on count included in thi a and Sierra Le	tries that shifted s summary table eone (and Soma	from soft po due to lach lia, which is	egs to independer < of data. s excluded due to	t float used ir lack of data).

Table 7

	Growth	'ı of per capita	GDP ^a	(Per	Exports centage of G	(ACI	Infla (Avera	ation in CPI in age annual ch	dex ange)
Country	1980–1989	1990-1994	1995–1998	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998
Benin	4.0-	6.0	2.2	26.2	24.1	25.1	n.a.	19.5	7.1
3urkina Faso	4.1	-0.1	2.7	10.4	11.9	12.2	1.7	5.1	5.2
Cameroon	1.8	-6.4	1.8	26.4	20.0	25.0	9.0	6.6	6.7
Central African Republic	-0.9	-3.0	1.3	20.5	15.4	18.3	3.7	3.5	5.7
Chad	4.0	-1.4	1.2	14.3	13.2	19.1	3.0	6.9	9.8
Congo	2.7	-2.9	0.1	52.0	49.8	66.9	7.6	11.6	10.6
Côte d'Ivoire	-2.6	-2.9	3.7	37.1	33.1	44.7	5.9	6.7	6.4
Equatorial Guinea	-1.9	2.6	31.7	35.9	39.3	83.9	n.a.	n.a.	n.a.
Sabon	-1.5	-0.1	1.7	53.3	50.0	58.5	5.8	4.6	4.8
Guinea-Bissau	2.9	1.4	-5.6	9.9	10.0	14.5	70.5	44.7	38.3
Aali	-1.5	-1.4	2.4	15.8	17.9	22.5	-0.1	3.8	6.0
Viger	-2.9	-3.2	0.9	21.0	15.6	16.6	2.8	4.3	5.8
Senegal	0.3	-1.3	2.4	28.7	26.1	33.9	6.7	6.0	3.4
ogo	-1.7	-4.0	2.1	46.1	29.8	34.0	4.2	8.2	7.6
Sample ^b	-0.4	-2.8	2.3	31.7	27.9	35.6	6.7	9.7	9.1

	Growth	ו of per capita	GDP ^a	(Per	Exports centage of G	(ad	Infla (Avera	ition in CPI in age annual ch	dex ange)
Country	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998
Vngola	-0.1	-8.6	5.4	34.7	55.4	63.9	n.a.	876.1	3 174.5
Sotswana	6.7	1.7	2.5	58.9	50.4	45.6	10.5	12.8	9.0
esotho	2.0	2.6	4.3	15.6	18.8	28.2	13.6	13.6	9.3
1alawi	-1.3	-1.6	5.3	23.9	23.4	26.6	16.8	21.1	40.0
Aauritius	5.0	4.2	4.3	54.6	61.0	63.3	7.7	8.6	6.6
Aozambique	-1.2	0.9	6.1	6.8	12.1	13.7	45.1	46.2	35.0
Vamibia	-1.8	1.3	-0.2	58.6	52.7	55.2	13.0	12.2	8.3
South Africa	-0.9	-1.9	0.6	28.3	22.4	24.5	14.7	12.5	7.8
Swaziland	3.1	0.7	-0.1	70.7	79.8	86.9	14.7	11.1	8.5
anzania, United Rep. of	0.7	-0.2	0.8	10.0	14.0	20.1	30.1	28.9	19.6
ambia (-1.8	-2.7	-1.1	34.4	34.7	33.1	69.3	122.2	35.1
limbabwe	0.8	-0.3	1.5	21.4	27.9	39.6	13.6	26.5	23.6
ample ^b	-2.9	-2.1	0.6	29.4	25.7	28.5	18.2	72.5	304.9
							(18.2) ^b	(28.7) ^b	(18.0) ^b

than half of the countries in this group (54 per cent). However, the majority of the countries in this group showed better performance in trade (73 per cent) and international reserves (85 per cent).

In examining the links between exchange rate regimes and economic performance, the group of countries that shifted from one regime to another may provide better information than those countries whose regimes remained unchanged over the investigation period. Looking at the group of countries that shifted from soft pegs to independent floats, the shift was not associated with much gain in terms of output growth, while inflation and the current account were worse than in the three categories of "nonshifters". However, this category had the highest proportion of countries with improved performance in trade and international reserves.

Overall, these casual observations reveal no systematic relationship between indicators of economic performance and patterns of exchange rate regime shifts. The transition toward floating regimes was not accompanied by much gain in GDP growth, while inflation and current account performance worsened for the majority of regime shifters. In the case of the CFA-zone countries, the realignment of the CFA exchange rate in 1994 was followed by significant improvements in output growth and trade. Due to the ill-advised delayed adjustment in the exchange rate of the CFA franc, price stability was achieved at the cost of lower output growth and lower trade performance. Much more empirical work is needed to establish empirical regularities about the relationship between economic performance and exchange rate regimes in African countries.

D. Further issues related to exchange rate regimes

(i) The exchange rate as a nominal anchor

As African countries move towards liberalization of their exchange rate regimes, they confront some important policy questions. In particular, under a flexible regime the exchange rate no longer plays the role of a nominal anchor of monetary policy. National authorities must then determine a credible alternative nominal anchor. One alternative is to target inflation. This option appears to have worked fairly well in industrialized countries. However, important institutional conditions are necessary for this alternative to work. In particular, successful inflation targeting requires a high degree of *instrument independence* of the central bank;⁶ monetary policy must be free from fiscal policy pressures and political intrusion. Moreover, inflation targeting requires a sound information base in forecasting inflation and output. These conditions are typically not met in most African countries. Furthermore, inflation targeting is difficult when the economy is hit frequently by supply shocks. The majority of African economies have experienced frequent supply shocks, which include both domestic shocks (e.g. natural disasters, such as drought) and international shocks (e.g. energy crisis and commodity price shocks). These effects can be hard to disentangle, which makes it difficult to determine whether inflation is the outcome of policy mistakes or the result of purely exogenous shocks, or a combination of these factors.

(ii) No exchange regime is good for all, all of the time

When the economy is predominantly subject to real/supply shocks, a rigidly fixed exchange regime can be destabilizing as it prevents the normal adjustment of the current and capital accounts to the shocks. A number of scholars support the following prescription: "if shocks are mostly real, float; otherwise fix" (Calvo and Reinhart, 1999; Berg and Borensztein, 2000). In some ways, the experience of the CFA zone lends some support to this view. Failure to adjust the exchange rate as the economies in the zone were hit by exogenous real shocks (e.g. terms of trade shocks, energy crisis) proved to be costly for these economies. However, as Calvo and Reinhart (1999) indicate, in some recent crises, shocks have come through the capital account, thus containing real as well as nominal components. African countries that opt for fixed exchange rate regimes should preserve enough flexibility to respond to shocks in a timely manner by adjusting the official exchange rate.

Many scholars have argued that along the spectrum of exchange rate regimes, between a very hard peg and a freely floating regime, those in the intermediate range (or soft pegs) are not viable beyond the short term (Obstfeld and Rogoff, 1995; Mussa, et al., 2000; Fischer, 2001). For countries that are significantly integrated into the world financial markets, so the argument goes, the only viable option is a flexible (possibly managed) exchange rate regime. However, for African countries that are not integrated into the international financial markets, a hard peg seems to be a sensible option. The recent transition of African countries towards floating exchange rate regimes is puzzling. Except probably for emerging market countries (Egypt, Morocco, Nigeria, and South Africa), African countries do not seem to have the institutional and infrastructural conditions required to benefit from fully flexible exchange rate regimes.

V. CURRENCY REGIMES, DOLLARIZATION/"EUROIZATION", AND IMPLICATIONS FOR CAPITAL FLOWS

A. Dollarization/"euroization": the new context

The increasing interest in the topic of currency regimes and dollarization (and, more recently, "euroization") is, to a large extent, motivated by the changing international environment; the newly emerging environment has cast doubts on the adequacy of many of the traditional policy prescriptions with regard to the management of international trade, foreign exchange markets and international capital flows. Here, three of the important new developments that have changed the international context of policy-making in the domain of currency regimes are discussed.

The first change in the global environment is the fact that inflation crises around the world have abated significantly since the early 1990s. With the decline and stabilization of inflation in many countries, the traditional argument for using exchange rate management as a stabilization tool has lost momentum. However, since inflation is still a significant problem for many African countries, exchange rate management should remain an important means of economic stabilization for these countries.

The second development is the recent surge in cross-border capital mobility around the world. This phenomenon has revived the debate over the choice of exchange rate regime. Two views have emerged on this subject. The first view (the bipolar view) is that only very hard pegs and independently flexible exchange rate regimes are viable in a financially integrating world (Fischer, 2001). The second view suggests that countries should simply abandon national currencies and adopt a strong and stable international currency, especially since, in today's global capital markets, it is unwise to peg the exchange rate because it is too costly to defend. Obstfeld and Rogoff (1995: 74) suggest that "for most countries, it is folly to try to recapture the lost innocence of fixed exchange rates". Calvo and Reinhart (1999: 13) echo the proposition by arguing that "the limited effectiveness of capital controls provides the basis for reassessing the relative merits of fixed and flexible exchange rate policies. Dollarization may offer emerging market economies a viable and more market-friendly alternative to capital controls". Below, we discuss the advantages and disadvantages of dollarization.

The third development is the creation of the European Monetary Union (EMU) and the adoption of the euro. The question is whether the creation of the EMU will spark more interest in the strengthening of monetary unions in Africa or the creation of new ones, or even the establishment of a continent-wide African monetary union (AMU).

B. Advantages and disadvantages of dollarization/"euroization"

(i) Advantages of dollarization

Proponents of dollarization have suggested a number of advantages that countries may derive from adopting a strong foreign currency. Here we elaborate on four of these (see Berg and Borensztein, 2000 for more details).⁷ The first benefit from dollarization is that it shields the national economy from the adverse effects of sharp fluctuations in exchange rates. The second advantage is that it raises international investors' confidence in the economy by lowering the risks arising from currency fluctuations,

and thus stimulates capital inflows. Dollarization also reduces the spread between domestic and international interest rates by lowering domestic interest rates, which stimulates private domestic investment.

However, critiques of dollarization point out that while dollarization eliminates the risk of currency devaluation, it does not eliminate countryspecific or sovereign risk. In fact, it may even increase sovereign risk in countries that are not fully dollarized (Berg and Borensztein, 2000). In the case of African countries, sovereign risk is likely to remain high due to weak economic fundamentals, loose macroeconomic policies and a turbulent political environment. Dollarization or "euroization" cannot be an insurance against fundamental political uncertainty or the adverse effects of bad macroeconomic policies.

The third alleged advantage of dollarization is that it facilitates integration into the world economy, especially by reducing uncertainty and transaction costs associated with the divergence in cross-country exchange rates.

Finally, proponents of dollarization argue that it can serve as an external agent of fiscal and monetary discipline and foster sound financial policies. The adoption of a foreign currency amounts to surrendering the option of monetary financing of government deficits as well as the possibility of using monetary policy for macroeconomic stabilization. However, evidence suggests that currency unions are not an antidote to fiscal indiscipline or political intrusion in the financial system. As shall be discussed further below, the experience of the CFA-zone countries in the 1980s testifies to this point.

(ii) Disadvantages of dollarization

There are many disadvantages of dollarization, of which four are emphasized here. The first is the loss of a national currency; this is likely to face political resistance because a national currency is a symbol of national sovereignty. Second, dollarization implies a loss of seignorage revenue, that is the resources created from printing interest-free cash in exchange for government securities. The adoption of dollarization or "euroization" implies that all the seignorage revenue accrues to the United States or to the EMU members respectively, which amounts to free credit by the dollarizing countries to the United States or the EMU countries, with the exception of the provision of these currencies through official development assistance (ODA). In principle, it is possible to design a scheme through which the United States or the EMU can share the seignorage revenues with members of the currency zone, but as of today there are no clear guidelines for the design of such a scheme.

The third disadvantage of dollarization is its high degree of irreversibility, or the lack of an "exit option". Unlike other currency arrangements (such as a currency board) where countries can elect to exit whenever they see fit, the costs of exiting from dollarization are rather prohibitive (Berg and Borensztein, 2000). The reintroduction of a national currency is possible, but it is likely to absorb substantial administrative and logistical resources. Most importantly, it is likely that the new currency will be perceived as weaker than the dollar (or the euro), which, among other things, will adversely affect investor sentiment and probably depress capital inflows while fuelling capital outflows.

The fourth disadvantage of dollarization is that the country relinquishes a large part of its autonomy for macroeconomic policy by losing three important policy tools: devaluation as a tool of current account and capital account management, the lender-of-last-resort function of the central bank, and monetary policy as a tool of macroeconomic stabilization. With respect to the lender-of-last-resort function, the inability of national authorities to intervene to protect the financial sector against adverse internal and external shocks is a high price to pay for dollarization. It is possible to argue that the increased presence of highly capitalized foreign banks that is likely to accompany dollarization can serve as an alternative potential rescue mechanism in the event of a liquidity crisis in the domestic banking sector. Another alternative rescue mechanism would be direct intervention of the central bank of the guarantor country (the United States or EMU countries). However, this leaves open the question of whether the penetration of foreign banks is necessarily desirable and whether the United States or EMU countries have the incentives to intervene to rescue troubled financial institutions in the dollarizing/ "euroizing" country.

C. Currency unions in Africa: opportunities and constraints

In this subsection, we explore three questions related to currency regimes in Africa. First, are currency areas or monetary integration the means towards greater trade integration? One of the potential advantages of currency unions is that they can foster trade among their members. However, evidence from African countries shows that currency unions and regional integration in general have not promoted trade. For example, intrazone trade in the CFA area represented less than 7 per cent of total external trade of CFA countries between 1994 and 2000, down from 9 per cent between 1970 and 1993 (Hadjimichael and Galy, 1997: 30).⁸ Low intraregional trade in sub-Saharan Africa is due to a range of structural constraints, including lack of complementarity in production across countries and weak infrastructural linkages. Therefore, the adoption of a common currency does not necessarily increase intraregional trade.

Second, are currency unions a means to fiscal discipline, efficiency and stability of the financial system? In principle, transferring financial and monetary policy to a supranational institution can foster financial stability by reducing political pressure on credit allocation. However, evidence from the CFA zone is not compelling in this regard either. The operating structure of the CFA zone, which delegates monetary and financial policies to two regional central banks, has not insulated the economies from fiscal indiscipline and intrusive manipulation of credit allocation by member governments, especially through lending to State-owned enterprises, regional organizations and government suppliers (Honohan and Lane, 2000). These loans have been characterized by very high default rates. As a result, the banking system was in severe crisis by the mid-1980s. African countries cannot count on successfully "outsourcing" fiscal and monetary policy by simply delegating it to regional monetary organizations. Nor can they expect dollarization or "euroization" to be a substitute for fiscal and financial reform.

Third, can currency unions foster international capital inflows? The creation of a currency union is expected to be accompanied by an expansion of markets, and, possibly, a reduction of country risk, which would increase international capital inflows. One potential negative effect is that with the expansion of the markets, African economies may no longer be "below the radar screen of international speculators" (Honohan and Lane, 2000). This implies a need for efficient management of capital flows to reduce the risk of financial fragility.

VI. CAPITAL FLIGHT FROM AFRICA

A. Magnitude of the problem in African countries

The problem of capital flight from African countries has attracted much attention in the academic literature (for surveys, see Ajayi and Khan, 2000; Boyce and Ndikumana, 2001; Ndikumana and Boyce, 2002). Existing studies show that African countries have experienced massive capital flight over time. Let us present estimates of capital flight for a sample of 30 African countries for the period 1970–1996, using the methodology developed by Boyce and Ndikumana (2001) who compute capital flight as follows:

$$KF_{it} = \Delta DEBTADJ_{it} + DFI_{it} - (CA_{it} + \Delta RES_{it}) + MISINV_{it},$$

where $\Delta DEBTADJ$ is the change in debt adjusted for cross-currency exchange rate fluctuations, taking into account the fact that a country's debt is denominated in various currencies; *DFI* is direct foreign investment, *CA* is the current account balance, ΔRES is the change in the stock of international reserves, and *MISINV* is net trade misinvoicing. Two modifications are made to the value obtained with the above equation. First nominal values of capital flight are deflated to real values using the United States producer price index (base 1996 = 100). Second, the accumulated stock of capital flight is computed by imputing interest earnings to past capital flight using the United States Treasury Bill rate. Table 10 presents capital flight estimates for 30 sub-Saharan African countries. The table contains estimates of total real capital flight from 1970 to 1996 in constant 1996 US dollars (column II), the stock of accumulated capital flight including interest earnings on past capital flight (columns III–V), and calculated net external assets (column VI) obtained by subtracting the stock of external debt in 1996 from the stock of accumulated capital flight with imputed interest earnings.

The results indicate that for the 30 African countries, real capital flight over the 26-year period amounted to about \$182 billion. Including interest earnings, the accumulated stock of capital flight was \$272 billion for the period. Total capital flight was higher if we consider only severely indebted low-income countries (SILIC). For this group, the estimates were \$189.7 billion and \$281 billion for total real capital flight and the accumulated stock of capital flight respectively. The sample as a whole was a "net creditor to the world" in the sense that private assets held abroad, as measured by capital flight, exceeded total liabilities, as measured by the stock of debt. Estimated net external assets amounted to \$81.7 billion for the entire sample of 30 African countries and \$102.7 billion for the SILIC group.

The magnitude of capital flight varied significantly across African countries. Angola, Cameroon, Côte d'Ivoire, the Democratic Republic of Congo and Nigeria had particularly high levels of capital flight, with as much as \$86.8 billion for Nigeria. The capital-flight/GDP ratio exceeded 200 per cent for nine countries in the sample. The data also indicate a high per capita burden of capital flight, amounting to several multiples of per capita income (comparing columns I and V in table 10).

Table 10

INDICATORS OF CAPITAL FLIGHT FROM 30 SUB-SAHARAN AFRICAN COUNTRIES, 1970–1996

	GDP/cap 1996	ita Real capital fligl	nt c	Cumulative apital stoc	e k	Net external assets ª
	(1)	(11)	(111)	(IV)	(V)	(VI)
Country		(Million 1996 \$)	Stock (Mill. 1996 \$)	Per cent of GDP	Per capita \$	5
Angola	673	17 032.5	20 405.0	267.8	1 803	9 179.9
Benin [®]	392	-3 457.4	-6 003.8	-271.9	-1 067	-7 598.1
Burkina Faso	201	1 265.5	1 896.6	96.5	194	700.4
Burundi	143	818.9	980.9	108.9	156	-146.0
Cameroon	672	13 099.4	16 906.0	185.6	1 248	7 364.4
Cent. African Republic	281	250.2	459.0	50.8	143	-482.1
Congo, Dem. Rep. of	130	10 099.4	19 199.9	327.1	424	6 373.5
Congo	959	459.2	1 254.0	49.6	476	-3 986.6
Côte d'Ivoire	770	23 371.0	34 745.5	324.7	2 502	15 221.9
Ethiopia	103	5 522.8	8 017.9	133.4	138	-2 060.7
Gabon [®]	5 139	2 988.7	5 028.1	87.0	4 469	717.7
Ghana	395	407.3	289.3	4.2	17	-6 152.9
Guinea	586	342.8	434.2	11.0	64	-2 806.1
Kenya	330	815.1	2 472.6	26.8	89	-4 458.4
Madagascar	291	1 649.0	1 577.5	39.5	115	-2 568.3
Malawi	132	705.1	1 174.8	93.8	124	-971.3
Mali	266	-1 203.6	-1 527.2	-57.5	-153	-4 533.2
Mauritania	469	1 130.8	1 830.0	167.4	786	-572.2
Mauritius ^{<i>b</i>}	3 792	-267.8	465.9	10.8	411	-1 351.7
Mozambique	175	5 311.3	6 206.9	218.4	382	-1 359.4
Niger	210	-3 153.1	-4 768.9	-247.7	-521	-6 392.1
Nigeria	308	86 761.9	129 661.0	367.3	1 1 3 2	98 254.4
Rwanda	209	2 115.9	3 513.9	249.9	522	2 470.8
Senegal ^b	544	-7 278.1	-9 998.2	-214.9	-1 168	-13 661.1
Sevchelles ^b	6 6 3 2	566.5	1 032.3	203.4	13 487	884.3
Sierra Leone	196	1 472.8	2 277.8	257.1	505	1 072.7
Sudan	265	6 982.7	11 613.7	161.1	428	-5 358.3
Tanzania, U. Rep. of	191	1 699.1	6 203.4	106.3	203	-1 158.4
Uganda	306	2 154.9	3 316.1	54.8	168	-358.3
Zambia	461	10 623.5	13 131.2	354.9	1 637	5 491.8
Sample	311	182 222.3	271 795.4	172.8	538	81 756.6
SILIC only ^c	286	189 670.4	281 271.1	201.1	576	102 765.5

Source: For severely indebted low-income countries (SILIC), Boyce and Ndikumana (2001), including revision of the data for the Democratic Republic of the Congo for 1990–1996. For other countries, the author's computations using the methodology developed in Boyce and Ndikumana (2001). The sample period varies by country depending on data availability.

a Net external assets = accumulated capital flight (with interest earning) minus stock of debt.

b These are not SILIC (according to the World Bank's classification as of December 1998).

c Prior to 1998, Kenya was classified as a SILIC. In this table, it is included in the SILIC sample statistics for purposes of comparison with earlier studies on capital flight from SILIC that included Kenya in this group (Ajayi 1997; Boyce and Ndikumana 2001).

B. Conduits, causes and macroeconomic consequences of capital flight

There are various conduits through which private actors can channel capital abroad illegally. Capital flight occurs through illicit bank transfers, embezzlement of exports of minerals and other natural resources, and misinvoicing of exports and imports. The amounts are notoriously high for such countries as Nigeria with \$23.6 billion, the Democratic Republic of the Congo with \$7.4 billion, and Côte d'Ivoire with \$6.7 billion (Boyce and Ndikumana, 2002).

Some studies have investigated the causes or determinants of capital flight using both cross-country data and country case studies. In examining the determinants of capital flight from 30 sub-Saharan African countries, Ndikumana and Boyce (2002) have found that external borrowing is positively and significantly related to capital flight; this suggests that to a large extent capital flight is *debt-fuelled*. Their results also indicate that capital flight exhibits a high degree of persistence in the sense that past capital flight is correlated with current and future capital flight. Furthermore, the growth rate of per capita GDP and an index of voice and accountability are negatively related to capital flight. These findings are consistent with the results from studies on smaller samples and from country case studies. For example Lensink, Hermes and Murinde (2000) found that capital flight was higher in countries with high corruption, bad governance and high political instability. Olopoenia (2000) found that capital flight from Uganda was higher during the periods of political and economic instability in the 1970s and the first half of the 1980s. Nyoni (2000) found that the black market premium, which is an indicator of market distortions, significantly and positively influenced the level of capital flight. And Lensink, Hermes, and Murinde (1998) found that capital flight declined following financial liberalization, indicating that reducing market distortions can contribute to reducing capital flight.

Compared to other developing regions, sub-Saharan Africa has experienced a relatively higher level of capital flight. Collier, Hoeffler and Pattillo (1999) found that Africa has the highest proportion of private capital held abroad (as a percentage of total private assets or GDP). Using a portfolio choice approach, these authors found econometric results suggesting that high capital flight from Africa was due, among other things, to overvalued exchange rates, high country-specific risk and high indebtedness.

Capital flight implies a high opportunity cost for the economy and a heavy burden on the population. A high level of capital flight implies that scarce resources are used to channel private assets abroad instead of financing imports of investment equipment or consumption goods. It also puts pressure on the exchange rate by increasing the demand for foreign currency to funnel wealth abroad. Furthermore, it constitutes a drain on national resources, and thus reduces the current and future growth potential of the country. It contributes to increasing macroeconomic uncertainty, which depresses lending and investment. Market participants may interpret a high level of capital flight as a signal of loss of control of economic policy by national authorities. Through herd effects, capital flight can lead to more capital flight, as agents seek to minimize expected portfolio losses in the face of an uncertain future political and economic environment.

C. Capital account liberalization and capital flight

The net effects of capital account liberalization on capital flight are unpredictable. It can curtail capital flight by removing market distortions, but only if it is part of a broader reform agenda aimed at fostering an environment that is conducive to investment.

Three issues are worth emphasizing with regard to capital account liberalization. First, it has adverse effects when financial markets are repressed. If domestic interest rates are significantly lower than foreign interest rates due to financial repression, then profit-maximizing savers prefer to hold their wealth in foreign assets. Substantially repressed interest rates can lead to disintermediation, as savings are channelled abroad and banks refuse to lend at negative real interest rates. The implication of this highly stylized argument is that African countries need to coordinate their capital account liberalization programmes with financial reforms to eliminate interest rate repression. There is some evidence that financial liberalization can in fact play an important role in curtailing capital flight (Lensink, Hermes and Murinde, 1998).

Second, the liberalization of capital account operations in the context of overvalued exchange rates can cause greater capital flight and can have detrimental effects on the current account. An overvalued exchange rate induces agents to underinvoice exports while overinvoicing imports, which increases capital flight. African countries need to coordinate capital account liberalization with exchange regime liberalization to avoid costly market distortions.

Third, political instability causes capital flight as agents seek to minimize the risk of expropriation and future portfolio losses due to political crisis. Current account liberalization or any other economic reform would have little effect on reducing capital flight in the presence of high political uncertainty. Therefore economic liberalization must go hand in hand with institutional reforms aimed at fostering transparent and accountable governance.

VII. SUMMARY AND POLICY IMPLICATIONS

A. Attracting and monitoring capital flows

African countries need to design strategies to attract foreign private capital to compensate for the recent decline in official lending. The evidence suggests that private capital flows are responsive to the macroeconomic policy environment. The focus should be on reforms aimed at improving fiscal discipline, controlling inflation and creating an investment-friendly environment. Indeed countries that have made progress in economic reform have also experienced an increase in capital inflows (e.g. Mozambique, the United Republic of Tanzania and Uganda). Gauging the effects of capital flows on macroeconomic performance and designing appropriate policy responses requires good information on the nature, magnitude, sectoral distribution and variability of capital flows. Unfortunately such information is still scarce in African countries. African governments need to invest financial and human resources to establish mechanisms for systematic monitoring of the inflows and outflows of capital. This could include the creation or strengthening of specialized divisions within central banks and national bureaus of statistics, whose mission would be to compile and disseminate information on capital movements.

B. Liberalization and openness: a cautionary note

Two points are worth emphasizing with regard to the recent moves towards greater flexibility of exchange rates and openness of capital account regimes in African countries. First, liberalization of current and capital accounts will enhance economic performance only if it is supported by appropriate macroeconomic and sectoral policies, especially disciplined fiscal and monetary policies committed to price stability. Second, to avoid potential adverse effects of capital account liberalization, African countries need to undertake the necessary steps to reduce market distortions.

C. Strengthening financial markets

Underdeveloped financial markets constitute an enormous constraint on private capital inflows into Africa, especially because of the lack of opportunities for portfolio diversification. At the same time, with underdeveloped financial markets and a weak regulatory infrastructure, African countries are ill-equipped to absorb large and sudden surges in capital inflows. Among other things, these countries need to pursue reforms aimed at enforcing creditor and investor rights and improving the efficiency of the clearing system. These measures would both facilitate financial development and encourage capital inflows. The role of stock markets in attracting private capital to Africa is a topic that deserves careful investigation. The evidence shows that countries such as Kenya and Zimbabwe have failed to attract significant capital inflows despite the fact that they have long-established stock markets. Thus, while stock markets can contribute to attracting private capital, they are not a sufficient condition. African countries need to pursue policies aimed at facilitating financial intermediation in general, which will promote the banking sector as well as equity markets. A solid banking system is essential to the development of the stock market because stock market development and banking development are complementary (Levine and Zervos, 1998).

Given the small size of national stock markets in Africa (with the exception of South Africa), they are not yet in a position to attract sizeable foreign capital. And the creation of national stock markets involves high costs (infrastructure and administrative costs) that small economies cannot afford in the short run. The development of regional stock exchanges could contribute to alleviating the small-size constraint. Operating rules (such as accounting rules and prudential regulation rules) need to be coordinated across countries to facilitate cross-border listings and increase the benefit of regional integration.

APPENDIX

CAPITAL ACCOUNTS AND FOREIGN EXCHANGE REGIMES: RECENT DEVELOPMENTS IN SOME AFRICAN COUNTRIES

1. Egypt

a. Capital flows

Egypt experienced a surge in capital inflows during the 1990s, motivated primarily by increased confidence among foreign investors in the Egyptian economy following economic reform. Noteworthy developments included successful fiscal adjustment and the curbing of inflation under a relatively liberal capital account regime. However, the surge in capital inflows has raised some concerns regarding their impact on the stability and performance of the economy, especially because high capital inflows cause pressure on the exchange rate, which undermines export performance.

b. Exchange rate regime

The exchange rate regime in Egypt underwent significant shifts in the early 1990s. Starting in 1969, Egypt instituted a system of multiple exchange rates and maintained an "official" parallel market to attract workers' remittances and encourage tourism. The exchange rate policies pursued in the 1970s and 1980s resulted in a substantial appreciation of the Egyptian pound and undermined export competitiveness. As part of the reform programme, the Government established a free market in foreign exchange for current account transactions in 1991, and eased capital account restrictions further in 1992. The real exchange rate continued to appreciate after 1991, partly as a result of nominal appreciation and partly as a result of the differential in inflation between Egypt and its trading partners (Subramaniam and Handy, 1997; Mongardini, 1998). There is no evidence to suggest that the real appreciation reflected productivity gains. The country did not experience any improvement in trade performance. In fact non-oil exports declined at the end of the decade. The Egyptian pound may continue to appreciate in the future if capital inflows remain at their present levels (keeping reserves high). Debt forgiveness and debt rescheduling may further improve the external reserves position, thus contributing to further real exchange rate appreciation.

c. The financial system

The Egyptian stock market is one of the oldest in the world. However, the stock exchange was largely dormant for over four decades following the policy shifts of the 1950s with the nationalization of industry and the adoption of central planning (Mecagni and Sourial, 1999). The 1990s saw a marked expansion of the stock market, with an increase in the number of listed companies, market capitalization and liquidity. Much improvement is still needed, however, to provide an environment that allows the capital market to channel and allocate resources efficiently, especially by enforcing information disclosure by firms and by strengthening the legal environment to protect creditor and investor rights.

2. Kenya

a. Symptoms of a crisis in the late 1980s

Towards the end of the 1980s (especially starting in 1987), the Kenyan economy showed signs of a pending crisis: real GDP slowed down from an already weak position, the budget deficit was high (about 6 per cent of GDP in 1987), and inflation rose from 4.8 per cent in 1986 to 7.6 per cent in 1987 and continued to climb in the subsequent years. At the same time, the policy stance was characterized by considerable regulation of foreign exchange markets, trade and the financial system (including differential credit ceilings, interest rate controls and political intrusion in credit allocation). By the end of the decade, it was clear that in the absence of major reforms, economic collapse would be inevitable. Here, only policy reforms in the areas of foreign exchange markets, and current and capital accounts are summarized (see Ariyoshi et al., 2000 and Krichene, 1998 for further details on recent policy reforms in Kenya).

b. Important policy reforms in exchange rates, the current account and capital account

- In 1989, Kenya began the process of liberalization of the financial system. Interest rate ceilings were gradually removed and interest rates fully liberalized by 1991.
- In 1991, liberalization of the current and capital accounts was initiated with the introduction of "foreign exchange bearer certificates of deposits", which could be used in current and capital account transactions. These certificates, available to residents and non-residents, could be freely traded in the secondary market and redeemed at the central bank at face value.
- Since 1991, some companies have been allowed to hold foreigncurrency-denominated bank accounts abroad and domestically, and banks have been allowed to conduct transactions in foreign exchange directly. Forward foreign exchange contracts have been allowed at market rates, albeit with some restrictions on the amount and the term.
- In the fourth quarter of 1993, the exchange rate regime shifted from a currency composite peg to an independently floating regime.
- In 1994, the Kenyan shilling became fully convertible.
- In 1995, all remaining exchange controls were removed. Also removed were restrictions on the purchase of shares and government securities by non-residents.

c. Crisis amidst (speedy) liberalization

Despite the liberalization efforts, the crisis that had begun at the end of the 1980s continued throughout the 1990s. Inflation rose from 19.8 per cent in 1991 to 45 per cent in 1993. It started declining in 1994 and dropped to single-digit levels again later in the decade (5.8 per cent in 1998).

Due to the continued deterioration of the economic situation, the Government moved in, tightening both monetary and fiscal policy.

However, the tight policy stance may have contributed to suffocating an already weak economy by undermining domestic demand. Liberalization in Kenya did not achieve the intended objectives of stabilizing the economy and boosting production. An IMF study concluded that "rapid and wide-ranging liberalization in the context of continued major macroeconomic imbalances may have increased the country's vulnerability to capital flows by providing legal channels for capital flight (the latter reflecting both a deterioration in private sector confidence and corruption)" (Ariyoshi et al., 2000: 67).

3. Malawi

a. Exchange rate and capital account regimes

Until May 2000, Malawi had actively managed its foreign exchange markets, which resulted in a large depreciation of the kwacha as well as severe distortions of economic incentives (IMF, 2001). The country data indicate large depreciations of the kwacha, especially in 1994, 1998 (by 40 per cent), and 2000 (by another 40 per cent). Even during periods of relative stability of the exchange rate (between 1994 and 1998), high inflation rates led to substantial real depreciation of the currency. May 2000 marked a major policy shift, when the central bank stopped quoting an explicit exchange rate and reduced substantially its intervention for determining the exchange rate, thus making the exchange rate fully flexible. Since 1995, Malawi has moved towards liberalization of capital account transactions. For example, non-residents are allowed to repatriate investment proceeds without restriction (registration is required only for statistical purposes).

b. Implications of membership in regional arrangements

Malawi is a member of various regional bodies, including SADC, the Common Market for Eastern and Southern Africa (COMESA), and the Cross-Border Initiative in Eastern and Southern Africa (CBI) (Fajgenbaum et al., 1999). It is one of the best performing participants in CBI and COMESA with respect to trade liberalization. One important concern is
that its membership in various regional bodies could produce distorted economic incentives and create administrative problems when obligations under the various bodies are inconsistent. A structural constraint for Malawi is its weak productive capacity, which limits the gains from multilateral arrangements. Another important constraint is the poor development of its financial system. The banking sector is heavily concentrated, with the two largest banks accounting for 90 per cent of deposits. These banks lend to a limited number of companies, many of which own large shares of the banks' capital. This promotes insider lending, which results in inefficient allocation of credit.

4. Nigeria

a. Exchange rate regime

Over the years, Nigeria has applied a variety of foreign exchange arrangements, including fixed official exchange rates, market-determined exchange rates, dual systems of fixed official rates, and rates based on inter-bank exchange (IMF, 1998). Before 1986 (the beginning of structural adjustment), the official rate was fixed without any link to the market rate or inflation, resulting in a high premium. After 1986, the Government pursued a *de facto* indexation of the official exchange rate by adjusting the official exchange rate in response to changes in the parallel market to prevent the premium from being too large. The evidence shows that the official and parallel exchange rates moved together after 1986 (Azam, 1999).

With the "abandonment" of the adjustment programme in 1994, the Nigerian Government reinstated – among other controls – foreign exchange controls with an artificially fixed exchange rate. However, by the end of 1994 it was clear that attempts to stabilize the naira by administrative means had failed. In 1995, the Government did a turnaround by resuming the economic liberalization programme. Since then, it has pursued policies aimed at allowing the exchange rates to reflect market conditions, while using monetary policy to contain pressures on foreign exchange rate (fixed at 22 naira per dollar since 1993), and the Central Bank of Nigeria (CBN)

gradually shifted its intervention from weekly allocation of foreign exchange through the Autonomous Foreign Exchange Market (AFEM) to exclusive reliance on continuous buying and selling in the Interbank Foreign Exchange Market (IFEM). This has eliminated the multiple exchange rates arising from the spread between the rates in the two markets.

b. Liberalization of the capital account

Since 1995, Nigeria has embarked on a process of liberalization of controls of capital movements. The following are some of the recent measures intended to encourage foreign capital inflows:

- The Foreign Exchange Monitoring and Miscellaneous Provisions Decree of July 1995 (retroactively effective as of January 1995) permits individuals and businesses to invest in any firm through an accredited dealer in the AFEM.
- There is guaranteed transferability in convertible currency for dividends, profits, debt service and proceeds from whole or partial sale or liquidation of an initial investment.
- Nationals are allowed to invest in securities abroad, provided proper documentation is used. However, nationals are not permitted to simply make deposits abroad, as officials are concerned that this may be a conduit for capital flight.
- Earlier "indigenization" measures that required majority Nigerian ownership of foreign enterprises have been abolished. There are no limits to foreigners' participation in any sector of the economy, except for crude oil and gas.

The authorities still face two interrelated and serious issues, namely a high debt burden and capital flight. There is evidence of progress in economic reforms, which will contribute to improving the overall macroeconomic environment. In particular, the country has embarked on a comprehensive programme of reform of the financial system aimed at strengthening the regulatory and supervisory framework (e.g. more independence for the CBN) and improving the stability of the banking sector (through enforcement of capital adequacy rules and systematic monitoring of banks). These measures, coupled with improvements in political stability, are likely to improve investor confidence, which could attract more capital into the country.

5. South Africa

a. Turbulence in financial markets and foreign exchange markets

The South African foreign exchange market and the financial system suffered the effects of the Asian financial crisis in mid-1998. Deterioration in investor sentiment caused substantial capital outflows and a depreciation of the rand. The authorities responded by tightening monetary policy and by intervening in the foreign exchange market (IMF, 2000b). The financial turbulence receded at the end of 1998, and the South African Reserve Bank (SARB) allowed interest rates to decline. Low inflation expectations and prudent fiscal policy contributed to rejuvenating market confidence, resulting in a substantial return of international capital.

b. Liberalization of the capital account

Since 1994, the South African Government has been committed to progressively abolishing controls on capital account transactions. Liberalization has covered transactions by non-residents and residents, banks and non-financial firms, private and public enterprises, as well as private individuals. Some of the important changes since 1995 are the following:

- Dismantling of restrictions on capital account and foreign exchange transactions by residents and non-residents. Non-residents are now allowed to purchase shares, bonds and other assets, and to repatriate dividends, interest receipts, profits as well as initial investment capital with little or no restrictions.
- Restrictions on exchange transactions by residents have been substantially relaxed. While capital and current account transactions by

residents are subject to quantitative restrictions, the quantitative caps have been progressively raised, and some have been abolished.

- However, the authorities maintain prudential regulation on foreign exchange by authorized dealers, with no quantitative limits.
- Investment abroad by residents is allowed within some limits. For corporations, the limit is 250 million rand for investments within the SADC region (no limits for Namibia, Lesotho and Swaziland, which are members of the Common Monetary Area) and 50 million rand elsewhere. Institutional investors are allowed to invest up to 15 per cent of their assets abroad. Private individuals can invest up to 750,000 rand abroad.

c. Foreign exchange policy: the "forward book"

The SARB has intervened in the foreign exchange market since the 1960s. The Bank has often maintained a large net open forward position (NOFP) whereby the Bank's forward US dollar liabilities exceed its forward dollar assets. The official objective of this policy is to absorb speculative pressures on the rand, preventing sharp depreciations and mitigating increases in the interest rate. The objective is not to defend a predetermined value of the rand but to ease (market-driven) adjustment of the exchange rate.

The experience of the 1990s suggests that the effectiveness of the SARB's intervention in the foreign exchange market in dampening pressures on the exchange rate was minimal and short-lived at best. In contrast, the evidence tends to support the view that high NOFPs lead to higher risk-premiums on investments in South Africa, as the market is doubtful about the ability of the SARB to sustain a large uncovered forward book.

6. Uganda

a. Exchange rate regime

The Ugandan Government is committed to moving towards liberal foreign exchange and trade regimes. In particular, it is committed to not resisting fluctuations in the exchange rate due to changes in economic fundamentals, and to supporting liberalization of the foreign exchange regime with appropriate fiscal and monetary policies. Recently the Ugandan shilling has been relatively more stable than it was in the 1980s and early 1990s, and compared to neighbouring countries (Krichene, 1998).

b. Promoting a capital-friendly environment

The Ugandan Government has been noted for its commitment to pursuing macroeconomic policy reforms (especially fiscal and monetary policies). This will allow it to establish policy credibility and to achieve macroeconomic stability, which will help to attract new private foreign capital. The Government has also pursued policies aimed at strengthening the financial system, including privatization of State-owned banks, enhancing banking supervision and regulation (including granting increased autonomy to the central bank), restructuring and recapitalization of weak banks, and the establishment of a capital market infrastructure. Evidence of credible commitment to economic reform and improvements in the macroeconomic environment will increase investor confidence and stimulate capital inflows.

7. The CFA zone

a. Origins

The CFA zone is the outcome of the political and economic relations between France and its former West and Central African colonies. In the 1930s and 1940s, France established currencies in its colonies that were pegged to the French franc (FF). At the end of the second world war, these currencies were consolidated into the *Franc des Colonies Françaises* d'Afrique (or CFA franc). Until the end of colonization, the currency was issued by the *Caisse Centrale de la France d'Outre Mer*. After independence, the two regional central banks of the CFA zone, the *Banque Centrale des Etats de l'Afrique de l'Ouest* (BCEAO) and the *Banque des Etats de l'Afrique Centrale* (BEAC), took over issuance of the CFA franc.

The CFA zone comprises 14 countries, including 12 former French colonies and 2 new member: Equatorial Guinea (since 1985) and Guinea-Bissau (since 1997). The zone comprises two regions: eight West African States (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) and six Central African States (Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon). The first group of countries belongs to the West African Monetary Union (WAMU) and the second belongs to the Central African Monetary Area (CAMA).

b. Exchange rate and monetary arrangements

The two regional central banks operate independently and issue two separate CFA currencies: the *franc de la Communauté Financière de l'Afrique* and the *franc de la Coopération Financière Africaine*. But since the two currencies have the same parity to the FF, they are equivalent, for all practical purposes, and the zone is in fact a common currency area. Any decision to change the parity of the currencies requires the unanimous support of all member States of the entire zone.

The parity of the CFA franc to the FF was established in October 1948 at 0.5 CFA francs per FF. However, in 1968 the parity was adjusted following the introduction of a new FF equivalent to 100 of the old FF. The value of the CFA franc relative to the FF did not change, but its absolute value was raised to 50 CFA francs per FF. Following the continued deterioration of economic conditions in the 1980s and early 1990s, the CFA franc, which had been overvalued for years, was finally devaluated by 50 per cent in February 1994.

Today, the CFA franc is fully convertible and there is free capital mobility between the two regions and France. Full convertibility of the CFA franc is guaranteed by the French Treasury, rather than the central bank of France. Therefore the arrangement is of a budgetary rather than monetary nature. This feature facilitated the shift of the parity from the FF to the euro when the EMU was established, as it did not require the approval of other members of the EMU. This shift has left the operating structures of the CFA zone and the relationships between the group and France fundamentally unchanged. The current fixed rate is 100 CFAF per 0.8385 euro. (For further details on the CFA zone and the implications of the EMU see, among others, Hadjimichael and Galy, 1997, and Honohan and Lane, 2000).

Under the fixed exchange regime, zone member countries have been able to maintain inflation rates that are lower than those of other comparable sub-Saharan African countries. However price stability has been achieved at significant costs. The inability to adjust the exchange rate has resulted in higher sensitivity of economic growth to real shocks, especially termsof-trade fluctuations. Most observers conclude that CFA zone countries would have been better off having flexibility to use exchange rate adjustments in the presence of external shocks (Savvides, 1996).

		IN SOME	AFRICAN COUNT	FRIES AS OF 1999		
	Controls (on FDI	Barkshowma	Limits on open foreign evolution	Resident ac	counts
Country	Inward FDI	Outward FDI	abroad abroad	position	Held domestically	Held abroad
Angola	Effective May 1999: - minimum of \$60,000 for FDI - up to \$25,000: central bank clearance required - above \$25,000: government approval required	Citizens allowed to invest abroad	Allowed	Daily open position up to \$500,000 for banks; \$150,000 for foreign exchange bureaus.	Deposits allowed without declaring source of funds	Clearance needed for enterprises; no approval needed for individuals
Benin	Reporting required only for statistical purposes	Subject to approval; maximum of 75% may be financed by foreign loans.	Authorized intermediaries may borrow freely abroad	No prudential ratios	Subject to prior authorization by MOF	Allowed with prior authorization by MOF and approval of the BCEAO
Botswana	n.a.	No limits	n.a.	Overall limit of 30% of unimpaired bank's capital	No limits on amounts	No restrictions
Comoros	Controlled	Subject to approval on underlying trans- actions	Controlled	п.а.	Allowed, approval required	Allowed, approval required
Congo, Dem. Rep.	Subject to license from central bank	Subject to license from central bank	Controlled	Ceiling for each bank authorized by central bank	In authorized banks, no approval by central bank	Allowed for public and semi-public enterprises, subject to central bank's approval

Table A.1

CONTROLS ON FOREIGN EXCHANGE AND CAPITAL ACCOUNT TRANSACTIONS

/...

		counts	Held abroad	Allowed	Not allowed	Allowed with prior approval	Permitted with prior approval	
Table A.1 (continued) CONTROLS ON FOREIGN EXCHANGE AND CAPITAL ACCOUNT TRANSACTIONS IN SOME AEPICAN COUNTERS AS OF 1999	TTRANSACTIONS	Resident ac	Held domestically	Allowed	Allowed for exporters with central bank's approval	Not allowed	Allowed	
	CAPITAL ACCOUN ⁻ FRIES AS OF 1999	Limits on open	roreign excnange position	Total foreign assets to total foreign liabilities not to exceed 105%	Maximum 15% of a bank's capital at end of business day on each Friday	л.а.	Allowed based on volume of foreign exchange transactions by banks, subject to periodic review	
	EXCHANGE AND (E AFRICAN COUN'		banks borrowing abroad	п.а.	Subject to central bank's authorization	n.a.	Allowed with prior notification of the central bank	
	DLS ON FOREIGN I IN SOME	on FDI	Outward FDI	n.a.	n.a.	Must be declared at MOFBP	Approval on the basis of merit t	
	CONTRO	Controls c	Inward FDI	Non-bank foreign exchange dealers must be entirely Egyptian-owned	Foreigners can hold up to 100% of shares in any ventures, exclud. banking, insurance, and transport: Investment restricted in some sectors; tax incentives for FDI	Minimum national shareholding of 10% of capital	Minimum amounts of: - \$10,000 if joint venture is with a Ghanaian partner 550,000 when wholly foreign-owned - \$300,000 if employs a least 10 Ghanaians and wholly or partly foreign-owned	
			Country	Egypt	Ethiopia	Gabon	Ghana	

Table A.1 (continued)

ICN EVCHANCE AND CAPITAL ACCOUNT TRANSACTIONS

.../...

Table A.1 (continued)

CONTROLS ON FOREIGN EXCHANGE AND CAPITAL ACCOUNT TRANSACTIONS IN SOME AFRICAN COUNTRIES AS OF 1999

	Controls o	n FDI		Limits on open	Resident ac	counts
Country	Inward FDI	Outward FDI	banks borrowing abroad	roreign excnange position	Held domestically	Held abroad
South Africa	ਲ. ਦ	Limits for companies: R250 million within SADC (no limit for CAM countries), R50 million elsewhere; R750,000 for individuals	Prior approval for medium- and long- term borrowing	Maximum of 15% of net qualifying capital and reserves	Limited to R50,000 for individuals; the max. allowed FDI of R750,000 may be held in domestic accounts	Merit-based approval; max. R750,000; individuals may retain foreign-earned income abroad
Tanzania, United Rep. of	Approval required; some areas restricted to public sectors, some to Tanzanian citizens	Subject to approval by central bank	Borrowing regulated, but banks permitted to operate credit lines with correspondents	Maximum 20% of core capital	Allowed	For individuals no restrictions on money acquired abroad; for banks, no restrictions on operations with correspondents
Tunisia	Free in most sectors; approval required in some service sectors	Central bank's approval required for transfers of capital: "free" (within limits transfer of funds by ex- porters to cover installation maintenance and operatin costs of subsidiaries	Free up to D10 million ;) n, 1g	Global limit of 20% of bank's net equity capital in all currencies (maximum of 10% in each currency)	Allowed; subject to regulations	Subject to approval for individuals; free for resident banks
Uganda	No controls	No controls	n.a.	Maximum 20% of core capital	Allowed	Allowed
						/

	CONTRO	LS ON FOREIGN I IN SOME	EXCHANGE AND C E AFRICAN COUNT	APITAL ACCOUNI RIES AS OF 1999	F TRANSACTIONS	
	Controls (on FDI		Limits on open	Resident ac	scounts
Country	Inward FDI	Outward FDI	Banks borrowing abroad	roreign excnange position	Held domestically	Held abroad
Zambia	No controls	No controls	No controls (reporting for statistical purposes)	n.a.	Allowed	Allowed
Zimbabwe	Approval by ZIC; max. foreign-ownership; up to100% in "priority sectors" (manufacturing, mining, hotels), 70% in specialized services; 35% in partnership with nationals in "reserve sectors"	ë L	Subject to exchange controls	For authorized dealers, maximum of US\$2 million or 10% of capital	Allowed	Allowed, subject to prior approval

Table A.1 (concluded)

Source: IMF (2000b). Note: MOF = Ministry of Finance; BCEAO = Banque Centrale des Etats de l'Afrique de l'Ouest (Central Bank of West African States); CMA = Common Monetary Area (comprising Lesotho, Namibia, South Africa, Swaziland); SADC = Southern African Development Community; ZIC = Zimbabwe Investment Centre.

Table A.2

EXCHANGE RATE REGIMES IN 1991 AND 1999

(Grouped by the exchange rate regimes in 1991)

Country	Regime 1991	Category 1991	Regime 1999	Category 1999	Currency peg 1999
Benin	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Burkina Faso	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Cameroon	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Central African					
Republic	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Chad	NS/CBA	Hard neg	NS/CBA	Hard neg	French franc
Congo	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Côte d'Ivoire	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Diibouti		Hard pog		Hard pog	French franc
Equatorial Cuinco	NG/CDA	Llard peg		Llard peg	French frenc
Equatorial Guiriea	NS/CBA	Hard peg	NS/CBA	Hard peg	
Gabon	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Guinea-Bissau	CP	Soft peg	NS/CBA	Hard peg	French franc
Mali	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Niger	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Senegal	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Тодо	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Botswana	FP	Soft neg	FP	Soft neg	Basket ^a
Cane Verde	FD	Soft peg	FD	Soft peg	Escudo
Cape verue	ED	Soft peg	ED	Soft peg	Eronch franc
Comoros		Soft peg		Soft peg	
Egypt		Solt peg		Solt peg	US\$ Dend
Lesotno	FP	Soft peg	FP	Soft peg	Rand
Libyan Arab		o <i>"</i>		o <i>"</i>	
Jamahiriya	нв	Soft peg	нв	Soft peg	SDR
Morocco	FP	Soft peg	FP	Soft peg	Basket"
Namibia	NS/CBA	Hard peg	FP	Soft peg	Rand
Seychelles	FP	Soft peg	FP	Soft peg	Basket ^c
Swaziland	FP	Soft peg	FP	Soft peg	Rand
Tunisia	CP	Soft peg	CP	Soft peg	CP
Zimbabwe	FP	Soft peg	FP	Soft peg	US\$
Algeria	FP	Soft peg	MF	Independent float	MF
Angola	FP	Soft peg	IF	Independent float	IF
Burundi	FP	Soft peg	MF	Independent float	MF
Congo, Dem, Rep. of	IF	Independent float	IF	Independent float	IF
Eritrea			IF	Independent float	IF
Ethiopia	FP	Soft peg	MF	Independent float	MF
Gambia			IF	Independent float	IF

Table A.2 (concluded)EXCHANGE RATE REGIMES IN 1991 AND 1999

(Grouped by the exchange rate regimes in 1991)

Country	Regime 1991	Category 1991	Regime 1999	Category 1999	Currency peg 1999
Ghana	IF	Independent float	IF	Independent float	IF
Guinea	MF	Independent	IF	Independent	IF
Kenya	FP	Soft peg	MF	Independent	MF
Liberia	FP	Soft peg	IF	Independent float	IF
Madagascar	FP	Soft peg	IF	Independent float	IF
Malawi	FP	Soft peg	MF	Independent float	MF
Mauritania	MF	Independent float	MF	Independent	MF
Mauritius	FP	Soft peg	IF	Independent float	IF
Mozambique	MF	Independent float	IF	Independent	IF
Nigeria	MF	Independent	MF	Independent	MF
Rwanda	FP	Soft peg	IF	Independent	IF
Sao Tome and Principe	CP	Soft peg	IF	Independent float	IF
Sierra Leone	IF	Independent float	IF	Independent float	IF
Somalia	CP	Soft peg	IF	Independent float	IF
South Africa	MF	Independent float	IF	Independent float	IF
Sudan	FP	Soft peg	IF	Independent float	IF
Tanzania, United Rep. of	FP	Soft peg	IF	Independent	IF
Uganda	FP	Soft peg	IF	Independent	IF
Zambia	MF	Independent float	IF	Independent float	IF

Source: Fischer (2001); IMF (2000a).

Note: Abbreviations: CP = Crawling pegs; FP = other conventional fixed pegs; HB = pegged rate in horizontal band; IF = independently floating; MF = managed float with no pre-announced exchange rate path; CB = rates within crawling bands; NS = arrangements with no separate legal tender; CBA = currency board; SDR = special drawing rights.

a SDR, rand.

b US\$, SDR, £.

c Euro, yen, £, US\$, Singapore \$, rand.

NOTES

- 1 For further discussion of financial development in Africa, see Ndikumana (2001), Gelbard and Leite (1999), Nissanke and Aryeetey (1998), and Mehran et al. (1998).
- 2 Commitment of monetary policy to price stability does not necessarily amount to surrender by the national authorities of the right to use monetary policy to respond to exogenous shocks. The idea is to foster *disciplined discretion* in monetary policy, especially by shielding monetary policy from fiscal pressures.
- 3 The "hard pegs" category includes regimes with a currency board, or arrangements with no special legal tender; the "soft pegs" category includes other conventional fixed pegs, pegged rates in horizontal bands, crawling pegs, and pegged rates with crawling bands. The "independent floats" category includes independently floating and managed float with no pre-announced exchange rate path (Fischer, 2001).
- 4 For a brief history of the CFA zone and its operational structure, see the text in the appendix. Also see Honohan and Lane (2000), and Guillaumont, Guillaumont and Plane (1988) for quantitative analyses of economic performance in the CFA zone. The finding of low inflation in countries with fixed-peg regimes is consistent with the results from existing cross-country studies (see Ghosh et al., 1997).
- 5 The choice of the year 1994 to split the 1990s decade for the SADC group is primarily for comparison purposes with CFA zone countries. For South Africa, 1994 is historically important as it marks the end of the apartheid era, and the year is therefore a natural break point for that country.
- 6 Instrument independence of the central bank refers to the freedom to choose the monetary policy instruments needed to meet given macroeconomic objectives. Goal independence means the central bank's freedom to set the ultimate goals of monetary policy. In practice, the independence of the central bank is generally limited to instrument independence.
- 7 Note that the arguments in favour of or against dollarization discussed here apply also to "euroization".
- 8 The average for the 1994–2000 period is computed from data in IMF, *Direction of Trade Statistics 2001.* See Yeats (1999); Aryeetey et al. (1996); and Asante (1997) for in-depth discussions of trade and regionalism in Africa.

REFERENCES

- Ajayi I and Khan M, eds. (2000). *External Debt and Capital Flight in Sub-Saharan Africa*. Washington, DC, The IMF Institute.
- Ariyoshi A, Habermeier K, Laurens B, Tker-Robe I, Canales-Kriljenko JI, Kirilenko A (2000). Capital controls: Country experiences with their use and liberalization. IMF Occasional Paper 190, Washington, DC, IMF.

- Aryeetey E, Robinson P, Lyakurwa W, and Mistry P (1996). *Regionalism and the Global Economy. The Case of Africa*. The Hague, FONDAD.
- Asante SKB (1997). Regionalism and Africa's Development. Expectations, Reality, and Challenges. New York, St. Martin Press.
- Azam J-P (1999). Dollars for sale: Exchange rate policy and inflation in Africa. *World Development*, 27 (10): 1843–1859.
- Berg A and Borensztein E (2000). The pros and cons of full dollarization. IMF Working Paper 00/50. Washington, DC, International Monetary Fund.
- Bhinda N, Griffith-Jones S, Leape J and Martin M (1999). *Private Capital Flows to Africa. Perceptions and Reality.* The Hague, FONDAD.
- Boyce J and Ndikumana L (2001). Is Africa a net creditor? New estimates of capital flight from severely indebted sub-Saharan African countries, 1970–1996. *Journal of Development Studies*, 38 (2): 27–56, December.
- Calvo G and Reinhart C (1999). Capital flow reversals, the exchange rate debate, and dollarization. *Finance and Development*, September: 13–15.
- Calvo G and Reinhart C (2000). Fear of floating. Working Paper 7993, National Bureau of Economic Research, Cambridge, MA.
- Collier P and J W Gunning (1999a) Explaining African economic performance. *Journal of Economic Literature*, 37(1): 64–111.
- Collier P and J W Gunning (1999b). Why has Africa grown slowly? *Journal of Economic Perspectives*, 13(3): 3–22.
- Collier P, Hoeffler A and Pattillo C (1999). Flight capital as a portfolio choice. Unpublished manuscript, World Bank, Washington, DC.
- Collier P and Pattillo C (2000). Investment and risk in Africa. In: Collier P and Pattillo C, eds., Investment and Risk in Africa. New York, St. Martin Press: 3–30.
- Cooper R (1999). Should capital controls be banished? *Brookings Papers on Economic Activity* 1: 89–141.
- Fajgenbaum J, Sharer R, Thugge K, and DeZoysa H (1999). *The Cross-Border Initiative in Eastern and Southern Africa*. Washington, DC, International Monetary Fund, July 14.
- Fischer S (1999). Capital account liberalization and the role of the IMF. Essays in International Finance: Should the IMF Pursue Capital-Account Convertibility? No. 207. Princeton, NJ, Princeton University: 1–10.
- Fischer S (2001). Exchange rate regimes: Is the bipolar view correct? *Journal of Economic Perspectives*, 15 (2): 3–24.
- Gelbard E and Leite SP (1999). Measuring financial development in sub-Saharan Africa. Working Paper 99/105, International Monetary Fund, Washington, DC.
- Ghosh A, Guld A-M, Ostry J, Wolf H (1997). Does the nominal exchange rate regime matter? NBER Working paper 5874, National Bureau of Economic Research, Cambridge, MA.
- Guillaumont P, Guillaumont S and Plane P (1988). Participating in African monetary unions: An alternative evaluation. *World Development* 16(5): 569–576.
- Hadjimichael M and Galy M (1997). The CFA franc zone and the EMU. Working paper 97/ 156, International Monetary Fund, Washington, DC.
- Honohan P and Lane P (2000). Will the euro trigger more monetary unions in Africa? Working paper 2393, World Bank, Washington, DC.

- IMF (1998). Nigeria: Selected issues and statistical appendix. *Staff Country Report* no. 98/78, International Monetary Fund, Washington, DC.
- IMF (2000a). Annual Report on Exchange Arrangements and Exchange Restrictions. Washington, DC, International Monetary Fund.
- IMF (2000b). South Africa: Selected Issues. Staff Country Report no. 00/42, International Monetary Fund, Washington, DC
- IMF (2001). Malawi: Selected issues and statistical appendix. *Country Report* no. 01/32, International Monetary Fund, Washington, DC.
- Kasekende L, Kitabire D and Martin M (1999). Capital flows and macroeconomic policy in sub-Saharan Africa. In: Helleiner GK, ed., *Capital Account Regimes and the Developing Countries*. New York, St. Martin Press: 141–183.
- Krichene N (1998). Purchasing power parities in five East African countries: Burundi, Kenya, Rwanda, Tanzania, and Uganda. IMF Working Paper 98/148. Washington, DC, International Monetary Fund.
- Lensink R, Hermes N and Murinde V (1998). The effect of financial liberalization on capital flight in African economies, *World Development* 26(7): 1349–1368.
- Lensink R, Hermes N and Murinde V (2000). Capital flight and political risk. *Journal of International Money and Finance*, 19: 73–92.
- Levine R and Zervos S (1998). Stock markets, banks, and economic growth. *American Economic Review*, 88 (3): 537–557.
- Mecagni M and Sourial M (1999). The Egyptian stock market: Efficiency tests and volatility effects. IMF Working Paper 99/48. Washington, DC, International Monetary Fund.
- Mehran H, Ugolini P, Briffaux JP, Iden G, Lybek T, Swaray S and Hayward P (1998). Financial sector development in sub-Saharan African countries. IMF Occasional Paper 169. Washington, DC, International Monetary Fund.
- Mongardini J (1998). Estimating Egypt's equilibrium real exchange rate. IMF Working Paper 98/5, Washington, DC, International Monetary Fund.
- Mussa M, et al. (2000). Exchange rate regimes in an increasingly integrated world economy. IMF Occasional Paper no. 193. Washington, DC, International Monetary Fund.
- Ndikumana L (2001). Financial markets and economic development in Africa. Working paper 17, Political Economy Research Institute, University of Massachusetts, Cambridge, MA.
- Ndikumana L and Boyce JK (1998). Congo's odious debt: External borrowing and capital flight in Zaïre. *Development and Change*, 29: 1995–217.
- Ndikumana L and Boyce JK (2001). Public debts and private assets: Explaining capital flight from sub-Saharan African countries. Mimeo, Department of Economics, University of Massachusetts.
- Nissanke M and Aryeetey E (1998). *Financial Integration and Development in Sub-Saharan Africa*. London, Routledge.
- Nyoni T (2000). Capital flight from Tanzania. In: Ajayi I and Khan M, eds. *External Debt and Capital Flight in Sub-Saharan Africa*. Washington, DC, IMF Institute: 265–299.
- Obstfeld M and Rogoff K (1995). The mirage of fixed exchange rates. *Journal of Economic Perspectives*, 9(4): 73–96.

Olopoenia R (2000). Capital flight from Uganda, 1971-94. In: Ajayi I and Khan M, eds. *External Debt and Capital Flight in Sub-Saharan Africa*. Washington, DC, IMF Institute: 238–264.

- Saviddes, A (1996). CFA franc zone membership and exchange rate variability. *Journal of African Economies*, 5(1): 52–68.
- Singh A (1999). Should Africa promote stock market capitalism? *Journal of International Development*, 11: 343–365.
- Singh, A and Weisse B (1998). Emerging stock markets, portfolio capital flows and long-term economic growth: Micro and macroeconomic perspectives. *World Development*, 26(4): 607–622.
- Subramaniam A and Handy H (1997). The Egyptian stabilization experience: An analytical retrospective. Working paper 97/105, International Monetary Fund, Washington, DC.
- Ul Haque H, Mark N and Mathieson D (2000). Rating Africa: The economic and political content of risk indicators. In: Collier P and Pattillo C, eds., *Investment and Risk in Africa*. New York, St. Martin Press, 33–70.
- UNCTAD (1992) World Investment Report 1992: Transnational Corporations as Engines of Growth. New York, United Nations, Publication sales no E.92.II.A.19.
- UNCTAD (1993). World Investment Report 1993: Transnational Corporations and Integrated International Production. New York and Geneva, United Nations Publication sales no E.93.II.A.14.
- UNCTAD (1994) World Investment Report 1994: Transnational Corporations, Employment and the Workplace. New York and Geneva, United Nations Publication sales no E.94.II.A.14.
- UNCTAD (1995a). Foreign Direct Investment in Africa. Current Studies, Series, A, No. 28. United Nations Publication sales no E.95.II.A.6
- UNCTAD (1995b). World Investment Report 1995: Transnational Corporations and Competitiveness. New York and Geneva, United Nations Publication sales no E.95.II.A.9
- UNCTAD (1996). World Investment Report 1996: Investment, Trade and International Policy Arrangements. New York and Geneva, United Nations Publication sales no E. 96.2.A.14.
- UNCTAD (1997). World Investment Report 1997: Transnational Corporations, Market Structure and Competition Policy. New York and Geneva, United Nations Publication sales no E.97.II.D.10.
- UNCTAD (1998) *World Investment Report 1998: Trends and Determinants*. New York and Geneva, United Nations Publication sales no E.98.II.D.5.
- UNCTAD (1999) World Investment Report 1999: Foreign Direct Investment and the Challenge of Development. New York and Geneva, United Nations Publication sales no E.99.II.D.3.
- UNCTAD (2000) World Investment Report 2000: Cross-Border Mergers and Acquisitions, and Development. New York and Geneva, United Nations Publication sales no E.99.II.D.20.
- World Bank (1997a). *Global Development Finance (CD-ROM editions)*. Washington, DC, World Bank.
- World Bank (1997b). Private Capital Flows to Developing Countries. The Road to Financial Integration. New York, Oxford University Press for the World Bank.
- World Bank (2000a). *Global Development Finance (CD-ROM editions)*. Washington, DC, World Bank.
- World Bank (2000b). World Development Indicators 2000. Washington, DC, World Bank.
- Yeats A (1999). What can be expected from African regional trade arrangements? Working paper 2004, World Bank, Washington, DC.

UNITED NATIONS CONFERENCE **ON TRADE AND DEVELOPMENT**



Palais des Nations CH-1211 GENEVA 10 Switzerland (www.unctad.org)

Selected UNCTAD Publications

Trade and Development Report, 2002

United Nations publication, sales no. E.02.II.D.2 ISBN 92-1-112549-9

- Part One Global Trends and Prospects
 - I The World Economy: Performance and Prospects
 - II The Multilateral Trading System After Doha

Part Two

- Developing Countries in World Trade
 - III Export Dynamism and Industrialization in Developing Countries
 - IV Competition and the Fallacy of Composition
 - V China's Accession to WTO: Managing Integration and Industrialization

Trade and Development Report, 2001

United Nations publication, sales no. E.01.II.D.10 ISBN 92-1-112520-0

- Part One Global Trends and Prospects
 - I The World Economy: Performance and Prospects
 - II International Trade and Finance
- Part Two
- Reform of the International Financial Architecture
 - III Towards Reform of the International Financial Architecture: Which Way Forward?
 - IV Standards and Regulation
 - V Exchange Rate Regimes and the Scope for Regional Cooperation
 - VI Crisis Management and Burden Sharing

Trade and Development Report, 2000

United Nations publication, sales no. E.00.II.D.19 ISBN 92-1-112489-1

- I The Current Global Recovery and Imbalances in a Longer-term Perspective
- II The World Economy: Performance and Prospects
- III International Markets
- IV Crisis and Recovery in East Asia

Trade and Development Report, 1999

United Nations publication, sales no. E.99.II.D.1 ISBN 92-1-112438-7

- Part One The World Economy: Fragile Recovery with Downside Risks
 - I The World Economy: Performance and Prospects
 - II International Trade and the Trading System
 - III International Financial Markets: Instability, Trends and Prospects
- Part Two Trade, External Financing and Economic Growth in Developing Countries

Introduction

- IV Payments Deficits, Liberalization and Growth in Developing Countries
- V Capital Flows to Developing Countries
- VI Rethinking Policies for Development

These publications may be obtained from bookstores and distributors throughout the world. Consult your bookstore or write to United Nations Publications/Sales Section, Palais des Nations, CH-1211 Geneva 10, Switzerland (Fax: +41-22-917.0027; E-mail: unpubli@un.org; Internet: www.un.org/publications); or from United Nations Publications, Two UN Plaza, Room DC2-853, Dept. PERS, New York, NY 10017, USA (Tel. +1-212-963.8302 or +1-800-253.9646; Fax +1-212-963.3489; E-mail: publications@un.org).

386

G-24 Discussion Paper Series

Research papers for the Intergovernmental Group of Twenty-Four on International Monetary Affairs

No. 20	Feb. 2003	D. KAPUR	Do As I Say Not As I Do: A Critique of G-7 Proposals on Reforming the Multi- lateral Development Banks
No. 19	Dec. 2002	R. KANBUR	International Financial Institutions and International Public Goods: Operational Implications for the World Bank
No. 18	Sept. 2002	A. SINGH	Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions
No. 17	April 2002	F. LÓPEZ-DE- SILANES	The Politics of Legal Reform
No. 16	Jan. 2002	G. ESQUIVEL and F. LARRAÍN B.	The Impact of G-3 Exchange Rate Volatility on Developing Countries
No. 15	Dec. 2001	P. EVANS and M. FINNEMORE	Organizational Reform and the Expan- sion of the South's Voice at the Fund
No. 14	Sept. 2001	C. WYPLOSZ	How Risky is Financial Liberalization in the Developing Countries?
No. 13	July 2001	J. A. OCAMPO	Recasting the International Financial Agenda
No. 12	July 2001	Y.C. PARK and Y. WANG	Reform of the International Financial System and Institutions in Light of the Asian Financial Crisis
No. 11	April 2001	A.A. MOHAMMED	The Future Role of the International Monetary Fund
No. 10	March 2001	JOMO K.S.	Growth After the Asian Crisis: What Remains of the East Asian Model?
No. 9	Feb. 2001	G.H. HANSON	Should Countries Promote Foreign Direct Investment?
No. 8	Jan. 2001	I. GOLDFAJN and G. OLIVARES	Can Flexible Exchange Rates Still "Work" in Financially Open Economies?
No. 7	Dec. 2000	A. CORNFORD	Commentary on the Financial Stability Forum's Report of the Working Group on Capital Flows

G-24 Discussion Paper Series

Research papers for the Intergovernmental Group of Twenty-Four on International Monetary Affairs

No.	6	Aug. 2000	D. KAPUR and R. WEBB	Governance-related Conditionalities of the International Financial Institutions
No.	5	June 2000	A. VELASCO	Exchange-rate Policies for Developing Countries: What Have We Learned? What Do We Still Not Know?
No.	4	June 2000	K. PISTOR	The Standardization of Law and Its Effect on Developing Economies
No.	3	May 2000	A. CORNFORD	The Basle Committee's Proposals for Revised Capital Standards: Rationale, Design and Possible Incidence
No.	2	May 2000	T.A. OYEJIDE	Interests and Options of Developing and Least-developed Countries in a New Round of Multilateral Trade Negotia- tions
No.	1	March 2000	A. PANAGARIYA	The Millennium Round and Develop- ing Countries: Negotiating Strategies and Areas of Benefits

G-24 Discussion Paper Series are available on the website at: www.unctad.org. Copies of *G-24 Discussion Paper Series* may be obtained from the Publications Assistant, Macroeconomic and Development Policies Branch, Division on Globalization and Development Strategies, United Nations Conference on Trade and Development (UNCTAD), Palais des Nations, CH-1211 Geneva 10, Switzerland (Fax: +41-22-907.0274; E-mail: mdpb-ed.assistant@unctad.org).