EMERGING ECONOMIES TRANSITION

Development Centre Seminars

Sustainable Recovery in Asia Mobilising Resources for Development

INTERNATIONAL DEVELOPMENT

Preface by Jorge Braga de Macedo and Tadao Chino

© OECD, 2000.

© Software: 1987-1996, Acrobat is a trademark of ADOBE.

All rights reserved. OECD grants you the right to use one copy of this Program for your personal use only. Unauthorised reproduction, lending, hiring, transmission or distribution of any data or software is prohibited. You must treat the Program and associated materials and any elements thereof like any other copyrighted material.

All requests should be made to:

Head of Publications Division
Public Affairs and Communication Directorate
2, rue André-Pascal, 75775 Paris
Cedex 16, France.

Development Centre Seminars

Sustainable Recovery in Asia

MOBILISING RESOURCES FOR DEVELOPMENT

Preface by

Jorge Braga de Macedo and Tadao Chino

ASIAN DEVELOPMENT BANK

DEVELOPMENT CENTRE OF THE ORGANISATION
FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

– to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
– to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
– to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

THE OPINIONS EXPRESSED AND ARGUMENTS EMPLOYED IN THIS PUBLICATION ARE THE SOLE RESPONSIBILITY OF THE AUTHORS AND DO NOT NECESSARILY REFLECT THOSE OF THE OECD OR OF THE GOVERNMENTS OF ITS MEMBER COUNTRIES.

*
* *

Publié en français sous le titre :

Pour une relance durable en Asie
MOBILISER DES RESSOURCES POUR LE DÉVELOPPEMENT

© ADB/OECD 2000
Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, Tel. (33-1) 44 07 47 70, Fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: http://www.copyright.com/. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

Asian Development Bank

Established in 1966, the Asian Development Bank (ADB) is a multilateral, development finance institution owned by 59 members, mostly from Asia and the Pacific.

ADB's fundamental goal is to reduce poverty in the Asian and Pacific region. To this end, it fosters economic growth, supports human development, improves the status of women, and protects the environment. ADB's principal assistance for developing member countries comprises loans and technical assistance. While a large portion of the assistance is used in public projects and programmes, ADB also pays special attention to private sector development.

ADB headquarters is in Manila, Philippines. The Bank has resident missions in 13 Asian countries, a regional mission for the Pacific, and three representative offices in Frankfurt, Tokyo, and Washington, D.C. ADB's staff numbers 2 000 employees from nearly 50 countries.

Headquarters
6 ADB Avenue, Mandaluyong City
0401 Metro Manila, Philippines

Mailing Address
P.O. Box 789
0980 Manila, Philippines

Tel: (63-2) 632-4444
Fax: (63-2) 636-2444

E-mail: information@adb.org
Website: http://www.adb.org

OECD Development Centre

The Development Centre of the Organisation for Economic Co–operation and Development was established by decision of the OECD Council on 23rd October 1962 and comprises twenty–three Member countries of the OECD: Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Poland, Portugal, Spain, Sweden and Switzerland, as well as Argentina and Brazil from March 1994, and Chile since November 1998. The Commission of the European Communities also takes part in the Centre's Advisory Board.

The purpose of the Centre is to bring together the knowledge and experience available in Member countries of both economic development and the formulation and execution of general economic policies; to adapt such knowledge and experience to the actual needs of countries or regions in the process of development and to put the results at the disposal of the countries by appropriate means.

The Centre has a special and autonomous position within the OECD which enables it to enjoy scientific independence in the execution of its task. Nevertheless, the Centre can draw upon the experience and knowledge available in the OECD in the development field.

Foreword

This publication was undertaken in the context of the International Forum on Asian Perspectives, jointly organised by the Asian Development Bank and the OECD Development Centre. It forms part of the Centre's research programme on *Capital Flows, Financial Crises and Development*, and the Centre's External Co–operation activities. The Forum held its sixth meeting in Paris on 3 and 4 July 2000 on the theme "Development Resource Mobilisation in the Post–Crisis Period". Contributions to that meeting are included in this volume.

Table of Contents

Preface
Jorge Braga de Macedo and Tadao Chino 7

Introduction
Colm Foy, Yun–Hwan Kim and Helmut Reisen 9

PART ONE
FINANCIAL RESOURCES FOR DEVELOPMENT

Post–Crisis Policy Agenda for Reforming the Financial Sector in Asia
Yun–Hwan Kim 19

Fiscal Outcomes and the East Asian Economic Crisis
J. Edgardo Campos and David Jay Green 43

The Need for Foreign Savings in Post–Crisis Asia
Helmut Reisen and Marcelo Soto 65

Best Practices for Promoting Private Sector Investment in Infrastructure
Sean O'Sullivan 87

PART TWO
PUTTING POLICIES INTO PRACTICE

Inaugural Address
Stéphane Pallez 109

Welcoming Remarks
Jorge Braga de Macedo 113

Keynote Address
Tadao Chino 119

Post–Crisis Asia: Resource Mobilisation through Capital Markets,
IFIs and the Private Sector
Christine Wallich 123

Towards Sustainable Growth of the Asian Economy
Ken Yagi 129

Complacency is Out of Place
Norbert Walter 135

Public Expenditure Reform
Hafiz Ahmed Pasha 141

Risk–Informed Capital Flows — A Global VaR Approach
José Braz 151

Foreign Direct Investment in Korea: The Role of the Ombudsman
Kim–Wan Soon 159

Lessons from the Asian Crisis
Philippe de Fontaine Vive 173

Programme 177

List of Authors and Participants 183

Preface

The Sixth International Forum on Asian Perspectives met in early July 2000 to discuss ways in which fresh and sustainable financing could be found in the wake of Asia's economic crisis specifically for development projects. The Forum, founded in 1995 by the Asian Development Bank and the OECD Development Centre, provides a venue for the discussion of contemporary Asian economic problems by experts and other concerned individuals from the political, business, academic and media communities.

The causes of the financial crisis of the late 1990s will remain a matter for discussion for many years, but there is no doubt that a major element was the volatility of financial flows. Fast–developing East Asia built its growth largely on domestic savings, but it *also* benefitted much from foreign inflows; when these flows were reversed, the economies faltered. This had important implications for public resources, causing revenues to shrink even as demands on the budget soared. It also revealed the inadequacy of the public sector to pay for development projects.

The supply of public services and infrastructures has increasingly become dependent on input from the private sector. This input can consist of partnerships in service delivery, or the privatisation of parts of the economy formerly assumed to be the state domain. For the private sector to become — and to stay — involved in the provision of public goods and services, sound sources of financing need to be found and a business environment conducive to long–term investment has to be created.

The broad conclusions of the Sixth International Forum on Asian Perspectives point to the imperative of finding innovative solutions to the problem of development funding. At the same time, the Forum reinforced the view that, beyond growth, economic development depends upon reducing poverty and providing employment. We hope that this book will also contribute to the adoption of appropriate poverty–reduction strategies throughout the region.

Jorge Braga de Macedo
President
OECD Development Centre
Paris

Tadao Chino
President
Asian Development Bank
Manila

October 2000

List of Abbreviations and Acronyms

ADB	Asian Development Bank
BLS	Bank–led Governance System
BOOT	Build–own–operate–transfer
BOT	Build–operate–transfer
CPI	Consumer Price Index
CSD	Central Securities Depository
DVP	Delivery versus Payment
EFB	Exchange Fund Bill
EFN	Exchange Fund Note
EFP	Exchange Fund Paper
EMBI	Emerging Market Bond Index
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IMF	International Monetary Fund
LIBOR	London Interbank Offered Rate
LOI	Letter of Intent
MLE	Medium and Large Enterprise
MSE	Micro and Small Enterprise
MTN	Medium–term Notes
ODA	Official Development Assistance
OECD	Organisation for Economic Co–operation and Development
OIO	Office of the Investment Ombudsman
PPP	Purchasing Power Parity
PSP	Private Sector Participation
SDDS	Special Data Dissemination Standards
SOE	State–owned Enterprise
S&P	Standard & Poor's

Special Note: Country Nomenclature

a. China refers to the People's Republic of China (PRC).

b. Hong Kong, Hong Kong, China (ADB convention) and Hong Kong (China) (OECD convention) are interchangeably used.

c. The Republic of Korea is usually called Korea throughout.

d. Taipei, China (ADB convention) and Chinese Taipei (OECD convention) are interchangeably used.

Introduction

Colm Foy, Yun–Hwan Kim and Helmut Reisen

While some Asian countries have staged a remarkable recovery from the deep 1997–98 financial crisis, growth has been uneven and the concern now is how to sustain the recovery. At the forefront of policy considerations is how to mobilise and govern financing for sustained growth.

The Sixth International Forum on Asian Perspectives, on which this book is based, thus sought to identify ways in which resources could be brought into play for development purposes from both the public and the private sectors and, indeed, from a partnership between both. The task is enormous: two–thirds of the planet's poor live in the Asian region and the accumulation of wealth in that region is not trickling down to them as fast as it should, and often hardly at all. The first question, therefore, is how can local assets — domestic resources — be drawn into supporting development; the second, complementary to the first, is how can foreign resources best be employed in the same direction; and, finally, what is an appropriate mix of public and private financing for development? The challenge has become one of rethinking the whole question of development financing in which all sectors of the financial community are involved, including official development assistance (ODA) donors.

Pro–poor sustainable growth is a necessary precondition for reducing poverty further, and that growth has to be financed. For example, an increasingly prosperous and urbanised Asia needs huge infrastructure investments, amounting to more than $100 billion per year, according to Asian Development Bank (ADB) projections, for sanitation, environmental protection and education.

The scale of the region's financing requirements calls for the mobilisation of domestic resources, particularly through public finance reform; for attracting reliable foreign flows, especially through opening further to long–term flows and through bringing corporate governance and transparency to global standards; for improving the allocation of resources, specifically through complementing Asia's bank finance with direct securities markets, and for private–public partnerships, as finance needs for infrastructure exceed public–finance possibilities by a wide margin.

Public Spending Reform

Much of Asia has long been characterised by high domestic savings, which financed the rapid capital accumulation that accompanied remarkable economic growth. One of the legacies of the Asian financial crisis, however, is the prospect that it may lead to a temporary drop in government, corporate and household savings as a result of reform efforts devoted to restoring sustained recovery. As a result of the ongoing and extremely costly resolution of the region's banking crises, bank recapitalisation has saddled many Asian governments with heavy public debt burdens, hence reducing government savings. Meanwhile, corporate savings may be affected negatively as long as growth prospects are not yet durably installed. Household savings may drop as a result of fiscal reform efforts aimed at containing public deficits and as a result of any positive income effect of financial–system reform aimed at higher capital returns. Rising old–age dependency is also set increasingly to dampen private savings. Theory and evidence have shown that only a return to sustained growth will — with a lag — stimulate savings again, as it did in the past in Asia.

One fairly reliable means of mobilising domestic resources is through public–finance reform. It can be shown that higher public savings only reduce private savings by half as much, thus resulting in a net increase in national savings. The problem here, however, is that government income has been hit by falling tax revenues, resulting from falling profit levels and private incomes, at the same time as calls on public spending rose as a result of the increased cost of debt service brought on by the devaluation of the currency. When the cost of recapitalising the banks is added, the scope for generating higher public savings is clearly reduced.

Innovative fiscal arrangements will have to be developed to deal with this new environment and permit public savings to rise. While it is obvious that Asian governments will need to improve revenue collection by broadening the tax base and reducing exemptions, a fresh look needs to be taken at streamlining and rationalising public spending. The sixth International Forum on Asian Perspectives suggested eight areas for public spending reform:

- refocusing the role of government so that spending produces public rather than private goods;
- improving transparency and accountability by adopting internationally recognised systems of public accounting and more improved disclosure procedures, and by introducing effective oversight mechanisms;
- fixing of priorities by reducing wage expenditure, rehabilitating infrastructure and raising spending on social development and poverty reduction operations;
- decentralising the management of public–sector activities according to the subsidiarity principle;
- privatising and entering into public/private partnerships for public–service delivery;

— developing a leaner and more effective civil service through appropriate incentive structures training;

— strengthening monitoring and evaluation; and

— integrating planning and budgeting into a medium–term framework.

Such measures, however, are not without their costs, specifically in the political field. What they amount to is the governance reform about which we have already made reference, and they imply reducing the power and influence of often key social, political and economic groups. By reducing discretionary powers and opportunities for patronage, such measures also diminish rent–seeking by groups which have become accustomed to using public resources for this purpose. Means will have to be found to overcome this political resistance, and among these means will certainly be reinforced democratic systems.

Attracting Foreign Resources

Alongside the central role of domestic resources for stimulating and facilitating growth, development and poverty reduction, there is an important place for foreign inflows in post–crisis Asia, provided that the right mix of these flows can be achieved. With domestic savings providing a limited pool of finance and with concessional financing in the form of aid flows on the decline, private foreign capital flows are bound to remain an important source of finance for Asian economies, despite the risks which can be associated with them and which gave rise to the Asian crisis in the first place. The primary risk associated with external flows is sudden reversal. These flows, typically bank lending and debt, tend to contribute to misallocation in the context of domestic distortions and corruption. In order to maximise the benefits of foreign flows — capital deepening, efficiency enhancement, technology transfer and consumption smoothing — the right mix of flows must be encouraged by the host countries. This is particularly true in those countries where domestic credit channels are weak. Essential to the maximisation of the benefits from foreign capital flows is the creation and maintenance of a regulatory regime with mandatory disclosure of financial information by the private corporate sector and enforcement and oversight by tightly regulated financial intermediaries. Such structures will permit foreign investors to obtain reliable information on the basis of standardised host–country data; employing modern risk–management techniques will, as a result, make global capital flows less risk–prone than in the past.

Recent research has demonstrated the degree of reversibility of different types of financial flows and the International Forum on Asian Perspectives heard evidence of the specific growth effects of the various types of flow. A clear conclusion is that Asian countries — and emerging markets generally — should favour portfolio flows and foreign direct investment (FDI) over debt–creating bank lending from abroad. Debt flows have a neutral or negative growth effect where banking systems are

undercapitalised, while FDI and portfolio investment generate positive independent growth effects in emerging markets, even in conditions of bank undercapitalisation. If portfolio flows require tight regulation to avoid asset–price inflation, emerging markets can maximise the benefits from bad weather–proof and largely irreversible FDI through a number of policy measures designed, principally, to reduce long–term import substitution, raise the educational level of the population and reduce price distortions produced by subsidies.

The role of official development assistance in supporting long–term fundamental structural change is likely to be limited, especially since ODA has declined since 1990 in both absolute and proportional terms when compared with foreign private flows. However, ODA can play a catalyst role in correcting identified weaknesses and in attracting new private financing, especially where it is used in social sectors, such as education, which are important in persuading FDI to come into the economy. ODA has also been instrumental in palliating the effects of the crisis — though not all countries decided to accept the rescue packages designed by the International Monetary Fund (IMF) — and Japan was a leader in mobilising funds for this purpose. The long–term effect of this use for ODA has not been determined. Perhaps more germane to the discussion is the use of ODA for poverty–reduction programmes during and in the aftermath of the crisis. Here, in an area traditionally unattractive for private funds from either domestic or foreign sources, ODA may be virtually the only source of financing when governments are forced to cut spending and face reduced revenues. The question debated at the Forum revolved around the feasibility of maintaining ODA levels during a crisis and specifically focused on both the co–ordination of ODA policies and improving effectiveness.

A new field for overseas public funding through ODA and other official funding is support for good governance. Currently only a small proportion of development assistance is directed to this purpose and, significantly, much of that goes to small island states. The financial crisis demonstrated, among other things, that the administrative and absorptive capacity of the Asian countries most badly affected was partly to blame for the unsustainability of the high levels of private flows they were receiving. This is thus an area where ODA and other official flows could usefully be used in order to attract more stable forms of foreign financing and improve financial management, generally. At the same time, official foreign flows can be used to support local government and non–governmental organisations in an attempt to underscore the governance initiatives being taken by national authorities and reformed enterprises.

Strengthening the Financial System

The importance of a sound financial system is particularly important for growth and development, and is crucial for recovery after a crisis. In the last few years of the 1990s, it became clear that the financial system in many Asian countries was anything

but sound and this weakness, especially in economies where bank lending was the major source of financing for enterprises, was fatal. Since then, valiant attempts and large amounts of money have been spent on restructuring and recapitalising surviving banks and closing terminally unviable ones, but many remain weak and vulnerable. In these conditions, banks are unable to intermediate sufficiently between private savers and corporate borrowers because they are preoccupied with trying to acquire low–risk government debt or highly liquid assets in order to pursue recapitalisation. The result for enterprises with little or no access to the securities markets or to foreign finance is a chronic shortage of funding. This is especially true for small and micro enterprises which account for up to 70 per cent of employment in low–income Asia and is thus a significant factor in maintaining or worsening poverty levels. A pro–poor strategy must, therefore, include an element of support for local banking equal to that accorded to capital markets.

Overall, the reluctance of banks to lend to private enterprises, a trend exacerbated by the crisis, is a substantial brake on recovery and future growth. Most of the crisis–hit Asian countries are unable to compensate for the banks' timidity in lending to the private sector with efficient capital markets and this implies that direct securities markets must be nurtured. Particular attention needs to be devoted to developing local bond markets in order to diversify the sources of corporate finance and to satisfy Asia's investment appetite reflected in the high levels of savings we have seen. This part of the recovery picture is relatively promising, in that government deficits and restructuring needs are stimulating the development of local bond markets through the issuing of government paper. Since the corporate bond market has a tendency to look to government paper for pricing benchmarks, this is a positive sign which will bring some dynamism to such markets. Nevertheless, obstacles remain on the supply side of local Asian bond markets. Lack of transparency in auction procedures, related to poor governance practices and the prevalence of family–owned firms, deters buyers, while market fragmentation and a small number of liquid benchmark bonds, as well as taxes and settlement obstacles in the secondary market, contribute to low levels of liquidity. Market–to–market accounting, such as that introduced in Korea, should force financial institutions to adjust their portfolios frequently and thus provide liquidity to the market. Meanwhile, the general shift which is beginning to take place in Asian countries from board–based corporate systems to market–based ones, from "insider" to "outsider" models, will strengthen corporate governance and add further transparency to corporate behaviour, thus attracting investor confidence and stimulating interest in the local bond market. This is particularly important because, as globalisation intensifies and competition between markets increases, local investors are more and more able to make investment choices outside their national boundaries.

Problems also remain on the demand side of local bond markets. The role of the small, independent investor in most Asian countries is small and bond markets have to rely on the larger, institutional investors, mutual funds and foreign investors. Local institutional investors, such as pension funds, need to be strengthened and encouraged. Deregulation can play a part in this process, but management skills also need to be

reinforced. As far as foreign investors are concerned, regulation has to be made more pliable and attractive. Measures such as offering tax benefits to foreign investors are being implemented, but more needs to be done on a region–wide basis.

Finally, as part of a poverty–reduction package of strategies, small and medium–sized enterprises must be given access to the bond and financial markets. Their special needs are unlikely to be met by the private sector alone and will have to rely on government initiatives to encourage and facilitate the establishment of appropriate financial institutions through, for example, policy and tax incentives. To compensate for the lack of collateral, peculiar to small and medium–sized enterprises, loan–guarantee institutions will be necessary. In the environment thus created, commercial financial institutions with prudent supervisory systems will cater to their needs leading to their growth and the employment opportunities they are likely to create.

Private Sector Participation

The decline in public flows to emerging economies and developing countries in Asia and elsewhere has led to the transfer of some of the burden of development financing to the private sector. There has thus been a fundamental shift in the aid–for–development paradigm and the private sector's contribution has become crucially important, to such an extent that private capital has replaced public funding in what were once considered the preserves of the state: water and electricity supply; telephones and communications; transport and urban development; health, education and social security. This evolution is seen as a positive trend in countries where consumers were unable to rely on optimal choice at low cost. In addition, the sheer size of some infrastructure projects defies the capacity of public authorities' resources. The role of the public sector, therefore, has become one of creating an enabling environment for private initiatives and of supporting business opportunities in these fields. This role is emphasised by the continuing shortage of bank financing in the aftermath of the crisis and as businesses are forced to turn to domestic and foreign public financing for their projects. In Asia, the ADB has taken a leading role in facilitating the entry of the private sector into development projects.

Many of the initiatives involved are, in fact, public–private partnerships, but their scope may be limited. Financial obligations and responsibilities between the two partners must be clearly mapped out in order to avoid moral hazard problems which might culminate in expensive public bail outs. In the experience of the World Bank, for example, similar partnerships have resulted in infrastructure projects 30 to 40 per cent of which have been labelled by the World Bank as "problematic". It is essential not only to create stable macroeconomic conditions and adopt regulatory reforms which open markets to competition and private investment, but also to establish an environment conducive to mitigating project risks. The problems resemble those of the governance which we have already mentioned: improved legal frameworks for contract enforcement; improved and more transparent accounting procedures; wider use of risk

management; clear definition of the layers and responsibilities of government; regulation fostering local and foreign oversight. In the absence of such reforms, the entry of the private sector will be even more timid than it has been hitherto and the effect of the partial withdrawal of the public sector will be more severe. Private participation in the development process should not, therefore, be seen as some kind of magic solution to the problems left behind by the receding crisis. It will require the same kind of attention to governance principles witnessed elsewhere in the economies of post–crisis Asia.

Part One

Financial Resources for Development

Post–Crisis Policy Agenda for Reforming the Financial Sector in Asia

Yun–Hwan Kim

Introduction

The Asian financial crisis has changed financial market conditions for both medium and large enterprises (MLEs) and micro and small enterprises (MSEs)[1]. MLEs in the crisis countries[2] must now diversify their industrial and infrastructure financing. They have hitherto relied heavily for long–term development resources on short–term external borrowing from domestic and foreign banks. This is due to a focus on setting up bank–centred financial systems without sufficiently encouraging alternative ways of financial contracting[3].

The bank–based system has greatly contributed to the region's high economic growth but has also created serious problems, notably the bank–based short–term financing which has caused critical financial mismatches concerning maturity and currency. The maturity mismatch arose from unhealthy financing practices, featuring large long–term investments through short–term borrowing[4]. This involved a serious currency mismatch without a proper currency–hedging arrangement. In fact, the currency mismatch was implicitly protected by overvalued exchange rates caused by foreign exchange misalignments in these countries.

Financial sectors in the crisis economies have been far less successful than the real sectors. Financial sector weaknesses are deep–seated and have caused problems in the overall economy. The crisis countries have also not seriously tackled these weaknesses during the high growth of the last four decades. The financial sectors remain weak mainly because of traditional government intervention in the operation of financial institutions, direct fiscal support for special–purpose banks, implicit government guarantees about bank operations and an improper financial sector development strategy playing down the role of capital markets. So the Asian crisis is seen as a liquidity crisis rather than a macroeconomic one.

MLEs in Asian developing economies, including the crisis economies, will see important post–crisis changes in financing, including extreme reluctance by foreign and domestic banks to provide it[5]. This will cause bank disintermediation, as in the United States and to a lesser extent Japan and Europe[6], though for different reasons. Since bank intermediated finance is still the biggest source of industrial funds in Asian developing countries, the change underlines the need for disintermediated financing. Prospects for domestic bond markets are very good because of high savings rates there.

MSEs have a different kind of problem. Since the Asian crisis, it has become harder to finance them through local banks and microfinance institutions that are their only source of external financing in the absence of access to capital markets. MSEs are important for creating jobs and reducing poverty because they are usually labour–intensive and account for the largest part of the workforce. So MSEs weigh more heavily in low–income countries than middle or high–income ones. They account for about two–thirds of all jobs and a third of production in most low–income Asian countries. Improving their access to finance is crucial to any sustained growth and increase in jobs in the post–crisis period.

Industrial Financing in the Asian Crisis Economies[7]

Industrial financing involves new equity and debt financing through bank intermediated or direct securities issues in domestic or foreign bond markets.

Domestic Debt and Equity Financing

The size of bond and equity markets and domestic bank lending in the crisis economies at the end of 1998 is shown in Table 1. All crisis economies have larger banking sectors and much smaller bond and equity markets. The table shows how these countries' domestic financing has traditionally relied on banks. Malaysia has the largest market for bank loans and equity market capitalisation in relation to gross domestic product (GDP) while Korea has the largest corporate bond market in relation to GDP (27.3 per cent), followed by Malaysia (5.1 per cent), Thailand (2.6 per cent), and Indonesia (1.5 per cent).

The reliance of the crisis economies on bank intermediated finance is clear when compared to the large and integrated financial market in the United States[8], where bank lending and corporate bond markets are almost equal in size (38.8 per cent and 43.2 per cent). The figures show Korea has the most disintermediated debt market and Indonesia the least. But Malaysia's equity market is comparable in GDP terms to that of the United States. Since intermediation via traditional financial institutions and direct securities markets competes on the basis of efficiency, the factors that have worked against development of non–intermediated financing in the crisis economies need to be pinned down.

Table 1. **Bank Loans, Corporate Bonds and Equities in Asian Crisis Countries and the United States at end–1998**
(percentage of GDP)

	Outstanding bank loans	Outstanding corporate bonds	Equity market capitalisation
Indonesia	60.2[a]	1.5	16.2
Korea	43.5	27.3	30.7
Malaysia	148.4	5.1	134.4
Thailand	108.7	2.6	26.3
United States	38.8	43.2	158.1

a. end–1997.
Source: National monetary authorities and Bloomberg Investor Services.

Table 2 shows that of the Asian crisis countries listed, corporate bond financing increased between 1996 to 1998 only in Korea — from 18.2 to 27.3 per cent. The United States however, helped by recycling of bank loans through various securitisation vehicles, displays continuing disintermediation, with bond financing rising from 37.1 to 43.2 per cent.

When the financial crisis erupted, commercial banks in Korea became extremely cautious about new lending and were eager to withdraw old loans to meet the Bank of International Settlement (BIS) capital adequacy ratio. So industrial firms turned to bond markets for finance. In Malaysia, the banking sector was well capitalised before the crisis, with capital–asset ratios above 10 per cent, and Malaysian banks, along with those in Thailand and Indonesia, did not drastically cut loans to industry. However, Indonesia, Malaysia and Thailand have been all keen to develop corporate bond markets and this enthusiasm was boosted by the crisis.

Table 2. **Outstanding Corporate Bonds in Asian Crisis Countries and the United States**
(percentage of GDP)

	December 1996	December 1997	December 1998
Indonesia	1.9	2.5	1.5
Korea	18.2	21.4	27.3
Malaysia	6.1	7.1	5.1
Thailand	2.8	2.8	2.6
United States	37.1	39.6	43.2

Source: National monetary authorities and Bloomberg Investor Services.

International Bank Financing

International lending (by BIS reporting banks) to the crisis economies between 1996 and 1999 is shown in Table 3, along with lending to the Asia–Pacific region generally. In December 1996, lending was at a high of $247.9 billion. It had dropped significantly to $160.7 billion by June 1999.

Table 3. **International Bank Lending to Crisis Economies**
($ billion)

	December 1996	December 1997	June 1998	December 1998	June 1999
Total developing countries (TD)	692.6	891.7	860.7	842.7	809.6
Total Asia (TA)	367.1	378.8	319.6	299.4	287.0
Indonesia	55.5	58.0	48.4	45.0	43.8
Korea	100.0	93.7	71.6	65.6	63.5
Malaysia	22.2	27.3	22.8	20.9	18.6
Thailand	70.2	58.5	46.4	41.2	34.7
Total crisis countries (TC)	247.9	237.5	189.2	172.7	160.7
(TA/TD) per cent	53.0	42.5	37.1	35.5	35.4
(TC/TD) per cent	37.8	26.6	22.0	20.5	19.8
Average maturity (crisis economies)					
Less than one year (per cent)	61.2	60.5	51.7	50.3	50.1
Average maturity (total Asian economies)					
Less than one year (per cent)	61.5	60.3	53.0	52.5	51.4

Sources: BIS (1999) *Consolidated International Banking Statistics for End–June 1999* (Basle, November) and BIS (1997) *The Maturity, Sectoral and Nationality Distribution of International Bank Lending: Second Half 1996* (Basle, July).

This seems to be linked to a cut in lending to Asia as a whole (from $367.1 billion to $287 billion) and an increase in lending to other developing countries (up from $692.6 billion to 809.6 billion). Thailand (50 per cent) and Korea (37 per cent) suffered the biggest cuts in bank lending over the period. This suggests that after the Asian crisis, international bank lending to the crisis economies involved re–balancing investor portfolios away from Asia to other developing countries, especially Eastern Europe.

In 1996 Asia accounted for 53 per cent of international lending to the developing world. As the Asian financial crisis spread, this fell to only 35.4 per cent in June 1999 and the amount of this directed to the crisis economies dropped from 37.8 per cent in December 1996 to 19.8 per cent in June 1999.

The average maturity of lending to Asia and the crisis economies is shown in Table 3. At the peak of lending in 1996, 61.5 per cent of loans to Asia and 61.2 per cent of those to the crisis economies had a maturity of less than a year. Though this has since been extended, in June 1999 the crisis economies still borrowed 50.1 per cent of loans as short maturities, but this figure hides the fact that the increase in the average loan maturity is more to do with the non–rollover of short–term loans.

Though not shown in Table 3, most international lending to Korea was to the banking sector (falling from 65.9 per cent in December 1996 to 57.4 per cent in June 1999), while lending to the other three crisis economies was mostly to the private sector (rising from an average 62.5 per cent in December 1996 to 69.2 per cent in June 1999). The anomalous situation of Korea is probably due to the concentration on the banking market and the financial arrangements between the Korean *chaebols*. Lending to the public sector in preference to other industry sectors has also increased

in recent years. In addition, capital inflows through banks were not sensitive to interest rate movements, so banks increased their domestic lending once they had borrowed unhedged from abroad[9].

International Bond Issues

Recent Trends

International bonds are those issued in Eurobond markets or in foreign domestic bond markets such as in the United States, Japan or the United Kingdom. Details are in Table 4. International bond issues by crisis economies ($77.7 billion) in 1999 were much smaller than the intermediated finance offered by international banks ($160.7 billion). However, these markets would compete on the basis of efficiency. The larger intermediated finance market has a higher entry or cost structure that may prevent the Asian crisis economies tapping this market as a debt alternative.

Table 4. **International Bonds Issued by Asia-Pacific Economies**
($ billion)

Countries	March 1994	March 1995	March 1996	March 1997	March 1998	March 1999
Australia	42.1	50.1	53.7	88.5	80.4	86.9
China	9.6	13.0	12.0	13.0	14.8	13.9
Hong Kong (China)	10.9	14.7	12.4	17.5	20.1	22.3
India	3.0	3.3	3.7	4.6	5.9	5.7
Indonesia	1.4	3.1	3.9	5.6	5.8	4.5
Japan	279.8	276.6	226.2	188.4	145.5	127.9
Korea	0.0	19.4	23.4	40.6	48.1	48.3
Malaysia	17.7	4.4	5.9	10.1	12.1	12.5
New Zealand	6.5	5.9	5.4	6.3	7.9	7.0
Philippines	0.0	2.0	2.2	6.4	8.0	9.9
Singapore	1.2	1.0	1.2	2.5	3.2	5.7
Chinese Taipei (Taipei, China)	3.3	2.4	2.8	3.8	5.7	6.5
Thailand	0.3	4.0	5.4	9.9	11.5	12.4
Total: Crisis economies	**19.4**	**30.9**	**38.6**	**66.2**	**77.5**	**77.7**
Total: Developed economies	**329.6**	**333.6**	**286.5**	**285.7**	**237.0**	**227.5**
Total: All economies	**375.8**	**399.9**	**358.2**	**397.2**	**369.0**	**363.5**

Source: BIS, *International Banking and Financial Market Developments* (various issues), Table 13 "International Bonds by Nationality".

International bond financing by the crisis economies rose 128 per cent, from $30.9 billion in 1995 to $77.7 billion in 1999, with Korea the biggest issuer. The international issues from the crisis economies have mostly focused on bond issues in the US market (termed "Yankee bond" issues) by quasi–government or sovereign borrowers. Though these securities have to be registered[10], reduced issuing and compliance costs and the withdrawal of international banks from the region after the Asian crisis (the drop in lending was 4 per cent in 1999 and 21 per cent in 1998) have encouraged borrowers to bypass national banking systems and move to the direct

security market. Also, while the US SEC discourages sale of Eurobonds to US citizens (the sale and trading of Eurobonds as private placements is allowed), strong investor demand for high–yield domestic issues has encouraged issues from better–rated issuers in the crisis economies.

So while US investors have recently emerged as the largest buyers of crisis economy bonds, US financial intermediaries have historically shown little interest in intermediated bank lending in crisis economies. This apparent anomaly is explained by the sanctity of the US financial system and the faith investors have in the US legal process. The US financial system is better able to resolve information asymmetries between crisis economy borrowers and potential investors, while offering better investor protection than domestic financial intermediaries do.

Despite the non–investment grade status of most of these domestic US issues, investors are reassured by their quasi–governmental or sovereign status. Few non–government or quasi–government issuers have tapped these markets because they have little or no issuing history and lack the marketability of a sovereign issue. The interest rate spreads of unknown or new issuers demanded by the markets has also been wider than those demanded by similarly rated European or US corporations in recent years and may have discouraged borrowers.

The attraction of the Yankee market is its availability to non–investment grade issuers (credit rating lower than BBB) representing sovereign issuers in the crisis economies. Emerging market issuers cannot usually tap the international Eurobond market[11], which prefers investment grade issues and is also largely a US denominated market[12]. But for the borrower, the degree of substitutability of these different markets is ultimately linked to cost. There were significant increases in offshore issues before 1995 largely because of the decline in spreads of issues over US Treasuries of similar maturity. After the Asian crisis, spreads increased, discouraging international issues in favour of domestic issues and loans from international banks[13].

Table 5. **Comparison of International Bank Lending and International Debt Securities of Crisis Economies, 1996–99**

Country	Change in levels of bank lending (December 1996 to June 1999)	Change in levels of international bond issues (March 1996 to March 1999)
Indonesia	–11.7	+3.1
Korea	–36.5	+48.3
Malaysia	–3.6	–5.2
Thailand	–35.5	+12.1

Implications

The replacement of intermediated finance with international bond issues suggests a degree of substitutability between these two kinds of financing. But the prevalence of issues by quasi–government or sovereign issuers reflects reluctance by international investors to hold non–sovereign paper, suggesting that substitute forms of financing are only available to high–quality issuers. This reluctance limits the amount of debt

that can be put on the international bond markets. Public sectors issuers may crowd out corporate issuers or be unable, rather than unwilling to price corporate debt since the infrastructure (such as benchmark yield curves) is not available.

While bond issues and intermediated finance may be substitutes for some risk classes of borrower, Table 5 (comparing changes in international bank lending and international bond issues after the Asian crisis) shows increases in international bond issues have not really made up for cuts in international bank lending to Indonesia, Malaysia and Thailand. Only Korea has successfully tapped international bond markets for extra funding. Each country's experience has been different, but the regional reduction in international lending is part of a much bigger pull–out of private sector funds from the region. The liquidity aspect of the Asian crisis can be tackled by increasing long–term financing options by developing more viable domestic bond markets in crisis economies and improving access to international bond markets for these borrowers.

Traditional Neglect of Domestic Bond Markets[14]

The traditional neglect of domestic corporate bonds by the industrial sector in the crisis economies is largely due to: *i)* Cheaper financing through overseas bank borrowing; *ii)* Bank–dominated domestic financial systems; *iii)* Agency problems arising from family–owned corporations.

Cheaper Financing Through Overseas Bank Borrowing

Most of the crisis economies have long ago taken steps to liberalise their financial sectors and before the crisis their domestic financial markets were almost fully open to foreign capital. In Indonesia, Korea and Thailand, domestic banks, finance companies, merchant banks and large conglomerates could borrow foreign funds with few restrictions. This was sometimes encouraged by the financial authorities to fill quickly the domestic financing gap. So domestic financial institutions and industrial corporations borrowed huge amounts of foreign funds, usually of short maturity (which could be extended or rolled over). These borrowings were spurred by a big difference between domestic and foreign interest rates and a rigid foreign exchange policy that boosted local currencies[15].

Table 6. **Comparisons of Domestic and Overseas Interest Rates**[a]

(annual percentage, period average)

	1993	1994	1995	1996	1997	1998	October 1999
Indonesia	20.6	17.8	18.9	19.2	21.8	32.2	22.8
Korea	8.6	8.5	9.0	8.8	11.9	15.3	9.0
Malaysia	9.1	7.6	7.6	8.9	9.5	10.6	6.8
Thailand	11.2	10.9	13.3	13.4	13.7	14.4	8.3
LIBOR[b]($)	3.64	5.59	6.24	5.78	6.08	5.53	5.7(Jul)

a. Commercial bank lending rates, unless otherwise stated.

b. For one year

Sources: ADB, *Key Indicators*, and IMF, *International Financial Statistics*, various issues.

Before the crisis, domestic lending rates were much higher in Indonesia and Thailand than the one–year LIBOR rates on US dollar lending, while the gap between domestic and overseas rates was modest in Korea and Malaysia. The gap between the two rates in the early 1990s was 12–16 annual percentage points in Indonesia, and 5–8 annual percentage points in Thailand. In Korea and Malaysia, annual domestic rates were usually between two and five times higher than LIBOR rates. So with the misalignment of exchange rates, domestic banks and corporations — as rational economic entities — must have made great efforts to borrow on international financial markets.

Domestic interest rates in the crisis economies before the crisis were much higher than international rates. Table 6 shows interest rate trends in the crisis economies as well as international financial markets.

Table 7 shows the purchasing power parity (PPP) indexes in the 1990s in the crisis economies. The indexes were calculated so a currency's nominal exchange rate against the US dollar (1990 = 100) is compared with a relative consumer price index (CPI), which is the local CPI divided by the US CPI. If it is 100, the currency's value against the US dollar, as of 1990, is unchanged. If it is lower (higher) than 100, the currency is overvalued (undervalued) compared to the 1990 level. It is a simplified PPP index because only the US CPI, not that of all major trading partners, is used. However, it could indicate the real value of each currency in the 1990s, before the crisis. The table suggests all countries' currencies had been overvalued in the 1990s, especially those of Indonesia, Malaysia and Thailand.

Combining the interest rate gap and the PPP index shows foreign borrowing was profitable in the crisis countries before the crisis. International interest rates were always cheaper than local rates, encouraging domestic firms and financial institutions to borrow from abroad. This borrowing has also been protected by the exchange rate regime that has continued overvaluing the local currency, making foreign loans even cheaper.

Table 7. **Purchasing Power Parity of Crisis Economies' Currencies**
(1990 = 100)

	1990	1991	1992	1993	1994	1995	1996
Indonesia							
Relative price (I)	100	104.9	109.6	119.7	128.0	135.7	140.6
Exchange rate(II)	100	105.8	110.2	113.3	117.3	122.0	127.1
PPP(II/I)	100	100.9	100.5	94.6	91.6	89.9	90.4
Korea							
Relative price (I)	100	104.9	108.1	110.0	113.9	115.8	118.1
Exchange rate(II)	100	103.6	110.3	113.4	113.5	109.0	113.7
PPP (II/I)	100	98.8	102.0	103.1	99.6	94.1	96.3
Malaysia							
Relative price (I)	100	100.2	101.8	102.4	103.5	106.0	106.7
Exchange rate(II)	100	101.7	94.2	95.2	97.0	92.6	93.0
PPP(II/I)	100	101.5	92.5	93.0	93.7	87.4	87.2
Thailand							
Relative price (I)	100	101.4	102.4	102.8	105.4	108.4	111.5
Exchange rate(II)	100	101.4	101.8	101.0	99.6	100.1	101.5
PPP(II/I)	100	100	99.4	98.2	94.5	92.3	91.0

Sources: IMF, *International Financial Statistics*, Yearbook 1998.

Bank–centred Domestic Financial Systems

These countries have given higher priority to the banking sector than the capital market. Capital market development has not been neglected, but banks were treated as the most important financial sector. In seeking a high growth strategy since the early 1960s, banks were the main suppliers of funding from domestic and foreign markets. Capital markets remained underdeveloped, preventing them from financing industrial projects through diversified sources. As noted, corporate bond markets are lagging behind in all these countries and Korea has made significant progress only in recent years, after the crisis.

Bank–centred financial systems have also encouraged high economic growth in many developing economies because they more effectively monitor financial environments that have asymmetric information because of obscure financial data.

So banks may be better able to ration scarce resources to priority sectors. However, these decisions can be influenced by outside parties, as shown by the decision by four Indonesian state banks to lend $2.7 billion to President Suharto's son Bambang Trihatmodjo to build the Chandra Asri petrochemicals plant. Or they may be swayed by family members in founder–family owned banks and corporations who exert influence so that resources are not allocated in the most effective way. This reflects poor governance structures that fail to tackle the underlying legal problems[16].

Agency Problems arising from Family–owned Corporations

The choice of financing follows a "pecking order" (Myers, 1984), starting with internal funding sources (such as retained earnings), then external sources in the form of additional debt or equity in both private and public markets. Agency concerns and problems arising from usually financial–based asymmetries of information, and differences in legal protection (both the laws themselves and the extent they are enforced) (La Porta *et al.,* 2000) seem to dictate the choice between various combinations of debt and equity instruments.

Many emerging countries lack the financial and technical infrastructure for proper public security markets. Traditional company financing is largely through banks that are expected to assume a key corporate governance role as part of intermediation. Firms prefer relationship–based bank borrowing to issuing corporate bonds, which requires disclosing important corporate information to the public. The governance role may be influenced by the lending institutions being owned by entrepreneurs and their families, who may also occupy top management positions, or by cross–ownership between financial intermediaries and corporate borrowers. A recent study[17] showed that in 1996 the share of a country's top 10 families in total market capitalisation was 57.7 per cent in Indonesia, 52.5 per cent in Thailand, 46.2 per cent in the Philippines, 38.4 per cent in Korea, and 28.3 per cent in Malaysia. In Korea, even when the formal share of ownership is low, control can still be exercised through member companies that own stocks. "Despite high debt, the bank–led governance system (BLS) did not come into play," says another study[18].

The ownership structures of banks and other financial intermediaries and large private firms in the crisis economies are examples of the "family–state model", where either a small group of founding families or a pervasive state plays a big role[19]. These structures range from the nominally privatised and largely state–owned Korean banks (with non–bank intermediaries generally privately–owned) to the largely family–owned banks of Malaysia (which directly control many of the non–bank intermediaries)[20].

Apart from the Korean nationwide banks, domestic financial institutions in the other crisis economies are generally small by world standards so the contagion effects of imprudent lending to local firms can be more acute. There is also pressure from the government (as in Malaysia) for specific intermediaries to consolidate to gain scope and scale efficiencies while retaining a local character, since the banks play an important part in understanding the close ties between family, kin and the community. Local banks are required to solve any problems of asymmetric information between firm borrowers and funding sources arising from poor disclosure and accounting.

As well as concerns over equity dilution, the capital structure choices of firms (financial and non–financial) may also be made so as to maintain the information asymmetries between family owners, as well as the well–documented such asymmetries between owners and managers. Development economists are currently arguing about the expected behaviour of family members in family–owned firms when additional funding is needed for expansion and where there is asymmetry of information among

them. This is an extension of popular theories that family links are an obstacle to economic development and suggests that family members, in firms where there is a significant founding–family presence, may be reluctant to provide additional savings for new investment because it means revealing information about individual wealth to other family members. The family members not directly involved with the firm may then try to get a free ride on the efforts of their wealthier kin. Firm managers may be able to avoid this conflict and borrow directly from financial intermediaries, so avoiding equity dilution (if new non–family equity is brought in) or equity readjustment within family groups.

Policies Needed for Corporate Bond Market Development

Viable corporate bond[21] markets require persistent long–term efforts to deal with both demand and supply side obstacles as well as infrastructure problems. While banks account for up to 80 per cent of financial assets in Asia, they have less than 25 per cent in the United States. This suggests that capital markets, including bond markets, have a promising future in Asia if proper policies are pursued. Vigorous government efforts should focus on the following issues:

Importance of Treasury Paper Market

A well–functioning government bond market can help foster corporate bond markets. Its risk–free yield curve facilitates private issues. It would be unrealistic for a country to try to develop a corporate bond market and derivative markets without a satisfactory treasury paper market. In Asia, the Australian and Hong Kong (China) governments have pledged to preserve a liquid treasury paper market although there is no immediate funding need from the market. The Australian government paper market currently has a yield curve of 12–13 year maturity, while the Hong Kong (China) treasury paper market provides a 10–year long yield curve.

These are the lessons for developing countries:

— To develop a meaningful government bond market, a clear and balanced long–term debt strategy and sound operational capacity are needed.

— Three courses of action will minimise the cost of government debt securities. First, tap the pool of global capital by opening the government debt market to foreign investors; second, there should be clear division of responsibility between government debt management and monetary policy; and third, primary and secondary market infrastructures should be adequate.

— Regular substantive communication and dialogue with markets on debt management goals and strategies is essential. The rationale for debt management operations should be clear and operations reasonably predictable. When–issued trading is recommended to minimise price and quantity uncertainties.

— Too many different types of sovereign bonds are not desirable and simplicity is better.

— There is broad consensus that a benchmark yield curve of at least 10 years is meaningful.

— Choosing primary issue arrangements should take into account the development stage of the government bond market. The open auction system is usually preferable, while smaller and less liquid markets may benefit from a dealer panel arrangement. A primary dealer system is essential to ensure market competition among participating dealers, efficiently distribute government securities and increase liquidity of the securities.

— A captive or obligatory investor arrangement, such as required holding of fixed proportions of financial institutions' assets in the form of government securities, is not desirable. In Australia, one result of the captive arrangement was only a very limited secondary market in government securities.

— Markets need a steady supply of new securities to sustain liquidity. Secondary market liquidity should be guaranteed by official policy.

— The uniform–price, sealed–bid auction is recommended.

— A coupon stripping, which splits bond income streams into coupon interest and principal repayment is desirable.

— Reliable real–time clearing and settlement arrangements are equally critical to efficient operations.

— It is important to have regulations that provide legal certainty and a level playing field, and also remain responsive to the market's changing demands.

— Government bonds must be attractive to investors.

— A single regional central securities depository (CSD) should be set up to perform safekeeping, clearance and settlement functions for all securities available in the region.

Developing Corporate Bond Markets

Supply–side Strategies

Providing suitable conditions: financial liberalisation, maintaining adequate exchange rate policy and regulatory standards

The capital regime in most Asian economies has been substantially liberalised, allowing foreign funds to move between countries. This trend will accelerate as globalisation advances and information technology rapidly develops. Local industries

and financial institutions will increasingly seek funds with the lowest interest rates at home or abroad, so domestic rates and foreign exchange rates will be crucial in determining the real effective price of such funds. If the local currency remains overvalued, other things being equal, foreign borrowing will become attractive and vice– versa. This is what happened in the crisis countries long before the crisis. Financial liberalisation needs to be continued and an adequate exchange rate policy put in place to help local financial markets, including bond markets, to grow and to achieve other macroeconomic goals.

While governments must create suitable conditions for financial liberalisation, central banks are also required to provide strict regulation and enforcement so investor confidence in the financial system is maintained. The independence of the central bank and its successful money policy management are key factors in this, along with the risk management practices of financial firms[22]. Recent regulatory improvements include:

— Better supervision of finance companies in Thailand;

— Improved asset–quality norms in Korea (where banks take interest on loans one month past due while international practice is three months);

— General agreement that central banks should subscribe to the Special Data Dissemination Standard (SDDS)[23] that stipulates what data can be published and when. (The Bank of Korea and the Korean Finance Ministry now publish material on a webpage, though the quality and timeliness of data from the Bank of Thailand is poor.)

Public sector bonds should not be given privileged treatment such as lower prices or rates. Market forces should determine prices of all bonds. In some developing countries, governments issue a large number of bonds to finance special projects and budget deficits at lower prices by forcing financial institutions to purchase them or by giving investors tax incentives. This distorts the overall bond market, while discouraging the corporate bond market.

Reforming Corporate Governance

Good corporate governance boosts protection of all stakeholders, including holders of corporate bonds. Many Asian corporations have been blamed for weak and unsatisfactory performance where corruption and transparency in financial transactions are concerned, along with ownership structure and accounting not up to international standards. This has sapped investor confidence in the financial documents of the firms and thus in the bonds issued by them.

Before the crisis, mutual payment guarantee arrangements were often made in Korea between companies in the group of *chaebol*. Also, *chaebol*–affiliated financial institutions made loans to their associated corporations in a non–transparent way, undermining the credibility of the documents of the firms and financial institutions in

question. Many countries changed their accounting methods haphazardly. While the crisis countries have repaired this situation, reform to adopt the best practices should be expanded to other areas. Investor perceptions of intangibles such as corporate integrity, prevention of asymmetric availability of corporate information and the powers of securities market regulators are a key to the quality of corporate bonds and to capital market dynamism.

Corporate systems differ from country to country, but they can be divided into outsider (market–based) and insider (board–based) models[24]. The United States and the United Kingdom generally have the first and other countries the second. In the market–based model, widely dispersed investors own and control the company and, if management neglects shareholder value, will sell the shares. In the board–based model, board members represent the interests of identifiable groups and are responsible for disciplining management. Asian countries are moving from a board–based to a market–based model. However, the market–based model requires adequate disclosure, a good flow of information, rigorous trading rules and well–developed investor protection systems[25].

Demand–Side Strategies

Strengthening the Role of Institutional Investors and Mutual Funds

Institutional investors (pension funds and insurance companies) and mutual funds are especially important in developing countries for expanding the investor base because individual investors there are not very familiar with bond markets and tend to shun corporate bonds. In economies that have managed to develop bond markets, such as Korea and Malaysia, institutional investors and mutual funds are important in buying and selling bonds and using them to create attractive asset portfolios.

In Korea, setting up mutual funds was substantially deregulated in 1998 and tax breaks for foreigners investing in domestic fixed income securities is being considered. In Malaysia, tax exemptions on bond market gains apply to individual investors but not institutions. The capacity of institutional investors still very much needs to be boosted by increasing pension funds (such as those of corporate and banking sector employees) and mutual funds, and by broadening funding sources and improving fund management skills. Consistency in the tax exemptions for investors and encouraging bond purchases by other financial institutions[26] will also help this market grow.

In Indonesia, only institutions, banks and the newly emerging mutual funds buy domestic bonds (including government bonds). Before the crisis, foreign holdings of rupiah bonds accounted for 10–20 per cent of new bond issues, especially very liquid ones with good credit standing such as PLN (the state–owned electricity company) and BTN (a state bank). Pension fund investments comprised about 50–55 per cent time deposits, 10–15 per cent stocks, 10–15 per cent bonds and promissory notes and

15–30 per cent miscellaneous, including real estate. Insurance companies opted for about 45–50 per cent time deposits, 4–6 per cent stocks, 12–15 per cent money market instruments (SBI), 8–10 per cent bonds and promissory notes and 19–30 per cent miscellaneous, including real estate. Bond holding by these companies was negligible.

The mutual funds appeared in 1996, grew fast and in 1997, before the crisis, had investment portfolio assets of 7.2 trillion rupiah — 25 per cent money market instruments, 15 per cent equities, 50 per cent bonds and promissory notes and the rest cash — which was substantial investment in domestic bonds. Indonesia needs to encourage institutional investors and mutual funds to expand by developing pension funds and mutual funds, improving human resources and broadening funding sources.

International investors have also been drawn to Asian bonds by broader benchmark indexes, which provide risk diversification. JP Morgan has updated its "Emerging Market Bond Index" (EMBI Global) to give greater weight to Asian issuers and now includes three of the crisis economies[27].

Robust legislation defining and enforcing financial security is important to encourage investors. With new bankruptcy laws, Thailand hopes to encourage bank lending to businesses by ensuring banks can recover future bad debts. But Senate amendments have doubled the minimum level proposed (debts need to exceed one million bhat for individual bankruptcy, and two million for corporations) and allow bankruptcy status to be lifted after three years instead of the proposed ten. These developments seem to have boosted secondary market bond turnover and more than half of total turnover is now in corporate bonds[28].

Private placement

Privately placing corporate bonds has advantages in developing countries, where the overall bond market is small. They are notably exempt from registration with the SEC because issues do not involve a public offering. Corporations and investment banks can find potential buyers of bonds on their own and decide on issuing conditions without involving official procedures. This is not unlike bank loans.

In the United States, even the trading of privately placed corporate bonds has been allowed since 1990 with adoption of SEC Rule 144A. There is now a private placement market for 144A bonds and the traditional one that includes non–144A bonds. Rule 144A placement is underwritten by investment banks on a commitment basis, as with publicly–offered securities. Table 8 shows the importance of private bond placement as a source of corporate financing:

From the 1970s to the early 1990s, privately placed corporate bonds accounted for a sizeable 40 per cent of all corporate bonds issued in the United States. This share rose between 1986 and 1991, partly because of adoption of Rule 144A.

Table 8. **Issues of Publicly–offered and Privately Placed Bonds by Non–financial Corporations in the United States, 1975–91**
($ billion, annual rate)

Type of bonds	1975–80	1981–85	1986–91
Public	21.0 (58.8)	35.6 (64.3)	87.6 (57.4)
Private	14.7 (41.2)	19.8 (35.7)	64.8 (42.6)
Total	35.7 (100.0)	55.4 (100.)	152.4 (100.0)

Source: Frank Fabozzi and Franco Modigliani (1996), Capital Markets (second edition), Prentice Hall, p. 530.

Developing Infrastructure

Credit rating reliability

Each country has a few domestic credit rating agencies that offer free rating services or charge a fee. In Indonesia, PEFINDO was set up in 1994 by the Ministry of Finance and Bank of Indonesia in partnership with Standard & Poor's (S&P's). Another agency, Kasnik, Duff and Phelps, was licensed in 1997 but is not operating. PEFINDO has rated some 200 companies involving about 250 debt securities (including CP). Requirements for rating listed bonds and CP have increased demand for the services. PEFINDO's partnership helped gain international credibility. In Korea, three local agencies operate — Korea Management Consulting and Credit Rating Corporation (KMCRC), Korea Investors' Service (KIS) and the National Information and Credit Evaluation Corporation (NICE). All publicly–issued non–guaranteed bonds have to be rated by at least two credit rating agencies and only firms scoring A or higher may issue them[29]. The predominance of guaranteed bonds in Korea, which do not need a credit rating, has restricted the growth of rating services however.

Local rating agencies are not very reliable owing to lack of rating skills, limited information sources and inadequate accounting by firms. Partnership with internationally credible agencies such as Standard & Poor's or Moody's will boost reliability. Small countries would do better to use these agencies rather than setting up their own because of the large fixed operating costs involved.

Creating a Benchmark Yield Curve

Benchmark yield curves are essential for pricing non–government securities since investors traditionally do so based on a spread over the equivalent risk–free or government security with the same maturity. Some Asian governments — Australia, Hong Kong (China) and Singapore — have recognised this and pledged to maintain the benchmark curve infrastructure despite absence of a funding need. These curves also help the growth of derivatives markets and give financial market participants more ability to handle risk transformation. The yield for a corporate bond maturity is usually interpolated based on spread over a stripped benchmark yield curve derived from a series of on–the–run government bullet bonds.

Except in Hong Kong (China) and Malaysia, mid–term and long–term benchmark government bonds have not existed in Asian developing economies. There are only short–term ones (including central bank issues) or quasi benchmark bonds like guaranteed corporate bonds in Korea. But nothing can beat the low risk of government bonds. The fast–growing Asian developing countries have maintained fiscal balances or surpluses which discouraged issue of government bonds to finance current expenditure, apart from some one–off issues. Fear of accumulating government debts has fed opposition to benchmark treasury bonds.

Hong Kong (China), however, which has managed to minimise the effects of the Asian crisis, has consistently tried, even before the crisis, to develop exchange fund bills (EFBs) and exchange fund notes (EFNs) (exchange fund paper, or EFP) and has notably strengthened them since the crisis. As Hong Kong has usually had a fiscal surplus, the main aim of the EFP programme was to encourage growth of the local debt market by increasing the supply of high quality bonds and creating a reliable benchmark yield curve for dollar debt instruments. The EFP programme was introduced in March 1990 with the issue of 91–day bills and expanded in subsequent years. The 182 and 362–day bills were launched in October 1990 and February 1991, followed by notes for two years (May 1993), three years (October 1993), five years (September 1994), seven years (November 1995) and 10 years (October 1996). EFP has been very well received by the market and gives a reliable Hong Kong dollar benchmark yield thanks to regular EFP issues of varying maturity, thus developing an effective market–making mechanism.

Hong Kong may be a good example for developing a benchmark government bond market in developing economies, although it has the advantage of being in much better financial and economic shape. Korea and Thailand also recently started a benchmark government bond programme. The benefits of a benchmark bond market far outweigh the cost of government debts, which shows the need to create a government bond–based yield curve. Benchmark government bonds must be highly liquid through offering enough bonds across a range of maturities. This enables correct interpolation of yields for non–benchmark maturities and helps prevent distortion of the yield curve through illiquidity induced volatility.

Thailand has recently tackled these problems, making a benchmark yield curve a priority in its bond market reform package. The existence of many government bonds, through financing fiscal deficits and the restructuring and recapitalisation of financial intermediaries, has made it possible to establish two market yield curves — one based on same–day trading and provided by the Thai Bond Dealing Centre and another based on settlement date yields provided on the Bank of Thailand website[30].

Regulatory Framework[31]

Regulatory authorities should try hard to avoid discouraging market innovation, but sound and effective supervision for a bond market, intermediaries, institutional investors and other market participants is essential for investor protection and good

business practices that reduce risks. This requires clear market rules, great transparency and rigorous standards, as well as internal and external surveillance to ensure compliance. The government's role as a debt manager — mainly the separation of debt management and other Treasury functions — also needs to be considered.

Transparency and clarity in the functions and aims of regulatory authorities are vital to their effective performance and to maintaining public confidence, as well as to avoiding regulatory gaps and duplications. So there must be clear legal definition of supervisory actions, close coordination between regulators, and well–defined rules for market participants (diversity of bank and non–bank participants) and financial instruments.

Settlement Systems

The cost of trading and issuing securities can be cut by economies of scale and scope. Better technology and Asia–wide settlement systems would make domestic bond markets more viable. Uniform procedures would be a first step. Policies in some countries show the way forward. In Thailand, the real–time delivery versus payment project (DVP) started in April 1998 should be completed by the third quarter of 2000. A real time bond price quotation system to news wire services has been set up to improve information flows and pricing mechanisms. Thailand also has a "master plan" guideline for policy implementation and coordination between the Thai Bond Dealing Centre, Securities and Exchange Commission and the Ministry of Finance.

Issues for Micro and Small Enterprise Financing

A corporate bond market is relevant to MLE industrial financing, but not to MSEs, which in developing countries have no access to a bond market. MSEs do not usually meet the requirements for issuing debt securities in bond markets because of their small capital, fluctuating profits and resultant low credit–worthiness. They are found in every rural and urban part of a country, engaged in small and cottage manufacturing, agro–industries, trading and other activities. They have suffered most from the Asian financial crisis and have little access to formal credit, so they need urgent attention and financial help.

Strengthening the financial markets for these firms will give a big boost to job creation and poverty reduction. Although they only account for about a third of manufacturing and service industry output in low–income Asian countries, they provide two–thirds of the jobs. They need a different kind of financial market from those serving the MLEs.

An MSE needs both short and medium–term funds. Short–term funds are for wages, maintaining stocks and inventories and other operational expenses. In developed countries, these are usually provided by banks, but in developing countries, commercial banks cannot or will not do this. Medium–term funds for plant and equipment are also rarely available because of low productivity and lack of collateral.

So MSE financing cannot be totally left to the private sector. The government should help set up financial institutions tailored to MSE needs by providing incentives, including tax breaks, as well as loan guarantee institutions to deal with the lack of collateral. Experience shows well supervised, commercially based financial institutions are best for developing countries.

Conclusions

Recovering Asian crisis countries should diversify industrial financing to boost resources for development and speed up growth of the financial sector. Such financing in these countries has long been overly bank–based, with the dangers of an extremely inflexible financing mechanism, predominance of short–term financing and vulnerability to external shocks. Bank disintermediation has already appeared, with very guarded lending by commercial banks for Asian developing countries. Bond markets should be given priority in the search for new funding. They have hitherto been neglected because of the cheaper cost of borrowing overseas, bank–dominated domestic finance and problems arising from family–owned firms.

Suggestions for developing bond markets in the crisis countries, covering supply and demand side policies and infrastructure development issues, include: *i)* providing the right conditions; *ii)* reforming corporate governance; *iii)* setting up reliable credit ratings; *iv)* creating a benchmark yield curve; *v)* strengthening the role of institutional investors and mutual funds; *vi)* expanding private placement; *vii)* setting up a real time delivery system; and *viii)* strengthening the regulatory system.

All this will take a long time to implement properly, with careful measures as part of a well–designed mid and long–term bond market development strategy. More bonds should also be placed in the international market to ensure funding diversity and lower costs.

The financial markets should also be improved for micro and small enterprises (MSEs) which are always in a weak position funding–wise. In most low–income Asian developing countries, MSEs account for two–thirds of total employment and a third of value added, and so are a key part of national economies. Commercial–based financial institutions should be encouraged to provide finance to MSEs with careful regulation.

Notes

1. Ambiguities often occur over measurement and definition of an MLE and an MSE. Number of employees, value of output, and value of assets are used to differentiate them. Here we define an MSE as having up to and including 49 employees and an MLE as having 50 or more.
2. Indonesia, Korea, Malaysia, and Thailand — the worst–hit countries.
3. See Walter (1993) for a discussion of the different ways of financial contracting and a stylised model of the financial intermediation process.
4. The best international practice, and some banking laws, suggest that a commercial bank entitled to receive only short–term deposits up to one year should try to match the average maturities of risk– sensitive assets and liabilities. Regulators usually require this maturity mismatch to be within a specific band determined by the bank's size, its experience and the infrastructure available to manage and measure risk.
5. Between 1996 and 1999, levels of international bank lending to Asian developing countries fell significantly.
6. International portfolio diversification and yield–seeking by globalised investors have increased the opportunity cost of bank deposits and contributed to bank disintermediation and broadening of securities markets in many advanced countries. The total market value of assets managed by US mutual funds (about $5 trillion) and invested in securities markets exceeds the total value of US bank deposits. Japanese and European financial markets are following US trends, though more slowly (see Schinasi and Todd–Smith, December 1998).
7. Batten and Kim (2000).
8. Given the big differences in historical background and current context of financial systems, it is unwise to compare these countries directly with the United States. However, because the United States has the most advanced capital market, it can serve as a comparator country in discussing bond market development.
9. Kawai and Takayasu (1998) make this point about Thailand, though it may apply to other crisis economies.
10. Domestic bond issues in the United States must be registered with the Securities and Exchange Commission (SEC) under the 1933 US Securities Act.

11. Bond credit rating agencies divide corporate bond issuers into nine major categories according to perceived credit quality. These include issuers of investment grade bonds (AAA, AA, A and BBB) and non–investment grades (BB, B, CCC, CC and C). Bonds with ratings below C are bonds in default or of bankrupts. The two major agencies use slightly different notation to refer to equivalent credit risk categories. Standard & Poor's use upper–case capitals (AAA), while Moody's Investor Services use an upper case first character with remaining characters lower case (Aaa). Here we use the Standard & Poor notation.

12. The US dollar is worldwide the most common currency of Eurobond issue with $1 673.4 billion, followed by the Japanese yen ($407.1 billion), German deutsche mark ($369.4 billion), pound sterling ($308.3 billion), French franc ($191.3 billion), Swiss franc ($141.5 billion), Italian lire ($117.9 billion), Dutch guilder ($105.3 billion), the euro ($99.3 billion) and the Luxembourg franc, with $37.8 billion in outstandings (BIS, 1998 Table 13B).

13. See Chart 5, Kamin and von Kleist (1999: 17) for graphical evidence of the decline in spreads (1991–97). Lenders favoured Asian issues (spreads on Latin American issues which were similar to Asian ones were 39 per cent higher). This may be because Latin American and Eastern European economies were more volatile than Asian economies (K. and vK: 18) and because of greater supply since Latin American countries issue more bonds than Asian countries (Eichengreen and Mody, 1997). But K. and vK. note that Asia, while not issuing bonds, tends to take out more loans. This suggests economic stability is the key to determining spreads.

14. Batten and Kim (2000)

15. Expectation that the local currency will not depreciate more than the difference in interest rate between the two countries will encourage unhedged foreign currency borrowing. International parity relationships predict that over time interest rate differentials equal the actual depreciation or appreciation of floating–rate currencies.

16. Jensen and Meckling (1976) originally investigated agency problems.

17. Classen *et al.* (1999).

18. Khan (1999).

19. See Nestor and Thompson's (1999) discussion of different systems of corporate governance, which vary from the outsider model (in the United States and the United Kingdom), to the insider model, of which the family/state model is a sub–category.

20. Casserley and Gibb (1999: exhibit 11.3) estimate significant family ownership of the 15 largest banks in Thailand (27 per cent of stock), Indonesia (47 per cent of stock), Malaysia (59 per cent of stock) and the Philippines (60 per cent of stock) at the end of 1997.

21. In medium to long–term industrial financing, corporate bonds and medium–term notes (MTN) may be comparable. However, an MTN is different because it is issued directly to investors without using an intermediary. There is also no secondary market for MTNs.

22. Note the report of the Institute of International Finance Task Force on Risk Assessment (January 2000) detailing best risk management practice for the private sector.

23. Note that the Institute of International Finance's Report of the Working Group on Emerging Markets Finance (March 1999) also recommended this information include the off–balance sheet positions of reporting institutions. See this report for details of data transparency and disclosure.

24. Thompson (1999).

25. Policies to enhance governance structures in crisis economies have been analysed in various ADB studies. Also see La Porta *et al.* (2000) discussion of agency problems and legal regimes.

26. The way Indonesian banks hold their reserves is specified by the Banking and Financial Institutions Act. Procedures could be established to facilitate the holding of bonds as bank reserves.

27. EMBI Global has a weighting of Korea 7.5 per cent, Philippines 2.9 per cent and the new additions of Malaysia 2.5 per cent, China 1.6 per cent and Thailand 0.4 per cent (Source: *Asiamoney*, September 1999). Other examples include the Strategic Income Fund of Chase Manhattan.

28. *The Nation* (11 January 2000) reported that in December 1999 BHT18.6 billion out of BHT35.4 billion was attributable to corporate bond turnover.

29. The rating categories of these agencies are similar to S&P's.

30. *Op. cit.* Meecharoen (1999).

31. APEC Collaborative Initiative on Development of Domestic Bond Markets (August 1999), Guidelines to Facilitate the Development of Domestic Bond Markets in APEC Member Economies.

Bibliography

Bank of International Settlements (BIS), Quarterly Review: *International Banking and Financial Market Developments*, various issues.

Batten, J. and Y.–H. Kim (2000), "Expanding Long–term Financing through Bond Market Development: A Post Crisis Policy Task", presented to ADB Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies, 28–30 March, Manila.

Casserley, D. and G. Gibb (1999), *Banking in Asia: The End of the Entitlement,* John Wiley & Sons (Asia) Pte Ltd., Singapore.

Classen, S., S. Djankov and L.H.P. Lang (1999), "Who Controls East Asian Corporations?", Working Paper, World Bank.

Eichengreen, B. and A. Mody (1997), "What Explains Changing Spreads on Emerging–Market Debt: Fundamentals or Market Sentiment", mimeo, International Monetary Fund.

Jensen, M.C. and W.H. Meckling (1976), "Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure", *Journal of Financial Economics,* 3, October.

Kamin, S. and K. von Kleist (1999), "The Evolution and Determinates of Emerging Market Credit Spreads in the 1990s", *BIS Working Paper No. 68*, May.

Kawai, M. and K.–I. Takayasu (1998), "The Banking and Financial System in Thailand", Asian Development Bank Report.

Khan, H.A. (1999), "Corporate Governance of Family Businesses in Asia", *ADB Institute Working Paper Series No. 3*, August.

La Porta, R., F. Lopez–De–Silanes, A. Shleifer and R. Vishny (2000), "Agency Problems and Dividend Policies around the World", *Journal of Finance* 55(1).

Meecharoen, K. (1999), "Central Banking Policies in Thailand", Bank of Thailand. paper presented at the Fifth Annual Asia–Pacific Central Banking Conference 9 July, Singapore.

Myers, S.C. (1984), "Capital Structure Puzzle", *Journal of Finance* 39(3).

Nestor, S. and J. Thompson (1999), "Corporate Governance Patterns in OECD Economies: Is Convergence Under Way?" Conference on "Corporate Governance in Asia: A Comparative Perspective", OECD, Seoul, 3–5 March.

Schinasi, G.J. and R.Todd Smith (1998), "Fixed Income Markets in the United States, Europe, and Japan: Some Lessons for Emerging Markets", *IMF working paper,* December.

Thompson, J. (1999), "Alternative Systems of Corporate Governance in OECD Countries: Strengths and Weaknesses," ADB–ADBI capacity Building Workshop on Corporate Governance in Asia, 22–26 November.

Walter, I. (1993), "High Performance Financial Systems: Blueprint for Development", *ISEAS Current Economic Affairs Series,* Institute of Southeast Asian Studies, Singapore.

Fiscal Outcomes and the East Asian Economic Crisis

*J. Edgardo Campos and David Jay Green**

Introduction

The crisis touched off a wave of soul searching as East Asian officials grappled with sudden reversals in economic fortune and a lack of confidence in previous policies. The problems were often handled through the use of *ad hoc* measures offering at best a temporary solution. The crisis clearly revealed two weaknesses of public expenditure management systems that should be addressed by reforms.

The first is the need to improve fiscal flexibility — the capacity to alter the level and mix of spending quickly in response to policy shifts. The public expenditure management system must be able to move smoothly to accommodate changes in spending plans while still meeting national priorities. This will require a number of changes, including:

— The real nature of public sector assets and liabilities needs to be better understood and acknowledged. The crisis snowballed as private liabilities became public knowledge and were assumed by the public sector. A tracking system for public sector contingent liabilities, such as the debt of state–owned enterprises (SOEs) and foreign borrowing by the private sector, would provide a more accurate sense of public sector indebtedness and serve as an early warning device for fiscal planning.

---

* The opinions expressed are those of the authors and not necessarily of the Asian Development Bank. The authors are grateful for comments received from participants at the Sixth International Forum on Asian Perspectives, "Development Resource Mobilisation in the Post–Crisis Period", OECD Development Centre, Paris, 3–4 July 2000.

— It may be advisable to have contingency plans for official lines of credit to be used when expansionary fiscal policy is necessary but cannot be supported by private or domestic capital sources. This would demand some longer–term, ongoing dialogue between regional governments and between the regional governments and international organisations.

— A more flexible cash management system is needed to ensure that the impacts of external or internal shocks are not aggravated by sub–optimal cash release mechanisms.

To support this increased flexibility, it may be necessary for the international community to establish emergency support systems that disburse funds rapidly and do not demand the extended processing time required for normal lending programmes. The mechanisms of such systems are beyond the scope of this chapter, but we demonstrate that they are needed.

Elements of the Crisis

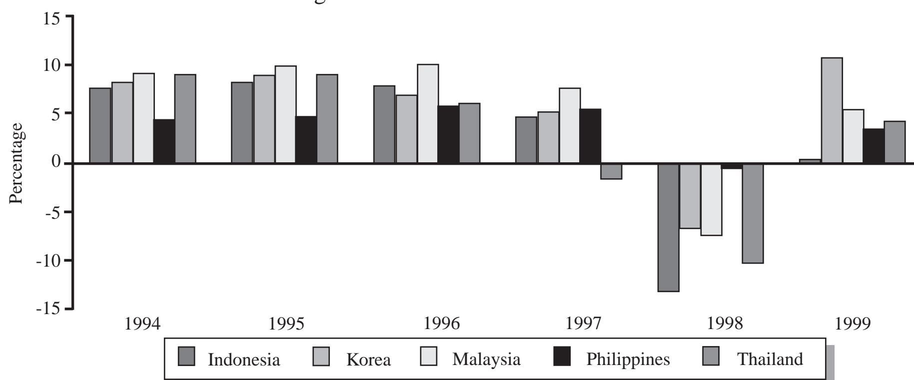
In August 1997, a massive depreciation shook the currencies of Thailand, Indonesia, the Republic of Korea (henceforth Korea), Malaysia and the Philippines. The sudden, relatively unexpected large shifts in the exchange rate were met with determined but somewhat futile efforts by the governments to reverse or dampen the fall in the local currencies. The external shock was first apparent in Thailand, but the problems spread rapidly throughout most of the region. The regional contagion was testimony to the convergence of policy and performance in the region as well as to the speed at which global capital markets reassess positions[1].

The sharp currency movements were presaged by a build–up of debt denominated in foreign exchange, especially by the private sector. The debt build–up ultimately came to be viewed as unsustainable and signalled a withdrawal of foreign capital and capital flight by domestic investors. The resulting fall in the domestic currency reinforced a lack of international confidence in the ability to repay the large foreign–denominated debts and led to successive waves of further depreciation. The terms–of–trade shock rocked a financial sector which was already over–exposed to foreign exchange debts and lacked the institutional skills and capacity to contend with the pressures that accompany liberalised financial markets.

In the short run, the massive depreciation had relatively little impact on the dollar value of exports from the economies hit by the crisis, partly because of the concurrent weaknesses in both regional markets and markets such as Japan. Imports fell considerably, partly as a result of the depreciation of the local currency, but also as a matter of import "compression" — weaknesses in import demand due to domestic recession and the credit constraints. The latter initially reflected the tight monetary policy pursued to reverse or slow the free–fall of the currency. Later on, slack imports resulted from the collapse of financial markets and the emerging private sector debt overhang that constrained further credit extension from traditional suppliers.

The swift deterioration in enterprise solvency for both financial and non–financial firms resulted in a collapse of investment, particularly in construction, but also, as systemic problems developed, in all other investment areas. Constraints on exports also emerged as a result of financial sector weaknesses, further depressing national income. The net result was a regional recession, plaguing a set of countries hitherto known as Tigers or Tiger Cubs for their consistent growth (see Figure 1).

Figure 1. **Economic Growth in East Asia**



Aggregate Fiscal Outcomes and the Crisis[2]

The Impact on Revenue

In the five countries, the initial impact of the crisis was a shortfall in projected revenues as tax efforts faltered owing to rising enterprise insolvency, shrinking trade flows and decreased personal income. Public revenue collection was naturally responsive to aggregate income, as more than one–half of pre–crisis domestic revenues flowed from income and value–added taxes. In most countries, tax collection fell more than proportionally to the drop in income, and spending and total revenue effort (tax–to–GDP ratio) declined. The dependence upon trade taxes also ensured that revenues would weaken with the crisis.

In Indonesia, in fiscal year (FY) 1995, GDP–sensitive income and value–added taxes accounted for an average of 52.9 per cent of total domestic revenues. An additional 5.2 per cent came from import duties, which are quite sensitive to national income[3]. ADB staff estimated that, as a consequence of the onset of the crisis, non–oil domestic revenues fell from 12–13 per cent of GDP in FY 1995–FY 1996 to 11.4 per cent in FY 1998–FY 1999. Coupled with the 13.2 per cent decline in GDP in calendar year 1998, this caused a large drop in fiscal resources in both nominal and real terms. Oil revenues fell as well during the crisis period, further reducing the country's capacity to deal with the fiscal crisis.

In Korea there was much more stability in the tax effort: tax collections increased marginally from 16.4 per cent of GDP in 1995–96 to 16.6 per cent in 1997[4]. This is said to be partly due to reforms in the bank secrecy law that prohibited certain practices which previously had allowed under–reporting of income. Despite this improvement in revenue efforts, fiscal resources fell as GDP declined by 5.8 per cent in 1998.

Malaysia also suffered from a significant fall in revenue in 1998. Tax revenue had been rising until 1997, but it fell by 15.5 per cent in 1998[5]. The immediate impact came in indirect tax collection: trade, excise and sales taxes fell 38–41 per cent in 1998[6].

In the Philippines a somewhat milder change occurred as the economy fell off the 5–6 per cent GDP growth rate observed in 1996–97 with a contraction of approximately –0.5 per cent in 1998. Tax collection efforts faltered during this period, however, falling by approximately 1½ percentage points of GDP[7]. This reversed the small but steady increase in the tax effort during the 1990s.

In Thailand, tax collection fell quickly in 1997, with the tax–to–GDP ratio falling from 17.5 per cent in FY 1995–FY 1996 to 16.3 per cent in FY 1997, and the decline continued in FY 1998. The slowing of economic activity was especially noticeable in the fall–off of corporate and property taxes[8]. Combined with the steep fall in GDP, this resulted in a significant decline in public revenues.

The Immediate Call on Budgetary Resources

The initial currency devaluation quickly increased the domestic cost of external debt servicing, placing an immediate strain on public budgetary resources. The impact varied across the region, being greatest in those countries with the weakest overall public sector financial position, especially Indonesia and the Philippines.

In Indonesia, on a current accounts basis, debt service as a proportion of GDP increased from approximately 9 per cent in FY 1995–FY 1996 to an estimated 13.5 per cent in FY 1998[9]. Although this reflected some increase in overall indebtedness, the predominant change resulted from the increased domestic cost of loans denominated in foreign exchange due to the plummeting value of the rupiah, which fell from Rp 2 181 to the dollar in FY 1994 to Rp 7 852.9 to the dollar in 1999. While most of the increased pressure fell upon the private sector, public sector interest payments on foreign exchange–denominated debt rose from Rp 6 000–7 000 in FY 1994–FY 1997 to Rp 11 263 in FY 1998. In 1998 it represented 9.7 per cent of total expenditure, as against 8.1 per cent in the previous fiscal year[10].

The Korean budget also reflected an immediate need to service external debt payments. Budgeted interest payments as a fraction of GDP increased from a relatively constant 0.5–0.6 per cent in the pre–crisis years to 1.1 per cent in 1998 or from 2.2 per cent of total expenditures in 1997 to 4.1 per cent in 1998[11]. (The 1998 figure, however, already included charges for bank restructuring.)

Total external debt in Malaysia rose from 37.5 per cent of GDP in 1996 to 52.1 per cent in 1998, but the debt–service ratio remained relatively stable at roughly 5.5–7 per cent of exports of goods and services[12]. What is more important from the public revenue standpoint, debt–service burdens remained quite small. In 1998, external debt–service charges represented a mere 2.3 per cent of total national government expenditure. Thus, in contrast to the situation in other crisis–affected countries, external debt obligations did not cause as much pressure on the national budget.

In the Philippines, interest payments by the central government rose 28 per cent in peso terms from 1997 to 1998[13]. The increased debt–service requirements were equivalent to 0.5 per cent of GDP. As a measure of the impact on fiscal resources, interest payments as a fraction of national government expenditures rose from 16.6 per cent in 1997 to 19.5 per cent in 1998[14].

In Thailand, on a current accounts basis, debt–service requirements rose sharply as a result of the collapse of the currency and the flight of private capital. In 1997, total debt–service requirements as a proportion of exports of goods and services rose to 15.8 per cent from 12.1 per cent in the previous year and an average of 11.5 per cent in the three previous years[15]. From a public sector standpoint, the change was more manageable — interest expenses in FY 1997 rose to 2.8 per cent of total expenditures against 2.2 per cent in the previous fiscal year[16] — but it did reverse a significant downward trend in interest payments.

The Legacy of the Crisis: Public Assumption of Private Debt

The short–run problems of increased public sector foreign debt burdens, although significant in some cases, pale when viewed against the longer–term problems resulting from the collapse of the financial sector in most countries and the public assumption of private sector debts, particularly those related to banking sector recapitalisation.

Weakness in the banking sector and in the financial sector generally has been an important factor in the crisis, prolonging the impact of the initial changes in exchange rates and debt problems. Banks in Indonesia, Korea and Thailand were widely seen to rely less upon market signals than on government or personal connections when making lending decisions. Lax regulation by the government served to encourage this debilitating behaviour. In the wake of the currency depreciation, many financial institutions were found to have had unhedged foreign currency exposure beyond their ability to service or were overextended to property investors or other firms which proved to have weak or insolvent balance sheets.

The virtual collapse of the banking system in several of the countries required active intervention on the part of the government. Agencies were created to assume debt and public sector funds were used to strengthen the balance sheets of the banking sector. Over the longer term, the collapse of the financial sector will act as a constraint on public finances, since private sector debts have become public sector liabilities[17].

The emergence of massive public sector indebtedness reinforces the need for improved public sector accounting of contingent liabilities: future risks must be properly incorporated into today's fiscal balances[18].

In Indonesia, as of early 1999, the non–performing loans of the predominant state banks were estimated at 60 per cent. The net worth of the banking system as a whole is estimated to be negative and corresponding to approximately one–third of total GDP[19]. The restructuring costs likely to be assumed by the public sector are estimated at 58 per cent of GDP.

In Korea, the non–performing loans of the banking sector had grown to nearly 8 per cent of GDP by the end of September 1997, and the system as a whole became insolvent. The fiscal costs of restructuring the banking system were estimated to be of the order of 16 per cent of GDP.

In Malaysia, non–performing loans, about 60 per cent of which are loans for the purchase of real estate or securities, have been increasing since 1996: in 1997, 5.9 per cent of total banking sector loans were non–performing; this figure jumped to 14.3 per cent in 1997 and to 16.8 per cent in 1998[20]. This level is not insignificant, but it is lower than in most of the countries in the region. Consistent with this, the fiscal costs of bank restructuring are also relatively low, being estimated at 10 per cent of GDP.

The banking sector in the Philippines was relatively stronger than in the other countries. There had been less reliance upon unhedged foreign currency borrowing, less involvement with the property sector and less reliance upon leveraged financing. It is also likely that there was less directed lending by the authorities and more reliance upon market institutions. The relative strength of the Philippine financial institutions was partially a result of the difficulties and lessons learned from the early 1980s and the subsequent difficulties in the mid–1980s and early 1990s. The Philippines developed institutions that exerted somewhat stronger supervisory and regulatory control and were less susceptible to systemic errors in judgement. Moreover, the asset market boom affecting property and stock markets in regional neighbours was less prolonged in the Philippines, and thus the country's institutions were not as over–extended as those of its neighbours. As a result, the Philippines was the only crisis–affected country in which the central government assumed no significant amount of banking or financial sector restructuring costs.

In Thailand, where the crisis began, the financial sector has suffered heavily. The non–performing loans of the banking system rose from just under 20 per cent at the end of 1997 to roughly 45 per cent in 1998 and 1999[21]. The government has taken a very aggressive stance on banking sector reform and will likely assume much of the cost of restructuring, estimated at 31.9 per cent of GDP.

Policy Responses to the Crisis

The Initial Policy Stance Was Pro–cyclical

The resulting deterioration in fiscal balance was initially addressed with pro–cyclical fiscal policy, exacerbating the emerging recession. Expenditures were cut and interest rates raised, building confidence that foreign exchange–denominated loans would be repaid. The initial focus of policy actions on maintaining external stability as opposed to maintaining aggregate income compounded the already sharp deterioration in macroeconomic and financial market conditions. Persistent underestimation of the extent of the crisis contributed to the policy dilemma.

The IMF programme for Indonesia called for an initial restriction in public spending. An initial programme targeted elimination of subsidies for fuel and electricity, increases in sin taxes (on alcohol, for example) and general increases in tax efforts, especially for VAT[22]. The FY 1998 budget called for a generally restrictive fiscal policy with total expenditures as a proportion of GDP programmed to fall to 14 per cent from 17.9 per cent in FY 1997 (and 18–19 per cent in the previous two years). In keeping with the fiscal conservatism of this initial policy effort, efforts were directed primarily at lowering expected debt servicing, but development expenditures (which include a wide range of government investment categories) were to fall by 14.3 per cent from the actual expenditures of the previous fiscal year.

In Korea, following the emergence of a fiscal deficit in late 1997, the emphasis in the first half of 1998 was clearly on restrictive fiscal and monetary policy, in line with IMF prescriptions to stabilise the won and the external sector in general. The initial 1998 budget called for an overall central government deficit of 1.7 per cent of GDP, the same as the 1997 level[23].

Although Malaysia moved more quickly than other countries to a counter–cyclical policy stance, its initial focus was also on fiscal conservatism. A press statement by Michel Camdessus, then Managing Director of the International Monetary Fund (IMF), noted approvingly that "Deputy Prime Minister Anwar has appropriately also proposed to rebalance macroeconomic policies. Fiscal policy will maintain Malaysia's strong record by targeting a surplus in 1998, despite the economic slowdown."[24]

The Philippine IMF programme of March 1998 called initially for a slight tightening of fiscal policy to reverse the recession–induced budget deficits expected in 1998: "from a deficit of 0.9 in 1998 to a surplus of 0.9 in 2003"[25]. While the difficulties of tax revenue generation frustrated any restrictive fiscal policy in 1998, the forward programme called for greater pro–cyclical efforts. An increase in the tax effort was expected to account for the greatest part of the change in the fiscal balance.

In response to the problems in tax collection, the government resorted to across–the–board budget cuts of as much as 15 per cent and to the sequestering of appropriated expenditures through "cash rationing". This process resulted in an accumulation of cash payment arrears[26]. One analysis of the government's response noted plans for a 25 per cent cut in the 1998 appropriations for non–personnel expenditures for the

national government and a 10 per cent cut in transfers to local governments[27]. Estimates of the payments arrears accumulated across sectors through mid–1998 are of the order of P108.5 billion ($2.7 billion)[28].

Thailand also went through a turn–around in fiscal policy stance, as can be seen in the successive reviews of the Thai IMF programme from August 1997. In the letters of intent (LOIs) of 14 August 1997 and 25 November 1997, for example, the fiscal targets called for a small surplus in FY 1998. In these first two LOIs following the onset of the crisis, the overall fiscal balance for the central government and the consolidated public sector were both targeted at a 1 per cent surplus in FY 1998, following the 1 per cent deficit expected in FY 1997. There was a call for tax increases, including a hike in VAT rates from 7 to 10 per cent.

As ADB staff have noted, the IMF programmes in Thailand recursively moved towards lower growth targets as incoming data disappointed earlier hopes. The IMF programme of August 1997 projected real GDP growth for 1998 at 3.5 per cent, but 12 months later the fifth revision in the programme projected a sharp decline of 7 per cent for the year[29].

Policies Became Increasingly Counter–cyclical

Despite the initial programmes' failure to restore exchange rate stability, the policy focus passed to confronting the downward spiral of aggregate demand and production. The initial policy goals were not met, and the costs of ignoring the real impact of the crisis and the costs to the financial sector of high interest rates appeared to be mounting. Fiscal and monetary policy became increasingly counter–cyclical. Plans calling for a quick return to public sector surpluses proved unfeasible in the face of mounting evidence of the need to utilise public funds to support financial sector restructuring.

In Indonesia, public spending in FY 1997 was increased from the budgeted 14 per cent of GDP to 18.3 per cent, despite the continuing deterioration in the exchange rate. For FY 1998, the spending programme changed quite sharply. The LOI of 15 January 1998 speaks of changing a commitment from a target of a 1 per cent budgetary surplus in FY 1998 to a balanced budget. By April 1998, the policy shift was more firmly established and a target of a 3 per cent deficit was adopted[30].

Fiscal policy was also loosened in Korea in the second half of 1998, although there was some apparent stabilisation of the won — the exchange rate had rebounded in early 1998 and had stabilised by the second quarter. This eased the path for expansionary fiscal policy, and the budget deficit for 1998 was raised from an initial target of 1.7 per cent of GDP to a deficit of 5 per cent, a level which was also adopted for the 1999 budget[31].

Malaysia has seen the least conventional policy response, with the government moving sharply and quickly away from an initial policy of restrictive monetary and fiscal measures. Indeed, by March 1998 the thrust of fiscal policy had turned towards

stimulating aggregate demand as against an earlier concern with reducing financing needs, although in April 1998 the government was still planning a public budgetary surplus[32]. By May 1998, it was clear that the government had shifted its focus towards fighting the emerging recession[33]. Current expenditures were reduced, development expenditures expanded, and the annual budget moved into a modest deficit (after many years in surplus). The 1999 budget announced in October 1998 was seen as a definite shift to counter–cyclical policies. A deficit projection of 6 per cent of GDP for the federal government was deemed acceptable[34].

In the Philippines, the IMF–supported macroeconomic stabilisation programme shifted emphasis in mid–1998 to deal more firmly with a weakening economy and less with "external vulnerability", despite the perception that the external situation had worsened in some important respects. Although the 11 March 1998 Memorandum of the Philippines government spoke of relaxing fiscal policy in the near term, its target for the consolidated public sector budget deficit for 1998 was 0.9 per cent of GNP — representing no change from the realised position for 1997[35]. It was expected that this deficit would be transitory and that a balanced fiscal position would be reached in 1999. By early 1999, the need for "a well–measured shift toward a more expansionary fiscal policy stance to stimulate domestic demand" was recognised. The new target for the consolidated public deficit was approximately 3.3 per cent of GNP[36].

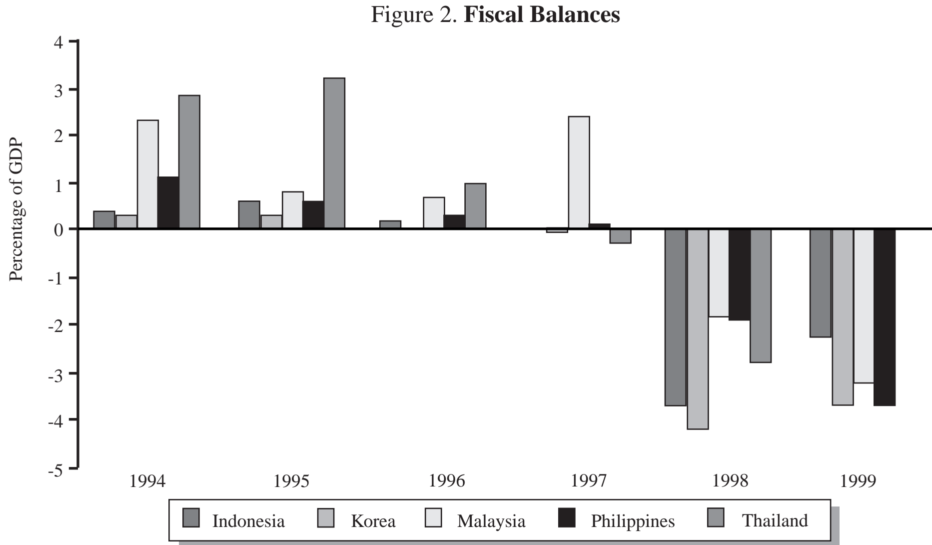
In Thailand, expectations and concerns had shifted by early 1998, but the shift was implemented in a rolling fashion, with each new plan or programme calling for increased public expenditures relative to revenues — i.e. for larger deficits. The LOI of 24 February 1998 called for a FY 1998 central government budget deficit of 1.6 per cent, whereas the target in the two previous LOIs had been a 1 per cent surplus, as noted above[37]. This was subsequently increased to a 2.5 per cent deficit. These deficits were complemented by smaller, but significant, planned deficits for state–owned enterprises. Major changes were also made in the planned deficits for FY 1999: that of the national government was raised to 3 per cent, and an additional 3 per cent was planned to take into account SOEs and the expected costs of financial sector restructuring[38].

In most countries the basic tool of expansionary fiscal policy was increased spending. Reduced revenue collection was not seriously considered, for a number of reasons. First, tax collection was falling in any event as the tax base diminished. Given the reliance upon export and enterprise taxes, only cuts in personal taxes would have had any impact on aggregate demand, and thus only a small part of the tax base was a viable target for tax cuts to stimulate the economy. Moreover, personal tax cuts would likely have had little impact on household spending because of the uncertainty about employment and income: such cuts would not have been perceived as affecting long–term disposable income. Finally, the inside lags for lowering these tax rates are no shorter than those for spending increases. Spending programmes were thus seen as procuring a greater impact for a given change in the deficit[39].

The Deterioration in Fiscal Balance

As a result of initial pressures and the movement towards counter–cyclical fiscal policies, the budget balance deteriorated quickly for all of the countries. Figure 2 shows the overall drift towards strong negative balances in a region hitherto characterised by fiscal surpluses. The largest impacts came when policies shifted to fighting the rapidly emerging recessions and to assuming the costs of financial sector restructuring.

Figure 2. **Fiscal Balances**



Note: Indonesia data from ADB estimates, otherwise from ARIC website May 2000.
Data do not always correspond to calendar year.

The initial impacts were most severe in Korea and Indonesia. In Indonesia, the national government budget moved from a small surplus before the onset of the crisis to a deficit of 3.8 per cent of GDP in FY 1999. Similarly in Korea, the budget balance tumbled to an average deficit of nearly 4 per cent in 1998 and 1999.

Although Malaysia was hit by the financial contagion, it has had less difficulty in managing its budget. Throughout the 1990s, the country practised prudent fiscal management resulting in budget surpluses. This provided a cushion against the initial impact of the crisis, which was less severe than in other countries: in 1998, the budget fell into a small, controllable deficit of 1.8 per cent of GNP, after a larger surplus in 1997[40]. Malaysia's greater fiscal freedom also allowed it more flexibility in setting overall policy and provided scope for an early swing to more expansionary fiscal policies.

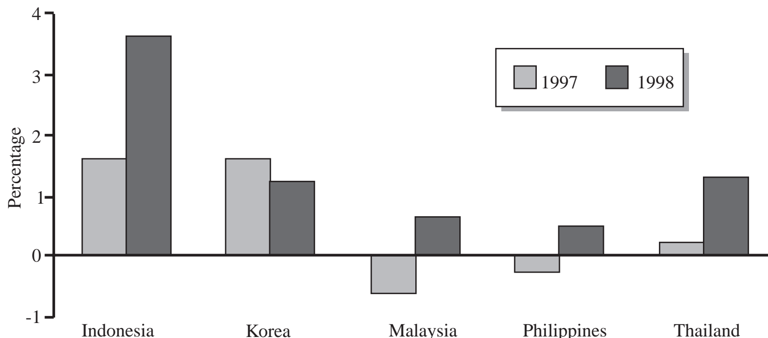
ODA: Assistance at a Price

With the inevitable emergence of abnormally high budget deficits, four of the five countries hit by the crisis were forced to request and rely on extensive official development assistance (ODA), primarily from the IMF, the ADB and the World Bank. The loans were largely policy–based structural adjustment lending intended to support reforms such as the improvement of regulatory and corporate practices. These packages were not, in all cases, quickly or completely made available. The disbursement of loans tied to reform programmes was conditional on the processing of loan documents and on negotiations between government officials and staff from international organisations over the nature, timing and extent of the individual actions.

In many respects, the international agencies are not well positioned to respond to emergency funding needs such as those which emerged in East Asia as policy moved towards counter–cyclical, expansionary fiscal spending. Increasingly, the internal procedures of international organisations call for background studies — for example on the environmental or social impact of any activity — which cannot be conducted in a matter of weeks. International organisations also increasingly require widespread participatory involvement of civil society in project design, which cannot be easily accomplished in a matter of days. These procedural developments, which are intended to procure greater accountability, transparency and participation, may increase the difficulties of providing support in emergency situations where time is the more crucial consideration.

Except perhaps in the cases of Indonesia and Korea, it is difficult to argue that the official assistance provided was commensurate with the kind of spending programmes that eventually emerged, as can be seen in Figure 3 in terms of transfers to the national governments in relation to GDP. In this respect, the rapid shortfall in financing reduced governments' ability to deal with the crisis from a counter–cyclical standpoint, limiting the scope for fiscal policy. Their inability to draw on immediately available and adequate external resources aggravated the impact of the earlier, pro–cyclical policy stance[41].

Figure 3. **Net External Financing of Government Budget as Fraction of GDP**



Source: Data from IMF, except Malaysia from Ministry of Finance.
Indonesia, Thailand are fiscal years.

In Indonesia, ODA commitments were quickly forthcoming, and on an unprecedented scale. Following the Indonesian government's request for assistance in October 1997, the ADB committed $3.5 billion, the IMF $10.1 billion, the World Bank $4.5 billion, Singapore $10 billion, etc., for a total of roughly $36.1 billion[42]. The actual disbursement of aid, however, tended to lag behind the developing need for funds. Net official transfers moved from a negative $0.8 billion in FY 1997 to a positive $1.2 billion in FY 1998, a swing of about $2 billion (1 per cent of GDP) or less than 5 per cent of the level of public commitments made[43]. With respect to fiscal expenditures, external financing was estimated to have accounted for 27.4 per cent of the central government deficit in FY 1997[44].

The extent of official assistance to Korea was also unprecedented for East Asia. The total IMF–structured multilateral assistance package put together in late 1997 totalled $58.35 billion on a commitment basis[45]. In contrast to what happened in other countries, funds seem to have been made available rather quickly. By the end of 1997, a financing package of $15.8 billion in callable capital was made available, more than two–thirds of which came from the IMF. External financing covered approximately 93 per cent of the consolidated central government fiscal deficit[46]. Similar, although somewhat smaller packages were made available in 1998. Korea thus received financial resources relatively early on.

In the Philippines, net external financing in 1998 amounted to P12.4 billion — a considerable reversal from the net outflow of P6.4 billion in 1996–97[47]. This represented 24.8 per cent of the total national government financing requirement, a level comparable to that seen in Indonesia. In dollar terms, the actual transfer was well under $0.5 billion. The budget planning had called for considerable reliance upon external financing. Although some of the necessary funding for expanded public sector spending was to be raised in the international capital markets, the bulk was expected to come from official assistance sources. The relatively small amount of net transfers actually made would clearly hinder fiscal policy from moving quickly to counteract output declines.

Malaysia has for the most part shunned significant external financing, as it has been able to raise the requisite funds domestically. In 1998, foreign borrowing amounted to only 16.2 per cent of the domestic borrowing utilised to finance the government's fiscal deficit (as well as an increase in reserves)[48].

Thailand has also received huge infusions of official assistance on a commitment basis. As in Indonesia and the Philippines, about 25 per cent of the central government's budget deficit was financed by external sources in FY 1997[49].

The Impact on Expenditure Allocations

The shift away from a contractionary fiscal policy during 1998 did not immediately provide for strong counter–cyclical spending, except possibly in Korea, but it did allow for a continuation of basic public expenditure patterns, despite the increased debt–service

burdens. As a result of fiscal pressures, some shifts in the spending mix occurred and the initial tight fiscal policy had an impact on government operations. Although each country's situation was quite different, there are some common trends:

— Efforts were made to protect social sector spending.

— Cutbacks were made in administratively easy areas including infrastructure project spending and maintenance.

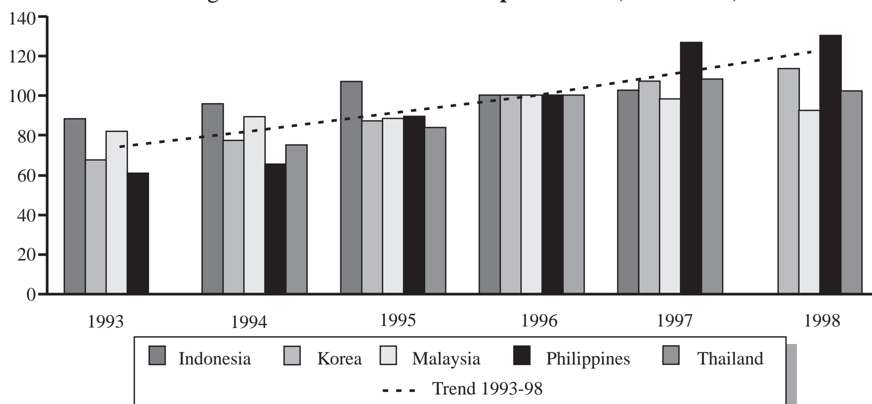
— Capital spending, at first reduced, was then utilised as a means of providing expansionary fiscal support for the economy.

— In cases of extremely strong constraints on fiscal resources, governments have resorted to practices such as sequestering funds, which have resulted in a spending bias. Wage bills, for example, tend to be paid ahead of suppliers, and personnel expenditure needs are met while expenditures for critical items such as operations and maintenance of infrastructure are not.

Social Sector Spending

In general, real public spending in the social sector was preserved or increased during the crisis. Figure 4 shows nominal expenditures — generally the total for education, health, housing and social welfare — adjusted for price changes using the GDP deflator[50]. All of the countries except Malaysia show significant increases in spending from 1996 to 1997. The fact that social spending was maintained testified to the high priority accorded these sectors and to the difficulty of making quick adjustments to these budgets. The picture thereafter is somewhat more mixed, as spending tailed off in 1998 in some cases. Moreover, the simple trend line, extrapolating the spending patterns seen just before the crisis, shows that most countries have not maintained the pattern of strong increases shown in the early 1990s[51].

Figure 4. **Real Public Social Expenditures (1996 = 100)**

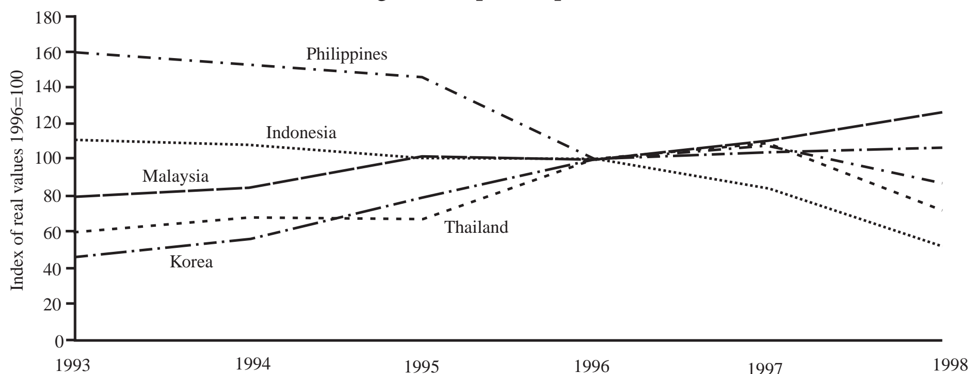


Finally, the increased real resources must be viewed within the perspective of the crisis. Some aspects of the human impact of the crisis can only be addressed with higher social spending. The increase in poverty, although not as large as initially feared, calls for more public health services, financial support for children of poor families to maintain their access to education, and strengthened social safety nets. The expenditures made have likely not been sufficient to meet the increased needs.

Capital Expenditures

As shown in Figure 5, capital expenditures in the poorer countries have fallen off with the financial crisis. Indonesia and Thailand showed the sharpest drops, with expenditures falling by 33 per cent and 38 per cent respectively. In Thailand, the difficulties of utilising fiscal policy to address declining aggregate demand were quite apparent. ADB staff analysis concluded that the shift from a fiscally restrictive policy to an expansionary one occurred only in the last quarter of 1998 — more than one year after recognition of the crisis. Problems included the time needed to restart projects after earlier cancellation[52].

Figure 5. **Capital Expenditures**



Source: Data from ARIC webpage 23 May 2000.

The Philippines showed a smaller fall in capital expenditures after 1997, although the situation may have been aggravated by the cash management system ("cash sequestering") used to counter the fall–off of public revenues (see below). The spending reduction followed a fairly substantial downward trend in public infrastructure investment before the crisis. Overall, although some part of the decrease is due to ongoing decentralisation and to the transfer of expenditures from the central government's books to those of local governments, the crisis exacerbated the existing problems of appropriating funds for capital spending.

In the other two countries there were clear signs of increased capital spending. Malaysia, showing the least fiscal strain and the quickest shift to counter–cyclical spending, managed to increase its spending on infrastructure by nearly 15 per cent. In Korea, increases in capital spending were used as an essential part of the expansionary spending programme, although the increases were much lower than the pre–crisis trend would have suggested.

Coping Mechanisms Distort National Priorities

The financial crisis caused a series of false starts and reversals in fiscal policy. Governments constrained expenditures, then relaxed the constraints and finally opted for large–scale deficit spending — all this in less than one year, within a single budget. Such shifts cannot be accommodated within the normal channels of fiscal decision making, which involve extensive discussions between the executive and legislative branches.

In the Philippines, the fiscal constraints resulted in "cash rationing" by means of placing restrictions on payment authorisations. The rationing was initially applied across the board, constraining different departments equally; later on, it was applied unevenly, giving priority to the larger agencies[53]. This coping mechanism is effective in the immediate sense of meeting a budget, but it often simply results in the accumulation of payment arrears and financial obligations that must be met in the near future. It may also result in increased opportunities for corruption, as creditors jockey for payment[54]. This fiscal control process has been used in the Philippines during other periods of constrained fiscal resources, such as in the early 1990s. During that period, it was also noted that cash sequestering inhibited needed infrastructure investment and biased spending away from areas such as maintenance.

In Indonesia, limited fiscal resources were further constrained by political changes. Internal developments were encouraged by the reform programmes tied to official lending. In particular, steps to address the widespread perception of corruption were difficult to undertake in a context of fiscal policy measures which sharply increased spending. Civil servants became reluctant to continue business as usual lest they be accused later of engaging in corrupt practices. As a result, spending on internationally funded projects has faced particularly slow implementation.

Beyond the National Accounts: the Broader Fiscal Governance Problems

The fiscal impact of the crisis may be much greater than is suggested by the changes in aggregate flows and expenditure allocations of the national governments. Off–budget items are common and in most cases substantial in the countries affected by the crisis. As off–budget activities are not centrally reported or easily monitored, there are considerable uncertainties regarding both overall fiscal flows and expenditure allocations.

In Indonesia, for example, there are particular problems with respect to large–scale off–budget subsidies and "quasi–budget" activities. Off–budget subsidies have long been present for food, petroleum and fertilisers. It is estimated that the subsidies, generally in the form of payments to state–owned enterprises, amounted to as much as Rp 58 trillion in FY 1998. This is equivalent to 5.8 per cent of GDP or 21.5 per cent of total budgeted expenditures. These items are increasingly being included in the budget: in FY 1999, the amount of budget subsidies, especially for sub–market pricing for petroleum products, was equivalent to 19.1 per cent of routine or current expenditures[55]. Indeed, the fiscal crisis is forcing a re–evaluation of the use of subsidies: they are not a cost–effective manner of providing social safety nets and need to be replaced by institutions which have a greater impact on the poor and place less of a strain on fiscal resources. In addition, many fees collected by agencies are never fully recorded. These "quasi–budget" revenues are utilised at the local level for education and reforestation efforts, among other activities.

The lack of transparency reflects some of the basic weaknesses of the governance structure of the countries concerned, and it seems that doubts about this structure exacerbated the public perception of their fiscal and financial fragility. In Indonesia in particular, current reform efforts directly address the issue of improving budget transparency and incorporating off–budget items in the budget. This activity is consistent with the broader trend towards less acceptance of corruption and poor governance in Indonesia. The fiscal crisis has worked in favour of greater transparency in one notable respect: the FY 2000 budget was publicly debated in the legislature — the first such debate since the 1960s[56]. Over time, this will secure more transparency in budget formulation and presentation and more accountability on the side of the government officials responsible for budget preparation and implementation.

Conclusion: the Crisis in Public Expenditure Management

The East Asian financial crisis was a region–wide external shock that, with little or no warning, drastically reduced fiscal resources and exerted overwhelming pressure on public expenditures. Unprecedented increases in official assistance flows were needed to restabilise the countries hit by the crisis. Although clear signs of recovery have appeared in most of these countries, there are still calls upon public fiscal resources for financial and enterprise restructuring. The financing requirements for these and for debt repayment will have major implications for the politics of budgeting in these countries. New fiscal arrangements will have to be developed to cope with this new environment.

There has been considerable debate as to whether the correct policy was followed in this crisis, but all too little discussion concerning the need for new policy instruments to allow governments to implement policy quickly. In particular, new fiscal arrangements are needed to lessen the impact and costs of future crises. These arrangements must support greater flexibility in fiscal policy, allowing the amount and nature of spending to change more rapidly in response to changing needs. In addition, the international community must develop new forms of support that can move rapidly in response to regional financial crises.

Notes

1. On the convergence of policy and performance in Southeast Asia, see Green (1994).
2. International comparisons are sometimes difficult owing to the differing definitions of the fiscal year (FY). In Indonesia, until this year, the fiscal year ran from 1 April to 31 March; using the government's terminology, FY 1995 means April 1994 through March 1995. In the Philippines and Korea, the fiscal year is the calendar year. In Thailand, the fiscal year ends on 30 September; thus FY 1994 designates October 1993–September 1994. In this preliminary paper, an attempt was made to correct for these differences in some illustrations; in others, caution should be exercised in the cross–country comparisons.
3. Sinsiri (1998), Table 4.
4. ADB (1999*a*), p. 4, Table 2.
5. Ministry of Finance (Malaysia) (1999), pp. 80–83.
6. Ministry of Finance (Malaysia) (1999), pp. 82–83.
7. ADB (2000*c*), p. 44, Tables A.13 and A.1.
8. ADB (1998*b*), pp. 6–7.
9. ADB (1999*b*), Appendix, Table 10.
10. IMF (1999*a*), p. 27, Table 24.
11. IMF (2000*a*), p. 15, Table 12.
12. Bank Negara Malaysia (1998), p. 250, Table A.23.
13. ADB (2000*c*), p. 7, Table 6.
14. ADB (2000*c*), p. 44, Table A.13.
15. ADB (1998*b*), p. 24, Table A.1.
16. IMF (2000*b*), p. 29, Table 26.
17. In this section, data on the fiscal costs of bank restructuring are as of October 1999, from ADB (2000*a*), p. 31.

18. Future revenues from reprivatising or selling newly acquired public sector assets are also not being carried on the public books. To this extent, the asset and liability picture may not be as grim as suggested in the section above. However, this merely reinforces the message of the crisis: prospective claims on public revenues should be more accurately reflected in public accounting systems.
19. ADB (1999*b*), pp. 21–22.
20. Bank Negara Malaysia (1998), Table 4.8, p. 153.
21. ADB (2000*a*), p. 25.
22. Material in this section is from Sinsiri (1998), p. 6.
23. ADB (1999*a*), p. 4.
24. IMF (1998*b*).
25. IMF (1998*a*).
26. World Bank (1998), p. i.
27. World Bank (1999), p. 7.
28. World Bank (1998), p. 2, Table 1.1.
29. ADB (1998*b*), p. 3.
30. IMF (1998*d*).
31. ADB (1999*a*), p. 4, Table 2.
32. For the suggestions of expansionary policies, see Bank Negara Malaysia (1998), p. 4. A more conservative characterisation is found in IMF (1998*c*).
33. Bank Negara Malaysia (1998), p. 4.
34. Ministry of Finance (Malaysia) (1999), p. 79.
35. IMF (1998*a*).
36. IMF (1999*c*).
37. ADB (1998*b*), p. 18.
38. *Ibid.*
39. The authors are grateful to Hafiz Ahmed Pasha for calling their attention to the asymmetry between the use of tax and spending.
40. Ministry of Finance (Malaysia) (1999), Table 4.2, p. xxx.
41. Corsetti (1998), p. 52.
42. ADB (2000*b*), p. 17.
43. IMF (1999*a*), p. 44.
44. *Ibid.*, p. 24.
45. ADB (1999*a*), p. 15.

46. IMF (2000*a*), p. 15.

47. IMF (1999*b*), Table 11, p. 15.

48. Ministry of Finance (Malaysia) (1999), Table 4.2, p. xxx.

49. ADB (1998*b*), Table 5, p. 7.

50. See ADB's Asia Recovery Information Center website: http://www.aric.adb.org, June 2000. The trend line is a simple extrapolation of the average values for 1993–96.

51. The impact of the fiscal crisis on social sector spending may be more serious than suggested in this chapter. In some countries, especially the Philippines, much responsibility for social spending has been devolved to local governments, which were also subject to fiscal constraints.

52. ADB (1998*b*), p. 18.

53. Reyes *et al.* (1999), pp. 20–21. There were also cutbacks in transfers to local governments.

54. World Bank (1998), pp. 5–6.

55. ADB (1999*b*), p. 5.

56. ADB (1999*b*), p. 6.

Bibliography

Asian Development Bank (2000*a*), *Asian Development Outlook 2000*, Oxford University Press, New York.

Asian Development Bank (2000*b*), *Country Assistance Plan: Indonesia (2000–2002)*, January.

Asian Development Bank (2000*c*), *Country Economic Report, Philippines*, January, Manila.

Asian Development Bank (1999*a*), *Country Economic Report, Republic of Korea*, January, Manila.

Asian Development Bank (1999*b*), *Country Economic Review, Indonesia*, March, Manila.

Asian Development Bank (1998*a*), *Country Economic Report, Philippines*, November, Manila.

Asian Development Bank (1998*b*), *Country Economic Review, Kingdom of Thailand*, December, Manila.

Bank Negara Malaysia (1998), *Annual Report 1998*, Kuala Lumpur.

Corsetti, G. (1998), "Interpreting the Asian Financial Crisis: Open Issues in Theory and Policy", *Asian Development Review*, Vol. 16, No. 2.

Green, D.J. (1994), "Convergence and Cohesion with the ASEAN–4", *Journal of Asian Economics*, Vol. 5, No. 1.

International Monetary Fund (2000*a*), *Republic of Korea: Statistical Appendix*, Staff Country Reports No. 00/10, February, Washington, D.C.

International Monetary Fund (2000*b*), *Thailand: Statistical Appendix*, Staff Country Reports No. 00/20, February, Washington, D.C.

International Monetary Fund (1999*a*), *Indonesia: Statistical Appendix*, Staff Country Reports No. 99/39, May, Washington, D.C.

International Monetary Fund (1999*b*), *Philippines: Statistical Appendix*, Staff Country Reports No. 99/93, August, Washington, D.C.

International Monetary Fund (1999*c*), "Supplementary Memorandum of Economic and Financial Policies", Government of the Philippines, 20 January, Washington, D.C.

International Monetary Fund (1998*a*), "Memorandum of Economic and Financial Policies of the Government of the Philippines", 11 March, Washington, D.C.

INTERNATIONAL MONETARY FUND (1998*b*), News Brief No. 98/9, 25 March, Washington, D.C.

INTERNATIONAL MONETARY FUND (1998*c*), Press Information Notice, "IMF Concludes Article IV Consultation with Malaysia", 27 April, Washington, D.C.

INTERNATIONAL MONETARY FUND (1998*d*), "Supplementary Memorandum of Economic and Financial Policies", Indonesian Government, 10 April, Washington, D.C.

MINISTRY OF FINANCE (MALAYSIA) (1999), *Economic Report 1999/2000,* Kuala Lumpur.

REYES, C., R.G. MANASAN, A.C. ORBETA AND G.G. DE GUZMAN (1999), "The Social Impact of the Financial Crisis in the Philippines (Working Paper #5)", mimeo, Asian Development Bank, December, Manila.

SINSIRI, N. (1998), "Financial Crisis and Adjustment of Government Budget in Indonesia", mimeo draft Asian Development Bank document, 7 December.

WORLD BANK (1999), *Philippines, the Challenge of Economic Recovery*, 26 February, Washington, D.C.

WORLD BANK (1998), *Social Expenditure Priorities*, 13 November, Washington, D.C.

The Need for Foreign Savings in Post–Crisis Asia

Helmut Reisen and Marcelo Soto

Introduction

Much of Asia has long been characterised by high domestic savings. East Asia saved, before the Asian crisis in 1997, a third of its GDP, more than any other region in the world. High savings financed rapid capital accumulation that accompanied remarkable economic growth. A question often raised is therefore: why should Asia incur risky foreign savings when it can finance development from local savings? After all, even distinguished economists such as Joe Stiglitz have argued that countries with such enviable savings rates as often found in Asia do not need foreign funds for investment and growth.

Foreign savings, of course, are net capital inflows, the counterpart of current account deficits (if there is no change in reserves). In particular the Asian crisis has reminded us of the *risks* of capital flows — that is, the unsettling effects of irrational exuberance, investor panic and financial contagion. As the (mostly temporary) withdrawal of foreign savings caused and accompanied the great Asian slump in 1997 and thereafter, policymakers have got used to terms such as moral hazard, asymmetric information and adverse selection, as far as global capital flows are concerned. There have been innumerable conferences and papers on the prevention and resolution of financial crises and their cross–border contagion, sharpening the awareness of policymakers to the risks of volatile capital flows.

This paper wants to take a respite from the current focus on the risks of capital flows. It rather intends to explore the benefits of foreign savings, both by reviewing the analytical arguments and by building fresh empirical evidence on the growth impact of private capital (in)flows. Some Asian countries have been blamed (also by the OECD; see Poret, 1998) for discouraging long–term equity inflows and encouraging short–term inflows in the past. Thus, a particular effort will be made to provide evidence on the independent growth impact that the various broad categories of flows are likely to exert.

We proceed in three steps before drawing conclusions. First, we review the economic arguments that have been advanced to presume economic benefits from overall capital inflows, even if domestic savings are plenty. Second, we concentrate on collecting arguments which have been advanced in favour of (or against) benefits of four broad categories of inflows — foreign direct investment (FDI), portfolio equity investment, portfolio bond flows and bank lending. This enables hypotheses to be formulated on the potential growth impact of these four categories and, third, to produce an econometric panel data analysis for the recent period of strong private flows to the emerging markets. Fourth, we draw conclusions: first, why is it important to encourage foreign savings in order to stimulate growth; second, which forms of private flows should be encouraged to maximise the benefits of financial integration? The insights should provide valuable inputs for the appropriate macroeconomic and institutional approach towards capital flows; this paper also warns against relying solely on national savings for financing development.

The Benefits of Foreign Savings

This section reviews the benefits of foreign savings along different strands in the literature. The literature has emphasised the potential of foreign capital flows to enhance growth through higher investment in physical and human capital, through higher efficiency with which these factors of production are used and through consumption smoothing as a result of cross–border risk sharing. The earlier two–gap literature (Chenery and Bruno, 1962), assuming fixed prices and exchange rates and no capital–good production in developing countries, had postulated that growth was not only limited by a country's ability to save, but also by foreign savings to buy imported capital goods. The assumptions underlying the two–gap literature make the theory largely irrelevant for today's Asia. We focus therefore on mainstream, rather than structuralist, economic thinking by providing capsule summaries of neoclassical and new growth models as well as of the intertemporal approach to the current research.

Neo–classical Considerations

In the neo–classical general equilibrium framework, the benefits of capital inflows into (capital–) poor countries are essentially derived from divergences in the marginal productivity of capital. Labour in advanced countries is equipped with better and more capital than the workers in developing countries, and capital can be used more productively by being sent south.

The simplest of the neo–classical models, the two–country Kemp–MacDougall model (see, e.g., Lal, 1990) can provide some basic insights about the benefit of capital inflows as well as the optimal size of these inflows. Savings rates are constant and a fixed proportion of per capita income in both countries. The marginal product of capital

is higher in the poor country than in the rich country in autarky, and is diminishing in both countries with rising capital–labour ratios. With perfect capital mobility, the poor country will benefit from capital inflows, until its marginal product of capital is equal to that of the rich country; both in turn determine (and are equal to) the world interest rate.

The size of the optimal net capital inflow rises with the difference between the autarkic marginal product of capital and the world interest rate, and falls the faster marginal capital productivity declines with a higher capital–labour ratio. The poor country gains per capita income – the marginal output of capital, times the capital inflow, minus the income payments on the capital stock located at home. (The rich country, of course, gains as well from the capital export: the output loss due to capital relocation is more than compensated by interest and dividend payments.) In the new, long–run equilibrium, output will grow at the same rate as in the closed economy.

The Kemp–MacDougall theory crucially assumes that the capital inflow is invested, not consumed, and that the capital ratio is raised by the inflow, until the steady–state capital ratio is reached. The inflow is not consumed, because the world interest rate exceeds the country's rate of time preference. This fulfils an important requirement of the full debt cycle, so that the deficits first incurred on trade and current accounts will give way to a trade surplus and later a surplus on current account. Concerns about debt stocks and the size of the financial and real transfer are unwarranted because they will adjust in a sort of automatic way. Foreign investors are assumed to bring in capital goods and take away part of the additional production, thereby resolving the transfer problem. The traditional neo–classical model thus seems more appropriate to describe FDI inflows than other capital flows.

Mere capital accumulation does not guarantee that a country will benefit from capital inflows; first, in the presence of sufficiently misguided policies, inflows can "immiserise"; and, second, an upward–sloping supply of capital will mean that the cost of capital inflows rises at the margin. Even on standard neo–classical grounds, governments can be justified to resist part of the capital inflows.

Models of "immiserising" inflows have warned that tariff–induced inflows of capital magnify the welfare losses due to distorted consumption and production patterns by stimulating capital accumulation in protected sectors and by attracting foreign capital into these sectors, if foreign capital receives the full (untaxed) value of its marginal product (Brecher and Diaz Alejandro, 1977). Despite drastic structural reform in most capital importing countries, distortions persist that may stimulate private credit booms, for example. Moreover, distortions may be reintroduced in the case of a capital–outflow crisis.

Further evidence that capital inflows will not play a crucial role in the standard neo–classical framework comes from growth accounting. Adding human capital accumulation to the standard Solow growth model, output growth can be written as:

$$\dot{y} = c\dot{K} + j\dot{H} + (1- c - j)\,\dot{L} + \dot{q} \qquad (1)$$

where dots represent growth rates of output y, physical capital K, human capital H and labour L, χ and φ are the physical and human capital shares in national income and θ is the growth rate of Solow residual. Mankiw, Romer and Weil (1992) have found that the three variables K, H and L of their augmented Solow model explain almost 80 per cent of the cross–country variation in income per capita of the full Summers/Heston country sample of 98 non–oil countries. Their estimates imply a physical capital share χ of 0.31 and a human capital share φ of 0.28. Taking an average capital–output ratio of 2.5 and an average current account deficit of 4 per cent of GDP (a stylised description of major capital importers), the Solow model would predict an increase in the growth rate of capital of 1.6 per cent; and the resulting increase in short–run growth of output would merely reach 0.5 per cent.

Implications of the Endogenous Growth Literature

Endogenous–growth models, unlike neo–classical models which imply decreasing returns to capital, are characterised by the assumption of non–decreasing returns to the set of reproducible factors of production. Equation (1) becomes an endogenous growth model if $\chi + \varphi = 1$, so that

$$\dot{y} = \chi \dot{K} + \varphi \dot{H} \tag{2}$$

Equation (2) says that long–term growth can be explained entirely by growth in capital, without any appeal to a Solow residual. In addition, in the absence of arbitrage between physical and human capital, their ratio is constant over time. This means that any increase in physical capital induces a rise in human capital. This implies external economies to capital accumulation: the elasticity of output with respect to capital greatly exceeds its share of GNP at market prices. Such externalities create a presumption that the benefits of capital inflows must be much higher than those stipulated by the standard neo–classical approach. In the neo–classical growth model, countries benefiting from large inflows could see large increases in physical capital accumulation; their growth rates should peak on impact, gradually to reach the steady state. To change the growth rate of the capital recipient permanently, though, the inflow must not only lift the economy to a higher capital equipment (and income level), but it also has to change the economy's production function. However, if returns to capital are constant, then the rate of return on capital will not be decreasing in the capital–labour ratio. There is thus no incentive in the endogenous–growth model for capital to flow from rich to poor countries, because returns on capital need not be larger (Lucas, 1990).

Nevertheless, if capital flows add to domestic investment (rather than stimulate consumption) and if they carry positive externalities, they will speed up income convergence through two channels. The time to convergence (of per capita income

between rich and poor countries), t, can be written as a function of the initial starting ratio of poor country to rich country GNP, R, and the differential between the poor country and the rich country growth rate, D:

$$t = -(\ln R)/D \quad (3)$$

In the neoclassical model, capital flows affect only the level of GNP, not its growth rate. Assuming capital's share of income χ to be 0.31 (Mankiw *et al.*, 1992) and a capital–output ratio of 2.5, the marginal product of capital is 12.4 per cent ($\chi/k/y$). An inflow worth 4 per cent of GNP that only raises the initial starting ratio of poor country to rich country GNP will raise R from 0.25 to 0.26, producing little reduction in time to convergence whatever the growth differential between the two country groups. Convergence will be sped up only if flows embody positive spillovers to a recipient country's efficiency.

The Inter–temporal Approach to the Current Account

In the models considered so far, the benefits of capital inflows are derived from net capital inflows that are fully invested and raise the level or the growth rate of GDP. However, the benefits of capital flows are not only derived from directing world savings to the most productive investment opportunities, but also from allowing individuals to smooth consumption over different states of nature by borrowing or diversifying portfolios abroad. Developing countries are likely to benefit greatly from the international pooling of country–specific risks that would result in inter–temporal smoothing of consumption levels. First, poor countries tend to be more shock–prone than richer ones; second, since per capita income is low, any downside adjustment will hurt more than in countries with higher consumption levels. Table 1 illustrates the point for four Asian countries (for which data were easily available).

Table 1. **Gains from the Elimination of Consumption Variability**

Country	Annual per cent consumption gain[a]	Real GDP per capita, 1999[b] (US = 100)	Standard deviation of GDP growth[c]
Bangladesh	3.04	4	5.5
India	0.93	6	3.4
Malaysia	1.17	24	3.3
Thailand	1.07	20	3.0

a. Obstfeld (1993): The calculations assume that the logarithm of per capita consumption follows a random walk with trend and that individuals have generalised isoelastic utility functions with annual time discount factor 0.95, relative risk aversion parameter 1, and inter–temporal substitution elasticity 0.25.

b. World Bank, World Development Report 1999–2000.

c. Own calculations; observation period is 1970–90 for real GDP.

In principle, the inter–temporal approach to the current account can be helpful in answering the question of how much to accept (in terms of the size of the current account deficit) of capital flows offered by foreign investors. International capital

mobility opens the opportunity to trade off present levels of absorption against future absorption; if saving falls short of desired investment, foreigners have to finance the resulting current account deficit, leading to a rise in the country's net foreign liabilities. The inter–temporal approach views the current account as the outcome of forward–looking dynamic saving and investment decisions (Obstfeld and Rogoff, 1994), which are driven by expectations of future productivity growth, interest rates and other factors. Table 2 collects some important predictions of the inter–temporal approach to the (first–period) current account from the two impulses that have figured prominently in the discussion on the determinants of recent capital flows to emerging markets.

Table 2. **Current Account Effects Predicted by the Consumption–Smoothing Approach**

Shock	Temporary			Persistent		
	Saving	Investment	Current account	Saving	Investment	Current account
Drop in world interest rates below permanent average rate						
Net debtor countries	+	0	+	Not applicable		
Net creditor countries	-	0	-			
Rise in productivity						
Country–specific	+	0	+	-	+	-
Global	+	0	+	+	+	0

Sources: Discussions in Glick and Rogoff (1995), Obstfeld and Rogoff (1994) and Razin (1995).
Table 2 yields some important insights about how the "equilibrium" current account of the developing–country recipients should respond to a drop in world interest rates, or, alternatively, to a reform–induced rise of productivity.

— The capital–importing countries, being net foreign debtors, should raise the saving rate in response to cyclical portfolio flows, which are interest–driven. The current accounts should move towards lower deficits (or into surplus) as people smooth consumption in the face of temporarily low interest payments. For net creditor countries, temporarily low interest rates would result in opposite current account effects. If a net debtor country widens current account deficits in response to temporary interest rate reductions, the response may well destabilise rather than smooth the inter–temporal consumption path.

— Likewise, the inter–temporal approach does not necessarily predict widening current account deficits when capital flows are attracted by country–specific productivity surges. The "equilibrium" response of the current account depends crucially on the expectation of whether the productivity surge is temporary or permanent. In both cases, the productivity surge will raise output immediately, but only a persistent rise in productivity will cause permanent income to rise. The reason is that only a permanent productivity surge will induce investment and a higher future capital stock. The rise in permanent income will also cause consumption to rise more than output, resulting in a strong current account deficit as a result of lower saving and higher investment. A transitory increase in

productivity, by contrast, should result in an opposite current account effect (a lower deficit), since there is no effect on investment and agents save part of any transitory increase of income (in the permanent income model of consumption).

— Productivity surges must not necessarily be interpreted as country–specific, but can be part of a broader global shock. A persistent productivity–enhancing shock common to all countries will raise the world rate of interest. This should dampen consumption in net debtor countries sufficiently to compensate for the consumption effects arising from higher permanent income brought about by higher investment. Since all countries cannot improve their current accounts, world interest rates rise until global savings and investment are balanced. A global transitory productivity shock will produce excess world saving and thereby exert downward pressure on interest rates. A temporary drop in world interest rates should result in lower current–account deficits for net debtor countries, as analysed above.

It is noteworthy that — among the capital–flow determinants discussed here — the inter–temporal approach predicts a widening of current account deficits (for net debtor countries) only if the country enjoys a permanent idiosyncratic productivity boom. However, the predictive power of the inter–temporal approach to the current account may remain very limited for developing countries, in spite of their higher financial openness (Reisen, 1998).

Specific Types of Capital Flows: Benefits versus Risks

It is a statement as common as it is trivial that capital flows "carry" benefits as well as risks. But can we establish something close to a pecking order for the broad categories of capital flows in view of their *inherent* benefits and risks for the capital–importing countries? This requires looking at the channels through which these benefits and risks operate. We have seen in the preceding section what theory tells us on how foreign savings can be beneficial: they need to add to domestic savings rather than crowd them out in order to stimulate capital accumulation; they need to raise the recipient economy's efficiency (e.g. through improving resource allocation, dynamising competition, interaction with human capital, deepening domestic financial markets or reducing capital costs for local entrepreneurs); and they need to lower consumption risks over various states of nature through enlarging choices for portfolio diversification, but also through appropriately sharing risks between capital exporters and importers.

The risks inherent to specific types of capital flows operate through two major channels: by magnifying welfare losses due to distorted consumption and production patterns; and by generating bankruptcies and output losses due to abrupt reversals of flows. Models of "immiserising" inflows (see, e.g., Brecher and Diaz–Alejandro, 1977) have shown that countries will be worse off if the foreign savings are attracted into protected sectors, as long as foreign capital receives the full (untaxed) value of its marginal product. While trade liberalisation and structural reform in most capital–importing countries have made the "immiserising inflow" argument less relevant today

in its original presentation, ill–regulated financial sectors or implicit credit guarantees have often created credit boom distortions that foreign flows have magnified (McKinnon and Pill, 1997).

The second channel through which foreign savings can take a heavy toll is when they are suddenly withdrawn. As the withdrawal causes a slump, it also acts to reduce national savings given the fact that growth has been shown to precede and cause savings (Carroll and Weil, 1993).

Table 3. **Pre–Crisis and Post–Crisis Savings in Selected Asian Countries**
(Percentage of GNP)

	Pre–Crisis 1990–96		Post–Crisis 1998	
	National	Foreign	National	Foreign
Indonesia	29.3	2.6	15.5	–4.9
Korea	35.5	1.8	32.8	–12.8
Malaysia	34.2	6.0	41.8	–13.7
Philippines	19.3	3.9	16.3	–1.9
Thailand	34.8	7.1	32.2	–13.2

Source: World Bank, IMF, Bank of Thailand, Bank Negara Malaysia.

The numbers presented in Table 3 and Table 4 help explain the concerns about the fickle nature of foreign savings and the painful impact of their withdrawal. Except for the Philippines, the Asian countries most affected by the crisis had saved during 1990–1996 30 per cent or more of their national income. In Malaysia and Thailand, foreign savings added another 6–7 per cent during that period, leaving 40 per cent for capital accumulation. As foreign savings turned wildly negative after the crisis and as domestic savings dropped as well, the funds available for investment tumbled down to around only 20 per cent of GNP, in Indonesia even to not much more than 10 per cent. Just when foreign savings were badly needed, they turned a cold shoulder. Note, however, that reduced disposable income and lower government savings as a result of efforts to recapitalise local banks took a heavy toll on national savings as well.

Table 4. **Growth, Consumption and Short–Term Debt in Selected Asian Countries**

	Pre–Crisis 1990–96		1997	Post–Crisis 1998	
	GNP growth per capita (% per annum)	Consumption share in aggregate demand (%)	Short–term debt/reserves	GNP growth per capita (% per annum)	Consumption share in aggregate demand (%)
Indonesia	6.4	69.4	1.7	–18.0	84.5
Korea	6.5	63.4	2.8	–7.4	76.0
Malaysia	6.0	62.0	0.7	–9.6	65.0
Philippines	1.2	78.7	1.3	–2.1	81.3
Thailand	6.9	61.1	1.0	–8.5	71.1

Source: World Bank, IMF, Bank Negara Malaysia, Rodrik and Velasco, 1999.

The bankers' adage that it is not speed that hurts, but the sudden stop was more than validated in Asia. High pre–crisis per capita growth turned to a severe slump in 1998. Guillermo Calvo (1998), analysing the mechanics of sudden stops in international capital flows, emphasises that negative swings in foreign savings may result in widespread bankruptcies, destroy local credit channels and make human capital obsolete (as a complementary input to lower physical capital). Assuming that consumption is more nontradeable–intensive than investment, he argues that the negative output effects of a cut in capital inflows are likely to increase the higher the share of consumption in a country's aggregate demand. To the extent that cuts in domestic absorption are focused on tradeables, there is less need for a lower real exchange rate to restore payments equilibrium. The larger the real devaluation, the deeper will be the ensuing financial turmoil. For the same reason, Rodrik and Velasco (1999) maintain that greater short–term debt exposure is associated with more severe crises when capital flows reverse.

How then do these benefit and risk channels relate to specific types of capital flows? It is often maintained that distinguishing between types of flows generates little policy insight, for essentially two reasons. First, capital flows are said to be fungible. That would imply, for example, that we cannot discern a differentiated impact of foreign direct investment or short–term debt flows on private or government consumption. Second, it has been argued that capital–flow labels have become meaningless in the presence of derivatives or efforts to circumvent capital controls. These claims, however, ignore a large body of empirical, if not analytical, evidence.

First, while there is ample evidence (Masson *et al.*, 1995; Edwards, 1995; Ffrench–Davis and Reisen, 1998) that the offset coefficient between foreign savings and domestic savings is generally around one half, the offset coefficient hides strongly different consumption responses for FDI flows and debt–creating flows. Cohen (1993) finds that for a sample of 34 developing debtor countries that benefited from renewed access to foreign bank credit in the 1970s, capital accumulation was less than for other developing countries. This observation was not explained by endogenous factors — the initial output per capita and the initial stock of capital. Rather, much of the debt–creating flows had leaked into consumption. Also aid flows have been found to stimulate consumption, namely government consumption (Boone, 1996). FDI flows, in contrast to debt–creating flows, have been found to stimulate domestic investment, rather than crowding it out by competing in domestic product markets or financial markets. The complementarity of FDI and domestic investment is explained by the complementarity in production and by positive technology spillovers.

The second claim, namely that capital–account labels do not reveal useful information for policy purposes, is based on an influential paper by Claessens, Dooley and Warner (1995). Using quarterly balance–of–payments flow data for changes in *net* claims of FDI, portfolio equity, and "long–term" and "short–term" debt flows, they find that labels do not provide any information about the volatility of the flow. The paper, however, does not address reversals of foreign savings on a large magnitude. Moreover, while FDI once made is hard to reverse because of its sunk cost nature, the resulting time series for FDI flows will appear to be temporary as it comes in large bits

and is often discretionary. The confusion introduced by the former paper has been rigorously settled by Sarno and Taylor (1999). They measure the relative size and statistical significance of permanent and temporary components of various categories of capital flows to a large group of Latin American and Asian countries during the period 1988–97. They find relatively low permanent components in bond flows, equity flows and official finance, while commercial bank credit flows appear to contain quite large permanent components and FDI flows are almost entirely permanent. If a large portion of the variation in the time series is explained by movements in the temporary components, then the flows under consideration indicate a higher degree of potential reversibility.

Short–term foreign debt (liabilities to non–resident banks, debt securities, suppliers' credit, domestic debt held by non–residents, deposits of non–residents in domestic institutions) in relation to official foreign exchange reserves has been identified as the single most important precursor of financial crises triggered by capital–flow reversals. As the level of international trade does not seem to have any relationship with level of short–term debt, short–term trade credit seems to play an insignificant role in driving short–term flows (Rodrik and Velasco, 1999).

The upshot of these studies is that FDI, long–term bank lending (often long–term project loans in syndicated lending) and short–term trade credits are less reversible than portfolio and short–term bank credit flows. Moreover, the more stable flows are mostly tied to particular investments and users, financing real assets. Short–term bank lending and portfolio flows, by contrast, constitute only an indirect link between foreign savings and domestic investment (Turner, 1996).

A cost–benefit analysis on specific types of capital flows from the perspective of the recipient developing countries should then consider the following elements:

— *Foreign direct investment* has been found to stimulate investment, to raise the recipient economy's efficiency (under certain conditions) and to be forthcoming during financial crises, hence helping smooth consumption levels. Borensztein, de Gregorio and Lee (1998), in their study on the growth effects of FDI, explain the complementarity of FDI and domestic investment by the complementarity in production and by positive technology spillovers. However, the technology spillover requires a sufficient level of human capital in the host economy. The fact that FDI displays little reversibility and even acts as the predominant form of foreign savings to liquidity–constrained developing countries during financial crises has been explained by their sunk–cost nature (Sarno and Taylor, 1999) and by the absence of asymmetric information between borrowers and lenders that plague other forms of capital flows and generate herd effects (Razin, Sadka and Yuen, 1999). More research is certainly required with a breakdown of FDI into mergers and acquisitions, raw material versus other sector orientation, and the role of distortions such as trade restrictions in the exploration of growth effects of FDI (Nunnenkamp, 2000).

— *Portfolio equity flows* have played an important role for external firm finance in developing countries. The static benefits of portfolio equity flows have been documented in numerous studies; Claessens (1995), for example, finds that increases in equity flows have been associated with significantly lower cost of capital and slightly higher per capita economic growth. Increasingly, in view of recent US and European experience, it is argued that deep stock markets (and they are deepened by free equity flows) facilitate capital re–allocation from low–return to high–return activities and the incubation of new start–ups. To what extent higher equity flows are associated with asset price inflation is yet to be researched more thoroughly: on the one hand, the imbalance between a small domestic asset supply and a large global asset demand potential may favour such hypothesis; on the other hand, higher liquidity and strong international integration of stock markets should dampen asset price volatility. High liquidity and low transaction costs — the outcome of higher stock market integration — suggest, however, a high degree of reversibility of portfolio equity flows.

— *Debt flows:* There is very little literature which emphasises the benefits of debt–creating flows (essentially portfolio bond flows, long–term and short–term bank credit). The theory of sovereign lending (Eaton and Gersovitz, 1981; Cline, 1995) has focused on the benefits of consumption smoothing to countries with alternating good and bad years. This may surprise as debt transfers, unlike equity finance, have a compensation rule independent of the borrower's fortune. Debt is serviced independent of the borrower's income stream, while equity finance shares into the borrower's earnings on investment. It can thus be argued that equity finance provides the benefits of lower fluctuation in the borrower's consumption, but that the potential incentive for borrowers to invest (rather than consume) is higher under debt–financed than under equity–financed transfers (Corsepius, Nunnenkamp and Schweickert, 1989). Short–term debt, except for trade credit, can be particularly inspired by consumption smoothing, however, weakening the case for the higher incentive compatibility of debt finance. To the extent that debt finance carries higher public guarantees than does equity finance, there is also a higher risk of it being allocated to distorted sectors with little social return. Short–term bank credit and portfolio bond flows have been shown to be very susceptible to bouts of creditor panic, making these flows highly reversible (e.g. Rodrik and Velasco, 1999).

Table 5 provides a summary of the above discussion on potential benefits and risks, giving some priors to the empirical analysis provided in the following section.

Table 5. **Potential Benefits and Risks of Specific Types of Foreign Capital Inflows**

	Benefits			Risks	
	Adds to domestic investment	Stimulates efficiency	Smoothes consumption	Magnifies distortions	High degree of reversibility
Foreign direct investment	X	X	X	(X)	
Portfolio equity investment	(X)	X		(X)	X
Portfolio bond flows		X	X	(X)	X
Long–term bank lending	X	(X)		X	
Short–term bank lending		(X)	(X)	X	X

Note: X denotes a strong, (X) a weak presumption that the considered case applies. See the discussion above for further details.

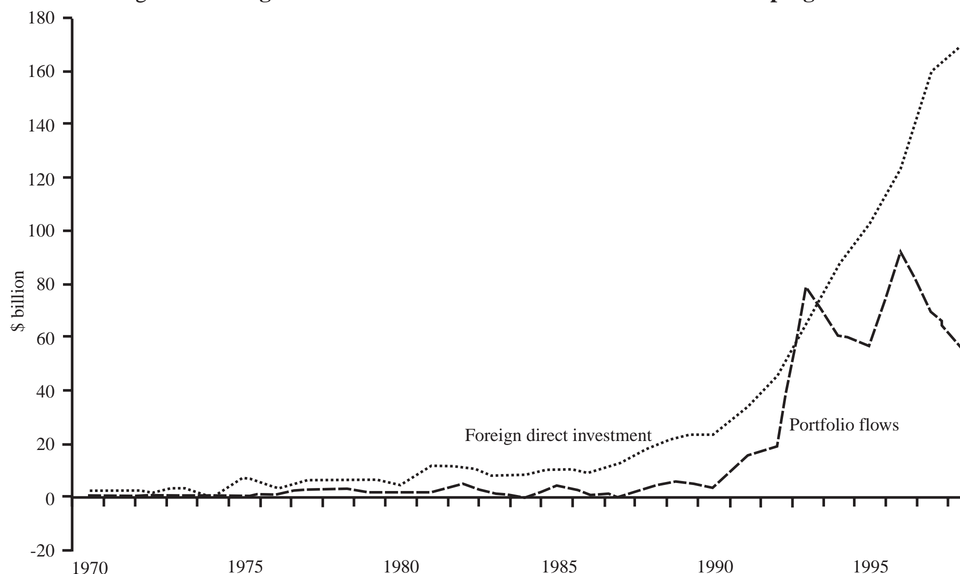
New Evidence on the Benefits of Specific Types of Capital Inflows

In the aftermath of the Asian crisis, the proponents of open capital markets have been criticised for having offered more "banner–waving" than hard evidence on the benefits that developing countries can derive from free capital flows (Bhagwati, 1998). Indeed, unlike for the benefits of free trade in goods and services, the empirical evidence that economists have been able to establish on the costs and benefits of foreign savings has been very sketchy and contradictory indeed. That failure can be easily explained: a rigorous attempt to quantify the gains that countries have realised from international capital mobility would require a fully–articulated model in which the counterfactual of no capital movements could be simulated. Moreover, the time series for private capital flows to developing countries, except for foreign direct investment, are not yet long enough to draw strong conclusions as they started in earnest only at the end of the 1980s. Finally, studies which focus on (the absence or presence of) capital controls cannot allow for varying degrees of intensity in the operation of capital–account restrictions.

Evidence on the growth effect of specific types of private capital flows exists so far only for foreign direct investment. For instance, Balasubramanyam, Salisu and Sapsford (1996) show that FDI has been more effective in promoting growth in export–oriented developing countries than in countries promoting import–substitution strategies. Borensztein, de Gregorio and Lee (1998) find that FDI positively affects growth only in those poor countries which have overcome a threshold in human–capital accumulation. De Mello (1999) finds a positive impact on FDI on output growth; in OECD countries the positive impact is largely due to higher efficiency (total factor productivity), while in non–OECD a dominant impact is observed for the effect on capital accumulation. All these studies are based on the Summers–Heston data set and thus do not go beyond observations in 1990. But at least the emerging markets are now operating under sharply different global financial conditions than those prevailing before the end of the 1980s. Only since then are the emerging markets really integrated into the global (private) financial markets. Figure 1 visualises the strong rise of FDI

and portfolio flows to these countries from negligible levels since the late 1980s. The period coincides with the resolution of the Latin American debt crisis through the Brady bond deals and with the effective opening of Asian and Latin American capital markets. Evidence based on prior observation periods is history, offering only limited help for drawing policy conclusions.

Figure 1. **Foreign Direct Investment and Portfolio Flows to Developing Countries**



Source: World Bank, *Global Development Finance,* 1999.

Another reason to explore the flow–growth nexus over a more recent observation period is the importance and reversibility of short–term bank credit flows (which were crucial in triggering the Asian crisis). Short–term bank credit has often been under–reported when it was based on debtor reports, for example in the World Bank data sources. Data published by the Bank for International Settlements, by contrast, are based on creditor sources, and generally held to provide the most reliable data set. The BIS series on short–term bank credit flows start only in 1985, hence constraining the observation period.

A recent study at the OECD Development Centre (Soto, 2000) has explored the growth effect of various categories of private capital flows in a sample covering 44 countries over the period 1986–97. The country choice was dictated by data availability for OECD non–members in 1986 (except for Turkey which was included as an emerging market for its low per capita income level). Roughly half of the countries in the sample belong to the middle–income developing–country group (in the World Bank classification), a third to the middle–upper income group, one to the high–income group, the rest to the low–income group. The results are thus not applicable to OECD countries or to very poor countries.

Adopting a standard approach in growth empirics, Soto (2000) estimated the following basic relationship in a panel data set for 44 countries for 12 years each (1986–97):

$$y_{it} - y_{it-1} = \alpha y_{it-1} + \boldsymbol{X}_{it-1}\beta + v_i + \tau_t + \varepsilon_{it} \qquad (4),$$

where y_{it} is the income per capita in country i during period t, $\boldsymbol{X}_{it-1}$ is a vector of determinants of the steady–state level at date $t–1$ with associated parameter β, v_i is a country–specific effect, t_t is a period–specific effect common to all countries, and ε_{it} is a residual. The hypothesis of income convergence dictates that richer countries should show lower growth rates than poorer countries, hence the parameter α should be negative. However, each country has its specific steady–state income level, and the level to which countries converge depends on a set of factors which are contained in the variable $\boldsymbol{X}$. Indeed, ignoring country–specific and period–specific effects v_i and τ_t, we can rearrange equation (4) to show that the steady–state income level is

$$y_i = \frac{-\boldsymbol{X}_i\beta}{\alpha} \qquad (4¢)$$

The income level to which each economy converges will thus depend on its specific set of values X which may vary along time. For the estimation of steady–state levels of income, good empirical performances have been obtained by including the country's investment rate, government consumption (as a proxy of domestic distortions), the degree of openness to international trade, and the terms of trade.

The direct estimation of equation (4) poses a number of econometric problems, mostly related to the problem of simultaneity of the determinants. To reduce these problems, Soto estimates annual differences to the time average for each explanatory variable. Moreover, GMM (generalised method of moments) estimators are used to deal with the problem of simultaneous causation between growth and capital flows by taking the lagged values of the explanatory variables as instruments; this is the standard procedure introduced by Arellano and Bond (1991). To explain the growth rate in period t, then, the difference between a two–year and one–year lagged deviation of the country variable from the full–country mean of the explanatory variable is used. This yields

$$\dot{y}_{it} = (\alpha+1)\, \dot{y}_{it-1} + (\boldsymbol{X}_{it-1} - \boldsymbol{X}_{it-2})\beta + \eta_{it} \qquad (5)$$

where $\dot{y}_{it}$ represents the country's growth rate $(y_{it} - y_{it-1})$ and where $\eta_{it} = \varepsilon_{it} - \varepsilon_{it-1}$.

How, then, do foreign savings enter in equation (5)? As already mentioned, the investment rate is, by definition, financed by and equal to the sum of national savings and foreign savings (the current account of the balance of payments). Capital inflows plus national savings can thus replace the investment rate in estimating the growth equation.

Table 6 summarises the main results of the Soto (2000) study, showing highly significant estimates for the parameter values of the various capital–account items and of the traditional growth determinants (recall Table 5). As expected (the test values show that the instruments used are independent of the error term and hence suitable for the estimation) foreign direct investment — with a lag of one year — exerts a positive, significant effect of per capita income growth in the recipient economy. However, the positive impact is somewhat lower than indicated by earlier studies (e.g. de Mello, 1999; Borensztein, de Gregorio and Lee, 1998). To raise short–term per capita income growth by one per cent would require a 10 percentage point in the FDI–GNP ratio. In addition, it can be computed from equation (4¢) that a 10 percentage point rise in the FDI–GNP ratio would increase the long–run steady–state income level by 3 per cent.

The most important growth impact, according to the Soto study, flows from portfolio equity flows. It cannot be totally excluded that the highly positive and significant parameter value associated to portfolio equity flows is due to their superior predictive power as these flows try to exploit anticipated developments in the real economy. But the positive growth impact of portfolio equity flows can be rationalised: These flows loosen constraints imposed by local financial conditions, which may spur growth in the presence of high productive capacity in fast–growing industries. Equity flows also stimulate the liquidity of domestic stock markets, easing resource allocation and lowering capital cost to high–return activities.

Bonds, by contrast, did not produce any significant impact on growth in the Soto study.

In contrast to the positive growth impact of foreign direct and portfolio equity flows, Soto finds that today's foreign bank lending — both short and long term — is negatively associated with tomorrow's per capita income growth in the recipient country, unless local banks are sufficiently capitalised. This result confirms both theory and prior evidence: undercapitalised banks tend to engage in excessive risk taking in a gamble to earn their way out of difficulties; or, to stem the decline in risk–weighted capital ratios, banks will increase their exposure to government liabilities or other zero–risk weighted assets. Good risks, by contrast, remain underfinanced and growth prospects undermined. As shown by McKinnon and Pill (1997), foreign bank lending intensifies these distortions. In a downturn, the resulting misallocation of resources and weak bank balance sheets will intensify credit slumps and widespread bankruptcies.

The interaction of foreign bank lending with a local bank capitalisation ratio, however, produces a significant positive growth impact in the regression results. The capitalisation ratio — bank capital as a percentage of bank claims — is based on different weights for bank assets that aim to mirror different degrees of riskiness. Soto assigns a 0 per cent weight for bank reserves held at the central bank and for claims on government and government–related entities; 50 per cent for claims on foreign debt; and 100 per cent for local private–sector claims. His results indicate that the growth impact of foreign bank lending turns positive once the capitalisation ratio reaches a certain threshold (21 and 14 per cent, respectively, for long–term and short–term bank credit flows).

Table 6. **Income Growth and Capital Flows**
(Dependent variable is real annual growth of GNP per capita)

		Regression (standard errors in parentheses)	
	Explaining Variables (change in)	**(1)**	**(2)**
Capital flow variables	Foreign Direct Investment	0.093*** (0.028)	0.102*** (0.026)
	Portfolio Equity Flows	0.474*** (0.075)	0.470*** (0.073)
	Portfolio Bond Flows	–0.038 (0.081)	
	Long–term bank credits (LTBIS)	–0.148*** (0.038)	–0.146*** (0.037)
	Short–term bank credits (STBIS)	–0.129*** (0.038)	–0.132*** (0.037)
	LTBIS × Bank Capitalisation	0.712*** (0.248)	0.700*** (0.245)
	STBIS × Bank Capitalisation	0.935*** (0.304)	0.944*** (0.294)
Other explanatory variables	Lagged GNP	0.662*** (0.019)	0.665*** (0.019)
	National Saving	0.145** (0.056)	0.143** (0.055)
	Squared (National Saving)	–0.841*** (0.109)	–0.833*** (0.106)
	(Exports + Imports)	0.052*** (0.007)	0.050*** (0.007)
	Government Consumption	–0.205*** (0.040)	–0.204*** (0.039)
	Log (Terms of Trade)	0.075*** (0.009)	0.074*** (0.009)
	Efficient–saving threshold	0.173	0.172
	Explained Variance	0.486	0.491
	Sargan Test (prob. Value)	0.999	0.998
	Arellano–Bond Test (prob. Value)	0.651	0.656

All the variables are taken in differences and lagged one period. Capital flows, national savings, exports plus imports and government consumption are all measured as a ratio to GNP.
The explained variance is the ratio of the fitted value's variance to the dependent variable's variance. The Sargan statistic tests the null hypothesis of no correlation between the instruments and the residual. The Arellano–Bond statistic tests the null hypothesis that the residuals are not second–order correlated.
, * The coefficient is significant at a 5 per cent and 1 per cent level, respectively.

While much of Asia has been praised in the past for its outstanding saving performance, Soto's findings suggest also that higher national savings are not uniformly associated with higher growth. Above a certain threshold, national savings will run into negative marginal returns in contribution to growth as the local absorption capacity for productive investment is limited. This result would hold in particular where domestic localisation requirements prevent domestic savings to be invested abroad. Moreover, it has been noted that in some Asian countries very high savings were partly covered by investment which represented ill–accounted consumption items, such as expensive pictures bought for office use (Corsetti, Pesenti and Roubini, 1998). Nevertheless, our results contrast sharply with the positive correlation between savings and growth typically obtained in growth regressions; in particular, the low threshold level from which savings start to impact negatively on growth is difficult to interpret. Note, however, that Attanasio *et al.* (2000) obtain a similar result for the investment–growth nexus; they speculate that there may be several explanations – the adjustment process towards the steady state, saving anticipating future growth – which may explain the negative link.

Conclusions

Theory and new evidence presented in this paper suggest that post–crisis Asia should not solely rely on national savings but encourage (certain forms of) foreign savings if the region wants to stimulate long–term growth prospects. This is in stark contrast to the dominant advice that emphasises domestic savings to finance development and that downplays the benefits of foreign savings.

As far as domestic savings are concerned, the paper shows for some Asian countries that they produce a less reliable and stable pool for finance than is often assumed. More importantly, excessive national savings can be negative for growth. Promoting national savings jointly with policies to keep these savings at home is bound to run into diminishing capital returns. As higher growth precedes savings, rather than the reverse, and as reform policies aimed at raising efficiency and promoting growth may lead to a temporary drop in savings, authorities have to consider a non–trivial policy trade–off (Hausmann and Reisen, 1997). Important reform policies, such as bank recapitalisation or import liberalisation, tend to reduce government savings, resp. private–sector savings; they lay the foundations for future growth, but there may be a substantial lag between the implementation of the reforms and the arrival of higher output which in turn will stimulate growth. A way out of this policy dilemma is to rely on foreign savings, and our paper provides suggestions which forms of capital inflows should be encouraged.

This paper advances our information about which flows to promote to maximise the net benefits of foreign savings. Essentially, these net benefits can be derived by substracting the risks connected to foreign flows — reversibility and amplified misallocation of resources in the presence of domestic distortions — from the benefits that the flows carry — capital deepening, efficiency enhancement and consumption

smoothing. Recent evidence on the reversibility of various types of capital flows and new evidence presented here on the specific growth effects of these flow items lead to the conclusion that authorities are right to prioritise the encouragement of capital inflows. Equity investment is to be preferred over debt instruments. Both FDI and portfolio equity investment have been found to exert a significant impact on growth. Avoiding protracted import substitution, educating people and reducing distortions have been shown to maximise the benefits from FDI. Moreover, FDI flows generate relatively little macroeconomic complications as their reversibility is low. By contrast, portfolio equity flows can add to asset price inflation, hence they require more regulatory attention with respect to bank system exposure, corporate disclosure and accounting standards and liquidity requirements for market makers. Finally, foreign savings in the form of foreign bank lending has been shown to contribute to growth only if the banking system is well–capitalised, as otherwise “good” risks will be underfinanced and “bad” risks overfinanced.

Bibliography

ARELLANO, M. AND S. BOND (1991), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations", *Review of Economic Studies*, 58.

ATTANASIO, O., L. PICCI AND A. SCORCU (2000), "Saving, Growth and Investment: A Macroeconomic Analysis Using a Panel of Countries", *The Review of Economics and Statistics*, 82(2).

BALASUBRAMANYAM, V.N., M. SALISU AND D. SAPSFORD (1996), "Foreign Direct Investment and Growth in EP and IS Countries", *Economic Journal*, 106(434), January.

BHAGWATI, J. (1998), "The Capital Myth: The Difference between Trade in Widgets and Dollars", *Foreign Affairs*, 77(3), May–June.

BOONE, P. (1996), "Politics and the Effectiveness of Foreign Aid", *European Economic Review*, 40(2), February.

BORENSZTEIN, E., J. DE GREGORIO AND J.–W. LEE (1998), "How Does Foreign Direct Investment Affect Economic Growth?", *Journal of International Economics*, 45(1), June.

BRECHER, R.A. AND C.F. DIAZ–ALEJANDRO (1977), "Tariffs, Foreign Capital and Immiserizing Growth", *Journal of International Economics*, 7(4), November.

CALVO, G.A. (1998), "Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops", *Journal of Applied Economics*, 1(1), November.

CARROLL, C. AND D. WEIL (1993), "Savings and Growth: A Reinterpretation", *NBER Working Paper*, No. 4770.

CHENERY, H.B. AND M. BRUNO (1962), "Development Alternatives in an Open Economy: The Case of Israel", *Economic Journal*., Vol. LXXII, No. 285, March.

CLAESSENS, S. (1995), "The Emergence of Equity Investment in Developing Countries: Overview", *World Bank Economic Review*, 9(1), January.

CLAESSENS, S., M.P. DOOLEY AND A. WARNER (1995), "Portfolio Capital Flows: Hot or Cold?", *World Bank Economic Review*, 9(1), January.

CLINE, W.R. (1995), *International Debt Reexamined*, Institute for International Economics, Washington, D.C.

COHEN, D. (1993), "Convergence in the Closed and Open Economy", in A. GIOVANNINI (ed.), *Finance and Development: Issues and Experience*, Cambridge University Press, Cambridge.

CORSEPIUS, U., P. NUNNENKAMP AND R. SCHWEICKERT (1989), "Debt Versus Equity Finance in Developing Countries: An Empirical Analysis of the Agent–Principal Model of International Capital Transfers", Institut für Weltwirtschaft an der Universität Kiel, Kieler Studien, No. 229. Tubingen, West Germany: Mohr; distributed by Westview Press, Boulder.

CORSETTI, G., P. PESENTI, AND N. ROUBINI (1998), "What Caused the Asian Currency and Financial Crisis?", available at http://www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html.

DE MELLO, L. (1999), "Foreign Direct Investment–Led Growth: Evidence from Time Series and Panel Data, Oxford Economic Papers 51(1), January.

EATON, J. AND M. GERSOVITZ (1981), "Debt with Potential Repudiation: Theoretical and Empirical Analysis", *Review of Economic Studies*, 48(2), April.

EDWARDS, S. (1995), "Why are Saving Rates so Different Across Countries?: An International Comparative Analysis", NBER Working Paper 5097, April.

FFRENCH DAVIS, R. AND H. REISEN (1997), *Capital Flows and Investment Performance: Lessons from Latin America*, ECLAC, Santiago and OECD Development Centre, Paris.

GLICK, R. AND K. ROGOFF (1995), "Global versus Country Specific Productivity Shocks and the Current Account", *Journal of Monetary Economics*, 35(1), February.

HAUSMANN, R. AND H. REISEN (eds.) (1997), *Promoting Savings in Latin America*, IDB, Washington, D.C. and OECD Development Centre, Paris.

LAL, D. (1990), "International Capital Flows and Economic Development", in M. SCOTT AND D. LAL, *Public Policy and Economic Development: Essays in Honor of Ian Little*, Clarendon Press, Oxford.

LUCAS, R. (1990) "Why Doesn't Capital Flow from Rich to Poor Countries?", *American Economic Review*, 80(2), May.

MCKINNON, R. AND H. PILL (1997), "Credible Economic Liberalizations and Overborrowing", *American Economic Review*, 87(2), May.

MANKIW, N.G., D. ROMER AND D.N. WEIL (1992), "A Contribution to the Empirics of Economic Growth", *Quarterly Journal of Economics*, 107(2), May.

MASSON, P.R., T. BAYOUMI AND H. SAMIEI (1995), "International Evidence on the Determinants of Private Saving", International Monetary Fund Working Paper: 95/51, May.

NUNNENKAMP, P. (2000), Ausländische Direktinvestitionen und Gesamtwirtschaftliches Wachstum in Entwicklungs– und Schwellenländern, mimeo, Kiel Institute of World Economics.

OBSTFELD, M. (1993), "International Capital Mobility in the 1990s", National Bureau of Economic Research Working Paper: 4534, November.

OBSTFELD, M. AND K. ROGOFF (1994), The Intertemporal Approach to the Current Account, Center for International and Development Economics Research C94–044, November.

PORET, P. (1998), "Liberalising Capital Flows: Lessons from Asia", *OECD Observer* 214.

RAZIN, A. (1995), "The Dynamic Optimizing Approach to the Current Account: Theory and Evidence", in P.B. KENEN (ed.) *Understanding Interdependence: The Macroeconomics of the Open Economy,* Princeton University Press, Princeton.

RAZIN, A., E. SADKA AND C.–W. YUEN (1999), "An Information–Based Model of Foreign Direct Investment: The Gains of Trade Revisited", NBER Working Paper 6884, January.

REISEN, H. (1998), "Sustainable and Excessive Current Account Deficits", *Empirica* 25(2).

RODRIK, D. AND A. VELASCO (1999), "Short–Term Capital Flows", NBER Working Paper 7364, September.

SARNO, L. AND M. TAYLOR (1999), "Hot Money, Accounting Labels and the Permanence of Capital Flows to Developing Countries: An Empirical Investigation", *Journal of Development Economics* 59(2).

SOTO, M. (2000), *Capital Flows and Growth in Developing Countries: Recent Empirical Evidence,* OECD Development Centre Technical Paper No. 160, Paris, July.

TURNER, P. (1996), "The Management of Capital Flows: Lessons from Latin America and Asia: Comment", in R. HAUSMANN AND H. REISEN (eds.) *Securing Stability and Growth in Latin America: Policy Issues and Prospects for Shock–Prone Economies*, OECD Development Centre, Paris.

Best Practices for Promoting Private Sector Investment in Infrastructure

Sean O'Sullivan

Introduction

An Asian Development Bank (ADB) regional technical assistance study was approved with the aim of developing sector–specific best practices for promoting private sector participation (PSP) in key infrastructure sectors in ADB's developing member countries. The sectors studied included power, water supply, roads, ports and airports, and the best practices covered: *i)* sector policy issues relating to pricing and competition; *ii)* legal and regulatory frameworks conducive to PSP; *iii)* the unbundling, mitigating and management of risks; and *iv)* mechanisms to reduce transaction costs. Five experts were engaged to undertake the study, one for each sector. A two–day regional workshop was held for the experts to present their findings and validate them with a group of senior government and private sector individuals, together with ADB staff. The five sectoral reports were published recently[1].

The following presents an overview of the study, including a discussion of the growth of private sector infrastructure investment in Asia, a review of cross–sectoral issues, a summary of the best practices for each sector and suggestions on the role of ADB in supporting private sector investment in infrastructure.

---

* This paper is an excerpt from the ADB publication entitled *Developing Best Practices for Promoting Private Sector Development in Infrastructure,* April 2000.

The Growth of Private Sector Participation

Expansion and Contraction of Private Sector Investment

The last decade, and notably the period to 1996, saw both the rapid expansion of private investment in public infrastructure and a sharp increase in private management of the services associated with this infrastructure. The investment was fuelled by the development of new forms of PSP, including various forms of public–private partnerships: build–operate–transfer (BOT), build–own–operate, build–own–operate–transfer (BOOT) and concessions.

New financial instruments, especially project finance, and the globalisation of private investment funds played a major role in the expansion of the infrastructure sectors in most countries. PSP in infrastructure, and particularly in power generation, received enthusiastic support from the multilateral development banks and bilateral development agencies, as well as the international financial community. Fewer transactions were completed in the more complex and customer–focused areas such as water, electricity distribution and transport infrastructure. Early successes involved financial transactions without major organisational restructuring; later transactions focused on major infrastructure (e.g., water treatment plants, bulk water supply, individual power generation units, container terminals, passenger terminals and airport toll roads) in mega–cities such as Manila, Jakarta and Shanghai.

In the first half of the 1990s, it was realised that Asia's investment requirements for infrastructure were on a scale that dwarfed earlier projections and experience. The Asian Tiger economies were growing rapidly, and demanding massive investments in power, roads, telecommunications and other infrastructure. In most Asian economies, there was also a sense that development was being hindered by bottlenecks in power (e.g. the Philippines), transport (e.g. Thailand), water (most of Asia) and telecommunications. As government infrastructure spending, international aid and official sector lending could not meet these requirements, the private sector was the focus of attention.

According to ADB estimates, East Asia's investment requirements for new infrastructure were of the order of $1 000 billion for the 1990s. Subsequently, they were estimated by the World Bank to be of the order of $1 500 billion for the decade 1995 to 2004. Such projections were useful as a means of highlighting the scale and structure of the huge infrastructure requirements of a growing and increasingly prosperous and urbanised Asia. They helped make clear the need for a major shift of focus towards PSP in infrastructure, to some extent motivated by efficiency considerations, but mainly reflecting the view that public sector financing for this scale of infrastructure requirements was neither feasible nor desirable.

There had also been a shift in views as to the comparative advantages of governments and the private sector in performing the various roles related to the provision of quality infrastructure services. Increasingly, an expanded regulatory and restructuring role was seen for governments, while investment, construction, financing and management were viewed as best opened to competitive PSP. According to this approach, risks should be assigned to the parties best able to mitigate them, and this meant a greatly expanded role for the private sector.

It was recognised that while many private sector investments of the BOT type were being completed, the assignment of risks in many of these projects left much to be desired. Government guarantees of bulk take–or–pay contracts (between utilities and investors), often indexed to exchange rates, had imposed huge contingent financial obligations on the utilities and their governments.

As with many investment trends, optimism, a proliferation of memoranda of understanding and glossy investment announcements gradually replaced careful evaluation. Some early successes, under special circumstances, led to the assumption that this BOT approach could be universally applied. By the mid–1990s, the expression BOT had become a shorthand for PSP in many countries; but by 1999 BOTs and often the associated power purchasing agreements had also become synonymous with unacceptable government risk exposure and with the isolation of projects from customer and market pressures.

This optimism ended with the Asian financial crisis, itself brought on by a lack of sound investment policies, particularly in the area of government–guaranteed power purchasing agreements. These agreements had inadvertently converted a shortage of power supply into an oversupply, secured by take–or–pay guarantees. The result of the crisis has been a sharp contraction in private sector investment and a significant exposure of government and private sector investors to contingent liabilities. This contraction not only limits the capacity of governments to stimulate economic growth but also has led to the deterioration or stagnation of many partially completed and privately financed public infrastructure projects. The rise and fall of private sector finance is clearly shown in the private finance data presented in Box 1.

The currency crisis has caused some dramatic revisions both to economic growth forecasts and to infrastructure investment programmes. The analysis in Box 1 shows, however, that while forecasts for infrastructure have fallen owing to lower growth and the expected move to best practice, the magnitude of investment is still huge and PSP will be essential if demand is to be met.

Box 1. **Past Project Finance and Future Infrastructure Demand East Asia**

Project Finance — Opportunity and Volatility

Figure 1 draws on a Euromoney (CapitalDATA) database and highlights the dramatic growth and subsequent decline of infrastructure funded through project finance in selected East Asian countries. The pre–crisis level of nearly $41 billion for 1996 contrasts sharply with the estimated level at the end of the 1980s, when the total market for funding projects was less than $5 billion per annum, as well as with the crisis figure of $12 billion for 1998. Clearly, in the 1990s and well prior to the crisis, the importance of the private sector in infrastructure development was rapidly increasing. As a result of the crisis, the telecommunications sector has shown the most dramatic decline, reflecting the fact that such projects are in general purely privately funded, and bear demand risk in a newly open environment. The energy projects, on the other hand, appear more resilient, but mainly because they have had some form of government support, in the form of guarantees in relation to bulk sales through power purchase agreements.

Future Demand for Infrastructure Investment

New infrastructure projections have been made for selected East Asian countries — the People's Republic of China (PRC), Indonesia, Republic of Korea, Malaysia, the Philippines and Thailand — for the period 1996–2005, adjusted to allow for both the phase–in of private sector market discipline/best practices and reduced economic growth. The revised projections are 23 per cent below the pre–crisis (baseline) projections. They are based on establishing the value of the capital stock of infrastructure in each country and projecting infrastructure investments with varying gross domestic product (GDP) growth assumptions and varying infrastructure–to–output ratios. A summary is given in Figure 2. The pre–crisis projections are based on the 1996 GDP growth forecasts. Case 1 is based on the current GDP growth forecasts while Case 2 adds the impact of a transition to a lower infrastructure–to–output ratio and assumes a gradual 25 per cent increase in efficiency in each sector in each country. An important factor to note in the projections for this region is that the PRC is assumed to maintain its relatively high GDP growth rate, which accounts for about two–thirds of the infrastructure spending in the region. The results for Case 1 indicate a fall of 14 per cent from the pre–crisis projections. If the PRC is excluded, the reduction is 33 per cent. Case 2, which assumes a transition to best practices, with a resulting change in the underlying infrastructure–to–output and efficiency parameters, indicates further reductions in the level of needed investments. The analysis clearly shows the relative impact of lower growth and the potential benefits of moving to best–practice models of infrastructure development. It also highlights the magnitude of investment requirements, in excess of $120 billion per year, and the need for PSP.

Source: "Private Sector Participation and Infrastructure Investment in Asia: The Impact of the Financial Crisis", Asian Development Bank paper prepared by M.G. Porter and C. McKinlay (Macquarie Bank and Tasman Asia Pacific) for the Finance Ministers Meeting, Asia Pacific Economic Co–operation, May 1999.

Figure 1. **Project Finance**

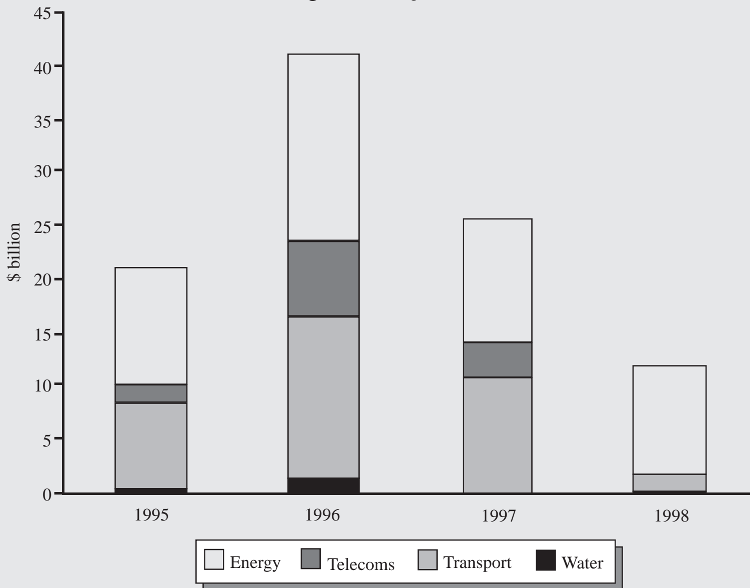
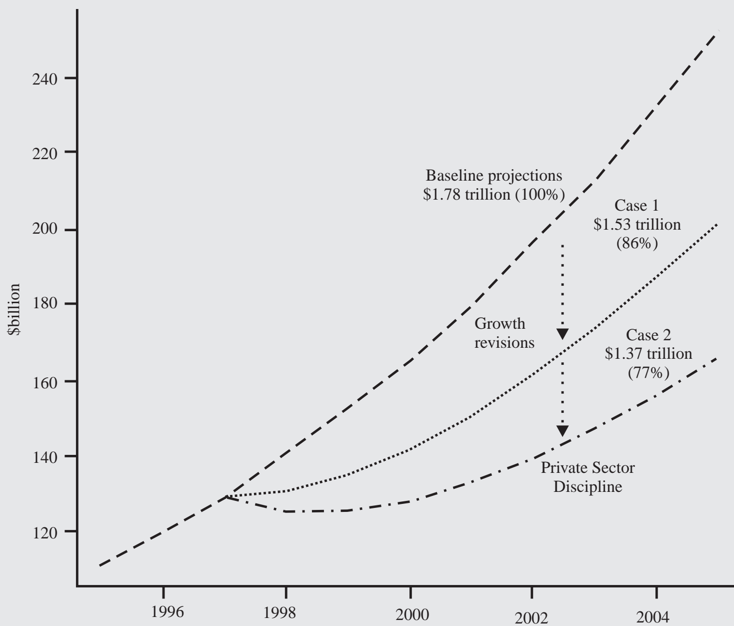


Figure 2. **1996–2005 Infrastructure Investment Projections**



The Challenge for Private Sector Infrastructure Investment

As this difficult period runs its course, it is important to reconsider the comparative advantages of the public and private sectors and the critical role of improved regulation and governance — including transparency, enforcement of contracts and the adoption of viable commercial tariff structures. The strengths and weaknesses of the process that has been used to implement these investments need to be reviewed, sector by sector. The opportunities and risks of new approaches need to be addressed — e.g. the case for expanding the emphasis on customer–focused and privately managed concessions. Bankable versions of these models need to be developed, ideally backed by the security of customer accounts rather than government guarantees or public sector assurances.

This shift to a new model for infrastructure development entails major challenges for governments and investors alike. The new best–practice model does not mean a total retreat by governments; on the contrary, moving to best or better practice involves a shift to good governance, and requires an upgrade of governments' regulatory, restructuring and monitoring roles. Without greatly improved governance, the shift to increased PSP might be no more than a shift of monopoly powers to the well connected in the private sector. Moreover, without improved governance, PSP would eventually flounder and the demands for infrastructure would not be met, as risks would become unacceptable.

Cross–Sectoral Issues for Private Sector Participation

A number of cross–sectoral issues relating to promoting private sector investment in infrastructure were identified during the study. The review of best practices in each of the five sectors highlighted the importance of competition, transparent tendering and effective regulation. There was broad agreement that:

— government should specialise in planning, structuring and regulation, while the private sector should specialise in management, investment, construction and financing;

— the transfer of responsibility to the private sector should be accomplished through deregulation and open competition or well–established contractual arrangements including management contracts, capital leases, concessions, sale of assets and rights to operate;

— economic regulation should be applied where there is insufficient competition, but it should be transparent and predictable while still accommodating the concerns of the affected parties;

— long–term domestic financing sources must be developed; and

— commercial risks should be assigned to the private sector, but other risks should be assigned according to which party is best able to mitigate the risks.

The cross–sectoral issues are discussed in more detail below.

The Need for Reform and Role of Government

PSP in infrastructure development still requires the government to play a key role in planning, policy and regulation. Infrastructure industries have remained so long in the public sector because some of them are natural monopolies; costs are lower when there is only one provider and the services are often essential (water, power and transport). These infrastructure monopolies also typically have a relatively high proportion of capital costs, have long–lived assets with low unit variable costs and exhibit significant economies of scale. It had been widely considered that state ownership of such monopolies, rather than state regulation of privately owned assets, was likely to deliver the best outcomes.

Existing service providers in these infrastructure areas have also had a considerable competitive advantage over potential new entrants, because of the amount of time required to construct expensive new networks and to build up the market for their services. The scarcity of land, rights–of–way and airspace suitable for development of the network acts as an additional barrier to competition. Sites for airports and seaports, dams, power plants, and rights–of–way for roads, rail lines and transmission systems had become increasingly difficult to acquire. Another common argument for retaining these industries within the public sector was that they must provide common (or universal) access to their services and that subsidies are required.

Public ownership and management have proved to be neither necessary, nor the best way to ensure universal access. Subsidies can easily be a requirement of a competitive tender or can be directly financed by government. A key advantage of having the private sector provide public services is that it allows public administrators to concentrate on planning, policy and regulation. The private sector, in turn, is empowered to do what it does best: *i)* invest capital, *ii)* manage the businesses, *iii)* manage and create appropriate incentives for staff and management, *iv)* deal with customers and *v)* improve the efficiency and quality of service — in recent years, under the spur of benchmark competition (competition by comparison).

Governments should allow the private sector to provide infrastructure services to the maximum extent possible, with governments concentrating on planning, policy and regulation, and the private sector on efficiently investing capital and improving the efficiency and quality of such services.

Institutional Reform

The organisation of the infrastructure sectors (i.e. ministries, regulatory agencies and utilities) has remained largely unchanged with the introduction of PSP. As financial transactions are the primary mechanism for transferring infrastructure services to the private sector, insufficient attention has been given to the broader issue of institutional

reforms. It has been implicitly assumed that the introduction of private management into the ownership or operation of specific assets would obviate the need for such reforms. Instead, the weaknesses of existing institutional structures have limited the effectiveness of the private sector initiatives. In most countries, the piecemeal transfer of infrastructure components has proceeded slowly, and the controlling bureaucracies, which add overhead costs and often limit improvements in infrastructure performance, have remained relatively unaffected. The currency crisis has emphasised the importance of institutional reforms, but government bureaucracies rarely reform themselves. Governments should carefully review the structure, size and responsibilities of state–owned utilities and other entities in the infrastructure sectors and establish special reform units reporting directly to top–level ministers to spearhead the necessary reforms.

Strategic Planning

Governments' acceptance of private sector investment in infrastructure has been due, in part, to their failure to anticipate future bottlenecks and make timely strategic investments to prevent shortages in capacity. The increased role of the private sector in developing infrastructure has caused many governments to neglect their responsibility for sectoral planning. Instead, governments have offered assets and public services to the private sector in an ad hoc manner, often failing to ensure that individual investments were complementary. In certain circumstances, unsolicited proposals have been used as a surrogate for planning. For its part, the private sector has selected projects that had already been identified in government plans, giving preference to those offering the highest rate of return, the lowest risk or the greatest short–term benefit. The private sector has had neither the interest nor the capacity needed to consider the network implications of its proposals. Governments have failed to subject these proposals to rigorous financial analysis to determine their sustainability in the absence of major increases in user charges or government guarantees. In addition, they have often overlooked the complementary investment required from the public sector to make the private investments successful. The results have been unsolicited proposals that involved little commercial risk (government guarantees, wrap–around provisions, transfer of existing assets, granting select rights–of–way) or politically generated proposals. Governments should maintain and strengthen their role in strategic planning of the infrastructure sectors, and in the process identify where PSP should be encouraged and the level of complementary support that should be provided.

Legal and Regulatory Framework

The effectiveness of PSP has suffered from the lack of adequate regulatory structures to control both technical and economic performance. Regulation of tariffs and other economic factors is particularly undeveloped. The basic objectives of autonomy, accountability, transparency and predictability have been difficult to achieve. More important, the mechanisms for consultation between the public and private sectors

and for dispute resolution between the providers and users of the network have not been fully developed. A further problem has been the failure to separate regulation from administration in order to avoid conflicts of interest. Most countries have been slow to establish autonomous regulatory agencies with independent funding and professional staff.

Unbundling the network into competitive and monopolistic components can significantly reduce the need for regulation. The competitive components can be transferred to the private sector in a way that promotes competition and allows deregulation. The monopolistic components can then be transferred to the private sector once an effective regulatory framework has been established. This regulation should create a situation where the businesses derive their profits from increased efficiency and the attraction of additional demand.

Effective economic regulation also covers deterrence of anti–competitive practices. Most developing countries lack laws or agencies for dealing with such practices. Economic activity continues to be concentrated in large conglomerates. The currency crisis has provided new impetus for breaking up the monopolies and introducing anti–monopoly laws.

The lack of established legal and regulatory procedures applies to contract law as well. Means of enforcing contracts and resolving disputes are not well established. Political interference in the awarding of contracts has also been a problem.

Without a well–developed legal and regulatory framework, PSP increases the level of risk to investors. It also encourages investors to rely on special situations and political relationships rather than on their merits as a means of securing and implementing contracts. The transfer of infrastructure services to the private sector should not lead to privileged deals or profits secured by government guarantees. These utilities should be businesses with regulated income streams which derive their profits from increased efficiency and the attraction of additional demand. These income streams should be capable of securing substantial private sector funding, both because their semi–regulated nature makes them much like a government bond, and because the essential and often monopoly nature of the service lowers demand risk. Such assets are also long–lived and thus attractive to pension and similar long–term funds.

Unbundling and Introducing Competition

Experience in a number of countries has shown that unbundled infrastructure sectors in which individual components are managed separately can perform better than centrally controlled networks. The additional costs of unbundled networks due to increased communications and transactions among components have been reduced by improvements in technology. At the same time, the unbundled management has been able to focus more sharply on the capacity and productivity of the individual components and their interfaces with other components.

The unbundling of the infrastructure sectors is an important technique for reducing their natural monopoly and promoting competition. Many parts of the network can support competition. Where it is not possible to create direct competition between suppliers of network services, it is often possible to create competition among providers of complementary network services. In the power sector, for example, many countries are separating networks into generation, transmission and distribution — and in some cases a fourth segment responsible for retailing power to customers — and making each segment the responsibility of a different company.

Where competition cannot be created, it is often possible to establish contestable environments, e.g. a market for the business. One method of doing so is through effective competitive bidding for the sale or lease of assets and licensing or franchising of services. Another is to reduce the period of the contractual agreements or to provide for a periodic review of performance. A third is to introduce performance targets related to the quality of the service, the range of services, the prices charged for the services and overall market share; the ability of the private sector to achieve these targets is then linked to penalties, or provisions that may lead to early termination of the agreement. A fourth method is to require performance comparable to that of other networks; this may take the form of requiring the network to increase market share relative to other providers of similar services, or requiring a quality of service and price comparable to other networks serving similar markets.

Most infrastructure sectors are composed of profitable and unprofitable components. A practical, but not ideal, strategy for transferring the components to the private sector is to bundle profitable and unprofitable components to produce a combination that has an acceptable level of profitability. Another is to tender the profitable components through techniques ranging from operating agreements and franchising to sales of assets and to transfer the unprofitable components using management contracts — in effect, bidding out the government support for that component. A third strategy has been to transfer the profitable components to the private sector and to retain the unprofitable components in the public sector, but under control of local government units rather than the national government.

Sources of Financing

Private sector funding of infrastructure usually carries the risk of foreign currency mismatches in the financing package; income is in local currency, but the need to resort to foreign debt and equity markets generates debt service requiring substantial foreign currency. The root problem is that capital markets in most ADB developing member countries are not deep enough, which prevents a tailoring of local currency debt to long–lived assets. The need to resort to foreign debt (and equity) creates substantial risks, which have been exposed in the recent crisis. Few infrastructure consortia can withstand an exchange rate depreciation of 40 to 50 per cent, let alone the 80 per cent decline experienced in Indonesia, when their products are sold for local currency. Hence the priority on programmes to deepen the domestic capital market.

In principle, currency matching requires that the bulk of debt funding of infrastructure services such as transport, water supply and electricity should be in local currency. In the absence of the necessary capital market reforms, it is hard to see how private sector provision of infrastructure can proceed on the scale required to meet future demand. A priority, therefore, given the recent experiences, is that international development agencies such as ADB expand their role both in facilitating political risk insurance and in fostering the development of domestic capital markets in Asia, particularly bond markets.

Direct foreign investment will remain an important source of funds for the development of the infrastructure sectors, but it will take time to restore investor confidence. Moreover, given the experience of Indonesia, Pakistan, Philippines, Republic of Korea and others, governments will naturally seek to limit their exposure to these funds in preference to local sources of capital, if possible. The development of domestic long–term capital markets will be critical for private sector investment in infrastructure, but these markets must have much better regulation as well.

Risk and Risk Mitigation

In order to reach financial closure, governments have often accepted commercial risks that should have been assigned to the private sector. These include not only the foreign exchange risk but also demand/traffic (volume) risk. The most obvious example has been the take–or–pay provisions in power purchase agreements. These guarantees have had three negative impacts. First, they have isolated the private sponsors from the influences of the market. Second, they have created substantial contingent liabilities for governments which are now contributing to their fiscal problems. Third, they have encouraged price rigidity, leading to distortions in the market and reducing the potential of the private sector to improve efficiency in investment and operations. Other examples are build–lease–transfer agreements and volume guarantees for toll roads, airports and seaports.

As governments have had limited contract–related knowledge or experience, the private parties have frequently been able to convince them to assume some of the commercial risks. In addition, governments' frequent inability to engage suitable legal, technical and financial experts to assist during negotiations has placed them at a disadvantage in arguing with foreign proponents concerning international practices such as take–or–pay contracts, or with international lenders concerning guarantees to protect their loans. Bureaucrats who have gone through a long, often contentious bidding process have been willing to accept some commercial risks during negotiations rather than to face rebidding. Conversely, private parties frustrated with drawn–out negotiations and the continual renegotiation of clauses have accepted risks that should have been borne by the government.

Governments should build up capacity to negotiate and deal with the private sector. Commercial risks should be assigned to the private sector and other risks should be assigned to the party best able to mitigate them.

Summary of Sectoral Best Practices

The challenge for governments is to encourage an appropriate form of private sector investment in infrastructure. The study has identified significant differences among the infrastructure sectors concerning the appropriate balance between private and public participation in ownership of assets and provision of services. Only some of the sectors have well–defined models for PSP. Other best practices are still evolving, and the menu will continue to develop as experience grows. The decisions on which infrastructure components should be transferred to the private sector are of a strategic nature. They depend not only on the characteristics of the sector and the market it serves but also on government objectives. There was consensus among the experts that the primary objective should be to benefit consumers, but it was felt that governments should consider a number of additional objectives: *i)* reduction of the national debt, *ii)* stimulation of domestic capital markets, *iii)* reduction in capital and operating subsidies, *iv)* investment in new infrastructure or rehabilitation of existing infrastructure, *v)* improvements in quality of service, *vi)* an increased range of services, *vii)* lower prices for services, *viii)* client–oriented operations and *ix)* more effective marketing.

Governments have at their disposal a number of means for transferring infrastructure components to the private sector. The pace and sequence of such a transfer depends on: *i)* the size and complexity of the infrastructure sector, *ii)* the rate of growth in demand and the competitiveness of the market, *iii)* options for unbundling by function or geography, *iv)* the legal regime regarding ownership of land and other critical assets, and *v)* the capacity for economic regulation. The established mechanisms, which range from management contracts to unregulated competition, are not new and have proved effective. The key is to have a vision of where the sector is going, and to carry through the reforms as quickly as possible so as not to allow the interim stage to become the final state of affairs. The findings of the sectoral experts for each sector are summarised below.

Power

In the electricity sector, IPPs have provided a quick solution (in the Philippines, for example) by offering generation capacity needed for rapid economic growth. The costs were often high, however, because the new capacity was not consistent with the least–cost expansion path and the private sector required high rates of return. These costs have been decreasing as the IPP market has matured. The focus on production rather than efficient distribution put the public sector in the position of retaining that activity in which it was least effective and restricting the private sector from performing

the customer–focused activities (distribution and supply) where it had real expertise. At the same time, it isolated the private sector from the market through a combination of regulated pricing and guarantees against commercial risks.

The power sector expert advocates restructuring to achieve a competitive market model with wholesale and retail competition. Such reform will encourage sustainable PSP and maximise the benefits to consumers. The expert suggests five major steps in implementing this approach, and indicates their order of precedence. To some extent these steps may proceed in parallel, but they should be considered as sequential actions leading to the implementation of a competitive power market:

i) Getting the investment framework right.

ii) Deciding on the goals of restructuring and the ideal industry structure.

iii) Preparing the players to participate in a competitive market.

iv) Privatising existing and new assets.

v) Ensuring that the competitive market is implemented properly.

Best practices for power sector restructuring would include the following:

— Create an enabling legal and regulatory environment to support competitive markets in electricity.

— Unbundle the power sector into separate generation, transmission, distribution and possibly retailing sectors to achieve the maximum benefits for customers.

— Privatisation should be a transparent process involving the sale of power distribution utilities as well as generation plants, and covering existing assets as well as new projects.

— Open access to transmission and distribution wires, and the ability to trade power between buyers and sellers in an open market, are critical to achieving a competitive framework.

— Operate the generation and retailing markets competitively, with a large number of generators selling into a wholesale electricity market at prices which balance demand and supply throughout the day.

— Operate the transmission network as a concession on the basis of competitive bidding, or privatise it within a tight regulatory framework, controlling rates of return, prices or gross revenue.

— The independent regulator should mainly oversee prices and incentives for transmission and distribution operations.

— Restructuring should proceed at a pace consistent with the development of a competitive and unbundled system.

Water

The water sector has been slower than electricity and telecommunications to embrace private sector investment, not least because of the jurisdictional, environmental and social concerns surrounding water supply and its affordability. While major private sector involvement has now been achieved in distribution (Manila and Jakarta), the bulk of transactions were BOT models with take–or–pay clauses guaranteed by governments. In addition to these difficulties, little was known about the location and condition of the (underground) water networks and aquifers in many countries.

The volume on the water supply sector addresses the question of why, given the alternatives, the private sector should seek to invest in a sector with so many natural, governmental and financial uncertainties. Water, unevenly supplied as rainfall, is often wrongly deemed a free public good, despite the costs of treatment and retail supply. Thus, there is often an ill–informed community resistance to private sector involvement in water supply, which in most countries has prevented the sorts of best practice referred to in this report.

The water expert makes the point that when it comes to best practice in the case of water supply, most of the messages are for government — to install sound and independent regulatory regimes, catchment management policies and enforceable laws on tariff setting and collections. Once these are in place, best practices such as water supply concessions can be implemented. If they are not in place, the best feasible practice may be simply to contract out some services under government guarantee, or to seek BOOT bulk supply to public sector water supply companies. Since the particular features of the water supply situation and regulatory and privatisation policies vary widely from one country to another, so too will the best feasible practice.

One misunderstanding regarding the scope for bringing commercial practices to water supply concerns the issue of affordability. The report notes that the poor often pay more for water than they would if it were supplied by efficient commercial firms. Experience has shown that low–income families will pay for quality water supply — and are not averse to PSP — if it delivers.

The key points recommended were:

— The benefits of PSP in the water sector must be explained to win public acceptance.

— The starting point in any reform of water supply is to form a high–level reform unit to drive and manage the process. It would be responsible for co–ordinating and facilitating the entire reform and PSP process. The reform unit may be a cross–sectoral unit.

— While not essential to the launch of reforms, the introduction of tradable water rights leads to efficient use of water, particularly when it is scarce and has alternative uses.

— The water sector should be unbundled to the extent possible. The private sector concession model is most likely to achieve the greatest benefits to the community and the economy as a whole. The government continues to own the network, while the private operators lease the long–term right to use the assets and collect revenue from service delivery. The benefits accrue owing to strong financial incentives to reduce water losses and expand service.

— If this raises political difficulties, then the next–best strategy is to use BOT, BOOT and rehabilitate–operate–transfer arrangements to bring expertise and finance to urgently required water supply projects. The bidding procedure should be carefully managed to ensure reasonable cost, and the contractual arrangements should not constrain subsequent progression to more competitive models.

— Commercialisation/corporatisation of water supply utilities, together with tariff reform, is advantageous as an interim step if the introduction of PSP is to be phased.

— Tariff reform to achieve full cost recovery is essential for PSP. Cross–subsidies for the poor can still be considered in a transparent manner.

— The success of PSP in the water supply sector depends on the creation of sound and independent regulatory regimes, catchment management policies and enforceable laws on tariff setting and collection.

— Risks are likely to vary between countries and even between different water utilities in a country. They should be managed by the party which is able to minimise and manage each risk most effectively. Where no party has a clear comparative advantage in managing the risk, it should be shared.

Roads

In Asia's roads sector, PSP has become synonymous with major BOT toll roads. These have been targeted where traffic is greatest: in and near the capital city, and sometimes along major inter–city corridors. This private investment has produced some successes but also many failures. After more than a decade of concerted effort, the experience has not matched expectations. Indeed, surprisingly few projects have been implemented outside the PRC.

The road sector expert has advanced three reasons for the modest progress in roads. First, governments have not defined their policies, often leaving the private sector to identify projects. Second, almost everyone involved has expected such toll roads to be profitable without government support, but this has only rarely proved to be the case (outside the dense PRC market, which is deemed a special case). Third, it has proved difficult to introduce promised tariffs and tariff increases in this sector because roads have come to be regarded as free.

What is clear is that private construction and maintenance of public roads produced better results in a context of adequate competition and effective methods for enforcing contracts. Efforts to substitute private sector management for public sector officials in the management of the public network are in their early stages even in the developed economies, but the preliminary results are encouraging.

Worldwide, PSP comes in a broad range of forms, in which BOT is close to being the most difficult to implement. Other forms include maintenance management contracts, turnkey contracts and operate–and–maintain or rehabilitate–operate–transfer concessions. Many of these arrangements target improved maintenance and rehabilitation of the existing network (rather than solely network capacity expansion). They have a much wider scope of potential application than BOT projects. Looking ahead, it will be necessary to improve the BOT process and to extend the applications of other forms of PSP. The key points to emerge are:

— Governments must prepare the PSP environment. Institutions may need to be restructured with the objectives of controlling the PSP process in the public interest, and of creating a regulatory body which is independent of the vested interests. A sound legal framework and a predictable regulatory regime are essential.

— Governments must identify priority PSP projects. This will almost always require an independent feasibility study focusing on traffic and tariff policy, project staging, network integration issues, risk allocation, finance and implementation issues.

— The best prospects for BOT projects are in middle–income countries (where the willingness to pay tolls exists) along existing congested corridors, or where there are missing links (e.g. estuarial/river crossings). A regulated income stream from a public toll road is capable of securing project financing of an appropriate kind (i.e. suitable to pension funds and other long–term investor groups).

— Modes of private sector participation other than BOT (e.g. concessions) should be applied more widely, as they can address many of the sector's problems, and in the process create a new high–growth industry for transport management companies.

— The major risk is traffic risk. This may be shared, with the core risk being taken by the private sector and government taking a share of the upside benefit and providing a downside guarantee in the event of low traffic.

— Transparency and competition are essential in the procurement process.

— The maximum level of government support should be defined from the outset so that the private sector can prepare realistic bids.

Ports

In the port sector, the transfer of cargo–handling activities to the private sector has been, in most cases, extremely successful in replacing inefficient government bureaucracy with commercially oriented management. Improvements in productivity and maintenance have raised the quality of service. Where there was no competition, however, such arrangements were less likely to procure these improvements. Private investment in port infrastructure has generally been limited to new and existing cargo terminals. Trans–shipment terminals were the most successful, since they were less dependent on local markets and land transport. Greenfield ports were slower to develop because they were further from their markets and transport access was less developed. Basic infrastructure offered few opportunities for full cost recovery.

The ports sector expert noted that the private sector has always been actively involved in port affairs. The land and water transport services that use the port are almost entirely in the private sector. Nearly all of the cargo shipped through ports is privately owned. The private sector provides an array of complementary trade facilitation and logistics services for this cargo. Within the confines of the public port, cargo owners, forwarders and ship agents actively participate in decisions concerning the handling and storage of cargo. The public sector's role is to own, develop and manage basic port infrastructure and common–user facilities.

The process of port privatisation has rarely involved pure privatisation, since land and infrastructure are rarely sold. Instead, the private sector participates in operations and invests in equipment and facilities. The process is not monolithic because of the diversity and complexity of ports and the services they provide. It can be divided into three components: *i)* institutional reform, *ii)* divestiture of existing services and assets, and *iii)* investment in new facilities and services. These can be implemented individually or in combination. For each port component, there are many possible public–private partnerships. The main points raised regarding moves to best practice were as follows:

— The bidding process should encourage unbundling not only of the network but also of services within the ports. Where ports are not financially viable, they should not be bundled with profitable ports, but should be treated as stand–alone facilities that are turned over to local government or put under management contract using a competitive tender.

— The landlord model is the best structure for promoting PSP because it accommodates different forms of public–private partnership while recognising that the only fixed responsibility for the public port stems from ownership of the site.

— The most effective and efficient procedure for promoting PSP in the port sector is to lease existing facilities under relatively short–term agreements that allow for reorganisation and improvement in productivity. Subsequently, concession agreements can be used to encourage private investment in additional capacity.

Where this capacity is required immediately, or when labour problems make it difficult to lease out existing facilities, then concessions might precede lease agreements.

— Continued public investment will be required, as it is difficult to recover the costs for basic infrastructure in what the private sector regards as a reasonable time period. Public investment may also be required to reduce barriers to entry. This is important where a new entrant would otherwise have to make a large investment before competing with existing service providers.

— The best form of tariff regulation is market regulation; the second best is through the contract terms that identify the non–competitive services requiring regulation, state the maximum rates, give the formulae for escalating these rates over time and stipulate the arbitration procedures for handling discriminatory behaviour in excess of that justified by commercial pricing. The third best is the establishment of a regulatory agency outside of the port which would apply a pricing formula related to cost recovery. All of these are preferable to a vague procedure for negotiating future changes in tariffs.

— The private sector should assume all commercial risks. Other risks should be negotiated on the basis of which party has the capability to mitigate the risk.

— The critical element in any effort to promote PSP is competition, or at least the potential for competition. This can be provided through direct competition between private sector service providers or between public and private service providers, or competitive bidding in the case of an activity that does not allow for direct competition.

Airports

For the airport sector, PSP in terminal operations produced significant improvements in financial performance and the quality of service. Private sector investments have increased substantially over the last five years. During the previous 20 years, there was little capital investment in airports, despite a five–fold increase in traffic. The airports coped with the higher levels of traffic through a combination of larger aircraft, better air traffic control, improved runway design and the addition of second runways and additional terminal space. This period has now ended, and most countries need to invest in new airports. These are proving to be costly, complex and often controversial investments.

The key policy questions concern how best to structure airports and groups of airports to obtain maximum customer benefits. The airports expert found little evidence of significant scale benefits flowing from multiple airport operation, but there is also little evidence of significant scale diseconomies. The case for significantly reducing the concentration of airport ownership at privatisation therefore depends on the trade–off between the up–front and visible costs of restructuring on the one hand, and on the

other, the possibly less tangible benefits of increased competition resulting from break–up. The competitive benefits in this industry are not clear–cut, primarily because major airports mainly serve distinct regional markets.

In the United Kingdom, the authorities took the view that any potential competition gains from breaking up the British Airport Authority prior to privatisation would have been offset by restructuring costs. In Australia, in contrast, the government has preferred restructuring and radical reduction of industry concentration, emphasising the public policy benefits of inter–airport competition for long–haul international traffic. The benefits of fragmented ownership also include those that flow from yardstick competition, enabling regulatory agencies to assess individual operators' performance more effectively, and from introducing a limited element of competition by emulation between operators. The airport expert found the benefits stemming from the Australian model to be greater. Key recommendations for the airport sub–sector are as follows:

— Airport privatisation should be encouraged by the adoption of legislation in the form of a BOT law or similar text signalling the government's recognition of the need for PSP in infrastructure provision. It is also important that the government be able to demonstrate that any projects offered to the private sector are economically viable.

— Regarding the optimum approach, full privatisation based on asset transfer or acquisition through long–term leases is preferable to more restricted forms of PSP (but is also more demanding in terms of legal and regulatory frameworks).

— As to airport industry restructuring, there is no evidence of significant economies of scale in airport operation other than those associated with increased traffic density at a particular location. Hence, PSP can be based on individual airports (although facilities may need to be bundled to assist financing of major new developments or extensions to capacity).

— The existence of unprofitable airports does not justify the maintenance of a highly concentrated industry structure to facilitate cross–subsidies.

— Limited sharing of traffic and revenue risk (between the private sector partner and government) is justifiable in airport BOT or concession contracts.

— Denomination of some or all airport charges in US dollars is an effective way of hedging against currency risk and may significantly reduce the risk premium required by private investors.

— The benefits of PSP in airports are likely to be maximised by regulatory frameworks that incorporate good regulatory governance practice. The price–cap approach to constraining airport charges is likely to encourage better performance outcomes than an approach based on rate–of–return regulation.

— Competition for the market, whether through sale, leases or BOT/concessioning, will be maximised by transparent bidding and sale processes.

The Role of the Asian Development Bank

The crisis has pointed up the urgent need for institutional strengthening and governance reforms in both the financial and infrastructure sectors — areas where ADB can play a major role. The study identifies a number of ways in which ADB can assist in the reforms associated with increased PSP in infrastructure. The most obvious is to provide technical assistance in defining policy objectives, developing network master plans, identifying and evaluating projects, defining the role of new regulatory institutions and training regulators to handle their new responsibilities, prepare contracts and negotiate with the private sector. ADB's efforts to promote financial sector reform and develop long–term capital markets — including efforts to improve the bankruptcy laws and the regulation of domestic debt and equity markets — will also be important.

To have a significant role in this area, the ADB should link the promotion of PSP to its ongoing project lending. ADB can provide support for private sector investment directly through its private sector window and through its guarantee operations. More important, ADB should provide sovereign loans to complement but not compete with private sector investment in the form of public–private partnerships. Public sector project lending should also be used to finance basic infrastructure which cannot be packaged into financially viable investments for the private sector but which provides significant economic benefits and improves sector efficiency. Another key means of promoting the necessary reforms is programme lending whereby ADB provides financing for the costs of adjustment in stages, upon the satisfactory achievement or fulfilment of government actions that will promote PSP and sector restructuring. This approach allows ADB to exercise some leverage on government decisions and actions to support reform. Country strategies should address which areas of development are to be financed by government using sovereign loans, general revenues and government bonds and which are to be financed by private investment, and should ensure a co–ordinated approach to all forms of ADB assistance.

In March 2000, ADB approved a new private sector development strategy which recognises the importance of a dynamic private sector for rapid and sustainable growth and for poverty reduction — ADB's overarching goal. Under the strategy, ADB will utilise the capabilities of both its public and private sector operations to address problems that impede private sector growth in the developing member countries and the private sector's contribution to poverty reduction. The strategy has three thrusts. The first two, which concern its public sector operations, have to do with supporting the developing member countries' governments in creating enabling conditions for business, and with generating business opportunities in ADB–financed public sector projects. The third, to be pursued through ADB's private sector operations, is to catalyse private investments through direct financing, credit enhancements and risk mitigation instruments. All of ADB's instruments for advice and financing will be utilised to support the strategy, focusing primarily on the following four priority areas of operations: *i)* governance in the public and private sectors, *ii)* financial intermediaries, *iii)* public–private partnerships and *iv)* regional and sub–regional co–operation.

Part Two

Putting Policies into Practice

Inaugural Address

Stéphane Pallez

Laurent Fabius, the French Minister of Economy, Finance and Industry, and Jean–Pierre Jouyet, the Director of the Treasury, were unfortunately not able to be here for the opening of this forum. They have asked me to welcome you in their name and to convey to you how important this seminar is for the Ministry.

I would like first of all to express our appreciation to Tadao Chino, President of the Asian Development Bank, who has joined us from Manila, and to the OECD Development Centre, for the perfect organisation of this forum.

Today, we are impressed by the phenomenal resiliency of the countries affected by the crisis. Such resiliency, which has surprised many an observer, can be imputed to a few fundamental elements: first, there was the both rapid and very large–scale mobilisation of the international financial community; then, the fact that the Asian economies were able to turn a number of favourable factors to their advantage, including the extensive growth of the US and European economies, the rise of the yen and the stability of the Chinese currency, and the significant volume of intra–zone trade in Asia; finally, and above all, far–reaching structural reforms, which tackled the inmost causes of the crisis.

What Are These Reforms and Why Should They Be Continued?

The Asian countries need better mobilisation of their internal resources. Human capital is foremost amongst these resources. Investment in human capital is, therefore, a priority for these economies, as much on the social as on the economic level.

Another feature of the Asian economies is their high savings ratio. It is fundamental today that this high savings ratio should be translated into an efficient allocation of resources. This is why we hold restructuring of the financial sector to be highly important: so it may play its part in the allocation of these savings, which are an essential factor of the solidity of these economies.

In addition, foreign investment still needs to be attracted. Asia is a strong attraction zone for such investment, but dynamic growth is not enough. As demonstrated by the crisis, there needs to be further improvement in governance practices and in the legal certainty of investment.

Finally, the interdependence of the Asian economies argues for the implementation of regional co–operation mechanisms. In most of the countries, trade with other Asian countries accounts for about 50 per cent, while in markets outside of Asia the Asian economies are essentially in competition.

All of this generates effective interdependence and implies co–operative exchange–rate strategies. On this point, Europe is prepared to share its experience in co–operation with the Asian countries and welcomes any progress towards a better co–ordination of economic policies, the promotion of co–operative exchange–rate strategies, and regional monitoring procedures.

In this context, the Chiang Mai initiative demonstrates the Asian countries' determination to reinforce the existing mechanisms. We see this as positive insofar as the initiative is firmly placed in the framework of the Bretton Woods system, as with the process that led to the European Economic and Monetary Union. Indeed, for us, a regional co–operation system cannot be dissociated from a crisis–prevention system in which the IMF plays a key part.

The role of the international financial community is to continue to assume its responsibilities so as to produce a favourable environment for economic development. There is no need to dwell on the responsibility of the industrialised countries to the emerging countries, nor on the major efforts in official development assistance provided by the European Union and by France (which is the third donor in absolute value after Japan and the United States, and the first of the G–7 in ODA as percentage of GDP).

In the multilateral area, the Member States of the European Union together constitute the leading shareholder of the World Bank and of the Asian Development Bank. On the bilateral level, the European Union and Japan each provide more than 40 per cent of the bilateral aid in Asia. In addition to these aid efforts, the markets of the industrialised countries need to remain open, as stated by Laurent Fabius at the June 2000 ABCDE Conference.

Finally, a very important task for the international community is to develop a form of action against non–co–operative jurisdictions based on a development model founded on "least disclosure", which we see as dangerous to the equilibrium of development and as a crisis factor.

The international community has recently taken three essential steps forward in this area: *i)* by publishing the Financial Stability Fund list of offshore centres featuring deficiencies in prudential regulation; *ii)* by publishing the International Financial Action Group report on states featuring deficiencies in the fight against money laundering; *iii)* and finally, by publishing the OECD list of tax havens.

A first conclusion that we can draw from these multilateral decisions is that they show the international financial community's determination to find solutions for the "black holes" of the monetary and financial system and therefore to take the necessary action for these lists to "shrink" continuously. These three lists reflect a clear shared message: development assistance must not benefit countries that choose not to comply with the international rules and therefore constitute the source of high risks for the international monetary and financial system.

We shall therefore make a strong plea for the work of the FSF and the IFAG to be taken into account by the international financial institutions, the IMF, the World Bank, and the regional Development Banks — the Asian Development Bank in particular — because these institutions have a mandate with regard to compliance with prudential standards and to the fight against money laundering. We shall encourage dialogue between these international institutions and the countries concerned, but we believe that we must henceforth clearly integrate this aspect into our programmes and policies *vis–à–vis* these countries.

France will continue to spearhead these initiatives and is counting on active support from the OECD and the Asian Development Bank alongside our institution to implement them.

So, back to Asia and the hope that this Year of the Dragon will mark for the Asian countries the beginning of a new cycle of growth, the sustainability of which it is up to all of us to take on, and from which we shall obviously all benefit. Growth is a public good for which we share responsibility.

Welcoming Remarks

Jorge Braga de Macedo

The OECD Development Centre is privileged to be organising this Forum in partnership with the Asian Development Bank for the sixth consecutive year. I am happy to be here today with my co–Chairman, Tadao Chino, President of the Asian Development Bank. I would also like to welcome Christine Wallich, Director of Infrastructure, Energy and Financial Sectors (West) of the Asian Development Bank and thank her for agreeing to say a few words to kick off the next panel, as the Dutch Minister had to cancel her trip at the last minute. Thanks to Christine, we also keep the gender balance, as we should.

The Forum is coming at a time that may be, in retrospect, a defining moment in the post–crisis period: **can we keep the momentum for reform going**?

As Ulrich Hiemenz and Tadao Chino said in their welcoming remarks one year ago, now published in the Development Centre Seminar series, much progress has been made since the onset of the crisis[1]. We heard then and continue to hear now talk of rapid recovery, of rebound, of robustness. Current account balances in the region have stabilised, currencies have strengthened and investment is moderate but steady. The opening of the economies has sped up, the awareness of good corporate governance has grown and countries are increasingly focusing on their real competitive strengths.

A recent publication from the Japan Centre for International Exchange, led by Tadashi Yamamoto, on *Changing Values in Asia*[2], notes that the crisis of 1997–98 led Asian scholars to question whether the so–called "Asian values" were an asset or a liability. Certainly, as the same author points out in another book on *Governance and Civil Society in Japan*[3], "the basic premise of the public–equals–official scheme under which the bureaucracy was seen as the exclusive arbiter of the public interest" has been shaken.

My own assessment of the Asian perspectives stresses the balance between globalisation and governance because this is indeed the guiding light of the current programme of work of the Development Centre and of the principles to be followed in 2001–2002.

Let us go back to the economic recovery, though. Regional growth forecasts have suddenly been lowered by some analysts in the financial sector. Due to the fact that the recovery is fuelled to a large extent by exports, whether the region can sustain recovery, or not, could depend on external factors such as whether the US economy continues its expansion and continues to soak up imports from Asia, or whether Japan can revive its own economy.

The US Federal reserve, by increasing interest rates, is aiming at a soft–landing for the economy slowing the rates of growth and lowering the rate of import absorption. There is light at the end of the Japanese tunnel, but whether the country will be able to return to sustained rates of economic growth in the range of 3 per cent is still a matter of speculation.

In a globalising world economy, it is hardly surprising that we see such links; that the well–being of each country depends on the expansion of the world economy as a whole.

The OECD has been highlighting these linkages for some time: our groundbreaking work at the Development Centre quantified the mutual interdependence between the OECD countries and Asia, notably the large countries: China, India and Indonesia[4]. Helmut Reisen and others examined the opportunities and challenges for sustained growth which had arisen from the emergence of the big Asian Three as "major players" on the world economic, political and environmental scene.

That study argued that today's globalising world economy provides an historic coincidence of interests for OECD and non–OECD countries, as closer economic linkages are beneficial for sustained economic growth, for improving living standards, for eliminating poverty, and for promoting environmental sustainability.

Using a general equilibrium model, the OECD study presented two alternative scenarios of the world economy in 2020. The results showed that all countries tend to gain most from globalisation if policy reforms are pursued actively. In this way Asian countries would narrow the income gap with OECD countries. China would become the economy with the largest GDP in the world in the year 2020[5].

The study also demonstrates that a key condition for sustained economic and social development is continued policy reform, or in other words, persistent efforts on the part of governments to improve governance. Good governance and globalisation are not simply complementary, but are necessary preconditions for each other and cannot go forward unless they do so together.

Good governance and outreach to non–OECD countries have been established as priorities for the OECD in 2001 and 2002. Governance is a complex and multifaceted issue, covering many areas. It refers to the whole economic, social and political fabric of a country. At the Development Centre considerable resources have already been directed to empirical work on governance in the public and private sector. Two examples have high relevance for Asia.

A recent study for the Centre by Shang–Jin Wei, now at The Brookings Institution in Washington, D.C., finds that corruption affects a host country's composition of capital flows in such a way that it becomes more vulnerable to a currency crisis[6]. The share of foreign direct investment is significantly reduced by corruption, while other forms of foreign finance are not. This is because international direct investors are more likely to have repeated interactions with local officials (for permits, taxes, health inspection and so on) than foreign banks or portfolio investors. This increases the need to pay bribes and to deal with extortion by local bureaucrats. Foreign direct investment also involves greater sunk costs than bank loans or portfolio flows and thus puts direct investors in a weaker bargaining position than investors in more liquid assets.

Ultimately, this is bad for growth as Reisen and Soto demonstrate[7]. Their work finds that FDI and portfolio equity investment exert a significant independent growth effect, while other forms of foreign finance can act negatively on growth in host countries with weak local financial systems.

The other relevant work is related to corporate governance. Under the auspices of the OECD/World Bank Global Corporate Governance Forum, an Asian Round Table on Corporate Governance has been initiated jointly with the Asian Development Bank. Charles Oman, who is leading our work on corporate governance and promoted a workshop where seven case studies[8] were discussed, participated in this meeting.

It seems fair to acknowledge that each Asian country has been actively undertaking financial and corporate sector restructuring. Reform measures have been proposed or implemented in areas of corporate ownership, shareholder participation and protection, transparency and disclosure, and bankruptcy procedures, aimed at strengthening the protection of minority shareholders and creditors.

There are, however, many outstanding issues that need to be reconciled. For example, those who hold real corporate power (owner–managers) in Asia seem, in practice, if not always in word, to be less convinced of the need for significant change in local corporate–governance practices than do the many government securities–market regulators, members of the accountancy and auditing professions, heads of stock exchanges and representatives of institutes of directors and of multilateral organisations. Nor do the latter seem particularly optimistic that the sources of pressure for significant change would prevail in much of the region any time soon.

Changes have, indeed, occurred in some countries under the influence of a small number of entrepreneurs — and an equally small number of established corporate managers — who seek to attract significant extra–firm finance from international investors (especially OECD–based funds) or to sell shares in the United States (e.g. NASDAQ). For example, in India, local corporations have appreciated the fact that good corporate governance and internationally accepted standards of accounting and disclosure can help them access the US capital markets: the Indian Company Infosys made its highly successful NASDAQ issue in March 1998. Other examples abound.

The greater access to international finance markets brings benefits which go beyond the better terms offered to good projects. The scrutiny of lenders and of rating agencies improves governance and helps in sharing of experience between the firm, the sector and the whole national economy. Clearly, there are also costs: both the volume drawn from the Tenth Forum on Latin America[9] and the proceedings of the panel on exchange rates in developing countries we organised at the Annual Bank Conference on Development Economics contain terms borrowed from other walks of life such as "sudden stop"[10], "original sin"[11] or "fear of floating"[12]. Similar analogies are visible in the recent research of Masaru Yoshitomi, a former OECD official, who helped me discover Asia some 20 years ago and whom I saw again recently as the director of the ADB Institute in Tokyo.

This is why advances in risk management are so germane to the particular combination of globalisation and governance sought by Asian countries in their strategies for recovery from the crisis. In spite of all the obstacles, technical, managerial and even political, the spread of more risk–informed judgement will help emerging markets escape from the curse of geography, something the largest continent on earth should not have trouble doing, especially if its main actors continue to combine in their own way globalisation and governance[13].

That geography is no longer a curse is perhaps the best effect of globalisation, as long as good governance permits.

This leads us to several important questions:

— What steps can be taken to ensure that economic recovery in Asia is sustainable, even if growth should slow in the United States?

— How can we keep the momentum of reform going to improve governance?

— What are the best ways to mobilise resources, both public and private, not just for development but for equitable development?

The challenge now, taken up in the pages which follow, is to obtain a better understanding of the diverse situations in the various Asian countries and to chart the way forward.

Notes

1. Ramesh, A. and U. Hiemenz (eds.) (2000), *Achieving Financial Stability in Asia*, OECD Development Centre Seminar, OECD, Manila and Paris, pp. 9–15.

2. Han, S.–J. (ed.) (1999), *Changing Values in Asia: Their Impact on Governance and Development*, Japan Center for International Exchange, Tokyo.

3. Yamamoto, T. (ed.) (1999), *Deciding the Public Good: Governance and Civil Society in Japan*, Japan Center for International Exchange, Tokyo.

4. OECD (1997), *The World in 2020: Towards a New Global Age*, OECD, Paris and OECD Development Centre (1995), *Global Interdependence: the Links between OECD and the Main Developing Economies*, OECD, Paris.

5. Maddison, A. (1998), *Chinese Economic Performance in the Long Run*, Development Centre Study, OECD, Paris, goes in the same direction.

6. This paper draws on a study by the same author: Wei, S.–J. (1997), "How Taxing is Corruption on International Investors", *Review of Economics and Statistics*. This paper was subsequently presented at a pre–conference on *Currency Crises Prevention,* held at the National Bureau of Economic Research in July 2000, and will be published in a conference volume edited by NBER.

7. Helmut Reisen and Marcelo Soto, in this volume.

8. See in particular the papers on corporate governance in India and China by Omkar Goswami, *The Tide Rises, Gradually: Corporate Governance in India;* and Cyril Lin, *Private Vices in Public Places: Challenges in Corporate Governance Development in China* (available upon request from charles.oman@oecd.org).

9. Hausmann, R. and U. Hiemenz (eds.), *Global Finance from a Latin American Point of View* (2000)*,* Inter–American Development Bank and OECD, Washington and Paris.

10. See Calvo, G.A. (1998), "Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops", *Journal of Applied Economics*, Vol. 1, No. 1, Centro de Estudios Macro–Económicos, Argentina.

    See also Calvo, G.A. and C. M. Reinhard (1999), "When Capital Flows Come to a Sudden Stop: Consequences and Policy Options", in P. Kenen, M. Mussa and A. Swoboda, *Key Issues in Reform of the International Monetary and Financial System*, IMF, Washington, D.C.

11. See Hausmann, R. (2000), "Exchange Rates Arrangements for the New Architecture", in R. Hausmann and U. Hiemenz (eds.), *Global Finance from a Latin American Viewpoint*, Development Centre Seminar, Inter–American Development Bank and OECD, Washington and Paris.

12. See Calvo, G.A. and C.M. Reinhard (2000), "Fear of Floating", paper presented at the NBER Institute; see also Calvo, G.A. (2000), "The Case for Hard Pegs in the Brave New World of Global Finance", ABCDE panel on Exchange Rates in Developing Countries.

13. José Braz in this volume explains the implications of the "risk–informed judgement".

Keynote Address

Tadao Chino

As always, the Asian Development Bank is very pleased with the opportunity to organise this Forum jointly with the OECD Development Centre for an exchange of views and communication with our European member countries.

At the beginning of the new Millennium, Asia faces many critical challenges. Despite significant progress over the last few decades, the region continues to be afflicted by unacceptable levels of deprivation, illiteracy, malnutrition and environmental degradation. Even today, nearly 30 per cent of Asians have no access to safe drinking water. Nearly 70 per cent of them have no access to sanitation. Almost 50 per cent of the adults in South Asia are illiterate. Close to 900 million people in the region still live in poverty. In other words, almost two–thirds of the world's poor live in the Asian region. Therefore, in order to win the global war on poverty, we must fight the battle against poverty in Asia. If the world is to halve poverty by 2015, Asia must be the spearhead. The overarching goals for Asia and the Pacific, and for the ADB, should, therefore, be to reduce poverty. How do we fight against poverty? Our approach is based on the three conceptual pillars: *i)* pro–poor, sustainable economic growth; *ii)* social development; and *iii)* good governance.

To win the battle against poverty, Asian countries, and the ADB, need to be empowered through provision of adequate resources. Take an example of the first pillar of our poverty reduction strategy, namely pro–poor, sustainable economic growth. To sustain and accelerate economic growth, there is obviously a need for investment and for mobilising adequate resources to finance the investment. Our theme of discussion in the International Forum on Asian Perspectives on development resources mobilisation is therefore of critical importance, if we are to reduce poverty and to improve the quality of life of all people so that every human being on this planet can live in dignity and hope.

Four points, which I think are particularly important for Asian economies to improve development resource mobilisation and deserve emphasis. First, mobilisation of domestic resources. Second, further mobilisation of long–term foreign investment such as foreign direct investment (FDI). Third, improvement in investment efficiency,

which calls for continued reforms in the financial and corporate sectors. And, fourth, partnership and co–ordination between private and public sectors in mobilising resources. The key is for the two sectors to complement each other.

Mobilisation of Domestic Resources

Savings ratios, relative to gross domestic product in many Asian economies, especially Southeast Asian countries, are among the highest in the world. However, many Asian economies have not been able fully to utilise this high level of savings for productive use, owing to the inefficient functioning of their financial and capital markets. For these countries, therefore, the main challenge is how to transform high savings into more productive use through an appropriate system that can ensure quality of investment.

One of the lessons learned from the recent Asian crisis is that too much reliance on short–term foreign capital for financing long–term investments will make an economy vulnerable to external shocks. In addition to the increased risks associated with the exchange–rate and maturity gaps, the experience of the Asian crisis has shown that short–term foreign capital can quickly evacuate. In fact, this is a global issue. Capital flows, including short–term capital, have increased both in terms of magnitude and frequency under the increasingly globalised world. A lesson from the recent crisis is that the prevention of excessive volatility, especially as a result of reversals of short–term capital flows, needs to be addressed in connection with a new international financial architecture, and that one way of decreasing dependency on short–term foreign capital is to develop domestic capital markets to utilise Asia's abundant domestic savings better for development purposes.

Further, while capital inflows from outside the region will continue to play an important role, they cannot alone meet the high investment requirements of the region. Effectively tapping domestic resources will be essential for marshalling the necessary financial resources.

For all these reasons, there is a need for strong initiatives and policy reforms to be taken to develop domestic capital markets, particularly bond markets. This will also serve to ensure a multiplicity of funding sources and reduce dependence on bank borrowing. Many countries have recognised the importance of capital–market development. It is thus satisfying to see all major Southeast and East Asian developing economies making strong efforts to develop or strengthen domestic bond markets in the aftermath of the financial crisis. Transparent and effective regulatory and supervisory frameworks are the key for proper functioning of the markets. In addition, institutional investors, like pension funds and insurance companies, need to be developed to participate in capital–market development.

In developing bond markets, a well–functioning government securities market plays a vital role in fostering corporate bond issues, since it provides financial markets with a risk–free benchmark yield curve and facilitates the formation of a liquid secondary market. In addition, an effective and sound regulatory and supervisory framework for bond suppliers, intermediaries, institutional investors, and other market participants is crucial for adequate investor protection and to reduce systemic risks.

Resources can also be mobilised from public–sector savings. Governments can generate such savings through better expenditure management and appropriate tax systems and administration.

The Importance of Long–term Foreign Investment and FDI

While domestic resources need to be tapped, it cannot be assumed that they will replace foreign resources. Foreign investment brings not only financial means, but also a raft of other tangible assets such as management know–how, best business practices and advanced technology. Therefore, foreign investment should continue to be pursued. It will continue to play an important role in development of Asia. Conducive environments for long–term foreign investments are, among others, political stability, the rule of law, well–developed physical and institutional infrastructure, and good governance in both public and private sectors ensuring transparency, predictability, accountability and participation.

Improving Investment Efficiency

In order to improve the efficiency of investments, Asian economies are expected to continue reforms in the financial and corporate sectors. In this connection, it is reassuring to note that in the wake of the Asian crisis, good process has been made in establishing a legal and institutional framework in banking and in corporate restructuring. In the banking sector, targeted compliance has been set for international best practices for capital adequacy, loan classification and loan loss provisioning. Practices in the areas of foreign–exchange exposure, liquidity management and connected lending are also being improved. However, much remains to be done. For example, the banking sector needs to be further strengthened where capital adequacy is still low and bank lending has not returned to a normal level.

A more serious problem in the region is slow progress in corporate restructuring. A prerequisite for effective restructuring is sound corporate governance. Poor corporate governance, driven largely by the ownership structure, is one of the important causes for the Asian financial crisis. It is claimed that transparency is lacking and the check and balance system does not function well in the corporate sectors in the region. It is a long–term task for the region to improve corporate governance.

The Need for Co–ordination and Partnership between the Public and Private Sectors in Mobilising Development Resources

Given the enormous need to reduce poverty and achieve sustainable development, Asian countries should further improve mobilisation of private sector resources for development purposes, especially in areas where the private sector can deliver services more efficiently. In the past, we have seen the growing participation of the private sector in a number of areas that were traditionally handled by the public sector. Examples include the development, operation, and maintenance of highways, mass transport systems, water supply, and provision of health care and education. The public sector should further facilitate private sector participation for development purposes, and in areas that create public goods yet attract little interest from the private sector, as well as in areas where it can perform a catalytic role effectively.

What should governments do to facilitate private–sector participation for development purposes? It is important for the government first to examine and define the optimal role of the state. In doing so, the government must ensure that the mobilisation of private capital is not done at the cost of social objectives. Where private–sector participation is encouraged, the government should ensure that adequate regulatory and supervisory mechanisms are in place to protect the interest of the public, especially that of vulnerable people, while providing a conducive environment for the private sector to operate. In addition, the government and other public–sector institutions can encourage private–sector participation by extending guarantees or co–financing opportunities to reduce the risks associated with transactions, which may otherwise discourage the private sector.

Conclusion

Asia faces daunting development challenges ahead. At the same time, official development aid is becoming increasingly scarce. The roles of the state and the private sector in developing countries are also changing gradually. We must explore ways to mobilise and utilise resources better to meet the needs of our developing partners.

Post–Crisis Asia: Resource Mobilisation through Capital Markets, IFIs and the Private Sector

Christine Wallich

A New Environment

We no longer have the anxiety about Asia's future that we had 12 months ago. At the Asian Development Bank (ADB), we are optimistic about Asia's prospects — although we are not complacent. We are optimistic because growth is on the rebound, exchange rates have stabilised, and most of the macroeconomic fundamentals are back to where they should be, with the exception perhaps of the Indonesian case. On the social front, real wages are rising and employment seems to be on the upswing, although it is still below its pre–crisis levels. However, we are not complacent, because many of Asia's problems still remain. Three key areas of "resource mobilisation in the post–crisis era", which is the theme of the Sixth International Forum on Asian Perspectives merit particular attention:

— domestic resource mobilisation via the capital markets;

— the role of international financial institutions (IFIs) in resource mobilisation and what might be their new role; and

— resource mobilisation through the private sector. What has happened to private flows in the post–crisis environment?

Domestic Resource Mobilisation *via* Capital Markets

The 1999 Forum focused on domestic capital markets, and one of the conclusions was that Asia was "overbanked". To use Alan Greenspan's phrase, the "spare tyre" of capital markets was missing. When the banking system came under stress, there was no alternative form of financial intermediation. The absence of capital markets — dubbed as "original sin" by Ricardo Hausmann — makes emerging–market

countries fragile and more exposed to economic crisis than industrial market economies: no matter how good the policy mix that they develop and use to address weaknesses, "original sin" remains and creates vulnerabilities. Hence, in Asia, the banking crisis was a fully fledged financial sector crisis, with a major impact on growth, and an increase in poverty. Another lesson from last year's session was the need to create *demand* for capital market instruments. Liberalisation of insurance markets, pension funds, social security reform, and so on, measures that create demand for capital market instruments are key to creating this demand. A parallel observation was that governments have a major role to play in creating a *supply* of marketable instruments, and can do so by changing their borrowing and debt management policies. An important conclusion at that time was that only government could create effective benchmark instruments for the private sector. A final big message from last year's Forum was the need to encourage transparency and disclosure in order to reinforce confidence in markets and issuers. Without transparency and disclosure, capital market development is doomed.

All these lessons remain equally relevant now, and perhaps even more so since banking markets are still fragile, but there are also new and somewhat different reasons for stressing capital market development. The "spare tyre" metaphor had to do with crisis prevention and crisis mitigation, and preventing a banking crisis from becoming a financial–sector and, ultimately, an economic crisis. With today's increasing realisation that Asia's population is getting older — and those of China and Japan will ultimately shrink — the "spare tyre" of capital markets is needed for other reasons as well. With more and more retirees being supported by fewer and fewer working people, increasingly, people will rely on pensions for their retirement income and no longer on the family. Those pensions will increasingly have to be funded and paid from government PAYG schemes which are often unsustainable. From this perspective, capital markets are key to success; capital–market development has a major role in supporting the demographic transition in Asia. As many Asian leaders have told us, better corporate governance and transparency in the management of assets are essential for capital markets to develop and work well: when the performance of your retirement fund depends on it, the notion of corporate governance can take on a whole new meaning.

The ADB supports corporate governance in a number of ways: in our policy dialogue with governments, and in our transactions as an investor. Governance is a criterion in screening our own private sector investments in private companies, banks, and investment funds. In sum, the "spare tyre" of capital development remains as important now as before.

Resource Mobilisation through IFIs: Post–Crisis

The IFIs still have a huge role to play in resource mobilisation for the developing countries in post–crisis Asia. However, The IFIs' role is evolving. There have been three revolutions in development banking. The first was the transition from multilateral institutions functioning as reconstruction agencies in the 1950s to their role as "project banks", focused mainly on investment loans in the 1960s and 1970s. The second revolution of the 1980s was the transition of IFIs from "project banks" to "policy banks" focusing on policy reforms — the result of a growing realisation that "policies matter" and that good projects in a bad policy environment are often not sustainable.

Now, we have the third not–yet–complete revolution, brought on by the realisation by IFIs that to be relevant to their member countries, they need to catalyse private–sector flows. Some numbers will make this clear. Twenty years ago official development assistance was of the order of $50 billion a year, with private–sector flows to emerging markets half of that, at $25 billion. Now, in the year 2000, private flows to emerging markets are about $300 billion a year and official flows are down to about $60 billion. There has not only been a reversal of the importance of official and private flows, but a complete change in the orders of magnitude of the two types of flows.

A small parable also illustrates how important the private sector has become in development finance. Imagine the head of USAID, the President of a major multilateral development bank and the Chairman of Moody's are all visiting India on the same day and the Prime Minister can see only one of them. Who would the Prime Minister see? In the 1960s, without question, it would have been the head of USAID, India's largest donor by far. In the 1980s, the Prime Minister would have seen the President of the MDB. In this century, 2000, without question, he would have chosen to see the Chairman of Moody's. The moral of this story is that the private sector is hugely important now.

In sum, the role of development banks is changing in some important ways. For example, the ADB has just prepared a new private–sector development strategy, which focuses on catalysing private flows. There are two thrusts: lending and policy advice to create a sound "enabling environment" for the domestic and foreign private sector; and, with our "private sector and transactional hat," we will play a direct role in financing selected private–sector projects.

In short, it is not just the amount of lending by development banks that matters — although it is very important that they lend and that they continue to be resourced in a significant way. More important is their role in catalysing resources and leveraging

relationships, i.e. "scaling up" partnerships, not only with the private sector but, increasingly, with other actors concerned with development — foundations, NGOs, civil society. Ideas count and development banks have a major role in creating the ideas and establishing coalitions that can help catalyse resources into developing countries. The OECD Development Centre, for example, plays an important role as a think tank for development concerns and has reached out to Latin America, ourselves in Asia, and to Africa. The IFIs will not just be lenders but, increasingly, partners with their clients, helping to share good practice and adapt ideas to local needs. Asia has done very well in absorbing best practice to create the foundation for the Asian miracle. Such ideas, together with the catalysing of resources, will be the IFIs' new role.

Resource Mobilisation through the Private Sector

Asia was a huge success story in the area of resource mobilisation, responding to globalisation and absorbing private flows — until the crisis. There is now renewed appreciation of the private sector's role in development as an engine of growth, and a necessary ingredient in reducing poverty. We also recognise that, while market–led growth, and the benefits of private sector development, offer a lot of promise, they are certainly not a panacea. They imply major challenges for the role of government, which needs to change in response. If government ignores the governance of companies, as has happened in some parts of the world, privatisation will not bear fruit, and neither will private sector development bring broad–based growth gains. If government ignores safety nets and society's needs, growth will not be equitable. If government ignores corruption and lack of transparency, we will have neither growth nor equity, and, especially if government ignores the distribution of assets — not just financial assets but other assets such as education — if there is inequitable access to education, credit, and land ownership, market–led growth cannot be a good solution for the socially excluded. So, while resource mobilisation through the private sector is important, the role of government remains equally so.

On the international front, globalisation is demanding on governments. The Internet age means a whole new way of doing business for many governments. Anyone can have access to information, and at extraordinary speed. In today's globalising world, pursuing sound macroeconomic policies is a great challenge for governments. In the social area, there is also a great demand on governments to get their expenditure priorities right — investing in their own people, investing in education, investing in health. Otherwise, the promise of globalisation will not be delivered to a broad base.

Finally, globalisation implies a huge challenge for the private sector, as well. For example, the private sector may need to involve itself in social issues — to avoid "reputational" risks, and to create legitimacy, as well as for the sustainability of its investments.

What does private sector involvement in social issues mean? A few examples may help: the ADB was recently involved in the privatisation of Manila's water supply system, where potential concessions included public stand pipes in selected slum communities where poor families had traditionally purchased trucked–in water from unreliable private parties at exorbitant prices. While clearly implying lower concession revenues for the government, this creative design resulted in close to 50 000 low–income families, over 250 000 people, having access to potable water. Furthermore, by making residents of depressed areas legitimate customers, illegal connection users were weeded out and the incidence of water theft was reduced.

Another example is an Indian company which contributed to slum upgrading in the local community, not just providing workers' housing and other benefits as is often the case, but specific investments in upgrading the city in which it was located — to create a sense of "corporate good citizenship". In Bangkok, two major hotels have been very active in educating and training their workers to fight HIV/AIDS (including free condom distribution to staff members). The same hotels are also working with UNICEF in providing hotel and "life skills" training to young women from north–eastern Thailand, the group most likely to be forced into poverty and to engage in commercial sex work. One last example is that of a major textile company in a poor area in Pakistan, which finances schooling for its underage workers. Child employees are required to attend three to four hours of schooling in the mornings (where they also get free breakfast and lunch) before being allowed into the workplace. These are very imaginative responses to very difficult social problems, as well as very imaginative responses by the private sector. With NGOs and media looking on, not only government, but also the private sector will be playing new roles, in perhaps unexpected ways.

Post–crisis, resource mobilisation through capital markets, IFIs and the private sector will be crucial. The crisis has highlighted the importance of managing flows well, the new dimension these flows can take, and the evolving roles of IFIs, governments, and private sector over time.

Towards Sustainable Growth of the Asian Economy

Ken Yagi

Current Situation and Prospects of the Asian Economies

Rapid Recovery

The Asian economies were severely damaged by the Asian currency and financial crises, with many Asian nations posting substantially negative growth in 1998. In 1999, however, economic growth rates turned positive and V–shaped recovery was achieved.

The expansion of exports, the implementation of appropriate fiscal and monetary policies, and financial and corporate sector reform contributed to the recovery. The rise in demand for electronic goods due to the expansion of information technology (IT) has caused a surge in exports, which in turn has had a positive effect on economic activity through intra–regional trade in the Asian interdependent economic structure.

Japan's Aid to Asia

Japan has contributed to the recovery of the Asian economies through aggressive measures including the New Miyazawa Initiatives.

In October 1998, Japan announced that it would provide a package of support measures totalling $30 billion, of which $15 billion would be made available for medium–term to long–term financial needs for economic recovery in Asian countries, and another $15 billion would be set aside for possible short–term trade financing needs during the implementation of economic reform.

Furthermore, in May 1999 Japan announced the "Resource Mobilisation Plan for Asia", also known as the second stage of the New Miyazawa Initiative, to achieve full–scale, vigorous recovery in Asia. It consists of assistance measures to mobilise private–sector capital, the upgrading and promotion of Asian bond markets, and the provision of technical and human resources assistance.

Long–term Prospects and Problems to be Addressed by the Asian Economies

Strength of Asia's Economic Fundamentals

Asia's economic fundamentals, which supported high economic growth in earlier years, have basically remained unaffected by the currency crises. Indeed, Asian economies may well be able, through efficient resource allocation, to utilise their strong fundamentals to overcome the weakness of the financial and corporate sectors which was revealed in the crises.

The IT Revolution and Asian Economies

The long–term prospects for Asian economies will depend in part on whether Asian countries can make effective use of the merits of the IT revolution.

Cellular phones are spreading rapidly in Asia, and it is forecast that they will be widely used as Internet terminals. Although constructing good communications infrastructure is an important task for Asian countries, the diffusion of cellular phones offers a possibility to solve the bottleneck of the Internet.

The IT revolution will raise the efficiency of resource allocation by enhancing the volume, speed and scope of every kind of trading, and will make it possible to take advantage of the strong fundamentals and potential of Asian economies.

Upgrading of the Industrial Structure in the Asian Region

The high growth of Asian economies has been accompanied by upgrading of the industrial structure, as early developers are replaced by latecomers with a certain time lag. This chain brought continuous growth to the Asian economies for over 30 years, a sustained period of development which has not been seen in other regions.

Coping with Change in the Comparative Advantage Structure

To enhance the industrial structure by introducing foreign capital into Asian countries, it is important to shift from forming labour–oriented export production platforms, which utilise cheap abundant labour, to attracting corporations and industries which use high technology. Given the scale of the countries concerned, industrial development in each country cannot cover all industries; the countries of the region must therefore form technology networks in order to complement one another.

Increasing Interdependence in Asia

In ten major Asian economies (the four ASEAN nations, the NIEs, China and Japan), intra–regional trade accounted for 46 per cent of exports and 50 per cent of imports in 1997.

It is expected that interdependence in the Asian region will increase further with high economic growth and the expansion of the ASEAN Free Trade Area (AFTA), among other factors. The recent increase in interdependence in Asia shows that the region has entered a new phase in the international division of labour, based on expanding domestic markets and creating industrial networks.

Constructing a Stable Economic and Financial System

In the light of the Asian currency crises, it would be prudent to take measures to build a stable economic and financial system which is not vulnerable to any future currency crises, taking a three–dimensional approach: a global approach, an individual–country approach and a regional approach.

Strengthening the International Financial Architecture

The G–7 finance ministers submitted a report entitled "Strengthening the International Financial Architecture" to the Cologne economic summit. Efforts to implement the proposals in this report are being vigorously pursued in various fora, such as the IMF, G–20 and the Financial Stability Forum.

Measures Taken in Individual Countries

Financial and Corporate Sector Reform

Each Asian country has been energetically tackling financial and corporate sector restructuring; the non–performing loan ratio is declining; and gradual progress has been made in debt restructuring. However, there are still many outstanding issues to be tackled. The financial and corporate sectors need to be strengthened and restructured. In addition, the fiscal deficits arising from financial sector restructuring and other measures constitute a potential risk for the future.

Creation of an Appropriate Exchange Rate Regime

Each country decides on an appropriate currency system in the light of its individual circumstances, such as its economic scale, trade structure, economic situation, policy targets and so on. An appropriate exchange rate regime for Asian countries is an important issue because the previous exchange rate system, which was virtually pegged to the dollar, brought about unstable trade and excessive capital inflows.

Asian countries have a variety of partners — the United States, European countries and Asian countries including Japan — in their trade and other economic activities. One option, then, is to peg their currencies to a currency basket composed of the dollar, the yen, the euro and other currencies, each of which would be assigned a weighting according to the volume of trade and other economic factors, while retaining a degree of flexibility through a mechanism such as a sufficiently wide band.

Capital Liberalisation

Capital liberalisation measures must be properly sequenced in developing economies. Before these countries implement capital liberalisation, the domestic financial system must be shored up by strengthening prudential rules and supervision for financial institutions, along with sound macroeconomic management. The liberalisation of long–term capital should precede that for short–term capital. In particular, restrictions on foreign direct investment must be abolished as completely and as soon as possible.

Each country also needs to manage foreign debt risks. Obtaining better data on capital flows and foreign debt and improving the monitoring system are essential prerequisites for risk management.

Social Safety Net

An appropriate social safety net has not only the short–term effect of providing support to the poor, but also long–term effects which make it possible to take necessary risks to cope with changes in markets, and to promote productivity and economic growth by enabling poor people to invest in education and health services even during crises.

The government of Japan decided to make a contribution in this field by setting up funds for poverty reduction at the Asian Development Bank and the World Bank. These funds aim to provide basic social services for the poor and to support the capacity–building efforts of local governments and NGOs.

Co–operation in the Asian Region

Improvement of Bond Markets

It is important to have some mechanism allowing long–term capital to flow from capital–surplus countries to capital–deficit countries in the region. For this purpose, efforts to improve regional financial markets, including bond markets, are required.

Exchange Rate Stability

The virtually dollar–pegged currency systems which Asian countries had adopted before the monetary crises brought exchange rate stability to the region, which contributed to the development of intra–trading and intra–investment. However, the monetary crises clearly demonstrated the risks of such systems. Asian countries must seek a new, stable exchange rate mechanism to develop exchange rate stability in the region.

The AFTA is to be completed by 2018. The experience in Europe suggests that intra–regional exchange rate stability is essential for promoting trade and investment in a free trade area. One option would be to peg these countries' currencies to a common currency basket with a sufficiently broad band. Even if a strict common currency basket is not adopted, the concerted adoption by the ASEAN nations of a virtually basket–pegged currency system would contribute to exchange rate stability in the region.

Promoting Policy Dialogue

It is important to develop a relationship of mutual trust and to exchange frank views within the region through many fora on various levels, such as dialogue between the public and private sectors, bilateral and multilateral meetings, conferences and seminars.

In the "Joint Statement on East Asia Co–operation" issued by the ASEAN+3 (i.e. China, the Republic of Korea and Japan) leaders at their informal meeting in Manila in November 1999, they agreed "to strengthen policy dialogue, co–ordination and collaboration on financial, monetary and fiscal issues of common interest". This is a significant first step for promoting policy dialogue in the region.

Establishment of a Regional Financing Co–operation Network

In view of the deepening interdependence of Asian economies and the need to counter the contagion effects of financial crises, it is necessary to set up regional financial arrangements to supplement existing international financing facilities, including those of the IMF.

At their May 2000 meeting in Chiang Mai, Thailand, the ASEAN+3 finance ministers agreed:

— to use the ASEAN+3 framework to facilitate the exchange of consistent and timely information on capital flows;

— to strengthen the existing co–operative frameworks among monetary authorities through the "Chiang Mai Initiative".

The initiative involves an expanded ASEAN swap arrangement covering the ASEAN countries, and a network of bilateral swap and repurchase agreement facilities among the ASEAN countries, China, Japan and the Republic of Korea.

Close co–operation among these countries, involving the use of a part of their foreign exchange reserves, will contribute to the stability of monetary and financial markets in the region.

Concluding Remarks

The currency and financial crises did a great deal of harm to Asian countries, but they also fostered a sense of solidarity in the region because people had common problems and sought solutions together. The crises may yet prove to have been an opportunity to strengthen regional co–operation and to establish a stable and prosperous Asian economy in the 21st century.

Complacency is Out of Place

Norbert Walter

The consensus which has emerged around an optimistic world economic forecast may be false; it may give a false sense of security. The best scenario, the most realistic scenario, for the United States of course is a soft landing, not only because they have placed their country in a particularly favourable structural setting, but also because if something goes wrong — and there is always something that can go wrong — the United States have a political machinery and a situation in which monetary and fiscal policy have all the instruments at hand and have proven that they will use them in a diligent way, if needed. This assurance of governance that could act in case of need is an important factor and points to a soft landing. This is a good underpinning for the world economy.

Where the financial markets in particular, but also most official forecasters are wrong, is on Japan. Complacency about the recovery in Japan is out of place. The balance sheet of neither the government nor the companies is in as good shape as is suggested by stock price developments in Japan and by the yen exchange rate. It is more difficult to get a society and an economy going when both are ageing, and when the means and attitudes adopted are not appropriate to setting realistic asset prices. It is possible that the government debt and the pension liabilities of companies are not properly accounted for. Therefore this very important pillar of the world economy, the second most important country, gives cause for concern.

Europe seems to be very remote from Asia, and it seems to be unimportant for Asia. This is a mistake, because it means we just do not exist in our own mindset, nor in the mindset of anybody else. Therefore nobody takes the region, Europe, seriously. It would be much wiser if we did so at home, and it would be much wiser if Asia considered Europe as the economic entity it is.

There is good news about Europe. Euro–sclerosis is mostly behind us and there are only a few governments that have not yet understood that there is no room for a third way. It is very obvious that one economic paradigm has won, the free market paradigm of the United States, and the faster we learn from it the better. That is probably something of an exaggeration; for an American audience, it would have to be put very

differently. For a European audience, it can be put even more directly, and for an international audience, it can be stated alongside some caveats. Of course Europe would not want to have as many young people in prison, nor as many lawyers per thousand inhabitants as in the United States. That is not optimal, but in most aspects of the societal setting, we could learn, and we would improve the efficiency and effectiveness of both Asia and Europe if we learned this lesson.

So Europe is moving in the right direction in terms of structural reforms. It is still hesitant but it is clearly moving, and we have a marvellous starting point in terms of cyclical performance. In addition, with the euro as weak as it is, and the misperception of the euro that is persistent in the United States, Europe and Asia alike will give us price competitiveness that we have not seen for a long time. Wage behaviour is excellent in Europe, and Europe will therefore outperform even the most optimistic forecasts for this year and next. So there is good news from that side for the international environment. In contrast talking about "Asia" makes less and less sense, because if there is one continent that is not homogeneous it is Asia. Of course, we discuss Japan and Asia, but even "Asia ex–Japan" is anything but homogeneous in terms of starting point; in terms of orientation; in terms of addressing the issues of structural deficiencies; in terms of relationships with specific countries. It is quite obvious that there are still a number of countries that talk about a market economy but do not mean it seriously. A look at any statistics in Asia and studying countries that still do not allow market prices to develop reveal no consistency. We, in Europe, have learned from the transformation countries of Central and Eastern Europe that, even if there are perfect national income accounts, you know little about a country if the deflators are not a reflection of individual preferences and production costs, but still reflect some form of central plan. They do not tell you anything about value added in such an economy. China has certainly to be mentioned in this context, and other countries in Asia should be mentioned here also.

As long as price structures do not reflect those preferences, what we will observe is "organised waste". This refers to systems which make ill use of the savings of relatively poor people. That is the case in quite a number of Asian countries which have high savings rates and low income levels. The people are being deprived because their savings are put to no good use: they are used in a way which is nothing but the organisation of the next round of waste. That is the type of thing we have to address at the roots. It is therefore so encouraging that everybody in the Forum has mentioned the important role of financial markets in the allocation of resources, but, if you allow that financial markets are needed to allocate resources, this implies that it cannot possibly be done by a financial sector that is interwoven with budget processes. If budget processes always intervene in these allocation processes, we end up with inferior allocation of capital. Therefore Germany, for example, which is insisting that almost half of the financial sector may not be in private hands, is not exactly in a good position to tell others how to structure their financial sector. France is not exactly a role model either. We do not have a system where capital is allocated through financial markets. It is allocated through the strange, insidious workings of a budget process, guarantees of all sorts, plus a financial sector. It is very obvious that we should be quite open about all that.

We have heard quite a number of positive remarks during the Forum about the importance of private–public partnerships. Of course, private–public partnerships are a much better solution than insisting that governments plan and execute certain infrastructure projects, when they are definitely not good at it; on occasion one should be quite Hayekian. If there is too much private–public partnership, there is at least a risk that responsibility for investment will lie nowhere. Nobody feels responsible, neither the private sector nor the public sector. At the end of the day it is, of course, the taxpayer who has to pick up the bill. We should be quite clear about that. Again, a somewhat more Hayekian orientation would occasionally be helpful. If we embark upon private–public partnership, we should at least know that it is a transitional solution. We should decide what can be assigned properly and fully to the private sector and we should be quite clear as to what can only be done by the government sector. Setting the rules can only be done by the state and the government sector. If the government sector could abstain from intervention and instead set rules, we would all be better off. As for Asia and the financial sector, private flows are again very large, but Asia of course has not got back to where it was in middle of the 1990s when private capital flows were very, very large. There was only one constant over the last five years — a very promising constant; namely, that foreign direct investment flows into the region stayed at a reasonable level, somewhere around $50 billion. That is certainly encouraging because it shows two things: first, the region is still attractive; and secondly, the world's investors understand it, particularly those that have a long–term commitment understand it. That is very important.

It is also reassuring that equity investment, portfolio investment, into the region, after a low in 1998, is beginning to accelerate again and that very risk–oriented but open–minded analysis is obviously possible in this connection. At the same time it is also very obvious that neither lending banks nor bondholders have regained confidence. If we read the international financial institutions correctly, it seems safe to say that it is very difficult to see bank loans ever again resuming the role they had in the past. You can hardly expect it from commercial banks, after being burnt as they have been, and with the financial sector generally moving in the direction of disintermediation and securitisation. So bank loans are something that we will certainly need to review as a source of funds in the future. The other question is how well the bond markets will develop. Here, of course, we have to work hard on both sides — the recipients as well as the international community — in order to get out of the doldrums in which we still are.

As to the prospects of these various capital flows, and as to the necessary measures on the part of the recipients, it is quite obvious that a few stand out: above all regulation and supervision as one element in each and every nation state. The core principles of effective banking supervision not only have to be defined, that has been done; they also have to be implemented. Arguing that this should be done is, of course, something we should be fair and frank about. Again, the experience we have had in Central Europe after the transformation of this part of the world into market economies and democracies is probably quite indicative of the order of magnitude of the task. Suffice it to say that when we built up the East German financial sector, West German banks

sent something like 8 000 bank managers from West Germany into East Germany for a period of five years, and we cannot claim that the East German financial sector is up to international standards, even now.

It took an operation involving 8 000 qualified people for five years to set the stage for something that is reasonable. This was for 15 million people. So to argue for a similar task force for technical aid for Indonesia would involve 100 000 bank mangers from around the world going for five years to Indonesia. What about China on the same scale? All of us in the business of consulting and advising these countries should make ourselves aware of the dimension of the problem and not continue to talk as if small, international financial institutions like the Asian Development Bank, or the IMF or the World Bank for that matter, could provide, with their resources, something that is close to adequate. If we address the issue in this way it becomes very obvious that technical aid of this magnitude never could happen as a form of coercion or obligation by the developed world. It has to be the wish of Indonesia or China or Thailand, for that matter, to ask for this technical help because otherwise it would be considered as coercion, as conflicting with the internal determination, the democratic processes, of the relevant countries. This is a very delicate problem from both sides, and, again, what should be stressed, are its dimensions. We always underestimate them in a way that is difficult to understand. Some of us have never left the seminar of an elite university and therefore do not understand the dimensional problems. On the other side, quite a few politicians who have not been exposed to Western democracies have no idea how a world that wants to be more open feels if we are obliged to behave as if the national sovereignty in any one country in Asia could be upheld and, at the same time, the international support could be upheld as well.

Liberalisation and the development of domestic financial markets is the important issue, but that of course requires openness. It will not work unless a certain amount of international participation is allowed, in terms of ownership and management in the financial sector. If the process of adjustment is to take place in two decades or less, then the input of this management know–how through participation and ownership by foreign companies is essential. If countries insist that this is not a political option for them, they should be frank and fair to their citizens and the international community and say that they are not fully part of the international division of labour and an open international capital market for that period.

For those who move ahead, however, accepting regulation and liberalisation is not the end of the task. Quite a few countries, even investment grade countries, have learned that it takes constant investor–relations–oriented activity of governments and institutions if what is done at home is to be understood internationally. People who have been working in the investment banking sector in your government or your central bank are needed not only to do a brilliant job in the finance ministry and the central bank, but also to be available to communicate to the international investor — and that on a frequent basis.

Quite a few interesting models have been established. Mexico may be a case worth looking into. This investor–relations activity of countries has to be something that is carried out regularly. The road show cannot only begin when a crisis is imminent. It has to be done on the basis of, say, a quarterly review and a quarterly press conference. The analysts must be invited in order to make them understand the policies. Of course all of this would be much better if, at the same time, there were macroeconomic stability. It is quite obvious looking into the trade numbers, the intra–region trade numbers of Asia, that if Asia, with more than 50 per cent trading within the region, still embarks upon an exchange rate regime that is either oriented towards the dollar or oriented towards the yen, the region will run into certain types of difficulty.

It is equally obvious that it will be very difficult, if not impossible, for the next decade or so to form something like an Asian monetary union. In the 1980s Japan and the yen would have been an excellent candidate for that, but this is no longer the case and it is clear that, as long as no new hegemony develops in economic and financial terms, and as long as the renminbi is not even a convertible currency, there is no obvious candidate for forming an Asian monetary union.

Given the exchange rate vagaries that exist for the dollar, the yen and the euro, a region that is trading increasingly with itself, but which relies in its exchange rate regimes on an outside anchor, is exposed to unnecessary risks for the time being. That is something worth discussing, and it would be wise for Asian institutions to work very hard at establishing regional institutions and exchange rate arrangements that at least orient themselves towards approaching an Asian monetary union in the longer–term future.

In the meantime, it is very difficult to know whether to advise Indonesia to have a floating exchange rate or a currency board. Indonesia is an obvious case: it is a very important case and a very delicate one. Those who claim that the best scheme for Indonesia is floating should remember what happened to the rupiah and what it meant for debt service; those who advocated a currency board should understand that they would be taking monetary policy away from Indonesia. Which regime would be more favourable is unclear, but it is certainly a very important issue, one which we have to address, and the old recipes that we, the Old World, have given probably deserve close consideration.

Help for the region from the international community is still a factor, and it is very wise not to get rid of the existing international institutions. We would have to reinvent them. Not that they cannot be improved, but it is very obvious that the alternative to an IMF that is coercing countries into certain policies, would be the United States and Europe coercing certain states into certain policies because otherwise the international division of labour would suffer even more. So international institutions are the best institutional set–up that we can have for the time being. These institutions should focus on what they are best at, and the new managing director of the IMF is

heading towards such a division of labour. Similarly, the World Bank knows its own brief, and the IMF will not do the World Bank's projects. It will be helpful if the intended division of labour between the two institutions is taken more seriously.

What would be helpful in the view of the private sector would be an end to loose talk about bailing in the private sector or coerced burden sharing. If the private investor smells that this is what the world is out for, private capital flows could dry up and that would certainly not be very helpful. Again, the IMF understands the message and will not move any further in that direction — or certainly not in a coercive way.

The implementation of standards and codes: after the crisis we have had, this is something that we, the international community, have to bring about. The private sector should be proactive in this field, for it is very obvious that it would be in the private sector's own interests to implement standards and codes in order to reduce the risks. One element to help the bond market to develop again in Asia and in other emerging countries would be a voluntary agreement that there should be an orderly debt workout and that certain clauses should be included in the new issues of international bonds; collective action clauses may be a way out. This should be not only talked about, but done.

On the part of the investors, on the part of the financial sector, there is a great need for an improvement in our risk management, and after the failures — not only with LTCM but also with others — it is quite obvious that we have to do much more frequent stress testing of our models. We have relied on old patterns, on old parameters, for too long and we should be more imaginative in doing this job, especially stress testing, and doing scenario analysis for that matter. The avoidance of herding effects would of course be another element, but it is unclear whether we can achieve this target in the new structure where pension funds, or life insurance companies, play a bigger role — even though these are institutions which by their very nature should look to the long term rather than the short term.

In the old days we had strategic investors and in many cases these were just families, individuals. They obviously had a long–run perspective. Today, among portfolio managers — even in insurance companies or pension funds — it seems we have nothing but short–term orientation. Making herd effects less probable appears to imply that we have to change some of our remuneration policies within the financial sector. If policies, factually, reward a lot of trading, it should be no surprise that certain attitudes are preferred. Therefore, at the end of the day, we will have to debate truly and openly staff remuneration policies in the financial sector in order to get away from the contagion effects that we have seen in the past. Ultimately, it is extremely important that the traders' bosses feel themselves to be responsible. Only if big institutions fail in the financial sector in the coming years, i.e. the "too big to fail" doctrine fails in a number of cases, will prudent behaviour and less herd effects and less herd instinct prevail.

Public Expenditure Reform

Hafiz Ahmed Pasha

Public expenditure reform is a key element of the strategy for alleviating resource constraints in the aftermath of the Asian financial crisis. As a former minister of planning and finance, the present author has extensive experience in this area through his involvement in the preparation of various federal budgets and annual plans of Pakistan during the last few years. In addition, this topic affords an opportunity to present a distinctly South Asian perspective at the forum, where much of the focus is on post–crisis developments in the relatively high–income economies of East and Southeast Asia.

The main effects of the Asian financial crisis on the South Asian economies were indirect or "contagion" effects. The primary transmission mechanism was the fall in international prices, which affected the export earnings of most of these economies. For example, India's exports, which had grown at an annual rate of 11 per cent between 1990 and 1996, showed growth of only 4 per cent in 1997 and a decline of over 3 per cent in 1998. Pakistan's exports grew at an average rate of 10 per cent in the 1990s prior to the crisis, but declined by 3 per cent in 1997 and showed only a modest recovery of 4 per cent the following year. The consequence of the fall in export earnings was some loss of growth momentum. The average growth rate of the South Asian economies fell by almost 1 percentage point in 1997 from the long–term regional growth rate of 5.5 per cent.

Public finances were adversely affected in a number of ways. First, the fall in GDP growth was inevitably accompanied by a loss of buoyancy in tax revenues. Second, in most South Asian economies, taxes on international trade — customs duties, sales taxes and so on — are the major source of revenue. The fall in international prices led to a major contraction in the tax base of imports. For South Asia as a whole, the value of merchandise imports increased by only 3 per cent in 1997 and remained stagnant in 1998, as compared to the rapid growth rate of 20 per cent over the previous six years.

The consequence of these adverse developments was a worsening of the fiscal situation in most South Asian economies. Fiscal deficits, which were already high in some countries, rose to virtually unsustainable levels, largely because the ratio of revenues to GDP fell while the GDP share of public expenditure remained sticky downwards. In 1997, for example, the central government budget deficit rose by over 3 per cent of GDP in India, by 2 per cent of GDP in Pakistan and by 5 per cent of GDP in Bangladesh.

Governments' inability to bring down the level of public expenditure in order to contain the fiscal deficit demonstrates not only how difficult it is to implement reforms in this area but also why such reforms are essential if a modicum of macroeconomic stability is to be restored.

Constraints to Public Expenditure Reform

The failure of public expenditure reforms can be attributed to a number of factors. In developing countries where priorities are distorted by strong constituencies and lobbies in their favour, public expenditure allocations generally reflect the thorniest problems of the political economy and governance. Politicians and senior bureaucrats frequently use the levers of concessions, subsidies, special expenditure allocations and subventions for the purposes of patronage and in many cases for personal gain in the form of bribes. Rent–seeking activities flourish in the budget preparation process: once a privilege is granted, the favoured groups are unwilling to give it up even in times of financial stringency, while simultaneously other groups continue to jockey for special treatment irrespective of the overall macroeconomic situation. In some respects, this is what democracy is all about, and the quality of governance hinges on the ability of an administration to resist the pressures of special interest groups and to pursue what can be considered as the general public interest.

Rent–seeking behaviour is perhaps most acutely manifest in the granting of subsidies and tax concessions (which can be viewed as tax expenditures), all of which erode the budgetary position of the government but remain largely invisible to the public. Recent research has demonstrated that subsidies granted by the central and state governments in India — on energy consumption, agricultural inputs, social and economic services, bank credit, etc. — add up to a staggering 10 to 12 per cent of GDP. In Pakistan, the corresponding figure is estimated at 4 to 5 per cent of GDP, while the cost of tax expenditures is about 3 to 4 per cent of GDP. Ironically, only a small share of these subsidies is targeted to the provision of "merit" goods, while the fiscal concessions primarily benefit the richer segments of society. The political economy in most South Asian countries has led to the capture of the state by the most influential, vocal and organised interest groups, such as large farmers, big business (e.g. the textile and steel lobbies), public enterprises and the military establishment. Despite considerable rhetoric on the need to protect the "common man" and to focus on poverty reduction, in practice the benefits of public expenditure are skewed towards the rich and powerful.

The experience of recent years has also demonstrated why it is particularly difficult to rationalise public expenditure when the economy is experiencing a downturn. Whatever cuts are achieved are essentially in spending on social sectors and on development, areas which are more discretionary in character but where budget cuts impair the country's future growth potential. The stickiness of public expenditure during times of recession is due to several factors.

First, there is the legacy of the post–independence historical process of most South Asian countries. In the presence of an underdeveloped and nascent private sector, the public sector was seen as the principal agent of nation building and promoting economic development, in addition to the colonial administration's traditional role of maintaining law and order and collecting revenue. Paradigms of the welfare state and central planning still linger in the minds of the people. As a result, the general expectation is that the brunt of any negative shock (like the Asian financial crisis) will be borne by the government and that the people will be insulated to the extent possible from the immediate and direct consequences of the shock. Public sector employment is thus seen as a kind of social safety net during periods of recession (when the private sector is not expanding jobs), and it has been extremely difficult at such times to downsize the government by trimming the labour force in the public sector.

Furthermore, many actors hold the view that fiscal policy should be counter–cyclical in character to pull the economy out of recession, and hence that the level of public expenditure should be enhanced to raise the level of aggregate demand. Not only might such a policy add to the waste in public expenditure by encouraging programmes and projects of doubtful economic merit, but there is also a risk that, given the already high fiscal deficits in most South Asian economies (as opposed to the East Asian countries), it would exacerbate inflationary pressures and raise interest rates, thus crowding out private investment and largely neutralising the fiscal stimulus.

Second, the pursuit of rent–seeking and patronage activities is largely independent of the economic situation. If anything, demands for concessions and incentives are voiced more strongly at times when real incomes are not rising and profitability is being eroded by a downturn in economic activity. The government of Pakistan had to bring down income tax and sales tax rates sharply in 1997, and after the fall in international prices it implicitly subsidised exports through mechanisms like higher duty drawback rates and cheaper export finance to protect exporters. Given this reluctance on the part of politicians and senior bureaucrats to abandon patronage even in difficult times, it has not been possible to trim the functions of the public sector and focus more on its role as an enabler and facilitator. This represents one of the biggest challenges for improved governance in developing countries.

Third, even if decisions could be reached to privatise some of the public sector's manufacturing or service activities, the overall climate is not conducive to privatisation during periods of recession. Private investment, domestic and foreign, is generally shy and capital markets are experiencing a downturn. It is not surprising that despite ambitious plans the process of privatisation has been severely retarded since 1997 in Pakistan.

Problems of the Public Sector

The failure to reform public expenditure has led to an increasingly bloated and overextended public sector in most South Asian countries. The presence of large fiscal deficits has sharply highlighted this feature of these economies. Overall, the public sector today misallocates resources, manages poorly and spends scarce public resources inefficiently. The long list of problems includes the following:

Misplaced priorities: The fundamental problem is that high–priority social and physical infrastructure investments and transfer payments for poverty reduction have increasingly been crowded out by growing interest payments (due to the persistently large fiscal deficits) and military expenditure. It is truly tragic that the region which has the world's largest concentration of the poor (almost 500 million) spends more than $15 billion annually on the military, with India, Pakistan and Sri Lanka devoting more than 3 per cent of their respective GDPs to defence. For the current fiscal year, India and Pakistan have increased their defence allocations by 28 per cent and 11 per cent respectively. An indication of misplaced priorities is the fact that in Pakistan military expenditure is more than twice the total public expenditure on education.

Improper utilisation of scarce funds: This is the consequence of faulty institutional structures for service delivery, poor financial management practices and defective planning. Services are delivered mostly by line departments and parastatal organisations which are characterised by overly centralised management and a supply–driven approach rather than by responsiveness to effective demand. As a result of the priority given to employment, there is over–emphasis on wage payments in relation to non–wage inputs, which reduces the effectiveness of spending. Lumpy capital expenditures are generally preferred over operational and maintenance spending because the former leave greater scope for "commissions".

Financial management practices have led to loss of control and leakages because of the absence of proper accounting systems, appropriate reconciliation procedures and auditing. Reliance on cash–flow accounting alone means that there is inadequate knowledge of public assets and of contingent liabilities. The excessive "politicisation" of project selection and execution has rendered planning ineffective and has contributed to the process whereby development programmes are spread too thinly in order to accommodate competing claims. The consequence is delays, cost overruns and the stretching of the limited implementation capacity. Overall, the improper utilisation of funds has reduced delivery of services and increased waste. Programme initiatives pursued by governments with populist agendas have the greatest potential for eroding the normal budgeting process and distorting priorities. Programmes like subsidised urban housing and transport have been demonstrated to be notoriously prone to leakages and defective implementation. They have frequently been abandoned owing to lack of financial sustainability, and the careers of many senior officials have been sacrificed at the altar of such programmes.

More recently, the launching of poverty reduction strategies has increased somewhat the outlays for social safety nets, including generalised food subsidies, targeted food support programmes, transfer payments in cash, enhanced social security and labour–intensive public works programmes. However, the institutional arrangements for these anti–poverty initiatives are generally fragile and underdeveloped. Consequently, overhead costs are high, targeting is poor, coverage is limited, leakages are common and negative incentive effects are frequent. Much more needs to be done to implement poverty reduction strategies effectively.

Absence of transparency and accountability: Large components of public expenditure remain outside the realm of public scrutiny. For example, the military budget, which consumes over 20 per cent of federal resources in Pakistan, is presented as just a one–line item in the budget documents. There is also a lack of explicit accounting of subsidies and tax expenditures. The problem of inadequate dissemination of information is especially acute in the case of statutory corporations and utilities, which account for the bulk of the "quasi–fiscal" deficit. Effective mechanisms for oversight by the legislature, consumers and civil society are virtually inexistent.

The consequence of misplaced priorities, lack of responsiveness to needs and preferences, and ineffective and wasteful service delivery is growing popular disillusionment with the provision of goods and services by government. Alternatives are being sought, and greater reliance is placed on the private sector and non–profit organisations. This is most evident in the areas of education and health where, especially in the urban areas, much of the demand has moved away from the government and most public service facilities are underutilised.

A stage has also been reached where, in the absence of reforms, public sector entities have begun to collapse. Closure has been forestalled temporarily by the accumulation of large overdrafts with the banking system and by deferring payments of liabilities to suppliers, contractors and so on. Government has had to bail out many of the large public utilities which provide vital services such as power, water and transport by effectively writing off their debts through debt–equity swaps.

Physical indicators of the crisis of the public sector include the lack of improvement in coverage and the deterioration in service levels (frequent power outages, interruptions in drinking water supply and breakdowns in telecommunication services). In addition, the lack of adequate repairs and maintenance has led to visible deterioration of physical infrastructure.

A particularly worrying consequence of the growing public perception of waste, corruption and inequity in public expenditure is the resulting breakdown of taxpayer compliance. Given the absence of any visible link between tax payments and benefits received, citizens are inclined to withhold their due tax contributions and to defy tax laws through higher levels of tax evasion. This highlights the need for greater accountability of public expenditure, greater exercise of economy and in some cases earmarking of revenues in order to promote the development of a tax culture.

Altogether, a stage has been reached where, without radical reform of the public sector, the growth and development process in many South Asian economies will be retarded by the lack of social and physical infrastructure, which has begun to hinder private sector production and investment.

Challenges Confronting the Public Sector

The reform of public expenditures will have to take into account the many major challenges confronting developing country governments today, including those in South Asia. These challenges include the following:

Rise of the private sector. One of the more favourable developments is the emergence of a stronger and more mature indigenous private sector in most countries, with the capacity to perform most trading and manufacturing functions and even to develop and manage infrastructure. This trend has been facilitated by the failure of the public sector. It is therefore necessary to create more space for private sector participation through deregulation and privatisation.

Globalisation. The rapid, ongoing process of globalisation requires that trade and investment be increasingly liberalised and deregulated. In addition, greater emphasis must be placed on rapid human resource development and on cost–effective provision of non–tradeable services in order to preserve and enhance international competitiveness.

Emergence of the informal economy. The rapid spread of the informal or underground economy in most South Asian economies has led to increased erosion of the tax base, theft of utilities or non–payment of utility bills, resort to smuggling or the sale of arms and drugs, and so on. The informal economy is reaching a scale where it now poses a serious threat to the writ of the state. Governments will have to devote substantial efforts to law enforcement and regulation of various activities without fundamentally jeopardising the ground–level dynamism which characterises the informal economy.

Severe fiscal constraint. The existence of large unsustainable fiscal deficits, the inability to raise the tax–to–GDP ratio drastically in the short run and the decline in levels of concessional development assistance imply that governments need to focus on core functions and to shed peripheral activities.

Rapid technological change. The rapid process of technological change (including the advent of information technology) and the increasing complexity of macroeconomic policy making in more “open” economies will require the adoption of more modern management practices, induction of professional skills into civil service cadres and development of appropriate management information systems, especially to avert and manage crises.

Meeting these challenges will require a new vision of the public sector as "small but effective, decentralised, responsible, customer–oriented and professionally managed". This will imply a change in the emphasis of governance from direct provision to effective facilitation and regulation, concentrating only on the provision of public goods, services which confer significant positive externalities and the important task of poverty reduction.

Key Areas of Public Expenditure Reform

To realise this new vision of the public sector as compared to the traditional view of government as an all–pervasive entity, employer of last resort and shock absorber, reforms are required in at least eight major areas:

Rethinking the role of government. Implementing the new vision will require fundamental reconsideration of the role of government. Each function (and the entity discharging it) will have to be studied carefully from the following viewpoints: Is the public entity producing a public good or a purely private good? Is the entity facing competition from the private sector? Is it surviving only because of some special protection or preferential treatment? Is it so overextended that it can do no more than cover the cost of its own establishment? Has the mission of the entity disappeared? Is there a duplication of activities with other agencies? Does the entity encroach upon the functions of a lower level of government? If it is a public commercial venture, is the entity making losses?

Based on the above assessment, a decision will have to be taken as to whether the entity should be retained in its present form or closed, downsized, privatised or devolved to a lower level of government. Such an audit will have to be undertaken not only for government ministries and departments but also for statutory corporations, public enterprises, autonomous bodies and attached departments. This is clearly a mammoth task and may have to be undertaken in phases, starting with the more peripheral activities. The body charged with conducting this review will have to be seen as independent and impartial, and must be made immune from the inevitable lobbying pressures. Fortunately, in most South Asian countries, commissions or high–powered committees have already looked at the role of various entities. The problem is less one of identifying the nature of the restructuring programme than of implementation, which will require substantial political determination.

Improving transparency and accountability. This will require the development of proper budgetary classification systems; the institution of information disclosure requirements, especially for parastatals, corporations and security agencies; the establishment of proper oversight mechanisms with requisite powers and representation from the legislature, consumer bodies and civil society at large; mechanisms to ensure that spending occurs only for authorised purposes; and the establishment of a strong, independent, legal and institutional framework to hold officials accountable for corruption and inefficiency.

Effective pursuit of priorities among broad expenditures and programmes: This will require focusing on increases in non–wage operations and maintenance spending in key sectors; on rehabilitation of infrastructure and consolidation of existing investments through better utilisation of available capacity rather than expenditure on new investments to expand capacity; and on increasing public expenditure in high–priority areas like social development and poverty reduction. Somehow, through international diplomacy, bilateral dialogue and general public pressure, the costly and unsustainable arms race in South Asia will have to be stopped and military expenditure diverted to these high–priority needs.

Decentralising management of public sector activities: Efforts will have to be made to devolve central government functions to the state (or provincial) and local levels wherever appropriate, in order to allocate expenditures more efficiently, to ensure that spending more closely reflects the preferences of the people and to promote greater beneficiary and community involvement in the management of service delivery. This implies, of course, that emphasis will have to be given simultaneously to developing the institutional and financial capacity of sub–national governments and to regulating borrowing by such agencies, in order to ensure that they face a hard budget constraint and do not engage in profligate spending financed by accumulation of unsustainable levels of debt. It is of some significance that the government of Pakistan recently launched a major devolution plan for strengthening local governments.

Restructuring public sector institutions and service delivery: Wherever possible, the approach should be one of commercialising and corporatising public service entities. Greater autonomy will need to be granted to the management boards of such entities and representation on these boards broadened to allow for greater civil society and consumer representation. There will also have to be more emphasis on cost recovery to make these entities financially sustainable and introduce a degree of market–based accountability. Simultaneously, independent regulatory entities must be set up to prescribe minimum service standards and tariff–setting rules.

Reforming the civil service: The objective here is to develop a leaner, more effective civil service equipped with needed skills, facing an appropriate incentive structure and less vulnerable to political pressures. Remuneration structures will also need to be based more on market practices. These goals will require changes in eligibility criteria for initial entry, a greater role of public service commissions in the recruitment process, strengthening of public training facilities, the introduction of "filters" for movement to higher grades, improvements in the system of performance evaluation, an independent process for confirmation of top–level appointments and granting of tenure in such positions, development of more specialised cadres and so on. Experience suggests that civil service reform will be a slow and difficult process. Those who enjoy elite positions in the existing civil service will form strong coalitions to resist change. It will be necessary to identify entry points into the process of reforming the civil service, i.e. measures which are not excessively contentious in character but can make a significant contribution in the medium to long term to improving the quality of the service.

Strengthening monitoring and evaluation: Systems will have to be established for monitoring impact on key output and performance indicators based on better, more timely information flows and meaningful feedback into subsequent public expenditure decisions. Wherever possible, independent third–party monitoring should be encouraged. In social services, for example, such monitoring could be used to determine whether actual site selection for facilities adheres to certain pre–specified objective criteria, whether teachers, doctors, etc. are present on a full–time basis and so on. In Pakistan, district–level monitoring teams set up by the army have contributed to an improvement in the quality of services, but the long–run sustainability of this approach remains in doubt.

Integrating planning and budgeting in a medium–term framework: Annual budgets and programme allocations should be consistent with a medium–term planning framework and projections of fiscal resource availability. This will ensure that sectoral investment programmes are driven by sustainable levels of recurrent expenditure, instead of having expenditure levels determined by the investment programme. This is especially true in the context of basic social services like primary education and health, which are intensive in operational and maintenance costs that are largely financed from tax revenues. In Pakistan, the rapid construction of primary schools and rural health facilities in the first phase of the ambitious Social Action Programme, supported liberally by donors, has now run into serious problems of staffing and recurrent funds, especially for non–wage inputs. A balance will, of course, be required in the implementation of the medium–term planning framework: on the one hand, sufficient flexibility is needed to adapt to changing circumstances, while on the other there must be enough commitment and discipline in adherence to the targets and allocations to preserve the credibility of the process.

Critics of the role of the public sector have suggested even more extreme solutions than those enumerated above. These include legislation (along the lines of the Gramm–Rudman initiative in the United States) to preclude the possibility of deficit budgets or to limit the deficit to a maximum level as a percentage of GDP. The intention here is to force an automatic downward adjustment in public expenditure in the event of a fall in revenues. It has also been proposed that as a rule no new projects should be undertaken unless all ongoing projects have been completed, that a compulsory recruitment ban be imposed to prevent any increase in public sector employment, and so on.

While there may be some merit to these proposals, which reflect growing frustration with the quality of governance, it needs to be emphasised that the intention of public expenditure reform should not be to put governments in a straitjacket. The balanced budget amendment entails the risk that governments, in order to satisfy this constraint, may opt to make even deeper cuts in allocations to the social sectors or development. The inability to take on new project initiatives will reduce the flexibility of governments to respond to new situations and challenges. For example, the recent drought in parts of South Asia highlights the need to raise allocations quickly in order to achieve faster development and better exploitation of water resources. The institution of recruitment bans could frustrate the process of modernising government and

improving service delivery; in most governments today, for example, there is a clear need for more IT specialists and experts in other fields. The overriding objectives of public expenditure reform must be to promote the process of institutional change, which enables more rational budget making, more efficient utilisation of scarce public resources and improvements in governance that increase governments' responsiveness to the needs of the citizenry and reduce their vulnerability to the pressures of powerful special interest groups.

In conclusion, we should reiterate that while public expenditure reform remains one of the most difficult areas of reform, it may constitute the ultimate litmus test of improved governance and promise the greatest gains to the economy and society at large. It should therefore continue to receive top priority in any comprehensive structural reform agenda.

Risk–Informed Capital Flows
A Global VaR Approach*

José Braz

The Age of E–Everything

The closing years of the 20th century have seen an unprecedented increase in international flows, both of capital and of information. The reasons were twofold: economic liberalisation, namely the dismantling of barriers to international capital flows, and technological progress. The latter had two aspects relevant to our topic: progress in computational speed and capacity permitted the development of increasingly sophisticated and complex financial instruments, while the reduction in telecommunications costs permitted almost instantaneous global transmission of data and capital. As a result, capital markets became increasingly integrated and the volumes of capital flows increased out of all proportion to the growth in trade.

When the crisis hit it was not totally unexpected, as the underlying causes had been recognised for some time: unhedged foreign currency borrowing, excessive short–term external debt and growing bubbles in stock and property prices. What went far beyond the expected, however, was the magnitude of the crisis and the speed with which contagion spread across countries in the same region and to other regions of the globe.

In the words of a recent IMF report, this was a "new breed of economic crisis" (IMF, 2000). In the age of e–everything, the Asian crisis probably could claim to be the first e–crisis, a crisis in which the fundamental financial disequilibria were augmented through speculative position–taking at the speed of global electronic messaging, the first major crisis in which financial instruments (such as derivatives) and procedures (leveraging, hedging, programme trading) relied heavily on the power of electronics.

---

* This paper draws on work being carried out with Jorge Braga de Macedo for the international forum Eurofi2000 "Banking and Financial Europe after the Euro", as described in Braz and Macedo (2000).

This paper will argue in favour of solutions which are equally influenced by electronics. It will argue that the same technological progress that helped to make the crisis more intense, namely sophisticated financial instruments and electronic transmission of information and funds, can also help to reduce the probability and scale of future crisis. Newly developed instruments such as derivatives can serve to hedge positions and improve asset–liability management, and techniques already in common usage in commercial banking, namely the analysis of value–at–risk (VaR), can be extended to provide a synthetic measure of the vulnerability of central bank accounts. This information, appropriately standardised and provided on a regular basis, can help financial markets to take decisions on capital flows on the basis of better quality information and can help policy makers decide between policy choices which take into account their impact on the risk–adjusted balance sheet of the country.

The Asian Crisis: An Interpretation

The relevant economic literature has for some time recognised that a key to understanding the financial crisis of the later 1990s is the issue of vulnerability, namely the vulnerability of the central bank to an attack on its solvency, reducing the credibility of its commitment to defend a given exchange rate position (Dornbusch, 1998*a*; Blejer and Schumacher, 1999). As frequently happens in a crisis of confidence, decisions by economic agents are made on the basis of perceptions rather than firm information. Government authorities contribute to this by being ambiguous or secretive with the facts.

In the Asian crisis, the extent of deposit guarantees was left undefined in some cases and, as had happened in many other crises, some central banks were thought to be operating in futures markets and other off–balance sheet areas without being explicit. As a result, investors and creditors, both domestic and foreign, participate in a frenzied scramble to recover their investments, frequently generating situations of panic and overshooting of variables such as exchange and interest rates. All parties could be better off if their decisions were based on facts rather than perceptions and many analysts and institutions have called for greater transparency of relevant information.

With hindsight it is easy to analyse the fundamental causes of the Asian crisis: a combination of macroeconomic imbalance and weakness in financial and corporate systems and, principally, external imbalances reflecting strong private capital inflows, high domestic private investment rates and the appreciation of the US dollar, to which the currencies of many Asian countries were formally or informally pegged (IMF, 2000).

Unlike previous crises, which tended to come at the end of gradual current account deterioration, the Asian crisis was a capital markets crisis (Dornbusch, 1998*a*). The central issue in the crisis was that of unsound finance, which translated into national balance sheet vulnerability. Balance sheet crises have far more leverage — both in collapsing a country's financial structure and economy and in spreading contamination to other countries. The core problem is that of a mismatch of maturities and of a mismatch of currency denominations, issues which have long been central to asset–liability

management in commercial financial institutions. The obvious conclusion (in the words of Dornbusch, 1998*b*) is that "the right answer for crisis avoidance is controlling risk".

The Solution: Risk Management

With the continuous decline in computational cost (according to Moore's law, the computational capacity of a microchip doubles every eighteen months, reducing by half the cost of electronic calculations), there has been a rapid development of computer–intensive risk management technologies, namely in the areas of market risk and credit risk (see, for example CDFT's website/ www.cdgroup.fi). It is already common practice for commercial banks to measure the exposure of their portfolios to changing market conditions, such as movements in interest rates, yield curves, exchange rates and the prices of stocks, bonds and commodities, as well as the derivative instruments based on these prices. The most advanced techniques are those that use full valuation historical or stochastic simulation to calculate the value–at–risk (VaR).

International standards for bank supervision and regulation have recognised and, in some cases, provided incentives for banks to develop internal models for calculating risk–adjusted capital requirements. Parameters for VaR estimation by internal risk measurement models of commercial banks were established by the BIS in 1996, with respect to market risk (see BIS, 1996). More recently, models evolved to include credit risk, such as counterparty risk in swap contracts, and further development is under way to allow all bank operations to be included in a bank–wide VaR measure.

Unlike traditional accounting measures of balance sheet items which look at historical costs and accumulated depreciation, VaR analysis is based on market values as they evolve over time. Also, it looks at all operations, including contingent liabilities and off–balance–sheet items. It is a measure of the vulnerability of the balance sheet to movements in the prices of its components. Since financial crises are precipitated by increased vulnerability, it seems natural to propose the use of the same technology to analyse the balance sheet of the national financial authority or central bank. This is particularly so in view of the increasing use that central banks make of derivatives and other contingent liabilities. Blejer and Schumacher (2000) list five reasons for central banks to engage in derivative operations:

i) To provide additionally to incomplete or illiquid markets;

ii) To defend a fixed exchange rate regime or an exchange rate band;

iii) To alleviate the conflict between the defence of an exchange rate regime and the stability of the financial system;

iv) As an automatic stabiliser of a foreign exchange market;

v) As an alternative instrument for monetary management under specific circumstances.

Examples of such interventions include the Bank of Spain operations in the options market during the 1992/93 ERM crisis, Mexico's stabilisation scheme of August 1996, the Bank of Thailand sale of forward contracts in 1997 and the recent use of foreign exchange swaps by the Reserve Bank of Australia to increase liquidity to deal with the Y2K problem. More traditional and widespread examples of central bank contingent liabilities include the provision of credit guarantees and of deposit insurance (in cases where there is no autonomous deposit insurance fund).

Techniques for the pricing of derivatives have been developed over several years and are in common usage by commercial banks, while traditional operations such as deposit insurance can be seen as the equivalent of a put–option held by the banks and written by the central bank (see Blejer and Schumacher 2000 for the corresponding formula). All standard assets in the central bank portfolio (foreign currency reserves, bonds, gold) can be included in the VaR measure with technology currently in extensive use by commercial banks. Additionally, policy risk can be added in the case of central banks, financing of budget deficits, for example, will have a negative net effect inasmuch as liabilities (base money) increase and the corresponding asset (loan to the Treasury, assumed not to be repaid) has an economic value of zero.

A Proposal : Transparent, Policy–Focused VaR–Analysis

In the post–mortem of the Asian crisis a wide variety of proposals was made, ranging from various models of new international financial architecture, regional IMFs, different forms of capital controls, etc. One of the few areas of agreement was that more transparency was essential. One result has been the creation of the Special Data Dissemination Standard (SDDS), a new benchmark for IMF members in providing accurate and timely financial and economic information to markets and the public at large. At the same time, emphasis has been placed on the need for better information and transparency (World Bank, 2000) and for a systematically greater focus by the international financial institutions on national financial vulnerabilities, including excessive leverage or unsustainable exchange rate regimes (US Treasury, 2000).

In line with the above analysis of factors which exacerbated the Asian crisis, with the unanimous desire for greater transparency, and with current practice of international commercial banks in risk management, a proposal can be made for central banks to work towards producing and publishing regular VaR reports of national financial accounts (consolidated central bank accounts plus relevant Treasury accounts). The advantages of this proposal are many:

— The VaR measure is a synthetic yet comprehensive indicator, incorporating all the assets and liabilities of the national financial system, including contingent liabilities, thus permitting rapid comparison between different countries and the analysis of the evolution over time for any single country.

- It incorporates all known information on international currency, bond, equity and commodity markets, updated continuously as that information evolves.
- It permits the inclusion of items usually excluded from the central bank balance sheet, such as derivative operations and contingent liabilities like deposit insurance or credit guarantees.
- It permits analysis of policy options prior to decision–making, by the use of "what–if" scenarios to study the impact on the VaR number of implementing alternative policies (for example, informing cabinet ministers of the impact on the national VaR measure of proposals to increase spending and the budget deficit).
- It permits both regular tracking of the situation under "business–as–usual" conditions as well as stress–testing to view the maximum likely loss of value under extreme scenarios.
- It permits the incorporation of portfolio effects (in which the total VaR is less than the sum of the components – see Annex 1) as well as the analysis of components, to examine where the greatest risks originate.
- It reduces the temptation of central bank officials to try to "beat the market", by making all their operations more transparent, increasing the accountability of officials and promoting good governance in institutions that usually prefer a very broad definition of "independence".
- From a global perspective, the use of VaR analysis promotes capital efficiency by allowing international investors to utilise available funds in such a way as to maximise returns for a given level of risk, measured uniformly across different markets.

Conclusion

The best way to avoid situations like the Asian crisis is to make investment and capital flow decisions better informed as to the current risk levels implicit in different countries and regions. This could already be done with existing technology extended and adapted to include all the assets and liabilities of a national balance sheet for each country. The proposed technology is that of value–at–risk, for which some guidelines already exist as developed by the Bank for International Settlements (BIS). Countries should be encouraged to provide VaR reports in a common format, under the supervision of an international agency, such as the BIS or the IMF (for example as part of the SDDS).

To mitigate the need for each central bank to have large reserves or expensive hedging instruments to help in asset liability of management, a special facility with the nature of "lender–of–last resort" should be established, either at a multilateral level (IMF or BIS) or on a regional or even a bilateral basis. The credit limits available under such arrangements would be one of the items included in the VaR report.

Bibliography

BIS (1996), *Amendments to the Capital Accord to Incorporate Market Risks,* Bank of International Settlements, Basle.

BLEJER, M. AND L. SCHUMACHER (1999), "Central Bank Vulnerability and the Credibility of its Commitments: A Value–at–Risk Approach", *Journal of Risk,* Vol. 2, No. 1, November.

BLEJER, M. AND L. SCHUMACHER (2000), "Central Banks Use of Derivatives and Other Contingent Liabilities: Analytical Issues and Policy Implications", IMF Working Paper, WP/00/66, March.

BRAZ, J. AND J. MACEDO (BRAGA DE) (2000) "Risk Management and Financial Globalisation" (in preparation for Eurofi 2000 "Banking and Financial Europe after the Euro", September).

CDFT (2000), Var+3.5.1 User Guide. CD Financial Technology Ltd., Helsinki.

DORNBUSCH, R. (1998*a*), "Asian Crisis Themes", At: http://web.mit.edu/rudi/www.

DORNBUSCH, R. (1998*b*), "After Asia: New Directions for the International Financial System". At: http://web.mit.edu/rudi/www.

IMF (2000), "Recovering from the Asian Crisis and the Role of the IMF". Issues Briefs for 2000, IMF, June.

US TREASURY (2000), "Response to the Report of the International Financial Institution Advisory Commission. Department of the Treasury, Washington, D.C., June 8.

WORLD BANK (2000), *East Asia – Recovery and Beyond,* IBRD, May.

Annex 1

VaR Report

Portfolio Name	VaR 1% p.a.	VaR 1%	VaR 5%	Volatility	MTM	Limit	Unit	SimType
Ex: Total Exposure by Asset Class	–58.458	–3.060	–2.149	1.327	463.040	0.000	M USD	MC
Bond Portfolio	–61.054	–3.196	–2.247	1.387	407.435	0.000	M USD	MC
Equity Portfolio	–24.655	–1.291	–0.931	0.582	42.639	0.000	M USD	MC
FX Portfolio	–4.682	–0.245	–0.184	0.130	12.966	0.000	M USD	MC

Portfolio Name	VaR 1% p.a.	VaR 1%	VaR 5%	Volatility	MTM	Limit	Unit	SimType
Ex: Total Exposure by Currency	58.458	–3.060	–2.149	1.327	463.040	0.000	M USD	MC
EUR Total	–40.748	–2.133	–1.512	0.912	172.915	0.000	M USD	MC
GBP Total	–28.880	–1.512	–1.074	0.669	184.839	0.000	M USD	MC
JPY Total	–5.981	–0.313	–0.227	0.138	17.835	0.000	M USD	MC
USD Total	–23.481	–1.229	–0.901	0.563	87.452	0.000	M USD	MC

Foreign Direct Investment in Korea: The Role of the Ombudsman

Kim Wan–Soon

Introduction

Just two years after one of the darkest moments in Korea's postwar history — the Asian financial crisis — the nation greeted the first millennium sunrise with relief and critical introspection, but also high hopes and great determination. Millennium resolutions contain lofty expectations — knowledge–based growth, social equity, transparency and globalisation. Diligent pursuit of them will lead to balanced and stable growth for Korea.

Last year the country achieved a key goal set by the government by attracting, in the two years since the crisis, $15.5 billion in foreign direct investment on an approval basis, surpassing a target of $15 billion. The government has come to regard foreign capital inflows, particularly FDI, as a catalyst for economic restructuring, even though Korea has been a highly efficient mobiliser of domestic savings — only slightly short of investment needs — and savings rates actually exceeded investment rates by nearly 60 percentage points in 1998 and 25 percentage points in 1999.

The changing investment climate is the launching pad for Korea's second takeoff. The Office of the Investment Ombudsman (OIO) is an example of the government's new effort to ensure Korea keeps abreast of international standards and economic achievement.

The Ombudsman

The OIO aims to tackle and resolve foreign companies' problems. The idea of the ombudsman in Korea can be traced back as far as the 15th century and King Tejong. In 1402, the king placed a "shinmungo" (drum of justice) outside his palace and anyone who wanted to report an injustice could do so by beating the drum. One of

the king's secretaries would then come out and hear the citizen's complaint. Today the word ombudsman is used in many other fields, to describe people who monitor sectors such as the media and politics.

Other countries too have an ombudsman to solve problems. Japan, for example, set up the Office of Trade and Investment Ombudsman (OTO) in 1982 to receive complaints from foreign and local firms about government regulations. It involves an extensive network of committees and government agencies working to improve Japan's export and investment climate.

Foreign Direct Investment

The Office of the Investment Ombudsman shows Korea is taking a serious new look at the importance of foreign direct investment after the country nearly went under during the financial crisis of 1997.

It is sad — and evidence of short–sightedness — that it took the financial crisis to make Korea, and much of Asia, realise the benefits of FDI and move away from relying only on plentiful local savings to finance investment. During the IMF bailout, the foreign currency crisis had been gradually easing, with imposition of the high interest rates, belt–tightening policies and restructuring programmes required by the IMF. However, other factors, such as negative economic growth and a tight domestic capital market, led to corporate bankruptcies, massive lay–offs and a drop in consumption, investment and domestic demand. Foreign direct investment has offset some of these harmful effects in important ways — the so–called "killing five birds with one stone" theory.

FDI is one of the driving forces behind globalisation, defined as the acquisition of 10 per cent or more of a foreign company's assets[1]. Investment by multinationals through their foreign subsidiaries is one of the clearest examples of it. We know from Dunning's eclectic approach that firms will engage in FDI if they can obtain ownership advantage, location advantage and the advantages of internalisation for technology transfer or vertical integration[2]. This means the multinational firm always has some unique assets that give it an edge over other firms, allowing it to generate future income and profits.

Research on FDI shows that foreign investors are strongly influenced by the host country's structures, such as market size, quality of infrastructure, level of industrialisation and amount of existing FDI. Multinational firms also make FDI so as to keep abreast of new technology and new trends in production and marketing. As global competition increases, technological developments demand a high level of direct investment to retain markets.

FDI Trends

According to UNCTAD's *World Investment Report, 1999*, world FDI inflows and outflows in 1998 reached $644 billion and $649 billion respectively. Mergers and acquisitions valued at more than $202 billion were driving FDI growth — increasingly into developing economies. The trio of the EU, Japan and the United States still dominated the scene, accounting for about 93 per cent of FDI flows into and 91 per cent of FDI flows out of developed countries. Mergers and acquisitions increase the share of production by transnational corporations, leading to "deep integration", as opposed to shallow integration of markets brought about simply by trade. Inward FDI flows have been the main feature of private capital flows to developing countries.

Developing countries' share of world FDI inflows had increased to 37 per cent by 1997, with Asia receiving the most. FDI flows out of these countries continued to increase until 1997, reflecting the growing ownership advantages of such firms and boosting their share of world exports despite the fact that the bulk of FDI originates from, and is located in, developed countries.

As Korea began its modern economic growth in the 1960s, it encouraged foreign capital inflow to make up for lack of domestic savings and foreign reserves. However, the government preferred foreign borrowing, which brought foreign resources under its control, to FDI. The general fear of foreign domination of Korean industry, stemming from Korea's history of Japanese colonisation, was too widespread for the government to accept foreign management. Suspicion still lingers that FDI is really a means to dominate Korean industry. Another negative factor was the relative cost of capital. In times of inflation and exorbitantly high domestic interest rates, cheaper borrowing from accessible offshore markets was much more attractive to Korean businessmen than foreign equity capital.

It was only after the 1997 currency crisis and as the country was on the verge of default in late December 1997 that Korea learned that short–term foreign borrowing could be extremely risky and realised how important FDI was as a bulwark against financial panic. Through a series of IMF–mandated reforms started in 1998, Korea's FDI regime will have to become fully liberalised. In fact, the government plans a far bigger opening to the capital market than it had agreed with the IMF.

As shown in Table 1, the total FDI flow into Korea on an approval basis was $15.5 billion in 1999, a 76 per cent increase on the previous year, but $10.4 billion on an arrival basis, a 98.7 per cent increase.

By April 1998, FDI was showing negative growth because from the beginning of that year most investors were reluctant to make investments owing to reduced buying power in the market and increasingly risky investment returns. But from May to December, the growth rate shot up to 135 per cent thanks to aggressive investment incentives by the government, along with strategic investment by multinational firms.

Table 1. **FDI trends in Korea, 1990-1999**
($ million)

Year	Approved	Arrived
1990	803	895
1991	1 396	1 177
1992	895	803
1993	1 044	728
1994	1 317	991
1995	1 947	1 358
1996	3 203	2 309
1997	6 971	3 088
1998	8 852	5 215
1999	15 541	10 360

Source: Ministry of Finance and Economy, *Financial Statistics Bulletin*, 1st Quarter, 2000.

By the end of 1999, the country had surpassed its goal of $15 billion and attracted 2 086 foreign investors. FDI in 1999 from the EU into Korea amounted to $6.26 billion (40.3 per cent of total FDI), from Japan $1.75 billion (11.3 per cent); and from the United States $3.75 billion (24.1 per cent). Even more remarkable, total investment in the last two years has been greater than all FDI inflows between 1990 and 1997.

So FDI grew despite shrinking domestic markets and, relative to GDP, cumulative FDI surged to 7.7 per cent in 1999 (up from 3.4 per cent in 1997), although it was still far below Singapore (81.6 per cent), Malaysia (38.1 per cent), China (23.5 per cent) and the United Kingdom (21.5 per cent). A sectoral breakdown shows FDI in Korean manufacturing was 45.9 per cent of the total in 1999 and that the emphasis has shifted towards the services sector (53.9 per cent). In 1999, Korea ranked 14th in the world and 2nd in Asia for FDI inflows, up from 21st and 4th place respectively in 1998.

Benefits of FDI

This unprecedented growth of foreign direct investment is helping to speed up worldwide economic integration and encouraging emergence of a complex international production system. UNCTAD reports that countries which do not attract FDI risk being marginalised and says it is crucial for developing countries to attract it by creating a hospitable environment while maximizing benefits for themselves.

This is why President Kim Dae Jung coined the phrase: "killing five birds with one stone"[3]:

i) Foreign direct investment is a safe way to secure foreign capital without having to worry about debt;

ii) FDI creates employment;

iii) FDI enhances productivity and economic growth by introducing competitiveness and new industries;

iv) FDI introduces new technology and management know–how and promotes transparency in business management; and

v) FDI can also contribute to increases in exports.

Foreign direct investment brings in long–term foreign capital without requiring principal or interest payments and is thus a stable source of foreign exchange, unlike portfolio investments, which are volatile and risky. Short–term borrowing also creates the burden of high interest rates. Latin American countries, recognizing that short–term borrowing can make them vulnerable to financial instability, are trying to attract FDI to stabilise their capital markets.

FDI creates jobs, triggering increased consumption, greater production and a continuous cycle for boosting national wealth as new companies are set up and the competitiveness of existing ones is improved. The Korea Institute for Industrial Economics and Trade (KIET) says 1 890 new jobs are created for every $100 million worth of investment[4]. During the financial crisis, foreign companies filled many of the gaps left behind by bankrupt Korean firms.

The Korea Development Institute — the government's economic policy think–tank — says Korean firms and sectors with high FDI have higher labour productivity, pay better wages, and spend more on research and development[5]. It found that foreign–invested firms in 1998 added 1.4 times more value per capita than purely domestic firms did.

New management techniques and training of workers by foreign companies benefit other Korean firms in the industry[6]. Motorola is a good example of how, through partnerships with SMEs and with higher foreign ownership ratios, a foreign company can help Korea advance its technology and improve its share of the global market. Nearly a third of the world's mobile phones are now produced in Korea. Other companies such as Volvo and BASF have opened research centres.

FDI produces healthy competition with foreign firms and encourages transparency in the Korean economy. Korean companies win credibility with overseas investors by improving their industrial structures, introducing new management and marketing methods and obtaining state–of–the–art technology. When foreigners are appointed executives in a company, the ability to monitor and ensure transparency of business transactions increases.

FDI helps economic restructuring because it has the capital liquidity to buy out businesses or the assets of poorly–performing Korean companies. The Bank of Korea says the debt–to–equity ratio in foreign–invested firms in 1998 was about 110 per cent, compared to 231 per cent in purely domestic firms[7]. The foreign–invested firms also showed good cash flows. Foreign participation lowers debt–to–equity ratios and leads to productivity spillovers.

Foreign investors also open new export markets because of their existing market links. Such exports not only reach more destinations, but also contain Korean–made materials and reduce the need for imports.

Government Savings

Has Korea relied solely on domestic savings to finance its development and discouraged foreign savings? Table 2 shows the rate of gross domestic savings rose sharply from 18 per cent in the early 1970s to 39 per cent in 1988. Since then, it has been falling and is now around 33 per cent. Dependence on foreign savings has fluctuated greatly. It accounted for less than 5 per cent of total savings in 1995, 13 per cent in 1996 and less than 3 per cent in 1997. The domestic savings rate also exceeded the average investment rate in 1998 and 1999 because of declining investment since 1997. However, foreign capital in the shape of foreign direct investment, despite being a very small amount, has been playing an important role in Korea's restructuring since the 1997 financial crisis.

The downward trend is also seen in government savings, which rose steadily from 5.1 per cent of Gross National Disposable Income (GNDI) in 1980 to a peak of 10.6 per cent in 1997. As the financial crisis began in late 1997, government savings started to deteriorate, accounting for large budget deficits since then. In the wake of the crisis, which shattered the Korean economy, the government faced a revenue shortfall just as it was required to spend massively on rebuilding the financial sector and providing a social safety net, including unemployment benefits.

Table 2. **Korea's Savings Ratio**

(Unit: per cent of GNDI)

Year	Gross Domestic Savings Ratio	Private Savings Ratio	Government Savings Ratio
1970	18.1	12.1	6.0
1975	18.1	15.6	2.5
1980	23.2	18.1	5.1
1985	29.8	23.7	6.1
1988	39.3	31.5	7.8
1990	37.5	28.9	8.6
1995	35.5	25.8	9.7
1996	33.8	23.5	10.2
1997	33.4	22.8	10.6
1998	34.0	24.4	9.6
1999[p]	33.7	24.2	9.5

p denotes preliminary figures.

Source: Bank of Korea, *Monthly Bulletin,* April 2000.

The IMF and OECD define government debt only as liabilities that are direct obligations. The general government debt (central and local) increased from 15 per cent in 1997 to 22 per cent in 1999 — much lower than the OECD country average of about 70 per cent. But when implicit debts such as government guarantees are taken into account, the public debt was more than 39 per cent of GDP in 1999. So the government could not just rely on domestic sources and had to turn to foreign ones. In 1999, nearly 21 per cent of its debt was financed by international organisations such as the IMF, World Bank, and ADB[8].

Costs of FDI

Opposition to FDI and market liberalisation arises from the associated costs. While market liberalisation produces aggregate gains, critics say such benefits are not distributed evenly over time or to different groups of workers or firms, regions and countries. Trade and investment liberalisation can entail real economic and social dislocation as well as changing technologies and reforming domestic regulatory practices.

The events in Seattle late last year illustrate the challenges of globalisation, not so much in tackling genetically–modified food, child labour or environmental conservation, but in ensuring that citizens are informed about the benefits of globalisation and that they receive these benefits. The failed talks in Seattle weakened the World Trade Organisation's authority, perhaps leaving it up to nations and regional bodies to ensure the rewards of globalisation are maximised. The suspension of the New Round of multilateral negotiations will give a new impetus to regional and bilateral efforts, which may endanger the multilateral trading system that has served global trade and investment liberalisation well.

The Seattle protesters denounced the effects of market liberalisation, charging that countries, firms and workers are being hurt by their competitors' improvements in efficiency, and that global competition is eroding the ability of governments to exercise national "regulatory" sovereignty. The main opponents of FDI have pointed to the outflow of national wealth because domestic firms do not receive fair value as a result of the government's FDI drive, and to loss of sovereignty and discrimination against local producers.

In the United States, the best–selling book *Buying into America*, about the wave of foreign investment in that country, raised the fear of "giving away America's future"[9]. In Korea, people think the government is "selling out" to foreign firms and "practically giving away" hard–earned Korean assets, and that FDI accelerates the foreign dependence of local industries by encouraging foreign dominance and monopoly.

This is the exaggerated view of a number of protectionists. The acquisition of Daesang Corporation's lysine business — an animal feed additive — by the German chemical company BASF was hardly cheap. It was the biggest foreign takeover of a Korean firm under the IMF's bailout programme and cost BASF over $600 million. Non–viable firms are forced, through mergers and acquisitions, to streamline down to their core business and reduce overcapacity. This is a powerful market mechanism that penalises inefficient management.

Those who say the final sale price of Korea First Bank to the US investment firm Newbridge–GE Capital was practically a "give–away" fail to see the enormous social cost and massive fiscal burden on the economy when a sale is delayed. They also fail to see how selling the debt–ridden, non–viable bank will help improve foreign investor confidence in Korea, benefiting Korean banks in the form of cheap loans from abroad. UNCTAD's *World Investment Report,1999*, says the ratio of repatriated earnings to FDI flows into Korea, as an indicator of outflow of national wealth, averaged 15.9 per

cent between 1991 and 1998, which is very low compared to the average 37.5 per cent for other countries and the 33.7 per cent for Asian–Pacific countries. The “selling–off of Korea” is a far–fetched story at best.

The Korean government has been working hard to disperse these fears. The priority is to change people’s attitude to foreign investment. No empirical evidence about the benefits of FDI will override political interests, however. Many interest groups will lose out to foreign competition in the short run, strongly oppose certain policies and the government cannot ignore their demands for protection. But the general public — the main beneficiaries of an open economy — is divided over the benefits of FDI.

The prejudice against foreign companies and associated fears of imperialism are the main obstacle to maximising economic gains and stability through FDI. People fear that raising the limits on foreign equity ownership would invite hostile takeovers of Korean companies. Many do not see the benefits this would bring, such as the increase and transfer of aggregate capital and improved infrastructure. There is little evidence elsewhere that FDI has harmed domestic capital formation to the point that foreign firms crowd out domestic producers.

Despite the small amount of FDI in Korea relative to the size of its economy, it was foreign firms, such as Motorola, that brought in key technology and laid the foundations of industries such as electronics and pharmaceuticals. Subsidiaries of foreign semi–conductor companies helped local firms become major players in the world market by turning out skilled workers and managers as well as providing technical guidance to sub–contractors. Multinational pharmaceutical firms also helped the Korean pharmaceutical industry develop new drugs by boosting local research capabilities.

FDI creates the conditions for strategic alliances and closer co–operation with other international corporations, paving the way for mutually beneficial collaboration and advancement in the global market. The recent takeover of Samsung Heavy Industries by Volvo is an example of this and evidence of the successful transfer of Western style management to Korea, a crucial change for local industry. Halla Heavy Industries, which did not share this pioneering vision, ended up bankrupt. Aggressive FDI policy and further successful greenfield investments, mergers and acquisitions will gradually reverse Korea’s negative view of globalisation and FDI.

Korean Investment Policy and Initiatives

The government responded to the financial crisis by overhauling its FDI policies. Its failure to attract a $3 billion investment by the US firm Dow Corning showed the clear need to switch from a regulation–oriented regime to a sharply promotion–oriented one. A major obstacle to FDI in Korea had been an intricate web of laws and regulations, along with vague administrative guidance and bureaucratic *fiat*, so one of the priorities in achieving our millennium goals and resolutions was to improve the investment

climate for foreign firms. This will mean educating "working–level" government officials, steering restructuring efforts towards eliminating red tape, rather than reducing staff, conforming to international standards and giving foreigners more information.

In 1998 the new government made fundamental changes in FDI policy. Attracting FDI has been made a top priority so as to plug the acute foreign exchange gap caused by a net outflow of capital, combat attacks on the currency and rebuild the country's competitive position in world markets. The intervention of the IMF also provided an unusual occasion for speeding up Korea's investment liberalisation.

The government aims to attract $16 billion worth of foreign investment in 2000[10]. Its four–point plan involves:

i) Using foreign investment to develop the industrial infrastructure;

ii) Aggressively improving the investment climate to boost the economy;

iii) Supporting local autonomy in attracting foreign investors and providing services to them;

iv) Aggressive public relations campaigns to change the public attitude to foreign investment.

The government has fully opened almost all sectors of the domestic market to foreign investment. Only 21 out of 1 195 sectors remain closed, seven of which are only partially closed. This means more than 98 per cent of industries have been liberalised. The barriers concerning the remaining 2 per cent are for reasons of national defence, cultural property or the livelihood of small farmers.

The accelerated capital market liberalisation demanded by the IMF also eliminated in May 1998 the ceiling on aggregate foreign ownership of listed Korean shares and money market instruments. The government said it would fully liberalise foreign exchange transactions by the end of 2000, which will improve Korea's international credibility and ability to attract FDI.

The Foreigners' Land Acquisition Act was amended on 26 June 1998 to remove restrictions on foreign ownership of land, property and dwellings and is a further boost to foreign investment. As a result, land acquisition by foreigners doubled in value and tripled in actual area between September 1998 and the end of June 1999. The National Assembly also passed two important bills favouring FDI. The first, on 15 May 1998, opened the way for both friendly and hostile mergers and acquisitions of Korean companies by foreign investors. The second bill legalised layoffs, allowing companies to dismiss their workforce and creating a more flexible labour market. Korea also now offers tax incentives to businesses setting up shop in a Free Export Zone or introducing advanced technology.

The historic law, however, was the Foreign Investment Promotion Act, passed on 2 September 1998 and implemented on 17 November the same year. It aims to make the foreign investment climate more attractive by offering tax incentives, lower

rents on factory sites, simplified procedures, comprehensive support services and job training. With high–tech investors in mind, income and/or corporate tax exemption has been extended from eight to ten years. Local governments are now free to offer their own tax reductions or exemptions from between eight and 15 years and have been given more say in creating and running Foreign Investment Zones (FIZs) to help attract FDI. Administrative procedures that greatly frustrated foreign investors have been abolished or drastically simplified and paperwork reduced.

The new law set up two bodies to support foreign investment within the government's Korea Trade–Investment Promotion Agency, which encourages exports and investment — the Korea Investment Service Center (KISC) and the Office of the Investment Ombudsman (OIO).

The KISC was established in April 1998 to lure investment by offering support, from site visits to investment authorisation and approval. It offers comprehensive one–stop service for entry into the Korean market and its experts on visas, property acquisition, construction codes etc. can answer questions and guide investors through the investment process. The centre also helps with mergers and acquisitions, joint ventures, legal, accounting and tax matters, accommodation, schooling, health care, feasibility studies, partner search and market research.

The OIO was set up to tackle foreign investors' problems in running their operations in Korea, either concerning investment or settlement. The KISC and the OIO are both expected to improve the foreign investment climate by trying to reduce the cost of compliance with bureaucratic regulations.

The OIO, launched on 26 October 1999, is staffed by 30 "home doctors" who are experts in various investment areas. Any of the 3 269 firms with at least a 10 per cent foreign investment ratio in 1999 can ask for one of these "doctors" to help it wrestle with the bureaucracy. The OIO's one–to–one policy means the "doctors" discuss problems individually.

Foreign investors usually point to trade union attitudes to foreign companies and Korea's record of transparency in accounting as the most negative aspects of life in Korea. Of 200 cases submitted to the OIO by the end of 1999 — 132 of which were resolved — taxation was the most common problem (26), followed by labour matters (23), the financial sector (21), investment procedures (18), visas (14), customs clearance (13) and construction (12).

The Ombudsman can directly investigate complaints by foreign–invested companies and ask for help from relevant administrative bodies, which must come up with a solution within seven days. If this requires a big change in laws or regulations, the issue might then be presented to the cabinet–level Foreign Investment Committee. The 30 "home doctors", who come from the private sector and specialised government agencies, are experienced in international investment issues and committed to ensuring Korea can offer the very best investment climate.

So far, the results have been very good. In December 1999, an OIO survey of the perception of Korea's investment climate among 178 firms — including major multinational companies in 20 countries such as the United States, Britain and Japan — showed that 74 per cent thought Korea was an "attractive investment target" and 53 per cent said they would invest there within 2–3 years.

There is still much room for improvement however. With the positive reaction of the international community, the OIO plans to expand its services to include a database companies can access to get data on investment issues, new laws and regulations and helpful insight on policy directions. A "Cyber Ombudsman" will enable foreign investors to file a complaint online and get help via e–mail. Other goals include boosting local government support for investors locating in the provinces and publishing a business guide with information about investment and settlement matters.

The OIO can be made more effective if it has more powers. Its aim is to improve the world's perception of Korea by attracting foreign direct investment and providing follow–up services to ensure their investment decision is as rewarding as possible.

Conclusion

FDI has played a negligible role in Korea's economic development. The "Buying of Korea" is an exaggeration at best. Even in 1999, its share of total domestic fixed capital formation was far less than in many other Southeast Asian countries. According to UNCTAD's *World Investment Report, 1999*, Korea has the lowest transnationality index among developing countries, reflecting minimal foreign activity in the Korean economy as measured by share of foreign assets, sales and employment.

But though very small, FDI has had a significant impact on Korea's economic development by turning out skilled workers and managers and providing technical guidance for sub–contractors, thus boosting foreign exchange reserves and improving productivity, financial structure and management transparency.

FDI will remain a key factor in Korea's progress towards becoming an advanced country, but many challenges lie ahead in the effort to attract foreign investment.

China will soon enter the WTO and other countries have bounced back from the crippling financial crisis, so competition for FDI is stiff. China, Chinese Taipei (Taipei, China), Malaysia, Singapore and Thailand are keen to attract FDI and Korea will have to maximise the advantages it has over other parts of Asia and inventively use its rich pool of resources to confront an increasingly borderless world and globalised economy. By combining the benefits of its educated workforce, technology base and strategic location in Asia, Korea will try to create a new knowledge–based society for the new millennium.

But this will require new ways of thinking and behaving. The US business management guru Peter Drucker has said the first step in organisational innovation is to *abandon yesterday*[11]. Competitiveness will be determined by the ability to create and process new knowledge rather than producing quantities of physical capital and labour. Knowledge will be the most powerful source of sustainable growth.

Amazing changes are taking place in world trade and business with the explosion of the Internet. The information highway has speeded up globalisation and brought the world closer together. The New York Stock Exchange has already set many new records and we can expect the rest of the world to follow as their economies reach new heights. Those who insist on clinging to the old ways will see the gap between them and the advancing world widen. Foreign investment will be a key factor in this race.

Korea is determined to stay ahead and will continue to face the immediate challenges — such as competition from emerging economies (notably China), globalisation and laying the foundations of an innovation–based society — by drawing on the creative roots of its people and by its ability to provide foreign investors with quality choices and service.

Notes

1. This definition appears in the International Monetary Fund's (IMF) *Balance of Payments Manual*.
2. John Dunning, "Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism", *Journal of International Business Studies*, Vol. 26 (3), 1995, pp. 461–493.
3. MOCIE, *FDI, Road to Enhancing Nation's Competitiveness* (in Korean), October 1999.
4. Y.J. Chang, *Economic Effects of FDI in Korea and Suggestions for an Agenda for the Future* (in Korean), Internal Seminar Paper, December 1998, pp. 18–23.
5. Seungjin Kim, "Host Country Effects of FDI: The Case of Korea", KIEP (Korean Institute for International Economic Policy) Seminar on *The Entry of Foreign MNCs and the Globalisation of the Korean Economy,* KIEP, November 1999, p. 18.
6. N. Choi, *Evaluating the Benefits of Market Opening for the Korean Economy* (in Korean), November 1999, pp. 139–145.
7. Quoted from Table 17 in D.K. Rhee, "The Entry of Foreign Multinationals and its Impact on Korea's Market", in KIEP Seminar on *The Entry of Foreign MNCs and the Globalisation of the Korean Economy,* KIEP, November 1999, p. 50 and Bank of Korea, *Press Release,* #6–7, July 16, 2000.
8. The government had a fiscal surplus from 1993 to 1996 that turned into a deficit after the financial crisis. In 1998, the consolidated central government budget deficit was 4.2 per cent of GDP. With the rapid economic recovery, this fell to 2.7 per cent in 1999, a great improvement on the projected 5.1 per cent. The government wants to reduce this to achieve a fiscal balance by the year 2003.
9. Martin and Susan Tolchin (1988), *Buying into America: How Foreign Money is Changing the Face of Our Nation,* Times Books, New York, p. 274.
10. MOCIE, *Report to the Foreign Investment Executive Committee,* February 29, 2000.
11. Peter Drucker (1999), *Managing for the Future,* Penguin, New York.

Lessons from the Asian Crisis

*Philippe de Fontaine Vive**

This is the last speech of the day. It is also the last time I will be speaking at this forum which I have had the honour of addressing on several occasions.

Today I simply want to discuss some of main considerations relating to France's official development assistance in Asia, whose financial co–ordination has been my responsibility in recent years.

I will not make any general comments on globalisation. Instead, I would like to focus my remarks on the lessons drawn from development policies and on the strategy we have adopted in France. But I do not deny that we need to improve our system of aid in Asia, whose shortcomings are undoubtedly due to the fact that Asia is far from France.

The first lesson we have drawn is that the struggle against poverty requires international rules and transparency. How can substantial means be mobilised without a framework for insuring the eventual success of reforms? After the financial crisis, the rigour and force of fundamental economic laws are felt again. Let us try to put the crisis behind us for a long time without going back to one.

The second lesson that we have learned is that it is necessary to save to invest and avoid debt. For three or four years the international community has recognised that an unfortunate lack of savings caused the poorest countries to become over–indebted and it has launched a major initiative for the highly indebted poor countries (HIPC) to eliminate that. This has had several consequences. In particular, Asia is in a way a victim of that initiative, because Asian wisdom, its encouragement of saving, means that almost no Asian country can benefit from this initiative which soaks up a good part of our official development assistance. Regretfully, it must also be recognised that virtue sometimes has unexpected effects.

---

* Deputy–Director of Treasury — Debt, Development and Emerging Markets, Ministry of Economy, Finance and Industry, France.

The third observation is that official development assistance budgets have decreased. We are among several countries in the OECD, notably in the Development Assistance Committee, who plead for an increase in official development assistance flows but, despite these calls, in reality the flows are falling significantly and therefore greater efficiency is necessary, which means doing the same thing with less. In this effort, all international organisations, including the Asian Development Bank, will have to "demonstrate economy", giving countries fewer resources but requiring them to do more in the domain of reform. That is still the reality and our statements cannot change it. I would like to discuss two additional points about this global assessment which are challenges, not objectives.

— The first is the fight against tax havens, protection against international criminality. This is an growing issue. The French Treasury in 1988 introduced the idea for an International Financial Action Group to fight international financial fraud. I remember that then few believed in it. Today, 12 years later, however, an initial list of countries has been published, and it has credibility. It has authority since everyone refers to it. It shows the power of ideas. Actually, 12 years ago few people believed in it. Today it is considered dishonourable to be on this list. It was featured at the front of newspapers and that has an effect on the investment policies of the private sector and on the behaviour of financial centres. That shows the power of ideas like those that the OCDE wants to use and underlines that this struggle against international misappropriation of public funds will be intensifying.

— Opening of trade is the second idea which will be spreading. One can say whatever one wants about that. Official development assistance budgets are decreasing but it can be verified that the opening of borders to trade contributes the most to development. Many ministers say that. The new round of the WTO will provide a major opportunity for that, and I fully believe that those having a generous position on official development assistance should, to be consistent, become progressively generous with respect to the opening of trade. That will take some time, some years, but it will become accepted.

In this context, what has France done vis–à–vis the Asian continent?

We have clearly decided not to provide much bilateral official development assistance. For cultural and historic reasons we have chosen the former Indochina, considering Cambodia, Lao (People's Democratic Republic) and Viet Nam as a zone for priority solidarity, and we have chosen multilateral official development assistance, which I will return to, for the other countries where we alone could not have a significant impact. This is a French political decision, a very European choice but one that at the same time must be accepted.

With respect to trade, we also think that Asia is one of zones of greatest economic expansion, not because of its large population and economic power but because there are major motors of economic development. The value of labour on this continent is recognised. I do not know what will occur in Europe in the coming years but, for the

moment, I believe that in China labour is used to greater advantage than in France, and clearly therefore very large productivity gains can be expected from investments made in Asia. That is why in the domain of commerce, France has tried to sign an agreement for investment security with each country (already 15 have been signed). That is why most of the large Asian markets are eligible for the instruments of support for our exports. China, the Philippines, Indonesia, Thailand and India are eligible for the procedure known as support "reserved for emerging countries". For the others, we would like to have the closest possible relationship between Asian and European decision makers. One of the best ways of doing that is obviously the European way, which allows me to turn to the multilateral.

Today is 3 July, that is, just at the beginning of the French presidency of the European Union. But that is not just a coincidence which would be a little too simple. It is clear that we have such stakes in Asia that only a union of sovereign European states can "compete on equal terms" with other major partners like the United States. That is why, even if a matter like the ASEM is still evolving today, having begun well but still evolving, we think that the large European contributions, in the order of nearly a billion euros a year, will enable us to be major partners of the Asian countries. As Europeans we believe that, but we obviously think it holds at the organisational level. Thus we would like to see four principles become more widespread.

First, there should be co–ordination between international organisations. That goes without saying, but that is not the case today in practically all the interventions which are carried on. This is seen in an example as simple and urgent as aiding East Timor. It was necessary to use all our leverage as a member to get the World Bank and Asian Development Bank to work together and not at cross purposes. We achieved that, but the institutions did not want to, since each institution has its own projects or particular aims. Thus co–ordination should continually be a watchword. The second watchword, complementarity, is obviously related. One is always ready to co–ordinate with another if one is smaller and ready to follow its own procedures. That is something that I often hear, for example, coming from the World Bank. Our position is slightly different, that of relative added value. Let each institution show where it is exceptionally efficient, and it should be the leader in the domains where it is exceptionally efficient, and the other partners should recognise its leadership. That is why I hope that we will soon have a co–operation agreement between the World Bank and Asian Development Bank for each to recognise the other's leadership in some sectors.

The third important rule for multilateral action is obviously transparency. We require it of governments, ours and those benefiting from official development assistance. International organisations should also be exemplary. Every institution must do more in this respect. Finally, it is necessary to have a regime which is attractive and includes sanctions. This means that official development assistance grants should be related to a country's real performance. We tend to expound that as a principle, but hesitate as soon as it is necessary to cut an aid programme because of the risk of not being able to support an economic recovery. Taking the example of Pakistan, it is

clear that the country's present efforts merit "special" help in relation to previous years, because Pakistan is in a difficult phase. We must make an exception, by now providing the resources necessary to get out of the crisis. The same reasoning could be applied to Indonesia. However, as these resources are not unlimited, from time to time it is necessary to sanction changes which take too long because some regimes have not understood that we have a world capitalist economy and that there is no other way to develop today. But that is obviously more difficult.

In sum, beyond the imperatives of fighting poverty, recognised by all, concessional windows which do not intend to lower their resources, and a need for co–ordination, we have a formidable challenge in trying to have constituencies in our own countries who support official development assistance. It must be recognised that we do not entirely have them today, and our development partners do not campaign for public opinion in favour of official development assistance. That leads to reductions in budgets for official development assistance. That is not the fault of others, but the confrontation of different aspirations in a market economy. But there will be inevitable reductions in official development assistance if enterprises, governments, non–governmental organisations and official agencies together cannot get the long–understood solidarity and development needs to be put before other needs, just as worthy, which I prefer not to name. Thus there are things to say and lobbying needed in all our societies, and the Development Centre is one of the possible and desirable places for that.

With respect to Asia, it is highly desirable for Asian countries not to draw up their development aims alone. It is indispensable to do that in full consultation with non–regional countries. A good balance would be a body having regional countries in the majority, and where non–regional countries are present and demonstrate their solidarity in a practical way, but are in the minority. You will have surely guessed that I have sketched a picture of the Asian Development Bank which should have the courage to be more oriented towards development policies and not only on development projects. For that, I believe that it could count on the support not only of France but all the European member countries.

Sixth International Forum on Asian Perspectives

PROGRAMME

Co–chairs of the Forum	Jorge Braga de Macedo, President, OECD Development Centre Tadao Chino, President, Asian Development Bank
Co–chairs of the Seminar	Gunter Hecker, Senior Advisor, Asian Development Bank Ulrich Hiemenz, Director for Co–ordination, OECD Development Centre

Public Conference

Monday, 3rd July 2000

Inaugural Address	Stéphane Pallez, Head, European and International Service, Ministry of Economy, Finance and Industry on behalf of Laurent Fabius, Minister of Economy, Finance and Industry, France
Welcoming Remarks	Jorge Braga de Macedo, President, OECD Development Centre
Keynote Address	Tadao Chino, President, Asian Development Bank

Session I: Panel Followed by Open Discussion

Christine Wallich	Director of Infrastructure, Energy and Financial Sectors Department (West), Asian Development Bank
Ken Yagi	Deputy Director General, International Bureau, Ministry of Finance, Japan
Norbert Walter	Chief Economist, Deutsche Bank, Germany

Session II: Panel Followed by Open Discussion

Hafiz Ahmed Pasha	Managing Director, Social Policy and Development Centre, Pakistan
José Braz	Partner, TEcFinance, Lda., Portugal
Kim Wan–Soon	Ombudsman, Office of the Investment Ombudsman, Korea
Philippe de Fontaine Vive	Deputy Director of the Treasury, Debt, Development and Emerging Markets, Ministry of Economy, Finance and Industry, France

Experts' Seminar

Tuesday, 4th July 2000

Welcoming Remarks and Introduction

Jorge Braga de Macedo, President, OECD Development Centre

Gunter Hecker, Senior Advisor, Asian Development Bank

Session I: Financial Sector Policy for Domestic Resource Mobilisation and Public Expenditure Reform for Alleviating Resource Constraints

Presentation on Financial Sector Policy:

Yun–Hwan Kim, Senior Economist, Economics and Development Resource Center, Asian Development Bank

Presentation on Public Expenditure Reform:

David Green, Lead Economist, Programs Department (East), Asian Development Bank

Discussant: William Witherell, Director, OECD Directorate for Financial, Fiscal and Enterprise Affairs

Discussant: Kiichiro Fukasaku, Head of Research Division, OECD Development Centre

Session II: Post–Crisis Needs for Foreign Savings

Presentation: Helmut Reisen, Head of Research Division, OECD Development Centre

Discussant: Kim Wan–Soon , Ombudsman, Office of the Investment Ombudsman, Korea

Session III: Privatisation and the Private Sector's Participation in Development Projects

Presentation: Sean O'Sullivan, Senior Private Sector Development Specialist, Infrastructure, Energy and Financial Sectors Department (East), Asian Development Bank

Discussant: Ulrich Hiemenz, Director for Co–ordination, OECD Development Centre

Session IV: Development Co–operation Policies of OECD–DAC Members in Asia

Chair:	Jean–Claude Faure, Chairman, OECD Development Assistance Committee
Presentation:	Scott Simon, Principal Administrator, OECD Development Co–operation Directorate *and* Pietro Veglio, Head of Division, OECD Development Co–operation Directorate
Discussant:	Hafiz Ahmed Pasha, Managing Director, Social Policy and Development Centre, Pakistan
Concluding Remarks:	Jorge Braga de Macedo, Christine Wallich and Gunter Hecker

List of Authors and Participants

SPEAKERS, AUTHORS, EXPERTS AND DISCUSSANTS (3–4 July 2000)

Sergio Alessandrini	ISLA, Italy
Frank Black	Department for International Development (DFID) United Kingdom
Jean Bonvin	Professor, IDHEAP, Université de Lausanne, Switzerland Former President, OECD Development Centre
Jorge Braga de Macedo	President, OECD Development Centre
William Branson	Princeton University, United States
José Braz	Partner, TEcFinance, Lda., Portugal
J. Edgardo Campos	Senior Economist, Asian Development Bank
Tadao Chino	President, Asian Development Bank
Odile Cornet	*Le Moci,* France
Jean–Claude Faure	Chair, OECD Development Assistance Committee
Philippe de Fontaine Vive	Deputy Director of the Treasury, Debt, Development and Emerging Markets, Ministry of Economy, Finance and Industry, France
Kiichiro Fukasaku	Head of Research Division, OECD Development Centre
Peter Grant	Department for International Development (DFID) United Kingdom
David Green	Lead Economist, Asian Development Bank
Gunter Hecker	Senior Advisor, Asian Development Bank
Ulrich Hiemenz	Director for Co–ordination, OECD Development Centre
Miroslav Hrncír	Chief Executive Director, Czech National Bank, Czech Republic
Kim Wan–Soon	Ombudsman, Office of the Investment Ombudsman, Korea
Yun–Hwan Kim	Senior Economist, Asian Development Bank
Frans van Loon	Managing Director, Emerging Markets Group, ING Barings, Netherlands
Françoise Nicolas	IFRI – Institut français des relations internationales, France

Irene Nørlund	Senior Research Fellow, Nordic Institute of Asian Studies, Denmark
Peter Nunnenkamp	Head of Research Division, Kiel Institute of World Economics, Germany
Sean O'Sullivan	Senior Private Sector Development Specialist, Infrastructure, Energy and Financial Sectors Department (East), Asian Development Bank
Stéphane Pallez	Head, European and International Service, Ministry of Economy, Finance and Industry
Hafiz Ahmed Pasha	Managing Director, Social Policy and Development Centre, Pakistan
Lionel Price	Managing Director, Sovereigns Fitch IBCA Ltd, United Kingdom
Helmut Reisen	Head of Research Division, OECD Development Centre
Bernd Schnatz	Deutsche Bundesbank, Germany
Scott Simon	Principal Administrator, OECD Development Co–operation Directorate
Pietro Veglio	Head of Division, OECD Development Co–operation Directorate
Christine Wallich	Director of Infrastructure, Energy and Financial Sectors Department (West), Asian Development Bank
Norbert Walter	Chief Economist, Deutsche Bank, Germany
William Witherell	Director, OECD Directorate for Financial, Fiscal and Enterprise Affairs
Ken Yagi	Deputy Director General, International Bureau, Ministry of Finance, Japan

DIPLOMATIC CORPS

(including national delegations to the OECD)

Chile

Alexis Guardia
Ambassade de la République du Chili
France

China

H.E. Jianmin Wu
Ambassador Extraordinary and Plenipotentiary of China
France

Czech Republic

Pavel Klíma
Delegation of the Czech Republic to the OECD
France

Lenka Adamcova
University of Economics Prague, Czech Republic

France

Guillaume Ollagnier
Ministère des Affaires étrangères, Direction des affaires économiques et financières
France

Germany

Eduard Westreicher
Delegation of Germany to the OECD
France

Greece

Dimitris Andreou
Delegation of Greece to the OECD
France

Hungary

H.E. Béla Kádár
Ambassador, Permanent Representative of Hungary to the OECD
France

Italy

Guido La Tella
Delegation of Italy to the OECD
France

JAPAN

Tomoko Onuki
Delegation of Japan to the OECD
France

Kazunori Miura
Japan International Cooperation Agency (JICA)
France

KOREA

Suk–Bum Park
Delegation of Korea to the OECD
France

Han–Pack Chun
Delegation of Korea to the OECD
France

MALAYSIA

H.E. Mme Rajmah Hussain
Ambassador Extraordinary and Plenipotentiary of Malaysia
France

MEXICO

Magdalena Diaz
Delegation of Mexico to the OECD
France

NETHERLANDS

Paul Sciarone
Delegation of the Netherlands to the OECD
France

PHILIPPINES

H.E. Hector Villarroel
Ambassador Extraordinary and Plenipotentiary of the Philippines
France

PORTUGAL

H.E. Jorge de Lemos Godinho
Ambassador, Permanent Representative of Portugal to the OECD
France

Irene Parades
Delegation of Portugal to the OECD
France

SWEDEN

H.E. Anders Ferm
Ambassador, Permanent Representative of Sweden to the OECD
France

Marie Hesselman
Ministry of Finance
Sweden

SWITZERLAND

Paul Obrist
Delegation of Switzerland to the OECD
France

THAILAND

Ranoppun Kapittai
Royal Thai Embassy
France

VIETNAM

H.E. Nguyen Dung
Ambassador Extraordinary and Plenipotentiary of Vietnam
France

MINISTRY OF ECONOMY, FINANCE AND INDUSTRY

(in addition to the persons mentioned in the programme)

Myriam Thiberge
Treasury

Patrick Thomas
Director,
Asian Development Bank

OECD SECRETARIAT

(*in addition to the persons mentioned in the programme)*

Economics Department

Sanghoon Ahn	Economist

Development Co–operation Directorate

Kaori Miyamoto	Administrator

Directorate for Financial, Fiscal and Enterprise Affairs

Fujiki Hayashi	Head, Outreach Unit for Financial Sector Reform

Public Management Service

Frédéric Bouder	Administrator
Scott Jacobs	Head of Programme on Regulatory Reform

Public Affairs and Communication

John West	Principal Event Manager

OECD Development Centre

Federico Bonaglia	Research Staff
Catherine Duport	Head of Support Services
Colm Foy	Head of Communication
Henny Helmich	Head of Policy Dialogue and External Co–operation Unit
Irène Hors	Researcher
Roberto Longo	Research Staff
Charles Oman	Principal Researcher
Marcelo Soto	Research Staff

Conference Secretariat

Marsha Beaudoin	Forum Secretariat
Terri Wells	Secretary–Assistant
Sandrine Sabatier	Secretary–Assistant

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(41 2000 09 1 P 1) ISBN 92-64-18546-1 – No. 51573 2000