

# ***Government Bond Market Development in Asia***

*Edited by:*

*Yun-Hwan Kim*

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## Foreword

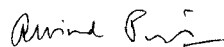
Among the many challenges that the Asian financial crisis posed for many of the Asian Development Bank's (ADB's) developing member countries (DMCs), the development of new instruments of resource mobilization is central. Excessive reliance of the banking system on short-term borrowing abroad, resulting from a lack of superior alternatives, contributed significantly to the crisis.

The crisis has underlined the need for both public and private sectors to tap new sources of funds to finance development needs. The domestic capital market is a potentially rich source of such fund, which remained underutilized prior to the crisis because of the availability of foreign funds at unsustainably low interest rates. While East and Southeast Asia have been enjoying high domestic savings rates, these savings have not been efficiently transformed into long-term investments partly due to the inadequate development of their financial markets. The development of viable domestic and regional bond markets has been proposed as one of the instruments that can help put these resources to productive use more efficiently.

A well-functioning government bond market—more pertinently a Treasury securities market—can play a critical role in developing domestic bond markets. It can increase investor confidence in overall bond and financial markets. It can also provide a risk-free benchmark yield curve, which is crucial for revaluating portfolios and pricing corporate bond issues.

As a part of their postcrisis policy agenda, the governments in the Asia-Pacific region are starting to focus on the development of effective government bond markets. In a conference entitled “Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies,” sponsored by ADB and held on 28–30 March 2000, a number of issues relating to the development of bond markets were discussed. Also presented at the conference were case studies of 10 DMCs wherein the authors assessed the feasibility of developing markets for government bonds, identified impediments to such development, and explored solutions.

This volume brings together the reports presented at the March 2000 ADB conference. It forms part of ADB's continuing effort to assist its DMCs in evaluating alternative policy options in general and in the area of financial markets in particular.



Arvind Panagariya  
Director and Chief Economist  
Economics and Development Resource Center  
Asian Development Bank



## Preface

A well functioning-government bond market can significantly help foster capital markets which should play a major role in diversifying financial methods of Asian developing economies in the postcrisis period. With this as its guiding principle, a regional technical assistance (RETA) project on government bond markets was undertaken by the Asian Development Bank (ADB) in ten of its developing member countries (DMCs). The research project commissioned in-depth studies in these countries to examine the feasibility of developing markets for government bonds and to identify impediments to the development. The country studies included a review and analysis of fiscal and monetary policy and management, the state of government bond markets, the feasibility and appropriateness of issuing government bonds at market rates, and the creation of benchmark yield curves. It also made strong efforts to identify measures that will help develop secondary bond markets.

The Inception Meeting (2-3 December 1999) and the Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies (28-30 March 2000) were important tools for undertaking the RETA. The inception meeting laid the groundwork for the studies, while the conference enabled major conclusions of the studies drawn as to the feasibility of developing markets for government bonds. The conference also provided a forum for the exchange of information and experiences about domestic and regional bond markets and contributed to gaining insights on successful approaches to bond and financial market development.

This publication, which compiles the major findings of the country studies as well as research papers on special topics, will help pinpoint specific problem areas in bond market development and identify more appropriate policy measures in ADB's DMCs. The publication is expected to contribute to ADB's (and other financial institutions') efforts at capital market development.

This study would not have been completed without the hard work and professionalism of the paper contributors: Jonathan Batten; Chok Kwee Bee; E. M. Mangala Boyagoda; Teng Chean Choy; Siri Ganjarerndee; Li-yen Paul Hsueh; Yun-Hwan Kim; Hui Liu; Peter McCray; Zhang Mingli; Chang Seok Oh; S. Ghon Rhee (Resident Scholar at ADB in 1997-1999 who initiated the RETA); Kahlil Rowter; Cesar Saldaña; Barbara Shiu; Tan Kok Hui and Yeong-Ho Woo. We also express our appreciation to Myoung-Ho Shin, Vice President (West) of ADB, and M.R. Chatu Mongol

Sonakul, Governor of the Bank of Thailand, who delivered the Opening Address and Keynote Address, respectively; and Jungsoo Lee, former Chief Economist and Yoshihiro Iwasaki, former Officer-in-Charge, Economics and Development Resource Center of ADB who provided overall direction to the RETA. Noteworthy too is the contribution of the moderators and discussants in each of the presentations during the Conference.

Deep appreciation is likewise extended to Arvind Panagariya, Director and Chief Economist and M.G. Quibria and Brahm Prakash, former and present Assistant Chief Economist, Economic Analysis and Research Division, ADB, respectively, for their enormous support at various stage of the study. Lastly, we thank Claire Wallerstein for her editorial service and Sally Mabaquiao, Ludy Pardo, Pat Baysa, Olive Nuestro, Anicia Sayos and Jenny Simon for their administrative assistance.

The views of and opinions expressed in this book are those of the authors and do not necessarily reflect ADB policies or positions.

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## Terms and Abbreviations

AALI	Astra Agro Lestari
ABI	Approved Bond Intermediary
ACU	Asian Currency Unit
ADAPS	Automated Debt Auction Processing System
ADB	Asian Development Bank
ADB I	Asian Development Bank Institute
ADC	Asian developing country
ADI	authorized depository institution
AFP	Armed Forces of the Philippines
ALM	asset liability management
AMC	asset management company
AMU	Asset Management Unit of IBRA
APEC	Asia-Pacific Economic Cooperation
APP	Asia Pulp and Paper (part of Sinarmas Group, an Indonesian industrial conglomerate)
ASCO	Association of Securities Companies
ASDF	Astra Sedaya Finance
ASPAC	Asia-Pacific
Bank Madiri	A new state-owned bank resulting from the merger of four state-owned banks: BDN, Bapindo, Exim, and BBD
BAP	Bankers' Association of the Philippines
BAPEPAM	Capital Market Executive Agency
BAPPENAS	National Planning Agency
BAY	Bank of Ayudhya Public Co. Ltd
BBD	Bank Bumi Daya
BBKU	Bank Beku Kegiatan Usaha (same as BBO)
BBL	Bangkok Public Co. Ltd.
BBO	Bank Beku Operasi (banks whose operations have been frozen)
BCA	Bank Central Asia
BDC	Bond Dealers' Club
BDL	Bank Dalam Likuidasi (banks in process of being liquidated)
BDN	Bank Dagang Negara
BECGBS	Book-Entry Central Government Bonds System
BES	Book Entry System
BFIT	Bangkok First Investment and Trust Public Co. Ltd

BI	Bank of Indonesia
BIBOR	Bangkok Inter-Bank Offer Rate
BIDS	Bond Information and Dissemination System
BII	Bank Internasional Indonesia
BIS	Bank of International Settlements
BLR	base lending rate
BNB	Bank Negara bills
BNI	Bank Negara Indonesia (a state-owned bank)
BNM	Bank Negara Malaysia
BOJ	Bank of Japan
BOJ-Net	BOJ Financial Network System
BOK	Bank of Korea
BondNet	Computerized system providing dealing connection for Thai BDC members
BOO	build-own-operate
BOT	build-own-transfer
BOT	Bank of Thailand
Bp	basis point
BPD	Bank Pembangunan Daerah (Regional Development Banks)
BPK	State Audit Board
BPD-DKI	Bank Pembangunan Daerah (state-owned regional development bank)
BPS	Badan Pusat Statistik (national statistics agency)
BRI	Bank Rakyat Indonesia (state-owned)
BSF	Bond Sinking Fund
BSN	Bank Simpanan Nasional
BSP	Bangko Sentral ng Pilipinas (Philippine Central Bank)
BTI	Bond Traders' Institute
BTN	Bank Tabungan Negara (National Savings Bank)
BTr	Bureau of Treasury
CABEI	Central American Bank for Economic Integration
Cagamas Berhad	National Mortgage Corporation
CAR	capital adequacy ratio
CB	compensation bond
CBC	Central Bank of China
CBSL	Central Bank of Sri Lanka
CCASS	Central Clearing and Settlement System operated by HKSCC
CCGBMD	Consultative Committee on Government Bond Market Development

CD	certificate of deposit
CEO	chief executive officer
CGI	Consultative Group on Indonesia
CGSTDC	China Government Securities Depository Trust & Clearing Co., Ltd.
CIBI	Credit Information Bureau, Inc.
CIFS	CBC Inter-Bank Funds Transfer System
CMB	cash management account
CMB	cash management bill
CMDC	Capital Markets Development Council
CMDCI	Capital Market Development Center, Inc.
CMO	Collateralized Mortgage Obligation
CMU	Central Moneymarkets Unit
COE	Council of Europe
COE	certificate of entitlement
COMMEX Malaysia	Commodity and Monetary Exchange of Malaysia
COP	certificate of participation
CP	commercial paper
CPF	Central Provident Fund
CPI	consumer price index
CRC	Credit Rating Corporation
CSD	Central Securities Depository
CSE	Colombo Stock Exchange
CSRC	China Securities Regulatory Commission
CTD	cheapest-to-delivery
CTRP	Comprehensive Tax Reform Program
Danareksa	Largest local investment bank in Indonesia
DBCC	Development Budget Coordinating Committee
DBM	Department of Budget Management
DBP	Development Bank of the Philippines
DCMWG	Debt Capital Management Working Group
DDMC	Domestic Debt Market Committee
Depkeu	Ministry of Finance of Indonesia
DIP	Debt Issuance Program, run by the HKMC
DMC	developing member country (of ADB)
DMO	Debt Management Office
DoF	Department of Finance
DPD	Department of Public Debt
DPR	Parliament of Indonesia
DR	depository receipts
DSR	debt-service ratio
DST	documentary stamp tax

DvP	delivery versus payment
E-bond	Enterprise bond
EBRD	European Bank for Reconstruction and Development
EFAC	Exchange Fund Advisory Committee
EFB	Exchange Fund bill
EFBNP	Exchange Fund Bills and Notes Program
EFN	Exchange Fund note
EFP	Exchange Fund paper
EMBI	Emerging Bond Market Index
EPF	Employees' Provident Fund
ERT	Employee Retirement Trust
ESCAP	Economic and Social Commission for Asia and the Pacific
ETF	Employees' Trust Fund
FAST	Fully Automated System for Tendering
F-bond	Financial Institution bond
FC	finance company
FCRAP	Financial and Corporate Restructuring Assistance Project (of World Bank)
FDI	foreign direct investment
FESF	Foreign Exchange Stabilization Fund bond
FIDF	Financial Institution Development Fund
FILP	Fiscal Investment and Loan Program
FINEX	Financial Executives' Institute of the Philippines
FINTRACS	PCD computer-based depository system for the equities market
FIS	fixed income service
Forex	foreign exchange
FSA	Financial Services Authority
FRA	Financial Sector Restructuring Authority
FSC	Financial Supervisory Commission
FSS	Financial Supervisory Service
GB	government bond
GBM	general bond market
GBMU	Government Bond Market Unit
GDP	gross domestic product
GEM	growth enterprises market
GHB	Government Housing Bank
GIC	Government Investment Certificate
GMRA	Global Master Repo Agreement
GMS	Grain Management Securities
GNI	gross national income

GNP	gross national product
GOCC	government-owned or controlled corporation
GOI	Government of Indonesia
GovPx	Benchmark of US Treasury for fixed income prices, providing real-time market prices and data based on global trading activity of all PDs
GRT	gross receipts tax
GS	grain security
GSB	government saving bank
GSE	government-sponsored enterprise
GSED	Government Securities Eligible Dealer
GSF	Government Special Fund
GSIC	Government of Singapore Investment Corporation
GSIS	Government Service Insurance System
GSRS	Government Securities Book Entry System
HCB	Housing and Commercial Bank
HDB	Housing Development Board
HIBOR	Hong Kong Inter-bank Offer Rate
HKAB	Hong Kong Association of Banks
HKFE	Hong Kong Futures Exchange Ltd.
HKMA	Hong Kong Monetary Authority
HKMC	Hong Kong Mortgage Corporation Ltd.
HKSCC	Hong Kong Securities Clearing Company Ltd.
HMSP	HM Sampoerna (a business conglomerate)
IADB	Inter-American Development Bank
IBCA	International Bank Credit Rating Agency
IBRA	Indonesian Bank Restructuring Agency
IC	Insurance Commission
IDB	interdealer broker
IDM	interdealer market
IFC	International Finance Corporation
IFCT	Industrial Finance Corporation of Thailand
IFTS	Inter-Bank Funds Transfer System
IHAP	Investment Houses Association of the Philippines
IMF	International Monetary Fund
INAS	Institutional Affirmation and Settlement System
INDRA	Indonesian Debt Restructuring Agency
IO	interest only
IPO	initial public offerings
IPP	independent power producer (international contractors teaming up with Indonesian partners in providing a power source for PLN)
IRAS	Inland Revenue Authority of Singapore

IRSOR	Indonesian Swap Offer Rate
ISMA	Internet Statistics and Metrics Analysis
JATS	JSX trading system
JGB	Japanese Government bond
JI	Jakarta Initiatives
JIBOR	Jakarta Inter-Bank Offer Rate
JSX	Jakarta Stock Exchange (the primary exchange)
JTC	Jurong Town Council
KAMCO	Korea Asset Management Corporation
KDB	Korea Development Bank
KDEI	Indonesian Depository and Clearing Agency
KDF	Kasnik, Duff and Phelps
KDI	Korea Development Institute
KDIC	Korea Deposit Insurance Corporation
KEPCO	Korea Electric Power Corporation
Keppres	Indonesian Presidential Decree
KIS	Korea Investors' Service
KLOFFE	Kuala Lumpur Options and Financial Futures Exchange
KLSE	Kuala Lumpur Stock Exchange
KMCRC	Korea Management Consulting and Credit Rating Corporation
KOFEX	Korea Futures Exchange
KOSCOM	Korea Securities Computer Corporation
KOSDAQ	Korea Securities Dealers Automated Quotation
KOSPI	Korean Composite Stock Price Index
KPEI	Kliring Penjaminan Efek Indonesia (Clearing Guarantee Agency)
KSD	Korea Securities Depository
KSDA	Korea Securities Dealers' Association
KSE	Korea Stock Exchange
KSEI	Kustodian Sentral Efek Indonesia (Centralized Settlement Agency)
LAF	liquid adjustment facility
LB	loan bond
LBO	leverage buyout
LBP	Land Bank of the Philippines
LGU	local government unit
LGUGC	Local Government Units Guarantee Corporation
LIBOR	London interbank offered rate
LTA	Land Transport Authority
LTCP	long-term commercial paper

MART	Money Market Association of the Philippines
MAS	Monetary Authority of Singapore
MCB	minimum cash balance
MDCH	Malaysia Derivatives Clearing House Berhad
MEPS	MAS Electronic Payment System
MESDAQ	Malaysia Exchange of Securities Dealing and Automated Quotation
MGS	Malaysian Government Securities
MLA	minimum liquid assets
MLR	minimum lending rate
MOF	Ministry of Finance
MOFE	Ministry of Finance and the Economy
MPF	Mandatory Provident Fund
MRCB	Malaysia Rating Corporation
MSB	Monetary Stabilization bond
MTB	Malaysian Treasury Bill
MTN	medium-term note
NACF	National Agricultural Cooperative Foundation
NAV	net asset value
NBFI	Nonbank financial institution
NCD	negotiable certificate of deposit
NDB	National Development Bank
NDP	New Development Policy
NEDA	National Economic Development Authority
NEP	New Economic Policy
NFPE	Nonfinancial public enterprise
NGO	Nongovernmental organization
NH	National Housing bond
NIB	Nordic Investment Bank
NICE	National Information and Credit Evaluation, Inc.
NIP	Note Issuance Program, run by HKMC
NLF	New Liquidity Framework
NPC	National People's Congress
NPL	nonperforming loan
NSB	National Savings Bank
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OTC	over-the-counter
OTC-FIS	OTC Fixed-Income Service
PBC	People's Bank of China
PCD	Philippine Central Depository

PD	primary dealer
PDFCI	Private Development Finance Corporation Institution
PDIC	Philippine Deposit Insurance Corporation
PDS	Private Debt Securities
PEFINDO	Credit Rating Indonesia, Ltd.
PhilRatings	Philippine Ratings Services Corporation
PIPU	Pusat Informasi Pasar Uang (Money Market Information Center; the Central Bank-initiated information system for inter-bank money market transactions)
PLMO	Property Loan Management Organization
PLN	Perusahaan Listrik Negara (state-owned electricity company)
PO	principal only
PO	public offering
POSB	Post Office Savings Bank
PP	private placement
PPP	purchasing power parity
PRC	People's Republic of China
PSE	Philippine Stock Exchange
PSS	postal savings system
PvP	payment versus payment
QDS	qualifying debt security
RAM	Rating Agency of Malaysia
RAPP	Riau Andalan Pulp and Paper
RDD	ratio of debt balance to deposit balance
RENTAS	Real Time Electronic Transfer of Funds and Securities
Repo	repurchase agreement
RITS	Reserve Bank Information and Transfer System
ROA	return-on-asset
RoSS	Register of Scriptless Securities
RSA	Revised Securities Act
RSBS	Retirement and Separation Benefits Program
RTC	Resolution Trust Corporation
RTGS	Real-Time Gross Settlement
RRP	reverse repo agreement
SAR	Special Autonomous Region
SB	savings bond
SBI	Sertifikat Bank Indonesia (Central Bank securities)
SBPU	Surat Berhaga Pasar Uang (promissory note issued by local banks endorsed by BI)

SCNPC	Standing Committee of the NPC
SDDS	Special Data Dissemination Standard
SDT	small denomination T-bond
SEC	Securities and Exchange Commission
SEHK	Stock Exchange of Hong Kong Ltd.
SEOCH	Securities Exchange Options Clearing House Ltd.
SEC	Securities Exchange Commission
SES	Stock Exchange of Singapore
SET	Stock Exchange of Thailand
SFC	Securities and Futures Commission
SGS	Singapore Government Securities
SGX	Singapore Exchange (formed by merging SES and SIMEX)
SIBOR	Singapore Inter-Bank Offer Rate
SIMEX	Singapore International Monetary Exchange
SIP	Small Investor Program
SOB	state-owned bank
SOCISO	Social Security Organization
SOE	state-owned enterprise
S-MART	SSX trading system
SMI	secondary market institution
S & P	Standard & Poor's
SPC	State Planning Commission
SPD	Superintendent of Public Debt
SPEEDS	System Pemindahan Elektronik untuk Dana dan Sekuriti (a scriptless securities trading system)
SRO	self-regulatory organization
SRR	statutory reserve requirement
SSS	Social Security System
SSX	Surabaya Stock Exchange (where second tier stocks and bonds are listed)
STAQ	Securities Trading Automatic Quotation
STRIPS	Separate Trading of Registered Interest and Principal of Securities
T-bond	treasury bond
T-bill	treasury bill
TCD	transferable certificate of deposit
TEI	tax-exempt institution
TFB	Trust Fund Bureau
Thai BDC	Thai Bond Dealing Center
TICS	Trust and Investment Companies
T-note	Treasury note

TOP	Treasurer of the Philippines
TOT	Telephone Organization of Thailand
TRIS	Thai Ratings and Information Service
TSD	Thailand Securities Depository Co., Ltd.
TSE	Taiwan Stock Exchange
UK	United Kingdom
UNCTAD	United Nations Commission on Trade and Development
US	United States
VAT	value added tax
WI	when-issued (trading)
WTO	World Trade Organization

#### **List of Currencies**

A\$	Australian dollar
HK\$	Hong Kong dollar
Rp	Indonesian rupiah
W	Korean won
RM	Malaysian ringgit
NT\$	New Taiwan dollar
P	Philippine peso
Y	Chinese yuan
S\$	Singapore dollar
SLR	Sri Lankan rupee
B	Thai baht
US\$	US dollar
¥	Japanese yen

# **ADB Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies**

(28 March 2000, Manila)

## **Opening Address**

*by*

*Myoung-Ho Shin*

*Vice President, Asian Development Bank*

Your Excellency Chatu Mongkol Sonakul, Governor of the Bank of Thailand, distinguished resource persons, participants, ladies and gentlemen, it is a pleasure to welcome you to the Asian Development Bank, and it is a privilege for me to open this conference.

This is an important meeting. There is a great need for development resource mobilization from the domestic financial markets of Asia, and the development of the financial sector, and in particular the long-term bond market, is an urgent policy matter.

Before addressing the conference theme, however, I would first like to remind you that, in 1999, ADB declared poverty reduction to be our overarching goal. Despite Asia's growth and the significant fall in the incidence of poverty over the last four decades, one in every three Asians is still wretchedly poor. Some 900 million people live in absolute poverty. The Asian financial crisis has aggravated the situation. We simply have to rededicate ourselves to reducing poverty in the region.

The most potent instrument for fighting poverty is economic development. But economic development requires finance. This truth applies to any development program at any level. We have seen, throughout the world, many development initiatives failing for lack of funds. Since its establishment, ADB has tried to help its developing member countries, DMCs we call them, to maximize mobilization of financial resources. We have provided lending and technical assistance programs aimed variously at financial sector development, public sector and public expenditure reform, private sector development, governance reform, and facilitation of cofinancing.

In recent years, ADB, in close collaboration with our DMCs, has made enormous efforts to strengthen and modernize financial sectors. In the wake of the financial crisis, we provided Indonesia, Republic of Korea, and Thailand with substantial assistance to help restructure their financial and corporate sectors as well as restore the public's confidence

in their financial markets. These assistance programs helped the countries to adopt best financial governance practices, increase the disclosure and transparency of financial information, and reform the legal and regulatory framework governing corporate and financial sectors. Capital market development is a key element of all these reform programs. We at ADB believe that these programs and our other assistance activities have significantly contributed to the stabilization of financial and foreign exchange markets, the restructuring of capital markets and banking sectors, and the ongoing economic recovery.

In fact, since as early as 1985, ADB has been involved in comprehensive capital market development work in its DMCs including Bangladesh, India, Pakistan, and Philippines. These programs have aimed to strengthen equity markets, corporate bond markets, asset-backed securities markets, mutual funds industries, investment banks, venture capital companies, and institutional investors, through both public and private sector windows. ADB is currently helping to develop long-term debt markets in India and Thailand with a focus on increasing the participation of pension funds, insurance companies and mutual fund industries, and also on asset securitization.

DMCs certainly need to diversify the sources of industrial financing through capital markets. They need to modernize their method of corporate financing, which has traditionally been overwhelmingly bank-based. Effective capital markets can help deepen the financial base, lead to greater diversification of financing sources, and screen financial risks more promptly than bank credit departments.

The industry sectors in these countries have relied excessively for their long-term development resources on short-term borrowings from commercial banks. At the outbreak of the crisis in July 1997, in some crisis economies more than half of corporate debt was of maturity of less than a year. There were currency mismatches too as a consequence of huge foreign borrowing without proper currency hedging arrangements.

Asia's developing countries now have to work out long-term financial sector development strategies that can prevent financial crises as well as lay a stronger foundation for sustainable development. Critical here is the need to deepen and modernize capital markets, particularly bond markets. This need is underscored by ongoing bank disintermediation, due to extremely guarded lending by both domestic and foreign banks in the aftermath of the crisis. Massive strides in information technology and economic and financial globalization also impel development of financial markets.

The potential for developing domestic bond markets in DMCs is considerable given their high savings rates. I note happily that some DMCs, particularly the Republic of Korea and Thailand, have already

initiated comprehensive plans to develop domestic bond markets covering both government and corporate issues.

Government bond markets, the main theme of this conference, serve as a stepping-stone on the path to developing a corporate bond market. They can offer pricing benchmarks for private debt issues and financial derivatives. A government bond market, if functioning satisfactorily, can significantly increase investors' confidence in the overall bond market, and in the whole capital market. And a well-developed government bond market can help government to finance expenditure and conduct monetary policy efficiently.

In most DMCs, lack of a reliable benchmark yield curve of longer maturity is the primary impediment to the development of corporate bond and other securities markets. As a benchmark, nothing is better than long-term government bonds given their low or negligible risks. Hong Kong, China is a good example. Since the early 1990s, it has been making significant efforts to develop the Exchange Fund paper market, the local version of a treasury paper market. Although its fiscal position has generally been comfortable, the Government has continued to issue Exchange Fund paper in order to create a reliable benchmark yield curve for local debt instruments and to increase the supply of high quality bonds to strengthen the capital market. I know that the Republic of Korea, Singapore, and Thailand are also currently working hard to develop a treasury paper market.

A government bond market should not be seen as a means of avoiding fiscal prudence. In some countries which suffer chronic budget imbalances largely due to fiscal mismanagement and weak governance, excessive reliance on government debt securities has been seen. This has crowded out financial resources for the private sector and distorted the overall financial market. I am sure you will discuss this.

In developing a sovereign bond market, there must be close coordination with the central bank so that monetary policy is not weakened. The prices of government bonds should be freely determined. An enabling environment must be provided to encourage participation of issuers, intermediaries and investors. The regulatory, legal, tax, and accounting framework must effectively protect and guide government bond markets without restricting the activities of participants. I am sure all these subjects will be examined in this conference.

Ladies and gentlemen, over the next three days you will have extensive discussions on many important issues related to the development of government bond markets in DMCs. I am sure you will freely share your ideas and experiences.

I wish you all the success in your deliberations.

# **ADB Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies**

(28 March 2000, Manila)

## **Keynote Address**

*by*

*M.R. Chatu-Mongol Sonakul  
Governor, Bank of Thailand*

Mr. Chairman  
Distinguished Guests  
Ladies and Gentlemen

I am honored for the opportunity to share with you some of my thoughts and reflections on the development of the domestic bond market in Thailand.

The Asian economic crisis, which started in Thailand in 1997, posed the most severe challenges to policymakers—how to contain the crisis, how to ease the burden of the poor, and how to ensure a sustained recovery.

But the biggest challenge to us all must be how the crisis could have been avoided in the first place.

If I can turn back the clock and have a wish, my list may be long. But high in its ranking would be a well functioning Thai baht bond market.

## **Benefits of Bond Markets**

A bond market provides a basic infrastructure for the development of the financial system and the overall economy. The bond market is an important alternative to bank lending.

During a crisis, banks themselves often come under liquidity pressure, from both domestic and foreign withdrawals. Not only do they cease to lend, they also recall loan from their best debtors. And even after the crisis has peaked, banks still face the problem of recapitalization. During these times, the process of intermediation suffers.

The existence of a deep and liquid bond market allows financial institutions to prepare themselves better for risk management. The au-

thority can require the banks to maintain a higher liquidity ratio, comprising both government and top-rated corporate bonds. The banks can then resolve their liquidity problem on their own by selling these bonds, regardless of their credit standings, which tend to suffer during a crisis.

In Thailand, the lack of a liquid bond market meant that the only way to obtain liquidity under pressure was for the banks to come to the Bank of Thailand using their entire loan portfolio as collateral. And as the crisis deepens, these loans were deteriorating day by day.

Another benefit of the bond market is that it can attract foreign investments. Foreigners can bring in funds to invest in high quality papers denominated in Thai baht. They are the ones to absorb foreign exchange risk. Without a bond market, Thai companies have no choice but to borrow abroad and bear the foreign exchange risk by themselves. Experience has shown that they have yet to fully develop their skills in doing so.

It is our intention, therefore, to expedite the promotion and development of the domestic bond market. The process is very time-consuming, but they are worthwhile for they provide the foundation for a strong and diversified financial market that would be more resilient to future shocks.

Ladies and Gentlemen,

### **Necessary Conditions for Bond Markets**

To develop a domestic bond market, we need three essential components:

First, there must be a deep and liquid government bond market to serve as benchmarks against which corporate papers can be priced. To ensure that a government bond market can continue to provide the benchmark yield curve, the supply of government bonds must be regular, predictable, and transparent.

In short, the framework of the budgetary process as well as debt management operation must support the continuing supply of bonds through operations such as automatic refinancing or refunding of maturing debt. Tools such as reopening of benchmark issues, government bond buyback schemes, or repurchase operations are also essential for the efficient functioning of debt management operation.

Second, there must be an adequate infrastructure, both legal and operational, to support trade and transfer of instruments and funds. Operational infrastructure includes such things as a delivery versus payment system that is safe, rapid, and efficient to ensure finality of fund transfers. An efficient bond registration system is also essential to provide legal protection of ownership of bonds. Rules and regulations to support

trading and financing operation such as repurchase agreements, securities lending, short positioning, as well as hedging practices are all essential elements.

Third, there must be a pool of market participants comprising both intermediaries such as dealers or interdealer brokers as well as end-users such as mutual funds, provident and pension funds, and insurance. The end-users will provide a steady stream of long-term demands for bonds which will complement the dealers' more traditional short-term horizon. In addition, the portfolio structure of end-users also act a countercyclical force to the one-way market of financial intermediaries which is common to an emerging market, and help preempt a massive panic or withdrawal of funds.

How are we doing all these then?

In the primary market, fiscal prudence in the past decades before the crisis had resulted in a very limited supply of government bonds. All this has changed as a result of the crisis. The amount of public sector bond has increased substantially during the past two years. Much of this was created by the Government taking on the responsibility of fiscalizing the costs of financial sector restructuring incurred by the Bank of Thailand in our cleaning up of financial institutions.

Currently, there is a close to one trillion baht in public sector bonds outstanding, amounting to about one fourth of the country's GDP and the banking system's deposit base. With even further losses to fiscalize, the supply of government bonds is not going to be a constraint for future development.

Attempts have also been made to introduce a quarter-ahead calendar of regular issuance. Thus, Mondays were typically reserved for treasury bills, Tuesdays for state-enterprise bonds and Wednesdays for government bonds.

This has worked well for a brief period, but now we are back temporarily to wait for new supplies of bonds.

Therein lies an important lesson I would like to share with colleagues and friends in the process of developing their bond markets.

Industrialized countries have been in a position to promote and sustain the development of their bond markets because of the continuity and predictability of supply.

In our case, due to restrictions on management and investment of government's treasury balance, the Government understandably has been unwilling to issue securities when the treasury balance is high. This causes discontinuity in the supply of bonds.

At the same time, because the treasury balance could not be invested to earn a return, there is a cost in terms of interest expense on

those bonds issued against no-revenue proceeds. Bond issuance has to be done on a regular basis, irrespective of the size of the treasury balance. But it may be difficult to explain politically, why it should become necessary to maintain a higher-than-necessary treasury balance with borrowed money.

Proposals are on the way to fine-tune the current legal framework and to permit greater flexibility in the management of treasury balance, while not compromising the discipline of budget finance.

I would like to turn now to the secondary market. This is an area where a central bank can become more active and can make a more significant contribution than in the primary market. To date, substantial progress has been made with regard to the basic rules and regulations to govern both market participants and trading practices.

Daily trading volumes have quickly picked up in line with interest from market participants and now amount to about 3-4 billion baht per day, compared to about 1-2 billion baht last year. Annual turnover for 1999 for certain popular issues amount to one third of its outstanding amount, which is very encouraging sign. Bid-spreads are narrowing and now can boast a level not significantly far from the more developed bond markets.

We have completed a yield curve available on the internet that spans from less than one-year, out into the 15-year tenor. This complemented with the low interest environment has boosted the issuance of corporate bonds. Last year alone, we have seen over 200 billion baht of private bonds issued. Of course, some of these were used to recapitalize the banking system, but no small amounts were also used for refinancing corporate debts as well as for business expansion.

We are fortunate that the legal framework for the supervision of the capital market, namely private and public offering and investor protection, have already been instituted. In fact, the private debt market started to flourish since 1992 after we set up the Securities and Exchange Commission. With this framework, the private debt market was able to resume activity again after the crisis but this time with the government yield curve as a pricing benchmark.

With regard to the operation of the secondary market of government bonds, the Bank of Thailand is currently working on the promotion of a full-fledged primary dealership system to facilitate the conduct of open market operations. We aim for the primary dealers to eventually provide market-making functions for both government and private securities.

The operation of primary dealers or counterparties of the central bank will be complemented, should market participants deem it useful, by the presence of interdealer brokers, who can assist in ensuring continuous

two-way quotation, as well as helping to preserve the anonymity of transactions or positions held by a market participant.

In August 1999, we appointed nine counterparties, which comprised eight banks and one securities firm. Starting 19 January 2000, the Bank of Thailand also began trading outright with the nine counterparties. This operation serves as a monetary policy instrument as well as the mechanism to promote the development of the secondary bond trading. At this early stage, the outright operations will be conducted primarily in the benchmark issues or those with potential to become benchmark issues. These selected counterparties are expected, ultimately, to become primary dealers and we are currently working on putting the right incentives to ensure that appropriate rights and obligations are accorded to these primary dealers.

The third area I would briefly touch on is infrastructure issues. Here, work is ongoing to promote a fully automated system of delivery versus payment (DvP) system in place. It is a stop-gap measure but it serves as an important infrastructure in the settlements of scriptless government bonds. The system, when fully developed, will be supplemented by the intraday liquidity facilities and queuing mechanism, employing the latest digital signature technology to ensure secured and smooth real-time delivery and payment transactions.

Ladies and gentlemen,

We are entering an era when capital flow across borders can only become more volatile than in the past. And we still have fresh memories of how disruptive it was before the crisis. In fact, it was a major cause of the crisis.

How do we go forward? How do we guard against this?

The work on the new international financial architecture seems to be very much lacking in the area of the behavior of key players, especially the highly leveraged institutions. In the eyes of the large Western countries, such issues have somewhat lost their urgency since the event surrounding the long-term capital management left the headlines.

In the absence of such rules, it appeared that the emerging markets could only look to our own selves for protection. We have to help ourselves. A well functioning bond market is an important tool in this respect. It will act as a reservoir that absorbs capital inflow and channel it to good use. A sudden withdrawal of foreign investors' confidence may cause price of bonds to soften, making new issues temporarily unattractive, but it will not affect the business that had already obtained the funds.

However, developing a well functioning bond market is no easy task. The work done in Thailand is only half-completed, with many

important agenda still remaining. The ingredients that I have mentioned—adequate supply, good infrastructures, central bank's active involvement in the market, and investors' demand—these are all very important. But they alone will not ensure continued success.

Success can be assured, and maintained, only if the market is able to win the trust and confidence of all investors. This means good governance all round. This means not only a well-supervised and fair trading system, but also clear and transparent information system. And this covers not only the information on macroeconomy, government actions, and rules and regulations, but also information on the firms, the issuers of the papers, to name but a few.

Asia, because of our younger population and our early stages of industrialization, will continue to need funds from outside the region to finance our growth for many years to come. The countries that can succeed in attracting the funds, and more importantly, can properly manage the inflow and outflow of such funds, will have to develop not only the tools but high standards to go with it as well.

Thank you for your attention.

# **ADB Conference on Government Bond Markets and Financial Sector Development in Developing Asian Economies**

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