Asia Bond Monitor 2005

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Asia Bond Monitor (ABM) reviews the development of East Asian local currency bond markets. It examines market size and composition, market liquidity, yields and returns, and market structure. Recent policy reforms and challenges facing these markets are also highlighted. The ABM covers the 10 Association of Southeast Asian Nations member countries plus the People's Republic of China and the Republic of Korea.

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Development of East Asian Local Currency Bond Markets—A Regional Update

Highlights

- Driven by the continued need for deficit financing, strong investor appetite, and intensified reform efforts, East Asian local currency government bond markets turned in yet another year of robust growth in 2004:
  - Thailand registered the strongest growth, followed by Philippines, Korea, Viet Nam, and PRC. Growth in Malaysia and Singapore was more modest;
  - In US dollar terms, outstanding government bonds grew by 32% for East Asia as a whole. Excluding the currency conversion factor, the growth rate was 25%.
- But growth of corporate bond markets was mixed. Outstanding corporate bonds on average grew by 10% in US dollar terms in the five countries where data are available, with Indonesia registering the strongest growth, followed by Singapore and Thailand. Market size fell marginally in Korea and Malaysia.
- Growth in trading volume was uneven in East Asian local currency bond markets in 2004. Declines in turnover were more significant in corporate bond markets than in government bond markets.
- Despite increases in the Fed Fund rates, local currency yield curves flattened in most East Asian bond markets in the second half of 2004, partly due to easing inflationary expectations and strong capital inflows.
- A combination of falling yields and a weakening US dollar ensured another year of high returns from investment in East Asian local currency bond markets.
- Important changes occurred in the structure of East Asian bond markets in 2004:
  - Issuance of longer tenor bonds extended government yield curves in Malaysia and Korea;
  - Efforts continued to increase issue size of benchmark government bonds by reopening issues in Indonesia, Korea, Malaysia, Philippines, and Singapore;
  - The strong growth of asset-backed securities and Islamic bonds, and the issuance of bonds by multilateral development banks, indicate the emergence of a wider issuer base backed by strong investor appetite;
  - The launch of the Asian Bond Fund 2 is likely to provide a boost to investment in local currency bond markets in the region.

Continued overleaf

- In 2005, markets expect any rise in interest rates to be limited in most of East Asia, as inflationary pressures are largely under control in many countries, economic growth tapers somewhat from the highs of 2004, and foreign capital continues to flow into the region.
- Growth of East Asian local currency government bond markets in 2005 is expected to be more modest due largely to fiscal consolidation.
- More reform initiatives are expected in several markets to support the development of East Asian local currency bond markets, such as improving trading systems, lengthening benchmark yield curves, and strengthening investor protection.
- In East Asia, corporate bond market development lags behind that of government bond markets in terms of size and liquidity, among others.
- The results of a poll of bond analysts from East Asian markets conducted by AsianBondsOnline point to a number of areas where measures could be taken to speed corporate bond market development:
  - Widen the issuer and investor base;
  - Improve the transaction environment;
  - Develop hedging products and derivatives markets;
  - Address uneven disclosure standards and strengthen the framework for creditor rights; and
  - Improve transaction and general data reporting.

Acronyms and Abbreviations

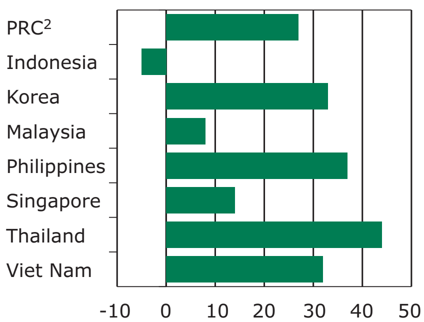
ABF2	Asian Bond Fund 2
ABMI	Asian Bond Markets Initiative
ABS	asset-backed securities
ADB	Asian Development Bank
ALBI	Asian Local Bond Index
ASEAN	Association of Southeast Asian Nations
BAPEPAM	Capital Market Supervisory Agency
BEX	Bond Electronic Exchange
BI-SSSS	Bank Indonesia - Scripless Securities Settlement System
BOK	Bank of Korea
BOT	Bank of Thailand
CAGAMAS	National Mortgage Corporation
CDC	China Government Securities Depository Trust & Clearing Co.
CRA	credit rating agency
CSDCC	China Securities Depository and Clearing Co.
CSI	contractual savings institution
DFP	delivery free of payment
DVP	delivery versus payment
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
EPF	Employees Provident Fund
Fed	United States Federal Reserve
FIDF	Financial Institutions Development Fund
FITS	Fixed-Income Trading System
FoBF	Fund of Bond Funds
GDP	gross domestic product
GII	Government Investment Issues
GOCC	government-owned and controlled corporation
GSED	Government Securities Eligible Dealer
HSTC	Ho Chi Minh Securities Trading Center
ISCAP	Institutional Securities Custodian Programme
KHFC	Korea Housing Finance Corporation
KLIBOR	Kuala Lumpur Interbank Offered Rate
KPEI	Indonesian Clearing and Guarantee Corporation
KRX	Korea Exchange
KSE	Korea Stock Exchange
KSEI	Indonesian Securities Central Depository
LCY	local currency bonds
LGU	local government unit
MARC	Malaysian Rating Corporation
MAS	Monetary Authority of Singapore
MBS	mortgage-backed securities
MDB	multilateral development bank
MEPS	real-time gross settlement system
MGS	Malaysian Government Securities
MSB	monetary stabilization bond
OECD	Organisation for Economic Co-operation and Development
OTC	over-the-counter
OTC-FIS	Over-the-Counter Fixed Income Service
PAIF	Pan-Asian Bond Index Fund
QFII	Qualified Foreign Institutional Investors
RAM	Rating Agency Malaysia
RENTAS	Real-time Electronic Transfer of Funds and Securities
repo	repurchase agreement
RMBS	residential mortgage-backed securities
SARS	severe acute respiratory syndrome
SBI	Sertifikat Bank Indonesia
SBL	securities borrowing and lending
SEC	Securities and Exchange Commission
SGS	Singapore Government Securities
SOE	state-owned enterprise
SSX	Surabaya Stock Exchange
TEI	tax-exempt institution
Thai BDC	Thai Bond Dealing Centre

Development of East Asian Local Currency Bond Markets—A Regional Update

Bond Market Development in 2004

Size and Composition

Figure 1: **Growth[1] of East Asian Local Currency Government Bond Markets, 2004** (%)



[1] Calculated using data from national sources.
[2] Excludes bills or securities with original tenor of less than or equal to 1 year.
Sources: PRC (Bank of China), Indonesia (Bank Indonesia and Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Philippines (Bureau of the Treasury), Singapore (Monetary Authority of Singapore), Thailand (Thai Bond Dealing Centre), Viet Nam (Ministry of Finance).

In 2004, local currency government bond markets turned in another year of robust growth in most East Asian countries.

With the continued need for deficit financing, strong investor appetite, and intensified reform efforts to develop bond markets, East Asian (ASEAN+3[1] excluding Japan) local currency (LCY) government bond markets turned in another year of robust growth in 2004. Data from national sources show that growth was particularly impressive in Thailand, Philippines, Korea, Viet Nam, and PRC, exceeding 25% in LCY terms (Figure 1). More modest growth was seen in Singapore (14%) and Malaysia (8%). Indonesia was the only country in East Asia where the size of the LCY government bond market declined. In US dollar terms, outstanding LCY government bonds grew by 32% for East Asia as a whole, compared with the average annual growth of 27% during 1997–2003. Excluding the currency conversion factor, the region's outstanding LCY government bonds grew by 25%.

Bond market developments varied across countries:

- Financing needs for infrastructure projects largely drove the rapid growth of the LCY government bond market in the PRC and Viet Nam, with net issuance amounting to USD52 billion (CNY432 billion) and USD0.9 billion (VND14.5 trillion), respectively.
- In Indonesia, the decline in outstanding LCY government bonds was partly due to maturing bank recapitalization bonds. It also reflected government efforts to consolidate its fiscal position.
- In Korea, net issuance of government bonds totaled USD83 billion (KRW86 trillion), of which about 40% was monetary stabilization bonds issued to sterilize excess liquidity in the financial system. Part of the remaining issuance was used to finance fiscal stimulus in an attempt to spur the economy.
- Malaysia's modest growth reflected the country's continuing fiscal consolidation and push for more private sector-led growth. Still, USD7.5 billion (MYR28.7 billion) net issuance entered the market.
- In the Philippines, net issuance amounted to USD4.8 billion (PHP267.1 billion), reflecting the continued need to finance the fiscal

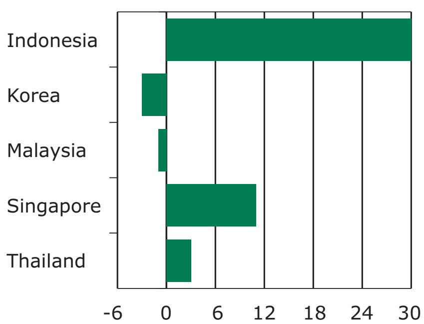
[1] ASEAN+3 comprises the 10 members of the Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam) plus People's Republic of China, Japan, and Republic of Korea.

deficit. Part of the new issuance was used to repay maturing obligations of government-owned and controlled corporations (GOCCs) assumed by the government.

- In the case of Singapore, the government did not need to finance its expenditure through the bond market. Net issuance, amounting to USD3.8 billion (SGD6.2 billion), was primarily designed to support capital market development.
- In Thailand, with the government budget in surplus, the USD1.3 billion (THB52 billion) net issuance was partly used to pay off foreign obligations.

But the growth of corporate bond markets was mixed.

Figure 2: **Growth[1] of East Asian Local Currency Corporate Bond Markets, 2004** (%)



[1] Calculated using data from national sources.
Sources: Indonesia (Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Singapore (Monetary Authority of Singapore), Thailand (Thai Bond Dealing Centre).

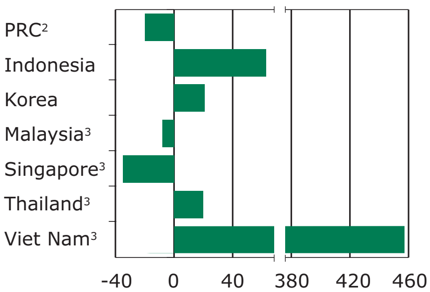
Growth of corporate bond markets was mixed.[2] Available data from national sources show that, in terms of LCY, outstanding LCY corporate bonds grew by 30% in Indonesia (albeit from a low base), 11% in Singapore, and 3% in Thailand; but they fell by 3% in Korea and 1% in Malaysia (Figure 2). Converted to US dollars, total outstanding LCY bonds in these five markets grew by 10% in 2004. Full year corporate bond data are not available for other East Asian markets.

In Indonesia, the impressive growth in the LCY corporate bond market in 2004 was driven largely by issuance in the finance, utilities, and transportation sectors, amounting to at least USD2.15 billion (IDR19.92 trillion). This was in line with government efforts to encourage private sector participation in infrastructure development (in light of the huge funding requirements). In Singapore, total LCY corporate bond issuance in 2004 was estimated at USD7.6 billion (SGD12.4 billion). About 30% was by offshore issuers, which represents an increase of 35% from the 2003 level, as issuers returned to the Singapore market after a year's absence due to uncertainties brought about by the outbreak of the war in Iraq and severe acute respiratory syndrome (SARS).

In Korea, one of the markets where growth performance was poor, many companies reduced investment spending as domestic economic growth continued to be subdued as a result of weak private consumption. In Malaysia, issuance of private sector debt securities fell to about USD9.5 billion (MYR36.0 billion) in 2004 from USD13.4 billion in 2003, partly because of uncertainties in interest rate movements during the first half of the year. In Thailand, the scenario of higher interest rates in the second half of 2004 resulted in a significant drop in corporate issuance in the third quarter.

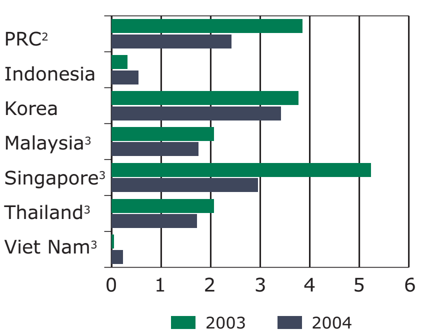
[2] In this report, corporate bonds include bonds issued by nonfinancial corporations and financial institutions.

Figure 3: **Government Bond Trading Volume Growth[1] in East Asia, 2004** (%)



[1] Calculated using LCY values (sales amount only).
[2] Excludes interbank transactions.
[3] Includes bills.
Sources: PRC (Shenzhen and Shanghai stock exchanges), Indonesia (Bank Indonesia and Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Singapore (Monetary Authority of Singapore), Thailand (Thai Bond Dealing Centre), Viet Nam (Ho Chi Minh City Securities Trading Center).

Figure 4: **Government Bond Turnover Ratios,[1] 2003 and 2004**



[1] Calculated as LCY trading volume (sales amount only) divided by year-end LCY value of outstanding bonds.
[2] Excludes interbank transactions.
[3] Includes bills.
Sources: PRC (Bank of China, Shenzhen and Shanghai stock exchanges), Indonesia (Bank Indonesia and Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Singapore (Monetary Authority of Singapore), Thailand (Thai Bond Dealing Centre), Viet Nam (Ministry of Finance and Ho Chi Minh City Securities Trading Center).

Market Liquidity

Trading activity for government bonds was strong in some markets but subdued in others.

Trading volume of LCY government bonds grew by 457% in Viet Nam (from a very low base), 63% in Indonesia, 25% in Korea, and 20% in Thailand, but fell by 35% in Singapore, 20% in PRC, and 8% in Malaysia (Figure 3).[3] In markets where trading activity was weak, the turnover ratio—trading volume divided by total bonds outstanding—was also down (Figure 4). The ratio also fell in Thailand, where trading volume growth was less than that of total bonds outstanding.

Trading volume and turnover ratio of LCY corporate bonds fell in most East Asian markets.

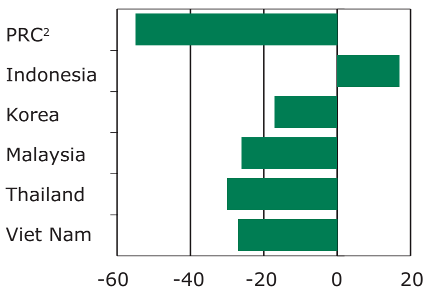
For LCY corporate bonds, trading volume fell in most markets where full year data are available: by 55% in PRC, 30% in Thailand, 27% in Viet Nam, 26% in Malaysia, and 17% in Korea. Indonesia was the exception, with trading volume increasing 17% (Figure 5). Declining trading volume led to a drop in the turnover ratio in Korea, Malaysia, and Thailand (Figure 6).[4] The turnover ratio also fell in Indonesia where trading volume growth was less than that of total bonds outstanding.

There could be several reasons for the generally patchy trading activity in East Asian LCY bond markets in 2004. Market commentators have cited the following:

- In response to US Federal Reserve (Fed) rate increases, portfolio managers shortened duration in anticipation of higher interest rates, and adopted more passive portfolio management.
- The trend in the composition of the investor base—moving away from banks toward contractual savings institutions (CSIs)—continues. CSIs tend to be less active traders than banks.
- In a rising rate environment, intermediaries are generally less willing to assume greater levels of market risk, particularly where effective tools for interest rate hedging are lacking.
- The imposition of mark-to-market rules on nonbank financial institutions in some countries may have also contributed to falling turnover because of uncertainties regarding revaluation methods.

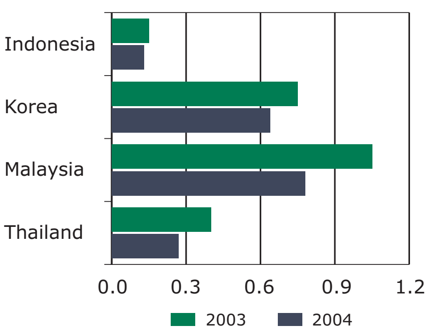
[3] Data for the Philippines are unavailable.
[4] Data on LCY corporate bonds outstanding for 2004 are unavailable for the PRC.

Figure 5: **Corporate Bond Trading Volume Growth[1] in East Asia, 2004** (%)



[1] Calculated using LCY values (sales amount only).
[2] Excludes interbank transactions.
Sources: PRC (Bank of China, Shenzhen and Shanghai stock exchanges), Indonesia (Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Thailand (Thai Bond Dealing Centre), Viet Nam (Ho Chi Minh City Securities Trading Center).

Figure 6: **Corporate Bond Turnover Ratios,[1] 2003 and 2004**



[1] Calculated as LCY trading volume (sales amount only) divided by year-end LCY value of outstanding bonds.
Sources: Indonesia (Surabaya Stock Exchange), Korea (KoreaBondWeb), Malaysia (Bank Negara Malaysia), Thailand (Thai Bond Dealing Centre).

While a one-off decline in turnover is not an immediate cause for concern, there are ramifications for pricing transparency in credit spreads, as gaps in transaction data mean that credit pricing information is discontinuous. Without reliable credit premium data, pricing transparency is jeopardized so issuers and investors may not be willing to enter the market.

Yields and Returns

In most East Asian local currency government bond markets, yield curves flattened in the second half of 2004.

Despite the increases in Fed fund rates, from 1.00% in June to 2.25% by year-end, US Treasury long-dated maturities (10 years and above) rallied during the second half, with yields ending 2004 below year openings. Perhaps the rally reflected reduced uncertainty in the timing of future Fed rate movements and lower inflationary expectations. It could also have been due to continued purchases of long-dated US Treasuries by foreign—primarily Asian—central banks.

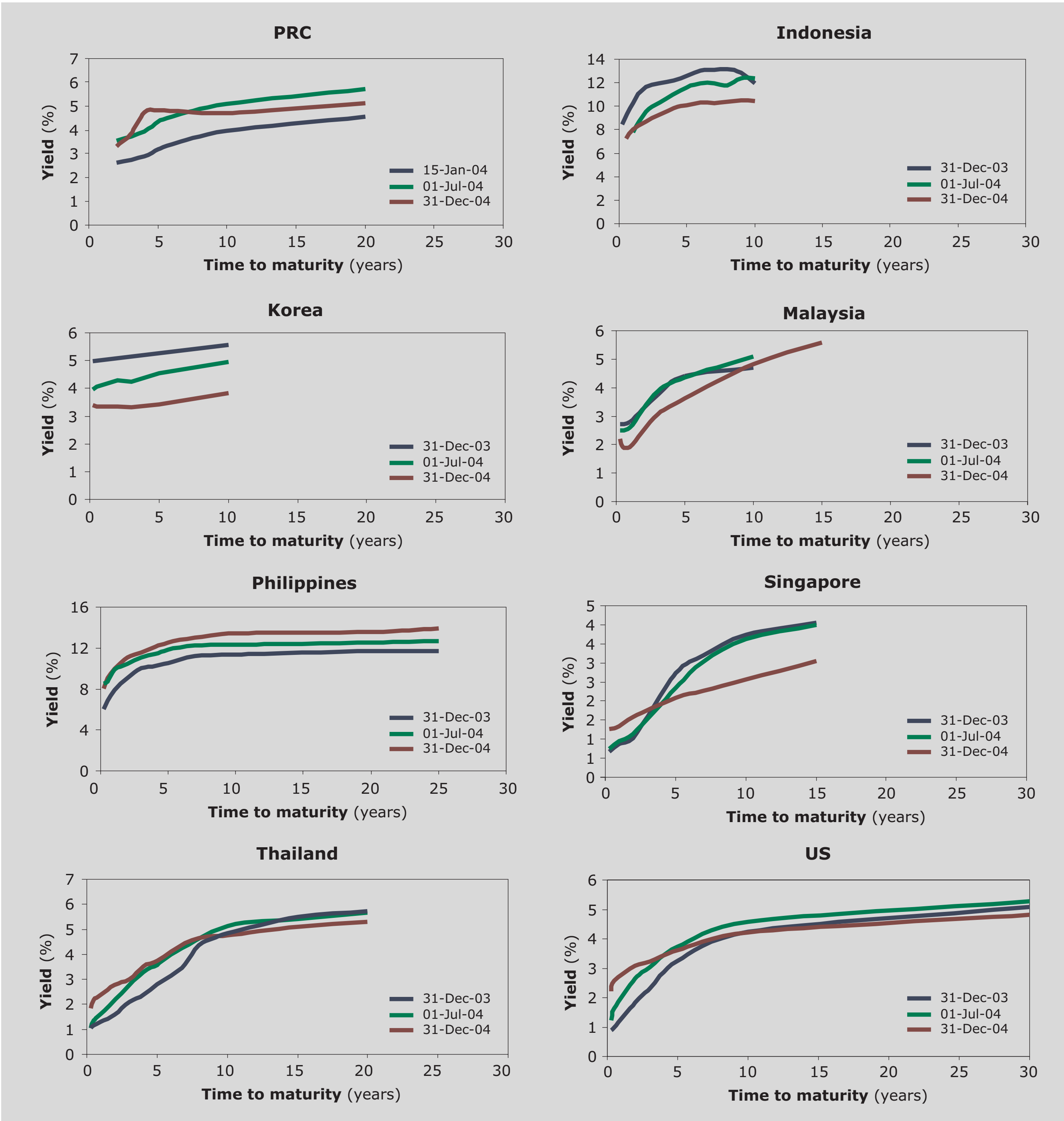
Partly in response to shifts in US yields, most East Asian LCY government bond markets rallied in the second half of 2004, resulting in yield curves either flattening (PRC, Indonesia, Singapore, and Thailand) or shifting downward across all maturities (Korea and Malaysia). The exception was the Philippines, where yields rose across all maturities, mainly on concerns about the country's fiscal problem (Figure 7).

In addition to the rise in US rates, several other factors also helped shape yields and yield curves of East Asian LCY government bonds.

- Despite the upward shift in the Fed fund rate and regional inflationary pressures, monetary tightening via interest rate increases was more limited in East Asia, with many countries resorting to increasing statutory reserve requirements to control monetary growth. The Philippines and Malaysia kept policy rates unchanged. Indonesia and Korea cut policy rates to support the domestic economy. And although the PRC and Thailand raised rates in the second half of 2004, the increases did not match the magnitude of the rise in Fed rates.

- The easing of inflationary pressures and reduced uncertainty over future policy rate movements in the region might have also caused LCY bonds—in particular those of longer maturities—to rally during the second half of 2004. Oil price concerns eased in the fourth quarter of 2004, as crude prices retreated from the psychologically important barrier of USD50/barrel. Early indications suggest that the PRC's monetary tightening—including the first rate increase in seven years—

Figure 7: **Benchmark Yield Curves—Local Currency Bonds**



Source: Bloomberg LP.

and other policy measures indeed helped dampen incipient inflation and restrain excessive investment in certain sectors of the economy.

- The general weakness of the US dollar led to foreign exchange markets refocusing on the perceived undervaluation of Asian currencies pegged to the dollar. Market expectations of an appreciation of these currencies, and the possible realignment of other East Asian currencies, induced significant amounts of capital flows into the region (Table 1). The generally optimistic ratings outlook for the region also encouraged foreign capital inflows. The resulting increases in liquidity might have encouraged buying in some LCY bond markets during the second half of 2004, leading to lower yields. In 2004, long-term foreign credit ratings of PRC, Indonesia, and Thailand were upgraded by S&P, and Malaysia's ratings were upgraded by Moody's and Fitch. The Philippines saw its ratings and outlook downgraded as a result of its fiscal problems. In 2005, Fitch upgraded Indonesia's ratings (January), while Moody's changed the country's ratings outlook to positive (February). S&P and Moody's downgraded the Philippines' ratings (Table 2).

Table 1: **Net Private Capital Flows to Six East Asian Countries**[1] (USD billion)

Item	1998	1999	2000	2001	2003	2004e	2005f
Net private flows (A+B)	-6.2	34.3	62.8	45.9	97.2	133.6	112.6
Equity investment, net (A)	59.7	68.6	69.0	57.5	76.7	89.0	93.8
Direct equity investment, net	54.7	53.4	50.6	47.1	52.5	65.8	70.1
Portfolio equity investment, net	5.0	15.2	18.4	10.5	24.3	23.2	23.7
Private creditors, net (B)	-65.0	-34.3	-6.2	-11.7	20.4	44.6	18.8
Commercial banks, net	-67.0	-37.5	-16.6	-8.7	9.8	29.9	7.6
Other private creditors, net	1.2	3.2	10.4	-3.0	10.6	14.8	11.2

e = estimate, f = forecast.
[1] PRC, Indonesia, Korea, Malaysia, Philippines, Thailand.
Source: Institute of International Finance.

Table 2: **Sovereign Credit Ratings in East Asia: Long-Term Foreign Currency Ratings**

	S&P		Moody's		Fitch	
Market	Dec 03	Feb 05	Dec 03	Feb 05	Dec 03	Feb 05
PRC	BBB/positive	BBB+/positive	A2/stable	A2/stable	A-/positive	A-/positive
Indonesia	B/stable	B+/positive	B2/stable	B2/positive	B+/stable	BB-/positive
Korea	A-/stable	A-/stable	A3/stable	A3/stable	A/stable	A/stable
Malaysia	A-/stable	A-/stable	Baa1/stable	A3/stable	BBB+/stable	A-/stable
Philippines	BB/stable	BB-/stable	Ba1/negative	B1/negative	BB/stable	BB/negative
Singapore	AAA/stable	AAA/stable	Aaa/stable	Aaa/stable	AAA/stable	AAA/stable
Thailand	BBB/positive	BBB+/stable	Baa1/stable	Baa1/stable	BBB/stable	BBB/positive
Viet Nam	BB-/stable	BB-/stable	B1/positive	B1/positive	BB-/stable	BB-/stable

Sources: AsianBondsOnline and web sites of respective credit rating agencies.

Due to falling yields, several East Asian local currency bond markets posted impressive returns in 2004.

Indonesia was the best performing LCY bond market in 2004 with an annual return of 19.1%, followed by Korea (8.9%), Malaysia (6.9%), Singapore (6.7%), Philippines (4.1%), and Thailand (3.9%). The only market with a negative rate of return in 2004 was the PRC, because yields rose in response to increased inflationary pressures. Compared with 2003, most markets saw significant increases in rates of return, ranging from 3.5 percentage points in Korea to over 8 percentage points in Singapore. The exceptions were the Philippines, where the rate of return declined by 6.2 percentage points, and the PRC, where the rate of return fell 3.2 percentage points (Table 3).

In terms of US dollars, Korea was the best performing market in 2004, with a rate of return of 23.0%—14 percentage points were currency-related. Singapore ranked second with a rate of return of 10.5%, (4 percentage points currency-related). Indonesia was third, even though a weakening rupiah reduced the rate of return to 9.5% in US dollar terms. An East Asian Local Currency Bond Index, based on HSBC Asian Local Bond Index (ALBI) weightings, would have returned 11.8%, compared with 5.1% in 2003 and 1.9% in 2004 for the US Treasury index of a comparable duration.

Market Structure

Important changes occurred in the structure of East Asian local currency bond markets in 2004.

- In several markets, authorities made efforts to extend benchmark yield curves. Malaysia issued a 15-year bond. And Korea began a policy of issuing longer-dated securities beyond the 3–5 year maturities traditionally preferred by local investors.
- Indonesia, Korea, Malaysia, Philippines, and Singapore increased the issue size of existing benchmark bonds by reopening issues (see Box 1 for Malaysia's case). In Philippines, Thailand, and Viet Nam, governments issued savings and small-denomination bonds to encourage retail investment.
- Asset-backed securities (ABS) continued to gain in popularity in Korea, Malaysia, Singapore, and Thailand. Korea established Korea Housing Finance Corporation (KHFC) and issued mortgage-backed securities (MBS) amounting to KRW3 trillion through 7 rounds of issuance. The success of Malaysia's first National Mortgage Corporation (CAGAMAS) residential MBS issuance showed the popularity of ABS with stringent core and prime credit quality. But

Table 3: **East Asian Local Currency Bond Indexes: 2003 and 2004 Annual Returns**

		Annual Returns (%)				Reference Indexes		
		In Local Currency		In USD				
Market	**Average Duration** (years)	**2003**	**2004**	**2003**	**2004**	**Index**	**Average Duration** (years)	**Annual Returns, 2004** (%)
PRC	5.07	0.132	-3.102	0.135	-3.099	US Govt All > 1 year	5.28	3.415
Indonesia	3.82	14.785	19.063	20.890	9.446	US Govt 1-10 years	3.31	1.835
Korea	3.07	5.402	8.915	4.864	23.037	US Govt 1-10 years	3.31	1.835
Malaysia	3.90	-0.537	6.850	-0.550	6.863	US Govt 1-10 years	3.31	1.835
Philippines	2.98	10.209	4.072	6.653	3.158	US Govt 1-7 Years	2.57	1.316
Singapore	4.75	-1.313	6.699	0.726	10.513	US Govt 3-10 Years	4.82	2.748
Thailand	5.30	-1.698	3.863	6.744	5.825	US Govt All > 1 year	5.28	3.415
Composite Bond Index	3.88			5.123	11.753	US Govt 1-10 years	3.31	1.835

Notes:
1. Market bond indexes are from HSBC's Asian Local Bond Index. The Composite Bond Index is calculated using HSBC's current weights and normalized to include the markets listed above.
2. Average duration as of 31 December 2004.
3. Annual return is computed for each year using natural logarithm of year-end index value/beginning-year index value.
Sources: HSBC, Bloomberg/EFFAS for US Government bond indexes.

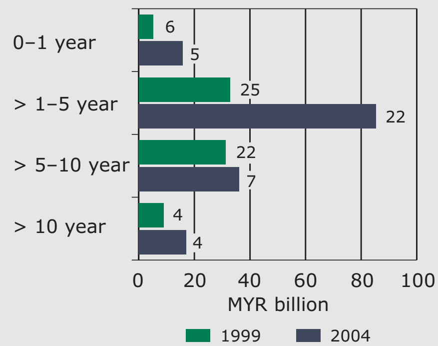
Box 1: **Creating a Benchmark Yield Curve—The Case of Malaysia**

To create a reliable government bond benchmark yield curve, the size of each benchmark issue needs to be sufficiently large, usually a significant multiple of the average transaction size. A large issue size encourages market makers to quote tighter two-way prices, as they are less concerned about supply shortages causing price disruptions. It also enhances market liquidity and reduces funding costs for the government.

East Asian governments recognize the importance of creating large and liquid issues. Some countries have adopted policies aimed at concentrating funding requirements into major benchmark issues, issuing according to a regular schedule, and improving the primary dealer system. Reopening and early redemption of small or illiquid issues have proved useful in increasing benchmark issues.

Beginning in 2000, the Malaysian government introduced the policy of reopening small-sized government issues to enhance liquidity. The importance the government attaches to this policy is illustrated by the fact that, during 2001-2004, the amounts raised through reopenings accounted for more than 70% of total gross issue amounts. As a result, the number of outstanding government issues decreased to 38 in 2004 from 57 in 1999, and the average issue size increased to MYR4.1 billion from MYR1.4 billion.

Figure B1: **Outstanding Malaysian Government Securities by Remaining Maturity, 1999 and 2004**



Note: Figures shown are number of issues.
Source: Bank Negara Malaysia.

securitized structures with varying credit quality tranches, aimed at satisfying investor demand for high yields, also grew rapidly.

- In Malaysia, Ingress Corp Bhd issued MYR150 million of domestic Islamic securities, the first *sukuk*[4] corporate issue, while Standard Chartered Bank Malaysia Bhd issued 7-year *sukuk* bonds, the first by a financial institution. Indonesia, Malaysia, and Singapore have already established or are in the process of establishing Islamic banking centers.

- There were also important developments in issuance by multilateral development banks (MDBs) to increase the availability of AAA-rated paper in LCY bond markets. The Asian Development Bank (ADB) became the first supranational issuer in the Malaysian domestic market, with the pricing reflecting the issue's popularity with investors. ADB is currently considering issuing LCY bonds in PRC, Philippines, and Thailand.

- The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) launched the Asian Bond Fund 2 (ABF2) in December 2004, which is likely to boost investment in LCY bond markets in the region (Box 2). The expectation is that ABF2 and its component sub-funds will eventually be made available for public investment.

[4] *Sukuk* translates as "securities," or more specifically, "a document or certificate that represents the value of an asset."

Box 2: **Asian Bond Fund 2**

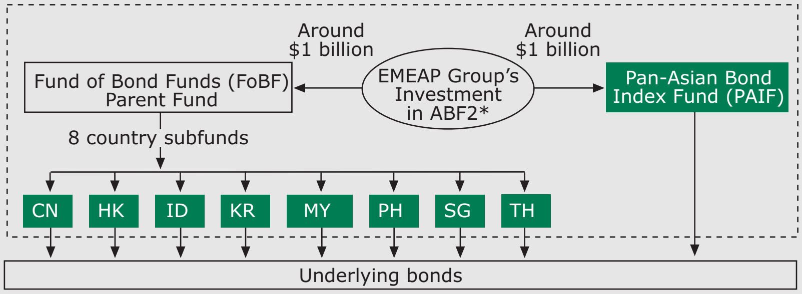
The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) launched the Asian Bond Fund 2 (ABF2) in December 2004. ABF2 consists of two components, a Pan-Asian Bond Index Fund (PAIF) and a Fund of Bond Funds (FoBF) (Figure B2). PAIF is a single bond fund index investing in sovereign and quasi-sovereign local currency-denominated bonds issued in eight EMEAP economies.[1] FoBF is a two-tiered structure with a parent fund investing in eight sub-funds, each of which will invest in local currency sovereign and quasi-sovereign bonds issued in their respective markets.

PAIF and the eight sub-funds will be passively managed by private fund managers against a Pan-Asian bond index and predetermined benchmark indexes in local markets. Through such a structure, ABF2 aims to promote low-cost and efficient products, and increase investor awareness and interest in Asian bonds. The fund will be domiciled in Singapore and initially listed in Hong Kong, China.

ABF2 is designed to facilitate investment by other public and private sector entities. While PAIF and the eight sub-funds will be limited to investments of EMEAP central banks during Phase 1, ABF2 will be opened to investment by other investors in Phase 2.

ABF2 has attracted a great deal of attention from market participants, policy researchers, and media. While most commentators consider this an important regional initiative in developing local currency bond markets in East Asia, there are debates on its impact on market development.

Figure B2: **ABF2 Framework**



* The BIS will act as the Fund Administrator for EMEAP Group's investment in ABF2.
■ Components that will be open to investment by other public and private sectors.
Source: EMEAP.

- Critics have argued that there already exists a strong demand for high quality Asian local currency bonds. Establishment of ABF2, although concurrently aimed at inducing supply side development, may not necessarily encourage a parallel increase in the issuance of such bonds. Thus, ABF2 could end up competing for a limited supply of highly rated Asian bonds. However, many consider this unlikely, as ABF2 investment will only amount to USD2 billion, 0.3% of total local currency government bonds outstanding for the eight EMEAP markets included in the fund.
- Another criticism is that ABF2 will do little to encourage wider issuance, particularly of lower grade corporate paper, as the bond funds will be investing in sovereign bonds. A counterview is that the development of a uniform and transparent bond index for high-grade issuance under ABF2 should encourage investment in corporate paper in the longer term, as private sector funds enter the market hoping to outperform the index by investing in corporate bonds that offer higher returns.
- A third criticism is that because ABF2 will be passively managed, it will not help to boost liquidity in local currency bond markets. A counterview is that, while this is true, increasing market liquidity should not be an immediate ABF2 goal.
- Lastly, critics also argue that public sector involvement in establishing and investing in local bond funds such as ABF2 may create moral hazard problems. ABF2 may serve as a mechanism for financing fiscal deficits of member countries and bailing out individual issuers. However, others think that the risk of this appears relatively small, as the bond funds of ABF2 are to be managed by private sector managers against a market based index.

[1] PRC (CN); Hong Kong, China (HK); Indonesia (ID); Korea (KR); Malaysia (MY); Philippines (PH); Singapore (SG); and Thailand (TH).

- Under the ASEAN+3 Asian Bond Markets Initiative (ABMI), governments continued to conduct regular policy dialogues and discussions within the group (and with private market participants and academics) on critical issues facing East Asian LCY bond market development. ABMI operates a Focal Group and six working groups, covering (i) new securitized debt instruments; (ii) credit guarantee and investment mechanisms; (iii) foreign exchange transactions and settlement; (iv) issuance of LCY bonds by MDBs, foreign government agencies, and multinational corporations; (v) rating systems and information dissemination; and (vi) technical assistance coordination. The AsianBondsOnline web site, an ASEAN+3 ABMI initiative, was launched in May 2004.

Market Outlook for 2005 and Challenges Ahead

Markets expect interest rates to rise slightly in most East Asian economies in 2005.

Interest rates in East Asia this year are likely to be influenced by a number of factors, such as inflationary pressures and growth prospects in the region, movements of regional currencies against the US dollar, and US interest rates, among others.

- The Fed raised its key funds rate by 25 basis points in March for the seventh consecutive time since June 2004, and second time this year. The Fed statement retained the “measured pace” wording, but cautioned that inflationary pressures had picked up in recent months, hinting that sharper interest rate increases are possible in the future.
- In most East Asian economies, economic growth is expected to taper somewhat from the highs of 2004. The latest Consensus Economics survey projects East Asia’s average gross domestic product (GDP) growth of 6.6%, compared with the estimated 7.7% in 2004 (Table 4). Only Indonesia is projected to grow at a higher rate this year, as the economic impact of the tsunami is expected to be relatively modest and efforts to rebuild affected areas are likely to boost fixed investment.
- The inflation picture in East Asia is more mixed. In many countries, inflationary pressures are largely under control. But there are renewed inflationary pressures in Indonesia and the Philippines, and to a lesser extent in the PRC. Still, the latest Consensus Economics survey projects East Asia’s average inflation rate in 2005 at 3.5%, compared with 3.8% in 2004.

Table 4: **Consensus Economics Survey of GDP Growth and Inflation**

Market	**GDP Growth** (%)		**Inflation** (%)	
	2004	**2005p**	**2004**	**2005f**
PRC	9.5	8.4	3.9	3.2
Indonesia	5.1	5.4	6.1	7.0
Korea	4.6[e]	3.9	3.6	3.1
Malaysia	7.1	5.4	1.3	2.1
Philippines	6.1	4.7	5.5	7.1
Singapore	8.4	4.2	1.7	1.5
Thailand	6.1	5.4	2.8	3.0
Viet Nam	7.7[e]	7.6	7.8	6.3
East Asia	7.7	6.6	3.8	3.5

e = estimate, f = forecast.
Note: East Asia GDP and inflation figures are weighted averages calculated using 2000 GDP weights.
Source: Consensus Economics, *Asia Pacific Consensus Forecasts,* March 2005.

- The general weakness of the US dollar, due to the twin US deficits, has continued to put pressure on East Asian currencies to appreciate. Barring the risk of a disorderly adjustment in the US current account, market expectations of an appreciation of East Asian currencies will continue to attract foreign capital flows into the region, increasing liquidity in financial systems and easing pressures on funding rates.

Based on these factors, markets are expecting any rise in interest rates this year to be limited in most East Asian economies. The latest Consensus Economics survey projects 2005 short-term interest rates to be only slightly above 2004 rates in most East Asian countries (Table 5). Bond analysts from the top five bookrunners in each active East Asian LCY bond market (see Appendix for bookrunner list), polled by AsianBondsOnline, project year-end long-dated LCY government bond rates to increase slightly in Singapore, Thailand, and Viet Nam, and to

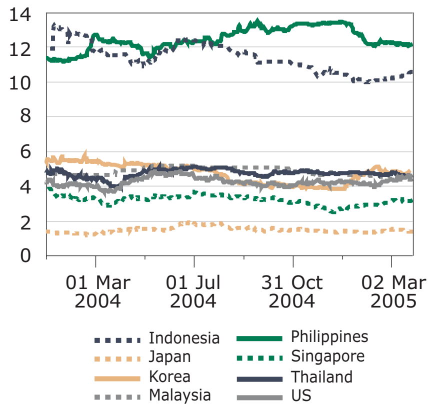
Table 5: **Consensus Economics Survey of Short-Term Interest Rates**

Market	**Short-Term Interest Rate**	**Rate at Survey Date** (%) **Mar 05**	**Forecast** (%) **End Mar 06**
PRC	1-year Base Lending Rate[1]	5.6	6.0
Indonesia	3-month Deposit Rate	6.5	6.8
Malaysia	3-month Interbank Rate	2.9	3.3
Singapore	3-month SGD Interbank Rate	1.9	2.2
Korea	91-day Certificate of Deposit	3.6	4.0
Thailand	3-month Interbank Rate	2.4	3.3

[1] Consensus Economics surveys 1-year Base Lending Rate for working capital only.
Source: Consensus Economics, *Asia Pacific Consensus Forecasts,* March 2005.

fall in PRC and Indonesia (Table 6). A major downside risk to this scenario, however, is the continued surge in world oil prices. Brent crude reached USD50.99 per barrel on 29 March 2005. If the oil price remains at this level or rises further, it could affect the inflation outlook and significantly impact bond markets.

Figure 8: **10-Year Government Bond Yields** (%)



Source: Bloomberg LP.

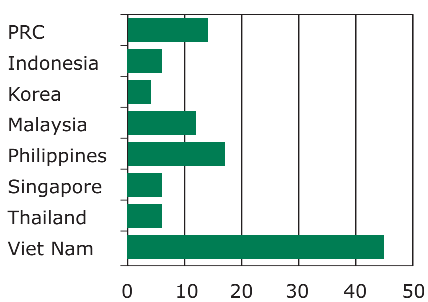
Table 6: **Projected 10-Year Local Currency Government Bond Yield at Year-End 2005**

Market	**First Trading Day 2005**	**Year-End 2005 Projection**	**Projected Increase/Decrease** (basis points)[1]
PRC	4.86	4.85	-1
Indonesia	10.44	10.40	-4
Korea	3.93	5.50	+157
Malaysia	4.72	4.79	+7
Singapore	2.56	3.34	+78
Thailand	4.87	5.29	+42
Viet Nam	8.90	9.05	+15

[1] A positive (+) sign indicates a rise in LCY bond yields.
Sources: Asia Bond Indicators, AsianBondsOnline 2005 poll.

Latest available data (as of 28 March 2005) indicate that, compared with its 2005 opening level, the US 10-year treasury yield increased by 43 basis points, partly in response to the two rate hikes. Among the East Asian markets, the LCY 10-year benchmark government bond yield increased by 111 basis points in Korea and 63 basis points in Singapore, remained more or less unchanged in Indonesia, while they have fallen in Malaysia, Philippines, and Thailand (Figure 8).

Figure 9: **Government Bonds Outstanding, 2005 Growth Projections** (%)



Note: Projected net issuance excluding bills.
Source: Compiled by AsianBondsOnline from independent market estimates. 2004 outstanding data from national sources.

Growth of East Asian local currency government bond markets is expected to be more modest in 2005.

Despite the anticipated benign interest rate environment, improving credit quality, and strong investor appetite, growth of East Asian LCY government bond markets is expected to be more modest in 2005. This is partly due to the limited scope for increases in government issuance in light of the need for fiscal consolidation in some countries. AsianBondsOnline collated independent estimates of 2005 LCY government bond issuance in each East Asian market. The results show that markets expect East Asia's total LCY government bonds outstanding (excluding securities with an original tenor of one year or less) to grow by 9% this year, compared with 29% in 2004 (Figure 9).[5]

[5] The 29% growth in 2004 excludes currency conversion factors, and only covers government bonds with an original tenor above one year.

- **PRC.** In line with the government's move toward fiscal consolidation, markets anticipate net issuance of government bonds to fall to USD34 billion (CNY280 billion) in 2005 from USD52 billion last year. The issuance of long-term construction bonds is expected to fall, with shorter tenor (2-, 5-, and 7-year benchmark T-bonds) to increase as the government is expected to reduce infrastructure financing this year.

- **Indonesia.** The government has planned USD2.4 billion (IDR22.4 trillion) in net bond issuance in 2005 to finance the budget deficit and repay maturing foreign obligations. This represents a 6% growth in outstanding LCY government bonds, as the government continues fiscal consolidation.

- **Korea.** Net issuance of government bonds is expected to reach at least USD15 billion (KRW16 trillion) in 2005. This includes USD10 billion of monetary stabilization bonds (MSBs) already issued in the first two months of the year, but excludes any MSBs that may be issued over the remaining ten months of 2005.

- **Malaysia.** Markets expect net issuance of government bonds to fall to about USD5 billion (MYR19 billion) this year from USD7.5 billion in 2004, as the government continues to consolidate its fiscal position.

- **Philippines.** The government will continue to issue bonds to finance its fiscal deficit. With this year's deficit expected to be lower than the 2004 level in line with its efforts at fiscal reform, the government targets net bond issuance at USD4 billion (PHP220 billion) for 2005.

- **Singapore.** As part of continuing efforts to develop a liquid government bond market that will serve as a benchmark for corporate debt securities, net issuance of government bonds is expected to reach USD1.9 billion (SGD3.1 billion), about half the 2004 level.

- **Thailand.** Given the projected budget position, markets expect net issuance of LCY government bonds to reach about USD2 billion (THB76 billion) in 2005. Part of the new issuance will be used for financing infrastructure projects. The National Housing Authority is expected to raise funds through mortgage-backed securities or bonds.

- **Viet Nam.** The government will continue to issue bonds to finance development projects. Net issuance is expected to reach USD1.7 billion (VND27 trillion) in 2005, an increase of 55% compared with the 2004 level.

More reform measures are expected to be implemented this year.

East Asian countries have taken significant steps in developing LCY bond markets in recent years, and these efforts will continue in 2005 and beyond. Some of the country-specific reforms in the pipeline are listed below:

- **PRC.** The government recently issued a regulation allowing foreign development agencies to issue LCY-denominated bonds in the domestic market. The Securities Law is currently being revised to open up the debt market to more borrowers. A cut in the rate of stamp tax levied on securities trading has been proposed. A new bankruptcy law, scheduled for implementation in 2005, will grant legal recognition to foreign bankruptcy procedures involving PRC-based companies.
- **Indonesia.** The Surabaya Stock Exchange (SSX) is expected to implement the Fixed Income Trading System (FITS) in the first half of 2005. FITS will allow securities companies to trade corporate bonds with straight-through-processing, integrated into the Indonesian Securities Central Depository (KSEI) and Indonesian Clearing and Guarantee Corporation (KPEI). In September 2004, Bank Indonesia introduced a repurchase agreement (repo) using Sertifikat Bank Indonesia (SBI or T-bills) as the underlying asset. The central bank is in the process of preparing the facility and mechanism for repo operations.
- **Korea.** The government is expected to increase homebuyers mortgage funding ceilings for loans from financial institutions. This will stimulate housing finance and encourage bond issuance by the Korea National Housing Corporation. The government plans to introduce the STRIPs market by the end of 2006. In addition, the issuing of the inflation-indexed government bonds is under review.
- **Malaysia.** The government plans to issue a 20-year bond to further extend its benchmark yield curve. Bank Negara Malaysia (BNM) is expected to implement measures to further enhance liquidity in the domestic bond market, including the use of repos as a funding instrument. It is also expected to introduce the Institutional Securities Custodian Programme (ISCAP) to encourage participation of institutional investors in securities lending activities. A securities lending facility for principal dealers is likely to be established to facilitate market-making activities and to promote competitive pricing.
- **Philippines.** A Fixed Income Exchange was launched for interbank trading in March 2005 to provide a competitive secondary market

for government and corporate debt. The exchange supports delivery-versus-payment. A legislative bill to update the Philippine corporate insolvency regime, the Corporate Rehabilitation and Insolvency Act, is currently with a technical committee in the House of Representatives.

- **Singapore.** The Monetary Authority of Singapore (MAS) will implement a new real-time gross settlement system (MEPS+) to replace the existing MEPS in the first half of 2005. To develop greater breadth and depth in capital markets, MAS recently announced tax incentives to encourage securities lending and borrowing, and to encourage investment in Islamic bonds.
- **Thailand.** The Thai Futures Exchange Company, established by the Stock Exchange of Thailand in 2004, is expected to start trading this year, initially for equity index futures, to be followed by interest rate products. The government is looking at ways to develop securities borrowing and lending (SBL) for both stocks and bonds to support the establishment of derivatives markets. Existing secondary market electronic trading platforms, the Thai Bond Dealing Centre (Thai BDC) and Bond Electronic Exchange (BEX), will be streamlined to establish a single electronic trading platform. Clearing and settlement systems will also be rationalized with all debt securities to be handled by the Thailand Securities Depository.
- **Viet Nam.** The Hanoi Securities Trading Center, Viet Nam's second exchange, opened in March 2005. The government has initiated the process for establishing credit rating agencies. The draft Securities Law is currently under review, and is expected to be approved in 2006. Amendments to Decree 144 on Securities have been proposed to establish a regulatory and procedural framework for listed and over-the-counter (OTC) transactions, and are awaiting approval. Proposed amendments also aim to align policies on foreign investor participation to international best practices.

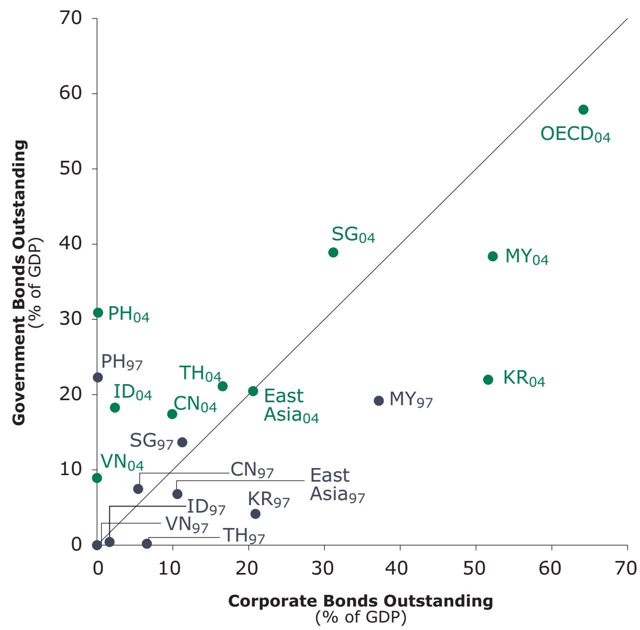
Developing corporate bond markets remains a significant challenge.

Growth of LCY bond markets in East Asia in recent years has been skewed toward the government sector. This was largely driven by the need in many East Asian countries to finance banking sector recapitalization programs and provide fiscal stimulus to support economic recovery in the aftermath of the 1997 crisis. While some countries are moving towards fiscal consolidation after consecutive years of expansionary fiscal policy, governments will continue to support infrastructure development and financing, greatly needed throughout

East Asia. Because of this, the government sector will continue to be a major source of growth for LCY bond markets in the region.

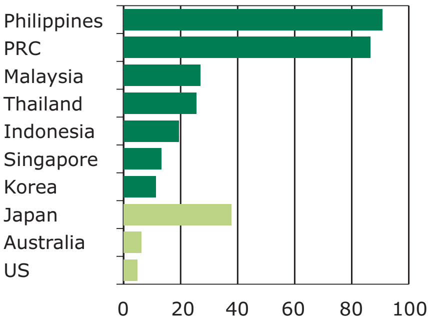
Compared with government bond markets, growth of East Asian LCY corporate bond markets has been slower. During 1997–2003, the annual growth rate for government bonds was 27%, but only 18.5% for corporate bonds. Also, development of corporate bond markets has been very uneven across East Asia. In terms of percentage of GDP, corporate bond market size ranges from 0.1%–2% in Indonesia, Philippines, and Viet Nam, to 10% in PRC, 19% in Thailand, 34% in Singapore, and 54% in Korea and Malaysia, with the East Asia average far below the OECD average (Figure 10). The turnover ratio, a measure of market liquidity, ranges from 0.13 in Indonesia to 0.27 in Thailand and 0.78 in Malaysia, significantly lower than those for the respective government bond markets. East Asian corporations rely far more on bank financing than their counterparts in developed countries such as the US and Japan. In 2003, for example, outstanding corporate bonds accounted for just 14% of total outstanding corporate debt in East Asia, with bank lending accounting for 86%. In contrast, outstanding corporate bonds in the US and Japan accounted for 59% and 30% of total outstanding corporate debt, respectively, while bank lending accounted for 41% and 70%.

Figure 10: **Size and Composition of East Asian Local Currency Bond Markets, 1997 and 2004**[1]



[1] As of the third quarter of 2004.
Note: East Asia and OECD are weighted averages.
Sources: Data on securities outstanding from BIS International Financial Statistics, Monetary Authority of Singapore. GDP data from national sources and OECD.

Figure 11: **Issuer Concentration Ratio[1]—Corporate Bonds, 2004**



[1]Percentage share of 3 largest corporate issuers of total corporate bonds outstanding.
Sources: AsianBondsOnline, Bloomberg LP, Bond Markets Association, Reserve Bank of Australia.

In addition to small size and low liquidity, there are some structural weaknesses in several East Asian LCY corporate bond markets:

- The issuer base is relatively narrow. Many markets are dominated by a few large corporate issuers (Figure 11). There is also a lack of diversity in sector distribution of issuers, as the majority of corporate bonds are issued by financial institutions and utilities companies (Table 7). Further, the credit curve is truncated due to the dominance of "investment grade" issuers in many markets (Table 8).[6] A narrow issuer base constrains the development of corporate bond markets and its long term viability because it could limit the supply of corporate bonds and restrict investor choice.

Table 7: **Corporate Bonds by Sector** (percentage share of total outstanding)

Industry	PRC	Indonesia	Korea	Malaysia	Philippines	Singapore	Thailand
Agriculture	—	3.1	—	1.7	—	—	—
Industrial and mining	9.2	12.7	21.6	5.5	—	15.1	4.0
Transport and utilities	68.5	22.9	6.5	48.4	17.4	10.0	38.0
Financial institutions	15.1	35.3	67.2	15.5	18.6	59.8	29.0
Holding companies	—	—	—	1.9	40.7	—	1.0
Property and real estate	4.2	3.6	—	20.5	23.3	—	—
Trading and services	—	7.4	—	5.0	—	—	1.0
Others	3.1	14.9	4.7	1.5	—	15.1	27.0

Sources: AsianBondsOnline estimates calculated using data from Bank of China (PRC, Dec 04); Surabaya Stock Exchange (Indonesia, Dec 04); Bloomberg LP (Korea and Singapore, Feb 05); Rating Agency Malaysia and Malaysia Rating Corp. (Malaysia, Feb 05); PhilRatings (Philippines, Jan 05); Thai Bond Dealing Centre (Thailand, Dec 04).

Table 8: **Corporate Issuer Ratings Distribution[1]** (percentage share of total number of issuers)

Local Ratings	Indonesia	Korea	Malaysia	Philippines	Singapore	Thailand
AAA	1.2	11.0	15.9	66.7	8.3	9.6
AA	7.0	11.0	25.4	16.7	18.9	16.4
A	37.2	24.0	48.4	16.7	8.7	32.9
BBB	40.7	35.0	6.3	—	2.9	28.8
BB	1.2	9.0	2.0	—	—	2.7
B	—	7.0	—	—	—	—
CCC and below	5.8	3.0	2.0	—	—	—
No rating	7.0	—	—	—	—	9.6
Not available	—	—	—	—	61.2	—

[1]Percentage share based on number of corporate issuers. For markets where no issuer ratings are available, issue ratings are used. In cases where there are different issue ratings for one issuer, the better rating is used.
Source: AsianBondsOnline estimates calculated using data from Surabaya Stock Exchange (Indonesia, Dec 04); Korea Ratings (Korea and Singapore, Feb 05); Rating Agency Malaysia and Malaysian Rating Corp. (Malaysia, Feb 05); PhilRatings (Philippines, Jan 05); Thai Bond Dealing Centre (Thailand, Dec 04).

[6] With the exception of Singapore, Asia Bond Monitor (ABM) uses ratings by local agencies. A BBB rated corporation in Indonesia may not be directly compared with a BBB rating in Malaysia, as credit ratings are not homogenous across markets. For simplicity, ABM defines any rating of BBB or above to be "investment grade" within the context of a domestic market.

- The investor base is also narrow. Most East Asian corporate bond markets are dominated by a few large investor groups, such as banks, insurers, and government-sponsored CSIs. Investor groups that are required by regulators to invest in LCY bonds have been effective in mobilizing domestic savings to be used for domestic investment. However, many of these investor groups tend to hold bonds to maturity, leading to low market liquidity. Furthermore, dominant investors controlling significant portions of the LCY bond market can lead to pricing distortions. This also can have a negative impact on the long-term development of corporate bond markets.

- In many markets, pricing efficiency is low, due to the lack of effective price discovery mechanisms. Compared with mature markets, such as the US and Australia, derivatives markets remain relatively undeveloped in East Asia (Table 9). Derivatives markets allow participants to hedge the risk of movements to the general level of interest rates (market risk) as well as the risk of the credit fundamentals of the corporate entity changing over time (credit risk). Derivatives markets also aid price discovery and improve pricing efficiency. The lack of efficient price discovery mechanisms leads to wide bid/ask spreads, low liquidity, and increased market volatility. Markets where effective mechanisms exist to hedge both market and credit risks tend to have higher turnover ratios in both physical and derivative instruments.

- In general, the framework for creditor rights and investor protection needs further improvement in the region. Despite recent efforts in insolvency reforms, there remain gaps in the legal framework for investor protection in many countries. Many debt structures rely on cash flows and collateral to obtain high credit ratings. Ineffectual bankruptcy legislation, weak creditor rights, and inadequate debt recovery and resolution procedures do not help create a framework conducive to new product development in debt markets. Certainty of collateral recovery in the event of default is a critical component of corporate security pricing. A recent study found that with the exception of PRC, Korea, and Singapore, East Asian insolvency recovery rates are well below the Organisation for Economic Co-operation and Development (OECD) average, and closure costs are significantly higher.[7] Only Korea and Singapore are placed below the OECD average for time taken to close a business.

- Disclosure standards vary significantly across East Asian markets. Poor disclosure discourages investors in bond markets. Some

[7] *Doing Business in 2004: Understanding Regulation,* World Bank.

Table 9: **East Asian Derivatives Markets**

Instruments	PRC	Indonesia	Korea	Malaysia	Philippines	Singapore	Thailand	Viet Nam	Hong Kong, China	Japan	US	Australia
Exchange-traded derivatives												
Government bond futures	not available	not available	active	active	not available	limited	not available	not available	active	active	active	active
Interest rate futures	limited	not available	active	active	not available	active	not available	not available	active	active	active	active
Interest rate/bond options	not available	not available	active	not available	not available	limited	not available	not available	not available	active	active	active
OTC derivatives												
Interest rate derivatives[1]												
Interest rate swaps	active	active	active	active	limited	active	active	limited	active	active	active	active
Interest rate caps/collars	not available	not available	active	limited	not available	active	limited	not available	not available	active	active	active
Cross currency swaps	limited	limited	active	active	limited	active	active	not available	active	active	active	active
Forward rate agreements	not available	limited	active	active	limited	active	active	not available	active	active	active	active
Basis swaps	not available	not available	limited	not available	not available	limited	not available	not available	not available	limited	active	active
Credit derivatives[1]												
Credit default swaps	not available	not available	limited	not available	not available	active	not available	not available	active	limited	active	active
Total return swaps	not available	not available	limited	not available	not available	active	not available	not available	not available	limited	active	active
Credit swap options	not available	not available	limited	not available	not available	active	not available	not available	not available	limited	active	active

[1] In local currency.
Source: AsianBondsOnline.

countries are looking at encouraging foreign investors to diversify the investor base. Many investors from outside the region will demand high disclosure standards. Increased foreign participation in domestic bond markets could make the issue of further improving disclosure standards more urgent. While more stringent disclosure has its cost in the form of greater regulatory compliance, poor disclosure also has costs if it discourages investors from participating in bond markets.

- While the reporting of LCY government bond data is well advanced, information on corporate bond market activity is more difficult to gather in the region. In mature markets, data on corporate bond market activity derives from reporting on computerized trading systems, which is very efficient. Within East Asia, the Thai BDC is a good example of effective reporting, with monthly corporate transaction data freely available on its web site. Reporting standards, however, differ widely across the region. Accurate reporting of data raises investor confidence and helps improve market liquidity.

Developing efficient LCY corporate bond markets is important for reducing vulnerabilities to future financial crises, providing a sustainable form of long-term financing, and maintaining the region's economic dynamism. Conditions favorable to the development of corporate bond markets exist in East Asia. In many countries, the private sector is being encouraged to participate in infrastructure development, and the success of these initiatives relies on the existence of a reliable source of corporate finance. Strong economic performance and high savings rates in most East Asian countries augur well for the development of corporate bond markets. Reforms and government policy initiatives implemented in recent years are improving basic bond market infrastructure, including benchmark yield curves, credit ratings, trading platforms, clearing and settlement systems, and the regulatory environment of bond markets (Table 10). Governments should continue these efforts to create an environment conducive to long-term development and viability of corporate bond markets in the region. Results of an AsianBondsOnline poll of bond analysts from East Asian bond markets point to a number of areas where measures could be taken to speed corporate bond market development: (i) widen the issuer and investor base; (ii) improve the transaction environment; (iii) develop hedging products and derivatives markets; (iv) address uneven disclosure standards and strengthen the framework for creditor rights; and (v) improve transaction and general data reporting (Box 3).

Box 3: **Measures to Develop Corporate Bond Markets—Bond Analysts' Views**

AsianBondsOnline conducted a poll of bond analysts from the top five local currency (LCY) book running institutions in East Asian markets (see Appendix for bookrunner list). These institutions are responsible for 50%–85% of total LCY corporate bond underwriting in their respective markets. Analysts were asked to identify major impediments to the development of corporate bond markets and suggest measures needed to address these impediments.

Analysts' responses varied according to the relative size and stage of development of their market. For less developed markets, the focus was on improving the physical transaction environment, raising disclosure standards, and reducing issuance barriers.

For the transaction environment, establishing formalized fixed-income exchanges, standardizing settlement procedures, and creating enhanced funding facilities such as repurchase (repo) markets were given a high priority. Formalized fixed-income exchanges appear to be favored above over-the-counter (OTC) mechanisms for markets at this stage of development because, in addition to enhancing liquidity, they also ensure timely reporting of market transactions and aid transparency. Settlement systems directly linked to exchanges help avoid settlement uncertainties and reduce transaction costs.

Specific suggestions for raising disclosure standards include adopting international practices of disclosure and reporting, imposing mandatory credit ratings for corporate issues and supporting the establishment of local credit rating agencies. As disclosure standards improve and investors are in a better position to assess credit risk, regulators may consider easing issuance restrictions, such as the requirement of compulsory minimum credit standards for corporate issuers. While guarantee mechanisms were credited with increasing the number of issues, there were concerns that mandatory guarantees by banks for corporate issuers may not necessarily be beneficial for the long-term development of corporate bond markets, because they result in a truncation of the credit curve.

Other measures suggested for reducing issuance barriers include clarifying any ambiguity in issuing procedures, cutting down administrative bottlenecks in issuance approval, and allowing foreign issuers to issue in domestic markets. Many foreign issuers seek to swap proceeds of bond issuance into foreign currency. Therefore, the lack of flexibility to swap proceeds into foreign currency may act as a disincentive for foreign issuers.

In more developed markets, bond analysts were less concerned about market structures and instead concentrated more on issues such as elimination of taxes seen as disproportionately levied on bond transactions. Suggestions regarding improving the credit ratings culture in these markets tended to concentrate on closing loopholes that allow issuers to circumvent disclosure requirements by way of their incorporation status.

The further development of hedging instruments and derivatives markets was considered critical for all markets. The lack of liquidity and restricted availability of hedging instruments were a recurring theme in the poll results. Once again, suggested initiatives differed according to a market's stage of development. In less developed corporate markets, emphasis was placed on products that facilitate hedging of market risk and enhance market liquidity, such as single and multi-currency swaps, futures markets, and securities borrowing and lending arrangements. In more developed markets, the creation of credit risk instruments such as credit default swaps was given greater importance.

Analysts in all markets wished to see a wider investor base, suggesting that the existing base was too homogenous. It was suggested that products such as cash management, closed end, and other fund types will help to widen the investor base and at the same time bring portfolio management styles and trading strategies to the markets. Many reforms suggested for derivatives markets, such as currency swap agreements, will also encourage foreign investors.

Table 10: **East Asian Local Currency Bond Markets: Factsheet**

Market	PRC	Indonesia
GOVERNMENT SECURITIES		
Overall Market Profile		
Benchmark curve	Government bonds—issuance up to 28 years	Fixed government bonds—issuance up to 10 years
Issues available	Treasury bills and government bonds	Sovereign bonds (including Recapitalization Bonds) and SBIs (T-bills)
Issue tenor-concentration for bonds	Issuances are primarily in 3-, 5- and 7- year tenors	Mostly longer-dated issues of 7- to 10-years
Futures market	No bond futures market	No bond futures market
Regulations		
Restrictions on investment and investment-related activities	No restrictions on investment in government securities by domestic investors. With the exception of Qualified Foreign Institutional Investors (QFII), foreign investors are not allowed to invest in government securities.	No restrictions on investment in government securities by domestic or foreign investors. Remittances of foreign currencies into or out of Indonesia, the repatriation of proceeds, or interest payments are allowed. However, local currency (IDR) transfers to offshore accounts is prohibited.
Taxation	For investments held to maturity, interest income is tax-exempt; otherwise 33% profit tax is applied on interest income.	Bond transactions that are traded or reported to the SSX, interest income and discount (capital gains) is subject to 20% final tax. OTC transactions not reported to the SSX are subject to the general tariff of income.
Primary Market		
Auction style	Government bonds—Dutch auction	Sovereign bonds—multiple or uniform; SBI (T-bills) —multiple price auction
Issuance cycle	Issuance of government securities is pre-announced via the People's Bank of China (PBC) or by the Ministry of Finance	Issuance of bonds is pre-announced via Bank Indonesia; 1- month SBIs issued twice a month, 3-month SBIs issued once a month
Average issue size	CNY30–40 billion (USD3.6–4.8 billion) for government bonds	IDR1.8–4 trillion (USD0.19–0.43 billion) for bonds; IDR8–11 trillion (USD0.86–1.19 billion) per month for SBIs
Secondary Market		
Trading mechanism	Either through the Shenzhen and Shanghai stock exchanges, or over-the-counter (OTC), locally refered to as "Interbank Market"	OTC
Annual turnover ratio	2.42	0.54
Repurchase market		
Government bonds	Active among banks in the "Interbank Market"	Starting-up
Corporate bonds	Information on trading activities unavailable	Mostly based on bilateral agreement
Clearing	Securities and payments are cleared through Central Government Bonds Depository and Clearing Corporation (CDC) or China Securities Depository and Clearing Corporation (CSDCC) for exchange traded and "Interbank Market" transactions.	Delivery-versus-payment (DVP) via Bank Indonesia-Scripless Securities Settlement System (BI-SSSS)
Settlement period	T+1 *	On the average T+2.
CORPORATE SECURITIES		
Domestic credit rating agencies (DCRA)	There are more than 50 rating agencies, of which 6 are approved by PBC to rate corporate bond issues. Dagong Global Credit Rating Co. and China Chengxin International Credit Rating Co. are the two accredited national rating agencies approved by the Ministry of Finance and PBC	PEFINDO and KASNIC CREDIT RATING INDONESIA
Annual turnover ratio	Data unavailable	0.13
Number of issuers (with outstanding issues as of a specified date)	69 (as of Dec 2004)	Approximately 107 (estimate from SSX as of Dec 2004)
Major investors	Primarily private individual and corporate investors	Banks and asset management companies
Issue requirements	Under the Company Law the following provisions apply to corporate bond issuance: issuing firms should have at least a net asset value of CNY30 million (USD3.6 million); bond proceeds may not be used to cover losses or nonproductive expenditures; bond interest rates may not exceed the limit set by the State Council, fixed at 1.4 times the bank savings-deposit rates; companies are barred from new issues if they fail to raise the full amount on a prior attempt or if they defaulted on principal or interest payment of previously issued bonds. Corporate issuers are required to secure credit ratings from either of the two accredited national rating agencies. Under recent rules published by PBC, international corporations may issue local currency bonds provided that an issuing company has more than CNY1 billion (USD121 milion) in loans & equity in PRC.The bond issue should have a minimum rating of AA from the two accredited national rating agencies; proceeds from the issue can only be used in PRC.	Under SSX rules, debt issuing companies should be in operation for at least three years; have a minimum equity of IDR20billion (USD2.16 million); and at least book some net profit in the latest year prior to issuance. Foreign issuers are allowed to issue IDR-denominated bonds subject to approval by Bank Indonesia and/or BAPEPAM. Bond issues have to be rated by at least one DCRA with a minimum rating of BBB-.
Issuance type	Underwriting or book-building	Bookbuilding or underwriting
DERIVATIVES	See separate table	See separate table

* T = trade date

Continued next page

Table 10—*Continued*

Market	Korea	Malaysia
GOVERNMENT SECURITIES		
Overall Market Profile		
Benchmark curve	Korea Treasury Bonds (KTBs)—issuance up to 10 years	Malaysia Government Securities (MGS)—issuance up to 15 years
Issues available	KTBs, Foreign Exchange Stabilization bonds, National Housing bonds, and Monetary Stabilization Bonds (MSBs).*	Bank Negara Bills, Malaysian Treasury Bills, MGS, Government Investment Issues, Khazanah bonds
Issue tenor-concentration for bonds	Majority (at least 50% of total issuance) of KTBs have tenor of less than or equal to 5 years	MGS issuances have primarily 3-, 5- and 10-year tenors
Futures market	Active, primarily with 3-year KTB futures as the most liquid	Relatively illiquid MGS bond futures; short-dated KLIBOR futures contract also available.
Regulations		
Restrictions on investment and investment-related activities	No restrictions on investment in government securities by domestic investors. Foreign investors may invest in all fixed-income instruments in the Korean bond market.	No restrictions on investment in government debt securities by domestic and foreign investors; currency forward and swap contracts limited up to 3 days
Taxation	Domestic investors are subject to 14% withholding tax on interest income. Foreign investors are subject to 27.5% withholding tax on interest income and capital gains tax of either 11% of gross proceeds or 27.5% of capital gains, whichever is lower. Foreign investors from countries with double taxation treaties are subject to the provisions made under the treaties. From July 2005, domestic financial institutions will be exempt from withholding tax on interest income.	All government securities are exempt from interest income tax and capital gains tax
Primary Market		
Auction style	All government securities—public offering via Dutch-style yield auction	All government debt securities—US Treasury auction style
Issuance cycle	3-, 5-, and 10-year KTBs are issued once a month	Auction calendar disclosed at the start of the year with no regular issuance schedule
Average issue size	KRW1.5 trillion (USD1.49 billion) for bonds	MGS issue size average MYR3 billion (USD0.79 billion). Over half are reopenings
Secondary Market		
Trading mechanism	Through Korea Exchange (KRX) and OTC, with 65% of trading activities done on the OTC market	OTC and exchange, but most trading is OTC
Annual turnover ratio	3.42	1.75
Repurchase market		
Government bonds	Repo transactions are performed between financial institutions as well as with the BOK	Active
Corporate bonds	Well-traded and inter-financial institution repos not subject to credit rating	Information on trading activities unavailable
Clearing	Via Korea Securities Depository for exchange-traded and OTC transactions	DVP via RENTAS
Settlement period	Bond settlement on the KSE is T+1; OTC can be negotiated between T+1 and T+30	T+2 days for OTC and exchange-traded transactions
CORPORATE SECURITIES		
Domestic credit rating agencies (DCRA)	Korea Investors Service, National Information & Credit Evaluation, Korea Ratings, and Seoul Credit Rating & Information	Rating Agency Malaysia (RAM) and Malaysian Rating Corporation (MARC)
Annual turnover ratio	0.64	0.78
Number of issuers (with outstanding issues as of a specified date)	314 (only covers issues listed in Bloomberg as of end Jan 2005)	252 (RAM- and MARC-rated issuers as of Dec 2004)
Major investors	Banks, securities companies, insurance companies, investment trust companies, and pension funds.	Asset management companies, including Employees Provident Fund (EPF)
Issue requirements	All corporate bonds to be issued under Article 3 of the Securities and Exchange Act must be registered with the Financial Services Commission (FSC) for disclosure purposes.The registration procedures are outlined in the Financial Supervisory Services (FSS) Regulation on Securities Issuance. Foreign issuers can issue KRW-denominated bonds subject to the approval of the FSS. Guidelines for foreign corporations issuing KRW-denominated bonds are provided under the Regulation on Securities Issuance. Unguaranteed bonds must be rated by at least two credit rating agencies. Credit rating is not required for guarenteed bonds.	The Securities Commission (SC) provides guidelines on the offering of corporate debt securities (i.e., private debt securities, Islamic securities, asset-backed securities). The SC approves prospectuses, which are lodged with the Companies Commission of Malaysia. Proceeds from MYR bond issuances cannot be used for refinancing of offshore borrowings and/or financing of investment abroad in excess of limits set by the Controller of Foreign Exchange. Foreign corporations are allowed to issue MYR-denominated bonds in the domestic market provided they comply with the private debt securities guidelines. They are, however, restricted to do currency swaps. All corporate bond issues must be rated by a rating agency recognized by the SC.
Issuance type	Public offering	Underwriting
DERIVATIVES	See separate table	See separate table

*Issued by the Bank of Korea and classified as Special Public Bonds

Continued next page

Table 10—*Continued*

Market	Philippines	Singapore
GOVERNMENT SECURITIES		
Overall Market Profile		
Benchmark curve	Treasury bonds—issuance up to 25 years	Singapore Government Securities (SGS)—issuance up to 15 years
Issues available	Treasury bills and treasury bonds which include Fixed Rate Treasury Notes (FXTNs) and Retail Treasury Bonds (RTBs)	SGS Bonds and SGS T-bills
Issue tenor-concentration for bonds	Issues are primarily concentrated in 3- to 5-year tenors	Issues are primarily 10-year tenor
Futures market	No bond futures market	Inactive SGS bond futures; active 3-month interest rate futures contract
Regulations		
Restrictions on investment and investment-related activities	No restrictions apply to investment in government securities	No restrictions on investment in SGS by domestic and foreign investors
Taxation	20% withholding tax on interest income on government securities. Documentary stamp tax (DST) is applied on purchases from the primary market. No DST is applied on secondary market trading	Taxes on interest income vary across institutional investors; resident and nonresident individuals are exempt. There is no capital gains tax
Primary Market		
Auction style	Treasury bills—English Auction. Treasury bonds: FXTNs—Dutch auction; RTBs—bookbuilding	SGS Bonds—uniform price auction; SGS Bills—multiple price auction
Issuance cycle	Treasury bills and bonds regularly issued based on a pre-announced schedule issued by BTr.	3-month T-bills are issued weekly; 1-year T-bills, 2-, 5-, 7-, 10- and 15-year bonds are issued according to an annual issuance calendar
Average issue size	PHP3 billion (USD0.05 billion) for treasury bonds	SGD2–3 billion (USD1.22–1.83 billion) for benchmark bond issues; SGD900–1,000 million (USD550–611 million) for T-bill issues
Secondary Market		
Trading mechanism	OTC through SEC-accredited financial institutions	OTC
Annual turnover ratio	Data unavailable	2.95
Repurchase market		
Government bonds	Active	Active
Corporate bonds	Information on trading activities unavailable	There is no active repo market on corporate bonds
Clearing	Via bank to bank	DVP via MEPS; MEPS+ expected to replace MEPS mid-2005
Settlement period	Market convention is T+2, but could be shorter depending on the parties involved in the transaction	T+1
CORPORATE SECURITIES		
Domestic credit rating agencies (DCRA)	PhilRatings (Philippine Rating Services Corporation)	No domestic credit rating agency; Issues are rated by international credit rating agencies.
Annual turnover ratio	Data unavailable	Data unavailable
Number of issuers (with outstanding issues as of a specified date)	5 (as of Dec 2004)	Approximately 206 (only covers issues listed in Bloomberg as of end-Feb 2005)
Major investors	Mostly financial institutions	Banks, insurance, and asset management companies
Issue requirements	Corporate Law requires issuance to be approved by 2/3 vote by majority stockholders. Numerous registration requirements; issuer must have net worth of at least PHP25 million (USD446,000); SEC charges 1/10th of 1% of total issue amount. Foreign corporations may issue PHP-denominated bonds in the domestic market subject to the approval of the Bangko Sentral ng Pilipinas and the Securities and Exchange Commission. All local currency bond issues must be rated by PhilRatings.	All corporate bond issuance must comply with the rules set under the Securities and Futures Act. No MAS approval is required for SGD bond issuance if the proceeds are to be used for economic purposes in Singapore. Issuance of SGD-denominated bonds by nonresidents requires MAS approval if the SGD proceeds are for use outside Singapore; the SGD proceeds also have to be converted into foreign currency before remitting abroad. SGD bonds issued by residents may or may not be rated, while SGD bond issuance by nonresidents must be rated.
Issuance type	Underwriting or bookbuilding	Public offer or private placement
DERIVATIVES	See separate table	See separate table

Continued next page

Table 10—*Continued*

Market	Thailand	Viet Nam
GOVERNMENT SECURITIES		
Overall Market Profile		
Benchmark curve	Government Loan Bonds—issuance up to 20 years	Treasury bonds—issuance up to 5 years. Rate ceilings set by Ministry of Finance, moving towards market-based yield
Issues available	Government Loan Bonds, Savings Bonds, Bank of Thailand (BOT) Bonds, Financial Institution Development Fund (FIDF) Bonds	Treasury bills and government bonds that include Treasury bonds, Central Project bonds, Investment bonds, Foreign Currency Bonds, Government-Guaranteed Bonds, Municipal Bonds
Issue tenor-concentration for bonds	Government Loan Bond issuances have primarily 5-, 10-, and 15-year tenors	Issuance of 5- and 15-year tenors account for at least 80% of total issuance
Futures market	Futures exchange to be opened in 2005; Interest rate futures and bond futures to be offered after stock index futures	No bond futures exchange
Regulations		
Restrictions on investment and investment-related activities	No restrictions on investment in government securities by domestic and foreign investors	Some government bond issues may not be available for purchase by domestic retail or foreign investors; all securities trading are in VND
Taxation	Varies, depending on type of investor (corporate vs individual) and type of income (interest income, capital gains)	Government securities are exempt from interest income tax and capital gains tax. Institutitonal investors, both domestic and foreign, are subject to 28% corporate income tax on income derived from bonds
Primary Market		
Auction style	All government securities—US Treasury auction style; except for Government Saving Bonds which can only be purchased by authorized investors through accredited commercial banks	Bonds—one price auction (Dutch auction style) through the Ho Chi Minh City Securities Trading Center (HSTC),* although issuance in the primary market may also be done via underwriting, issuance agencies, or retail system; Bills—one price auction via the State Bank of Viet Nam
Issuance cycle	Regular weekly issuance for all government securities except for Savings Bonds and FIDF Bonds which are pre-announced by the Ministry of Finance	No definite or regular schedule of bond issuance. Issuance of government bonds are pre-announced by the Ministry of Finance
Average issue size	Average issue size is THB1–1.5 billion (USD25–39 million) per week for each tenor for Government Loan Bonds; about half of issuances are reopenings	Varies according to the capital needs of the issuer; generally skewed towards smaller size issuances
Secondary Market		
Trading mechanism	OTC with transaction reporting via Thai Bond Dealing Centre	Traded at the HSTC* generally through put-through system
Annual turnover ratio	1.72	0.23
Repurchase market		
Government bonds	Active	Transactions are primarily between the State Bank of Vietnam and financial institutions
Corporate bonds	Information on trading activities unavailable	Information on trading activities unavailable
Clearing	Via Bahtnet (either DVP or DFP) and over-the-counter at the Bank of Thailand	Centralized at the HSTC* via Bank for Investment and Development of Viet Nam (BIDV)
Settlement period	T+2 days	T+1 for HSTC transactions*
CORPORATE SECURITIES		
Domestic credit rating agencies (DCRA)	TRIS Rating, Fitch Rating (Thailand)	In planning
Annual turnover ratio	0.27	Data unavailable
Number of issuers (with outstanding issues as of a specified date)	88 issuers (Thai BDC registered)	1 HSTC-registered (as of Feb 2005)
Major investors	Provident funds and pension funds (including government pension funds)	Institutional investors
Issue requirements	The Securities and Exchange Act (Chapter 2) and the SEC notifications cover issuing requirements.Only corporations incorporated in Thailand are allowed to issue THB-denominated bonds subject to SEC approval. International organizations can issue THB-denominated bonds in the domestic market subject to Ministry of Finance approval. All bond issues require credit ratings by SEC-recognized rating agencies.	Firms wanting to issue bonds must register with the State Securities Commission, must have a statutory capital of VND10 billion (USD634,000) and must have recorded profits on the year prior to issuance date.
Issuance type	Underwriting	Underwriting
DERIVATIVES	See separate table	See separate table

*Hanoi Securities Trading Center, Viet Nam's second exchange, opened in Mar 2005

Appendix: **List of Institutions Contacted for the AsianBondsOnline Poll**

	Bookrunner	Issues	Underwritten Amount in 2004	% Share to Total
	PRC (CNY billion)			
1	China International Capital Corp Ltd	3	18,500.00	22.40
2	Bank of Communications	1	12,000.00	14.53
3	China International Trust & Investment Corp - CITIC	7	11,417.67	13.82
4	China Galaxy Securities Co Ltd	7	10,667.67	12.92
5	Shanghai Pudong Development Bank Co Ltd	1	6,000.00	7.27
	Indonesia (IDR billion)			
1	PT Trimegah Securities	14	2,454.17	16.15
2	PT Andalan Artha Advisindo	32	2,027.50	13.34
3	PT (Persero) Danareksa	7	1,766.67	11.63
4	PT Bahana Securities	8	1,633.33	10.75
5	PT Bank Mandiri	9	1,529.17	10.06
	Korea (KRW billion)			
1	Korea Development Bank - KDB	105	8,119.09	15.30
2	Daewoo Securities Co Ltd	93	5,399.14	10.18
3	Hana Bank	50	5,322.33	10.03
4	Samsung Securities Co Ltd	78	5,297.68	9.99
5	LG Securities International Ltd	57	4,022.55	7.58
	Malaysia (MYR billion)			
1	AmMerchant Bank Bhd	11	4,586.33	27.00
2	RHB Capital Bhd	2	2,126.00	12.52
3	HSBC	33	1,770.00	10.42
4	Aseambankers Malaysia Bhd	31	1,727.67	10.17
5	Commerce International Merchant Bankers Bhd	9	1,395.00	8.21
	Singapore (SGD billion)			
1	Citigroup	24	2,176.83	26.62
2	HSBC	20	1,353.50	16.55
3	Barclays Capital	3	875.00	10.70
4	Standard Chartered Bank	11	835.50	10.22
5	Deutsche Bank	8	710.00	8.68
	Thailand (THB billion)			
1	Kasikorn Bank pcl - KBank	23	29,253.25	24.96
2	SCB Securities Co Ltd	16	24,500.00	20.90
3	Standard Chartered Bank	14	15,169.92	12.94
4	Deutsche Bank	4	14,900.00	12.71
5	Bangkok Bank pcl	7	14,436.58	12.32

Note: Institutions polled belong to the Top 5 Bookrunners in Asian Local Currency Bonds for 2004 in their respective markets based on *Dealogic Asia Pacific Benchmark League Tables* as of 31 December 2004. For Viet Nam, where no Dealogic league tables exist, AsianBondsOnline contacted experts on the domestic bond market of the country.

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