

Bond Market Developments in the Fourth Quarter of 2010

Size and Composition

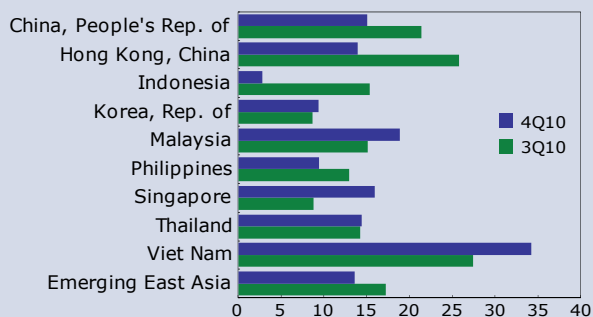
Total LCY bonds outstanding in emerging East Asia rose by 13.6% y-o-y in 4Q10 to USD5.2 trillion, driven mainly by corporate bonds, which grew 20.3%. Government bonds rose 10.8%.¹

Emerging East Asia's local currency (LCY) bond market growth rates for 4Q10 are strong, positive numbers, although they represent a decline from the total market's year-on-year (y-o-y) growth rates of 17.2% in 3Q10 and 16.2% in 4Q09 (**Figure 1**). The 4Q10 growth rates do, however, represent a pattern of more broadly-based market growth for emerging East Asia than had been the case in previous quarters.

The LCY bond market of emerging East Asia excluding the People's Republic of China (ex-PRC) grew 11.6% y-o-y in 4Q10, compared with 11.7% in 3Q10, while the PRC market's growth rate of 15.1% in 4Q10 was down from 21.4% in 3Q10. The y-o-y growth rate for the PRC's government bond market in 4Q10 was 10.3%, or 1.5 percentage points lower than that of the government bond market for emerging East Asia ex-PRC. Large increases in issuance by the central banks of Malaysia and Thailand pushed growth rates for the government bond sector in these markets up to double-digit levels. In the Philippines, new issuance and hugely successful debt exchanges in 4Q10 resulted in y-o-y growth of 10.1% for its government bond market (**Table 1**).

While the PRC's large corporate bond market grew 37.2% y-o-y in 4Q10, this was exceeded by rapid y-o-y growth of the corporate bond market of Viet Nam (41.4%). Meanwhile, Singapore

Figure 1: Growth of LCY Bond Markets in 3Q10 and 4Q10 (y-o-y %)



LCY = local currency, y-o-y = year-on-year.

Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from local currency base and do not include currency effects.
3. Emerging East Asia growth figure is based on end-December 2010 currency exchange rates and do not include currency effects.
4. For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

(30.9%), Indonesia (29.8%), and the Republic of Korea (11.1%) all saw significant growth in their respective corporate bond markets in 4Q10.

These trends are even more evident when growth is reviewed on a quarter-on-quarter (q-o-q) basis. The emerging East Asian bond market grew 1.2% on a q-o-q basis in 4Q10. The emerging East Asian bond market ex-PRC grew 1.7% q-o-q in 4Q10, compared with only 0.8% in the PRC. The q-o-q growth rates of the government bond markets of both the PRC and emerging East Asia ex-PRC were essentially flat. However, the q-o-q growth rate of the corporate bond market of emerging East Asia ex-PRC was 3.8%, compared with 3.6% for the PRC.

¹ Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Thailand; and Viet Nam.

Table 1: Size and Composition of LCY Bond Markets

	4Q09		3Q10		4Q10		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	4Q09		4Q10		4Q09		4Q10	
							q-o-q	y-o-y	q-o-q	y-o-y	q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)														
Total	2,567	100.0	2,991	100.0	3,052	100.0	6.3	16.0	0.8	15.1	6.3	16.0	2.1	18.9
Government	2,113	82.3	2,377	79.5	2,408	78.9	4.9	8.0	0.02	10.3	4.9	8.0	1.3	14.0
Corporate	454	17.7	614	20.5	644	21.1	13.6	77.5	3.6	37.2	13.6	77.5	4.9	41.8
Hong Kong, China														
Total	144	100.0	161	100.0	164	100.0	12.1	55.8	1.6	14.0	12.1	55.8	1.4	13.7
Government	70	48.3	87	53.6	87	53.2	29.5	242.2	0.8	25.5	29.5	242.1	0.6	25.2
Corporate	74	51.7	75	46.4	77	46.8	(0.4)	3.3	2.5	3.2	(0.5)	3.2	2.3	2.9
Indonesia														
Total	99	100.0	112	100.0	106	100.0	7.3	19.4	(4.4)	2.8	10.3	41.2	(5.3)	7.5
Government	89	90.5	101	89.7	94	88.0	6.8	19.2	(6.2)	(0.03)	9.8	41.0	(7.1)	4.5
Corporate	9	9.5	12	10.3	13	12.0	12.1	21.2	11.3	29.8	15.2	43.3	10.2	35.7
Korea, Rep. of														
Total	1,016	100.0	1,122	100.0	1,149	100.0	0.5	15.0	1.2	9.4	1.7	24.4	2.5	13.1
Government	444	43.7	496	44.2	492	42.8	(4.3)	11.4	(2.0)	7.2	(3.2)	20.5	(0.7)	10.8
Corporate	572	56.3	626	55.8	657	57.2	4.6	18.0	3.7	11.1	5.9	27.6	5.0	14.8
Malaysia														
Total	185	100.0	234	100.0	247	100.0	1.4	10.3	4.7	18.9	2.4	11.6	5.5	33.0
Government	101	54.6	137	58.4	145	59.0	(0.5)	10.9	5.7	28.5	0.5	12.2	6.5	43.7
Corporate	84	45.4	97	41.6	101	41.0	3.7	9.6	3.3	7.4	4.8	10.9	4.2	20.1
Philippines														
Total	63	100.0	73	100.0	73	100.0	3.4	8.1	0.2	9.4	6.0	11.3	0.3	15.3
Government	55	87.9	64	88.0	64	88.4	2.3	3.1	0.7	10.1	4.9	6.2	0.8	16.0
Corporate	8	12.1	9	12.0	8	11.6	12.4	66.5	(3.7)	4.8	15.3	71.4	(3.6)	10.5
Singapore														
Total	141	100.0	166	100.0	179	100.0	(1.5)	8.4	4.9	15.9	(1.2)	10.4	7.6	26.9
Government	88	62.5	97	58.6	103	57.7	0.9	18.3	3.3	7.0	1.2	20.4	5.9	17.1
Corporate	53	37.5	69	41.4	76	42.3	(5.3)	(4.8)	7.3	30.9	(5.0)	(3.0)	10.0	43.3
Thailand														
Total	177	100.0	217	100.0	225	100.0	2.5	20.5	2.7	14.4	2.7	25.5	3.7	27.0
Government	141	79.8	176	81.3	183	81.4	3.3	21.0	2.8	16.7	3.5	26.0	3.8	29.6
Corporate	36	20.2	40	18.7	42	18.6	(0.5)	18.8	2.2	5.3	(0.3)	23.7	3.1	16.9
Viet Nam														
Total	12	100.0	15	100.0	15	100.0	(2.4)	(4.2)	2.8	34.2	(5.8)	(9.4)	2.8	27.2
Government	11	90.6	14	91.3	14	90.1	(4.6)	(9.5)	1.4	33.5	(7.9)	(14.4)	1.4	26.5
Corporate	1	9.4	1	8.7	2	9.9	26.1	116.9	17.4	41.4	21.8	105.2	17.3	34.0
Emerging East Asia (EEA)														
Total	4,404	100.0	5,090	100.0	5,209	100.0	4.4	16.2	1.2	13.6	4.9	19.2	2.3	18.3
Government	3,113	70.7	3,547	69.7	3,590	68.9	3.5	11.2	0.1	10.8	3.8	13.2	1.2	15.3
Corporate	1,292	29.3	1,542	30.3	1,619	31.1	6.7	30.5	3.7	20.3	7.4	36.4	5.0	25.3
EEA Less PRC														
Total	1,837	100.0	2,099	100.0	2,157	100.0	1.8	16.6	1.7	11.6	2.9	23.8	2.8	17.4
Government	1,000	54.4	1,171	55.8	1,182	54.8	0.7	18.5	0.1	11.8	1.8	26.2	1.0	18.2
Corporate	837	45.6	929	44.2	975	45.2	3.3	14.3	3.8	11.2	4.3	21.2	5.0	16.4
Japan														
Total	9,621	100.0	11,211	100.0	11,723	100.0	1.5	3.6	1.5	6.3	(2.1)	1.0	4.6	21.8
Government	8,656	90.0	10,134	90.4	10,609	90.5	1.7	3.7	1.7	6.9	(1.9)	1.1	4.7	22.6
Corporate	964	10.0	1,077	9.6	1,114	9.5	(0.1)	2.7	0.4	0.7	(3.7)	0.1	3.4	15.5

LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:

1. For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.
2. Corporate bonds include issues by financial institutions.
3. Bloomberg LP end-of-period LCY–USD rates are used.
4. For LCY-base, total emerging East Asia growth figures are based on end-December 2010 currency exchange rates and do not include currency effects.
5. Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Thailand; and Viet Nam. Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Japan (Japan Securities Dealers Association); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

The expansion of the emerging East Asian corporate bond market ex-PRC was driven in 4Q10 by double-digit q-o-q growth rates in Indonesia and Viet Nam, substantial 7.3% growth in Singapore, and moderate growth in the Malaysian and Korean corporate bond markets.

Total government bonds outstanding in emerging East Asia rose by 10.8% y-o-y in 4Q10—led by Viet Nam; Malaysia; Hong Kong, China; and Thailand.

Growth in the government bond markets of Malaysia and Thailand in 4Q10 was driven primarily by issuance from Bank Negara Malaysia and the Bank of Thailand for sterilization purposes, rather than issuance by their respective treasuries or other government agencies. Thus, the total stock of government sector bonds in Malaysia and Thailand grew 28.5% and 16.7% y-o-y, respectively. The q-o-q growth rate for Malaysian government bonds in 4Q10 was 5.7%, the highest in the region; the q-o-q growth rate for government bonds in Thailand was a more modest 2.8%. The only other government bond market to experience significant growth in 4Q10 on a q-o-q basis was Singapore, which expanded 3.3%, while its y-o-y growth in 4Q10 was 7.0%. The growth of the Singapore government bond market reflected an absence of amortization of long-term Singapore Government Securities (SGS) in 4Q10 amid substantial issuance of short-term SGS bills.

Growth in the government bond market of Hong Kong, China was negligible in 4Q10 on a q-o-q basis, due to a sharp drop in issuance by the Hong Kong Monetary Authority (HKMA) and very limited new issuance of so-called Special Administrative Region (SAR) bonds by the government of Hong Kong, China under its Institutional Bond Issuance Programme. The high y-o-y growth rate of Hong Kong, China's government bond market was driven by large issuances of Exchange Fund Bills and Notes (EFBNs), as well as issuances of SAR bonds earlier in the year.

Philippine government bonds outstanding in 4Q10 increased by 10.1% y-o-y and 0.7% q-o-q,

reflecting a number of factors, including the government's efforts to lengthen the maturity structure of its bonds and a slowdown in transactions during the Christmas season in the Philippines. More recently, during an offer period extending from 22 February to 1 March, the Bureau of the Treasury accepted PHP104.0 billion (USD2.4 billion) of bids for Retail Treasury Bonds (RTBs). In Thailand, the government issued a 50-year bond in early March worth THB3.5 billion (USD116 million).

The more interesting movements in government bond markets in 4Q10, however, seem to have been (i) the PRC, in which the total stock of government sector bonds outstanding grew 10.3% y-o-y while remaining essentially unchanged on a q-o-q basis; (ii) the Republic of Korea, where the stock of government sector bonds declined by 2.0% q-o-q; and (iii) Indonesia, where the stock of government sector bonds was flat on a y-o-y basis and declined 6.2% q-o-q.

The slowing growth rate of the PRC government bond sector in 4Q10 was driven by a sharp reduction of new short-term bill issuance by the People's Bank of China (PBOC), a trend that has been in place since 3Q10, as well as a reduction of the growth rate for long-dated PBOC bonds. This resulted in the outstanding amount of PBOC bonds and bills shrinking by 8.0% q-o-q and 3.5% y-o-y in 4Q10, even as treasury bonds grew by 16.1% y-o-y and bonds issued by policy banks grew by 16.0% y-o-y. The reduction of the PBOC's overall issuance in 4Q10, especially the sharp reduction of short-term issuance, is part of the PBOC's efforts to tighten its monetary policy in the last months of 2010, a trend that is likely to continue into 2011.

In the Republic of Korea in 4Q10, government sector bonds grew 7.2% y-o-y, but fell by 2.0% on a q-o-q basis, reflecting a sharp reduction in issuance by both the Korean government and the Bank of Korea. In Indonesia, there was limited new government bond issuance in 4Q10 as the government completed its domestic issuance program earlier in the year. Furthermore, Bank

Indonesia has been paring back its issuance of *Sertifikat Bank Indonesia* (SBI) to discourage foreign inflows into the Indonesian bond market, as well as other segments of the financial sector, in an effort to manage the inflationary pressures facing the economy. Bank Indonesia raised its policy rate by 25 basis points to 6.75% in early February, but does not appear eager to raise it any further. Thus, while central government bonds outstanding rose by 10.2% y-o-y in 2010, they fell by 0.6% on a q-o-q basis. Outstanding SBIs, however, fell by 23.0% y-o-y and 20.5% q-o-q in 4Q10.

The corporate bond market in emerging East Asia expanded 20.3% y-o-y in 4Q10, led by Viet Nam, the PRC, Singapore, and Indonesia.

In 4Q10, the corporate bond markets of Viet Nam, the PRC, Singapore, and Indonesia grew at y-o-y rates of 41.4%, 37.2%, 30.9%, and 29.8%, respectively. On a q-o-q basis, the Viet Nam corporate bond market also grew the most among markets in the region at 17.4%. Indonesia's market saw the next largest increase at 11.3%, followed by Singapore at 7.3%. The PRC corporate bond market grew by only 3.6% q-o-q, just behind the Republic of Korea at 3.7%.

The PRC corporate bond market's y-o-y growth rate has slowed dramatically from a 77.5% expansion in 4Q09. At that time, the various segments of the PRC corporate bond market were growing at high double-digit levels, both on a y-o-y and q-o-q basis, and the medium-term note (MTN) market was growing by an astounding 415.7% y-o-y. All of these growth rates had moderated by 4Q10. MTNs still rose an impressive 57.0% y-o-y and commercial paper by 43.2% in 4Q10, but state-owned corporates and commercial bank bonds grew by only 22.1% and 3.6% y-o-y, respectively. In fact, MTNs only grew 5.0% q-o-q in 4Q10, while the outstanding value of commercial paper actually shrank 2.6% q-o-q and commercial bank bonds were flat. The only growth sector among PRC corporate bonds in 4Q10 were local corporate bonds—mainly corporate entities owned by local

governments—which grew 13.6% q-o-q, compared with 4.4% q-o-q for state-owned corporates.

The two most interesting corporate bond markets in 4Q10 were those of Indonesia and Singapore, which both doubled their y-o-y and q-o-q growth rates from 2Q10. Most of Indonesia's IDR14.2 trillion of issuance in 4Q10 came from banks and other financial institutions. Singapore's SGD6.0 billion of issuance was led by a SGD2.5 billion bond offering from DBS Bank, and SGD500 million of new issuance each from Keppel Corp, Keppel Land, and the Land Transport Authority.

The Republic of Korea's corporate bond market, which reached USD657 billion in size at the end of 4Q10, ranked fourth in the region in terms of q-o-q growth. This large and complex market comprises three major sectors: (i) special public bonds issued by government-owned companies; (ii) bank debentures issued by commercial banks, excluding bonds issued by their non-bank subsidiaries; and (iii) private corporate bonds, which include securities companies, other types of specialized financial companies, and private industrial corporations. Private corporate bonds were the largest sub-sector at the end of 4Q10, amounting to USD257.0 billion and with growth rates of 22.9% y-o-y and 13.5% q-o-q. If the Republic of Korea's private corporate bonds were treated as a separate market, they would be larger than any other corporate bond market in emerging East Asia ex-PRC. They would also have been the second-most rapidly growing corporate bond market in the region on a q-o-q basis in 4Q10, exceeded only by Viet Nam's q-o-q growth rate.

Growth in both the Malaysian and Thai corporate bond markets was notable in 4Q10. However, 4Q10 issuance can be explained by a relatively small number of transactions in each case. The leading contributors to Malaysia's MYR25.6 billion of issuance in 4Q10 were new bonds issued by Senai Desaru Expressway (MYR5.6 billion), Cagamas (MYR2.5 billion), Pengurusan Air SPV (MYR2.2 billion), CIMB Bank (MYR2.0 billion), and Malaysia Airports Capital (MYR1.5 billion).

The major new corporate issues to come out of Thailand in 4Q10 included multiple issues from energy conglomerate PTT, as well as issues from Siam Cement, Charoen Pokphand Foods, Krung Thai Bank, and Don Muang Tollway, among others.

Structure of the LCY Corporate Bond Market

Almost all emerging East Asian corporate bond markets share a very interesting structure. In each market, the top 6–8 companies have issued in very large amounts, whether in terms of bonds issued in large sizes or simply large amounts of bonds, with the remaining 30–50 issuers in each market offering much smaller amounts. In some markets, the bonds outstanding of the seventh or eighth largest issuer might only be one-tenth the amount outstanding of the largest issuer. This results in an asymptotic curve for the distribution of issuers when bonds outstanding of the leading issuers in each market are graphed in a scattergram format (**Figure 2**). The most asymptotic distribution curves are those of the PRC and Thailand:

- (i) In the case of the PRC, this reflects the large bond issues of the “Super AAAs”—the very large government-owned transport, infrastructure, and oil companies—as well as large state-owned banks such as Bank of China, ICBC, and Industrial Bank.
- (ii) In the case of Thailand, the asymptotic curve reflects the very large issuance amounts of energy conglomerate PTT, which is followed by Siam Cement in terms of issue size. The next three largest issuers are banks: (i) Bank Ayudhya; (ii) Krung Thai Bank; and (iii) PTT Exploration and Product, a PTT subsidiary.

The curves for the Philippines and Singapore are less asymptotic:

- (i) In the Philippines, most of the corporate bond issuers are private companies in capital-intensive businesses—banking, real estate development, and energy—that require

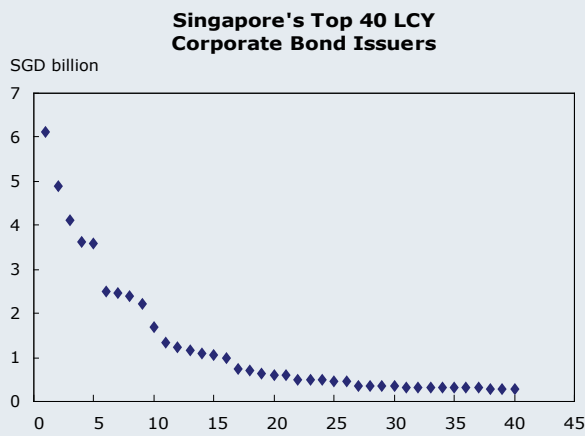
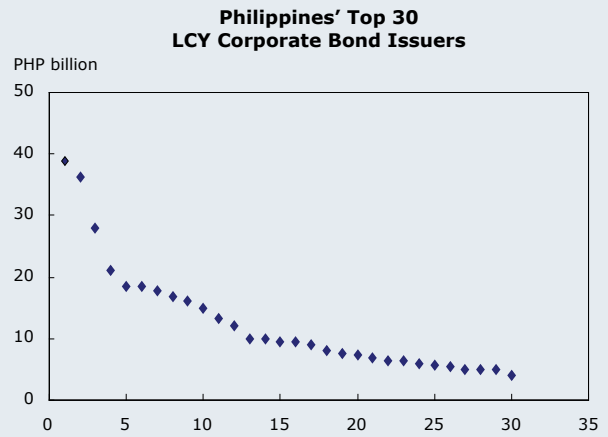
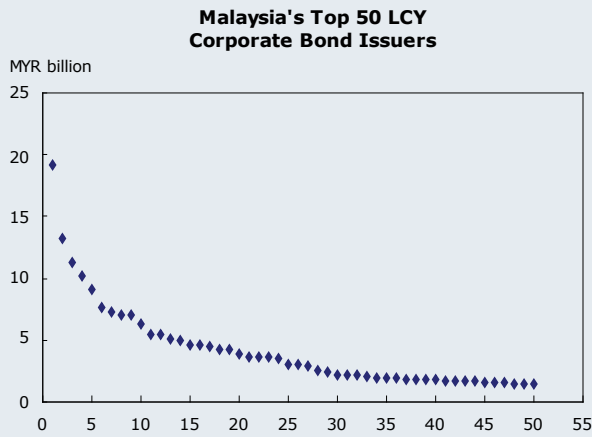
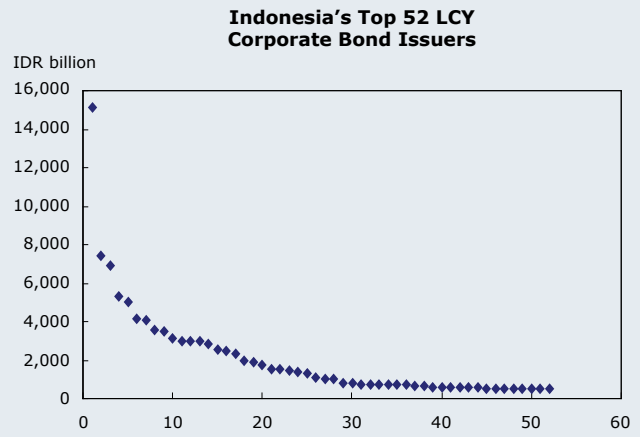
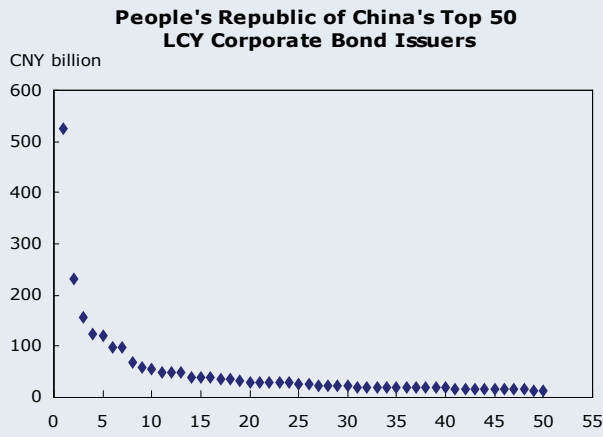
large amounts of debt financing for business expansion.

- (ii) In Singapore, the slight upward bulge reflects a more diverse and well-developed corporate sector in terms of product lines and growth prospects, as well as the sudden acceleration of corporate bond issuance in the second half of 2010.

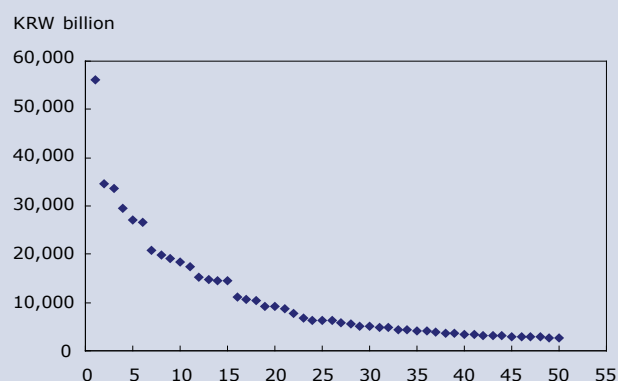
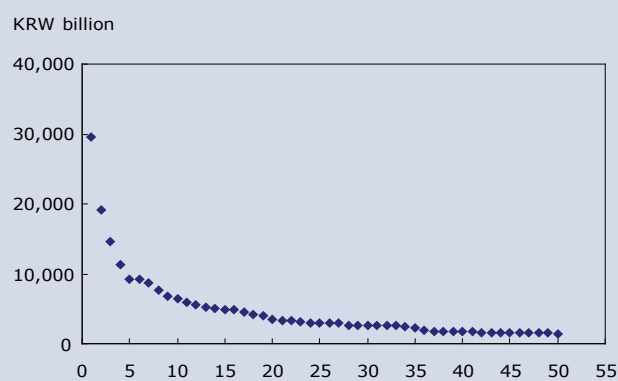
Two scattergram graphs are presented for the Republic of Korea. **Figure 3a** is for the 50 largest corporate bond issuers, and **Figure 3b** is for the 50 largest privately-owned corporate bond issuers:

- (i) Figure 3a is less asymptotic than Figure 3b due to the presence of a number of government-owned banks that are major issuers of bonds in broadly similar amounts.
- (ii) Figure 3b removes these banks and all other government-owned companies, resulting in a highly asymptotic curve. The list of top corporate bond issuers in the Market Summary for the Republic of Korea in the final section of this report shows that the top half-dozen private issuers, most of which are securities companies, issue in very large amounts. Meanwhile, other leading private companies in the industrial and services sectors issue in much more modest amounts, with little relationship to the size of the company.
- (iii) Steel company POSCO is the 41st largest private sector issuer of bonds, while the chaebol SK Holdings is the 47th largest. Other household-name chaebol rank well below number 50 as issuers of corporate bonds.

Figure 2: Scattergrams of Top LCY Corporate Bond Issuers in Select Countries in Emerging East Asia



LCY = local currency.
 Source: People's Republic of China (*ChinaBond*); Indonesia (Indonesia Stock Exchange); Malaysia (Bank Negara Malaysia); Philippines (Bloomberg LP); Singapore (Bloomberg LP); and Thailand (Bloomberg LP).

Figure 3a: Scattergram of the Republic of Korea's Top 50 LCY Corporate Bond Issuers

Figure 3b: Scattergram of the Republic of Korea's Top 50 Privately-Owned Corporate Bond Issuers


LCY = local currency.
Source: KoreaBondWeb.

Ratio of Bonds Outstanding to Gross Domestic Product

The overall ratio of bonds outstanding to GDP in emerging East Asia fell slightly in 4Q10.

The ratio of emerging East Asia's LCY bonds outstanding to gross domestic product (GDP) stood at 57.4% at the end of 4Q10, down slightly from 58.7% at the end of 3Q10 (**Table 2**). This reflected a drop in the ratio of government bonds to GDP to 39.5% at the end of 4Q10 from 40.9% at end-3Q10. Meanwhile, the ratio of corporate bonds to GDP remained unchanged in 4Q10 at 17.8%. The two markets that experienced

Table 2: Size and Composition of LCY Bond Markets (% of GDP)

	4Q09	3Q10	4Q10
China, People's Rep. of			
Total	51.4	52.7	50.7
Government	42.3	41.9	40.0
Corporate	9.1	10.8	10.7
Hong Kong, China			
Total	68.8	73.2	72.8
Government	33.3	39.2	38.7
Corporate	35.6	33.9	34.1
Indonesia			
Total	16.6	16.1	14.9
Government	15.0	14.5	13.1
Corporate	1.6	1.7	1.8
Korea, Rep. of			
Total	111.3	112.4	115.2
Government	48.6	49.7	49.3
Corporate	62.6	62.7	65.8
Malaysia			
Total	93.5	96.4	98.6
Government	51.0	56.3	58.2
Corporate	42.4	40.1	40.4
Philippines			
Total	37.9	38.3	37.4
Government	33.3	33.7	33.1
Corporate	4.6	4.6	4.3
Singapore			
Total	74.2	73.5	75.5
Government	46.4	43.1	43.6
Corporate	27.8	30.4	31.9
Thailand			
Total	65.3	66.3	66.8
Government	52.1	53.9	54.4
Corporate	13.2	12.4	12.4
Viet Nam			
Total	13.4	15.6	15.1
Government	12.2	14.2	13.6
Corporate	1.3	1.4	1.5
Emerging East Asia			
Total	57.7	58.7	57.4
Government	40.8	40.9	39.5
Corporate	16.9	17.8	17.8
Japan			
Total	190.0	195.7	198.4
Government	171.0	176.9	179.6
Corporate	19.0	18.8	18.8

GDP = gross domestic product, LCY = local currency.

Notes:

1. Data for GDP is from CEIC. 4Q10 GDP figures for the Republic of Korea was carried over from 3Q10.

2. For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Japan (Japan Securities Dealers Association); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

the largest increases in their respective ratio of bonds to GDP in 4Q10 were the Republic of Korea and Malaysia. The Republic of Korea's ratio rose 2.8 percentage points to 115.2%, while Malaysia's ratio rose 2.2 percentage points to 98.6%. The third-highest rise in the ratio of bonds to GDP was in Singapore, whose ratio rose by 2 percentage points to reach 75.5%. Malaysia and Singapore experienced increases in their respective ratios of bonds to GDP in both their government and corporate bonds sectors. The only other market to experience a rise in its ratio of bonds to GDP was Thailand, whose ratio rose by 0.5 percentage points to 66.8%, due entirely to a modest rise in its ratio of government bonds to GDP.

Other markets experienced a fall in their ratios of bonds to GDP in 4Q10. The largest such decline was in the PRC bond market, whose ratio fell by 2 percentage points to 50.7%, reflecting modest declines in both the government-bonds-to-GDP and corporate-bonds-to-GDP ratios.

Issuance

LCY bond issuance in emerging East Asia for 2010 as a whole totaled USD3.8 trillion, a 10.2% increase over 2009.

Annual LCY bond issuance in emerging East Asia for 2010 as a whole totaled USD3.8 trillion, a 10.2% increase over 2009. Government bond issuance in 2010 grew 12.3% y-o-y to USD3.1 trillion and corporate bond issuance rose by 1.1% to USD634.0 billion. Quarterly issuance was highly volatile during the year, rising to more than USD1.0 trillion in both 1Q10 and 3Q10, compared with USD937 billion in 2Q10 and USD747 billion in 4Q10.

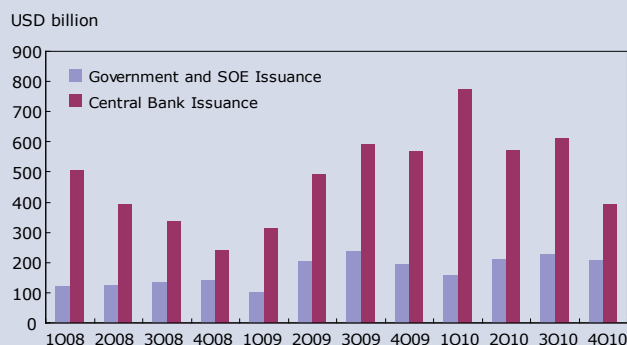
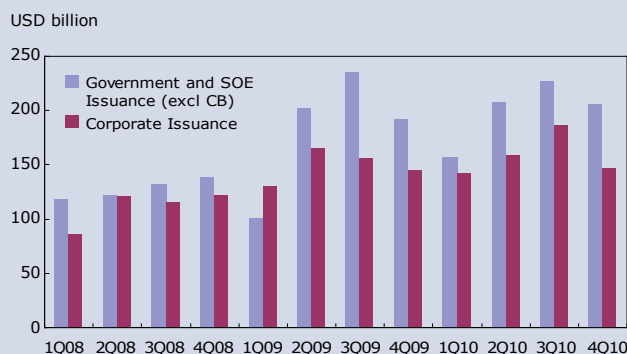
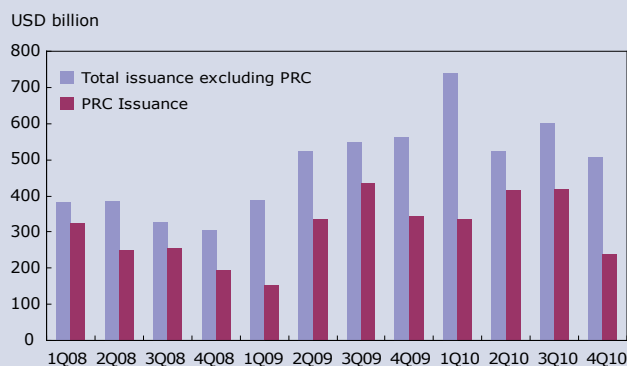
The increase in total issuance to nearly USD1.1 trillion in 1Q10 was driven by a rise in central bank issuance to an all-time high of slightly under USD800 billion (**Figure 4a**). Central bank issuance then sank to somewhat lower levels in 2Q10 and 3Q10, before falling

further to USD394 billion in 4Q10, its lowest level since 1Q09. Issuance by government entities (excluding central banks) and issuance by corporates rose from 1Q10 to 3Q10, before falling in 4Q10 (**Figure 4b**). Corporate issuance of USD147 billion in 4Q10 was approximately 75% of the total quarterly issuance of government entities excluding central banks.

Finally, **Figure 4c** tracks issuance in the PRC and all regional markets excluding the PRC on a quarterly basis from 2008 to the end of 2010. The data series show that the PRC's total issuance rose more rapidly than issuance from the rest of emerging East Asia between 1Q09 and 3Q09, before declining in 4Q09 and 1Q10. The PRC's issuance was approximately the same in 2Q10 and 3Q10, before declining again sharply in 4Q10. Issuance for the rest of the region excluding the PRC rose sharply in 1Q10, before falling in 2Q10 and rising slightly again in 3Q10, and then falling back in 4Q10 to a level roughly comparable to that of 2Q10.

Total issuance in emerging East Asia in 4Q10 of USD747 billion represented a 20.4% decrease from USD905 billion in 4Q09, and a 27.6% decrease from USD1.0 trillion in 3Q10 (**Table 3**). The largest decrease occurred in the government bond sector, which fell by 23.7% y-o-y in 4Q10, driven primarily by a 32.6% y-o-y decrease in issuance by central banks and monetary authorities. Issuance by treasuries and other central government agencies rose slightly by 2.0% y-o-y. Meanwhile, corporate issuance also fell for the region as a whole, but by a much smaller amount of 3.1% y-o-y.

The fall-off in issuance by central banks and monetary authorities in 4Q10, however, masks large disparities among various markets. Issuance by central banks actually increased by 147.4% y-o-y in the case of Malaysia and by 74.5% y-o-y in the case of Thailand. However, y-o-y issuance by central banks and monetary authorities declined sharply in the PRC; Hong Kong, China; Indonesia; and the Republic of Korea.

Figure 4a: Government (including SOE) and Central Bank Bond Issuance¹**Figure 4b: Government (including SOE) and Corporate Bond Issuance¹****Figure 4c: Total LCY Bond Issuance**

CB = central bank, LCY = local currency, PRC = People's Republic of China, SOE = state-owned enterprise.

¹These data include both bonds and bills issued by governments and central banks as well as commercial paper issued by corporate entities. In the PRC, government issuance (including SOE) includes policy bank bond issuance.

Source: *AsianBondsOnline*.

The PBOC's issuance fell by 68.4% q-o-q and 63.4% y-o-y, although most of this cutback was in the bills sector as the PBOC sharply reduced liquidity in 4Q10 to combat inflationary pressures in general and to reduce the availability of funding for property speculation in particular. The PBOC continued these efforts into 2011 with a 25 basis points hike to 6.06% for its lending rate and a 25 basis points hike to 3.00% for its deposit rate. The Bank of Korea also cut its issuance by 42.7% q-o-q and 58.1% y-o-y in 4Q10 to quell rising inflationary pressures. More recently, the Bank of Korea raised its policy rate by 25 basis points to 2.75% on 13 January and by another 25 basis points to 3.0% on 10 March.

Bank Indonesia's issuance declined 30.0% q-o-q and 73.6% y-o-y in 4Q10, mainly as a result of regulations promulgated in the second half of the year that reduced the frequency of auctions and required a 1-month holding period for SBIs. In November, Bank Indonesia stopped issuing 3-month SBIs and, instead, began offering term deposit instruments to banks with excess liquidity and limited foreign holdings. These term deposit facilities were only being offered to banking institutions. In January, Bank Indonesia announced that it would no longer issue SBIs with maturities of less than 9 months, while extending the tenor of its term deposit facilities to 5 months in January and then to 6 months in February. Furthermore, Bank Indonesia raised its reference rate by 25 basis points on 4 February to 6.75% to curb inflation, which rose to 7.0% y-o-y in January.

Issuance by treasuries and other central government agencies (excluding central banks and monetary authorities) was essentially flat for the region as a whole in 4Q10. This trend has been in place since 2Q10, as governments in the region phase out their economic stimulus programs. Issuance of treasuries and other types of central government bonds fell 50.7% q-o-q in Thailand, 33.8% q-o-q in Malaysia, 36.3% q-o-q in the Republic of Korea, and 67.0% q-o-q in Indonesia. Treasury and policy bank issuance in the PRC dropped by a relatively modest 7.2% q-o-q in 4Q10, but still managed to rise 13.1% y-o-y. The

Table 3: LCY-Denominated Bond Issuance (gross)

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	4Q10	% share	4Q10	% share	4Q10		4Q10	
					q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)								
Total	1,585	100.0	240	100.0	(43.7)	(32.5)	(43.0)	(30.2)
Government	1,282	80.9	194	80.9	(42.3)	(31.7)	(41.6)	(29.4)
Central Bank	402	25.4	61	25.4	(68.4)	(63.4)	(68.0)	(62.2)
Treasury and Other Govt	880	55.5	133	55.5	(7.2)	13.1	(6.0)	16.8
Corporate	303	19.1	46	19.1	(48.9)	(35.6)	(48.3)	(33.5)
Hong Kong, China								
Total	1,321	100.0	170	100.0	(30.0)	(23.4)	(30.2)	(23.6)
Government	1,272	96.3	164	96.3	(31.0)	(24.6)	(31.1)	(24.8)
Central Bank	1,268	95.9	163	95.9	(31.1)	(24.8)	(31.2)	(25.0)
Treasury and Other Govt	5	0.3	0.6	0.3	28.6	125.0	28.3	124.5
Corporate	49	3.7	6	3.7	10.3	34.9	10.1	34.6
Indonesia								
Total	179,227	100.0	20	100.0	(32.1)	(70.7)	(32.8)	(69.4)
Government	165,027	92.1	18	92.1	(34.7)	(72.5)	(35.3)	(71.3)
Central Bank	154,445	86.2	17	86.2	(30.0)	(73.6)	(30.6)	(72.5)
Treasury and Other Govt	10,582	5.9	1	5.9	(67.0)	(26.5)	(67.4)	(23.1)
Corporate	14,200	7.9	2	7.9	23.5	19.5	22.3	24.9
Korea, Rep. of								
Total	128,015	100.0	114	100.0	(20.9)	(22.9)	(19.9)	(20.2)
Government	47,598	37.2	42	37.2	(40.8)	(54.5)	(40.1)	(52.9)
Central Bank	32,780	25.6	29	25.6	(42.7)	(58.1)	(42.0)	(56.7)
Treasury and Other Govt	14,818	11.6	13	11.6	(36.3)	(43.7)	(35.5)	(41.8)
Corporate	80,417	62.8	71	62.8	(1.2)	31.0	0.1	35.4
Malaysia								
Total	119	100.0	39	100.0	4.0	55.3	4.8	73.8
Government	94	78.6	31	78.6	0.6	80.1	1.4	101.4
Central Bank	82	69.0	27	69.0	8.4	147.4	9.3	176.8
Treasury and Other Govt	11	9.5	4	9.5	(33.8)	(39.4)	(33.3)	(32.2)
Corporate	26	21.4	8	21.4	18.4	3.3	19.3	15.6
Philippines								
Total	304	100.0	7	100.0	68.3	118.7	68.5	130.5
Government	304	100.0	7	100.0	73.2	212.4	73.4	229.3
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	304	100.0	7	100.0	73.2	212.4	73.4	229.3
Corporate	0	0.0	0	0.0	—	—	—	—

continued on next page

Table 3 continued

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	4Q10	% share	4Q10	% share	4Q10		4Q10	
					q-o-q	y-o-y	q-o-q	y-o-y
Singapore								
Total	61	100.0	47	100.0	(1.1)	7.1	1.4	17.3
Government	55	90.7	43	90.7	(1.1)	1.3	1.5	10.9
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	55	90.7	43	90.7	(1.1)	1.3	1.5	10.9
Corporate	6	9.3	4	9.3	(1.4)	146.7	1.2	170.0
Thailand								
Total	3,286	100.0	109	100.0	9.8	51.1	10.9	67.8
Government	3,027	92.1	101	92.1	9.4	57.9	10.4	75.3
Central Bank	2,897	88.2	96	88.2	15.7	74.5	16.8	93.7
Treasury and Other Govt	130	3.9	4	3.9	(50.7)	(49.5)	(50.3)	(43.9)
Corporate	259	7.9	9	7.9	15.3	0.7	16.5	11.7
Viet Nam								
Total	11,222	100.0	0.6	100.0	29.7	23.0	29.7	16.5
Government	9,522	84.9	0.5	84.9	42.1	99.4	42.1	89.0
Central Bank	0	0.0	0.0	0.0	—	—	—	—
Treasury and Other Govt	9,522	84.9	0.5	84.9	42.1	99.4	42.1	89.0
Corporate	1,700	15.1	0.1	15.1	(12.8)	(60.9)	(12.9)	(63.0)
Emerging East Asia (EEA)								
Total	—	—	747	100.0	(27.6)	(20.4)	(27.0)	(17.5)
Government	—	—	600	80.4	(28.9)	(23.7)	(28.3)	(21.0)
Central Bank	—	—	394	52.7	(35.8)	(32.6)	(35.4)	(30.6)
Treasury and Other Govt	—	—	207	27.7	(10.4)	2.0	(9.1)	7.2
Corporate	—	—	147	19.6	(22.1)	(3.1)	(21.2)	0.9
EEA Less PRC								
Total	—	—	507	100.0	(16.3)	(13.0)	(15.8)	(9.8)
Government	—	—	406	80.1	(19.9)	(19.2)	(19.5)	(16.3)
Central Bank	—	—	333	65.7	(20.8)	(20.3)	(20.7)	(18.2)
Treasury and Other Govt	—	—	73	14.5	(15.5)	(13.5)	(14.1)	(6.8)
Corporate	—	—	101	19.9	2.3	25.8	3.5	31.9
Japan								
Total	49,588	100.0	611	100.0	(0.9)	4.1	2.0	19.4
Government	45,623	92.0	562	92.0	0.0	4.5	3.0	19.8
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	45,623	92.0	562	92.0	0.0	4.5	3.0	19.8
Corporate	3,965	8.0	49	8.0	(10.7)	0.5	(8.1)	15.3

— = not applicable, LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:

1. Corporate bonds include issues by financial institutions.

2. Bloomberg LP end-of-period LCY–USD rates are used.

3. For LCY-base, emerging East Asia growth figures are based on end-December 2010 currency exchange rates and do not include currency effects.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia, Indonesia Debt Management Office and Indonesia Stock Exchange); Japan (Japan Securities Dealers Association); Republic of Korea (Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bloomberg LP); Singapore (Singapore Government Securities and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

only government in the region that reported any significant increase in treasury bond issuance in 4Q10 was the Philippines, where the issuance of central government securities rose by 73.2% q-o-q and 212.4% y-o-y.

Money Market Trends and Bills-to-Bonds Ratios

The region's overall bills-to-bonds ratio continued to fall in 4Q10, due to declines in the ratios of both central bank and treasury bills to bonds in most markets.

The total bills-to-bonds ratio for five of the eight emerging East Asian markets presented in **Figure 5** fell in 4Q10 on a q-o-q basis. Furthermore, the bills-to-bonds ratio for Hong Kong, China fell to 6.21 in 4Q10 from 6.49 in 3Q10. Hong Kong, China is not presented in Figure 5 because its ratio of bills to bonds is significantly higher than that of other markets in the region.

The region's ratio of central bank bills to bonds fell to 1.92 in 4Q10 from 2.13 in 3Q10, due to

the sharp decline of the PRC's ratio of central bank bills to bonds to 2.36 in 4Q10 from 2.76 in 3Q10 (**Table 4**). The ratio of central bank bills to bonds also fell modestly in Thailand, although it rose slightly in Hong Kong, China and the Republic of Korea. The stock of central bank bills grew by 5.6% q-o-q in Thailand in 4Q10; 20.8% in Malaysia, which issues no central bank bonds, but does issue central bank bills; and by only 0.2% in Hong Kong, China. However, central bank bonds in Thailand grew by 9.3% q-o-q, resulting in the decline of its central bank bills-to-bonds ratio. In the PRC, central bank bills fell by 11.8% q-o-q in 4Q10, while central bank bonds rose by a modest 2.8% q-o-q, resulting in the decline of the PRC's central bank bills-to-bonds ratio. The sharp decline in SBI issuance over the course of 2010 contributed to the decline of Indonesia's ratio of total bills to bonds from 0.46 in 3Q10 to 0.38 in 4Q10.

The region's overall ratio of treasury bills to bonds remained unchanged in 4Q10 at 0.12, reflecting the modest pace of treasury bond and bill issuance as governments wound down their fiscal stimulus programs in the second half of 2010. However, the ratio for the region as a whole disguises modest changes that occurred in the treasury bills-to-bonds ratio in each market. The treasury bills-to-bonds ratio rose slightly in the PRC and Singapore, and fell slightly in the Philippines, Thailand, and Viet Nam.

The modest pace of central bank issuance—outside of Malaysia and Thailand—suggests that governments in the region may be turning to administrative measures to counter capital flows. The Korean government, for example, announced in November that it would reimpose a 14% withholding tax on interest income in early January, as well as a 20% tax on capital gains from Korean Treasury Bonds (KTBs) and Monetary Stabilization Bills/Bonds (MSBs).

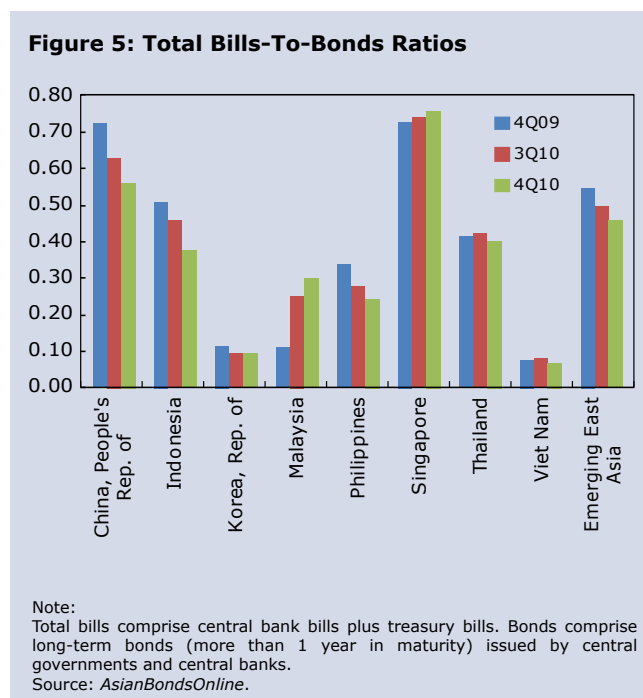


Table 4: Government Bills-to-Bonds Ratios of LCY Bond Markets

	4Q09		3Q10		4Q10		Government Bills-to-Bonds-Ratio			Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	4Q09	3Q10	4Q10	4Q10		4Q10	
										q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)													
Total	1,400	100.0	1,523	100.0	1,521	100.0				(1.4)	5.1	(0.1)	8.6
Total Bills	588	42.0	588	38.6	546	35.9	0.72	0.63	0.56	(8.3)	(10.2)	(7.1)	(7.2)
Treasury Bills	112	8.0	101	6.6	111	7.3	0.17	0.13	0.14	8.6	(3.7)	10.0	(0.5)
Central Bank Bills	477	34.0	486	31.9	435	28.6	3.34	2.76	2.36	(11.8)	(11.8)	(10.7)	(8.8)
Total Bonds	812	58.0	935	61.4	975	64.1				3.0	16.2	4.3	20.1
Treasury Bonds	669	47.8	759	49.8	791	52.0				3.0	14.4	4.3	18.2
Central Bank Bonds	143	10.2	176	11.6	184	12.1				2.8	24.8	4.1	28.9
Hong Kong, China													
Total	70	100.0	87	100.0	87	100.0				0.8	25.5	0.6	25.2
Total Bills	60	86.1	75	86.6	75	86.1	6.18	6.49	6.21	0.2	25.6	0.1	25.3
Treasury Bills	0	0.0	0	0.0	0	0.0	—	—	—	—	—	—	—
Central Bank Bills	60	86.1	75	86.6	75	86.1	6.66	8.29	8.34	0.2	25.6	0.1	25.3
Total Bonds	10	13.9	12	13.4	12	13.9				4.7	24.9	4.5	24.6
Treasury Bonds	1	1.0	3	2.9	3	3.5				23.1	—	22.9	—
Central Bank Bonds	9	12.9	9	10.5	9	10.3				(0.4)	0.3	(0.6)	0.0
Indonesia													
Total	89	100.0	101	100.0	94	100.0				(6.2)	(0.03)	(7.1)	4.5
Total Bills	30	33.8	32	31.4	26	27.3	0.51	0.46	0.38	(18.4)	(19.2)	(19.2)	(15.5)
Treasury Bills	3	2.9	3	3.3	3	3.5	0.04	0.05	0.05	(0.5)	20.6	(1.5)	26.1
Central Bank Bills	28	30.9	28	28.1	22	23.8	—	—	—	(20.5)	(23.0)	(21.3)	(19.5)
Total Bonds	59	66.2	69	68.6	68	72.7				(0.6)	9.8	(1.6)	14.7
Treasury Bonds	59	66.2	69	68.6	68	72.7				(0.6)	9.8	(1.6)	14.7
Central Bank Bonds	0	0.0	0	0.0	0	0.0				—	—	—	—
Korea, Rep. of													
Total	369	100.0	424	100.0	422	100.0				(1.7)	10.5	(0.5)	14.2
Total Bills	38	10.3	36	8.5	37	8.7	0.11	0.09	0.09	(0.05)	(6.7)	1.2	(3.5)
Treasury Bills	0	0.0	0	0.0	0	0.0	—	—	—	—	—	—	—
Central Bank Bills	38	10.3	36	8.5	37	8.7	0.42	0.33	0.34	(0.05)	(6.7)	1.2	(3.5)
Total Bonds	332	89.7	388	91.5	386	91.3				(1.9)	12.5	(0.7)	16.3
Treasury Bonds	241	65.3	280	66.0	277	65.6				(2.4)	11.0	(1.1)	14.7
Central Bank Bonds	90	24.5	108	25.5	109	25.8				(0.7)	16.4	0.5	20.3
Malaysia													
Total	100	100.0	136	100.0	145	100.0				5.7	29.8	6.5	45.2
Total Bills	10	10.0	28	20.2	33	23.0	0.11	0.25	0.30	19.9	197.5	20.9	232.7
Treasury Bills	1	1.3	1	1.0	1	1.0	0.01	0.01	0.01	4.2	4.2	5.0	16.5
Central Bank Bills	9	8.8	26	19.2	32	22.0	—	—	—	20.8	225.3	21.7	263.9
Total Bonds	90	90.0	109	79.8	112	77.0				2.1	11.1	2.9	24.3
Treasury Bonds	90	90.0	109	79.8	112	77.0				2.1	11.1	2.9	24.3
Central Bank Bonds	0	0.0	0	0.0	0	0.0				—	—	—	—
Philippines													
Total	53	100.0	61	100.0	61	100.0				0.7	9.2	0.9	15.1
Total Bills	13	25.3	13	21.7	12	19.6	0.34	0.28	0.24	(8.8)	(15.2)	(8.7)	(10.7)
Treasury Bills	13	25.3	13	21.7	12	19.6	0.34	0.28	0.24	(8.8)	(15.2)	(8.7)	(10.7)
Central Bank Bills	0	0.0	0	0.0	0	0.0	—	—	—	—	—	—	—
Total Bonds	40	74.7	48	78.3	49	80.4				3.4	17.5	3.5	23.8
Treasury Bonds	40	74.7	48	78.3	49	80.4				3.4	17.5	3.5	23.8
Central Bank Bonds	0	0.0	0	0.0	0	0.0				—	—	—	—

continued on next page

Table 4 continued

	4Q09		3Q10		4Q10		Government Bills-to-Bonds-Ratio			Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share				4Q10		4Q10	
							4Q09	3Q10	4Q10	q-o-q	y-o-y	q-o-q	y-o-y
Singapore													
Total	88	100.0	97	100.0	103	100.0				3.3	7.0	5.9	17.1
Total Bills	37	42.1	41	42.5	44	43.2	0.73	0.74	0.76	4.8	9.6	7.5	20.0
Treasury Bills	37	42.1	41	42.5	44	43.2	0.73	0.74	0.76	4.8	9.6	7.5	20.0
Central Bank Bills	0	0.0	0	0.0	0	0.0	—	—	—	—	—	—	—
Total Bonds	51	57.9	56	57.5	59	56.8				2.2	5.0	4.8	15.0
Treasury Bonds	51	57.9	56	57.5	59	56.8				2.2	5.0	4.8	15.0
Central Bank Bonds	0	0.0	0	0.0	0	0.0				—	—	—	—
Thailand													
Total	125	100.0	160	100.0	167	100.0				3.3	19.7	4.3	32.9
Total Bills	37	29.3	48	29.8	48	28.6	0.42	0.42	0.40	(0.7)	16.8	0.3	29.6
Treasury Bills	6	4.9	5	3.2	2	1.4	0.10	0.06	0.03	(53.4)	(65.3)	(53.0)	(61.5)
Central Bank Bills	31	24.4	42	26.6	45	27.2	1.28	1.34	1.30	5.6	33.4	6.6	48.1
Total Bonds	89	70.7	112	70.2	119	71.4				5.0	21.0	6.0	34.3
Treasury Bonds	65	51.5	80	50.4	84	50.4				3.3	17.1	4.3	29.9
Central Bank Bonds	24	19.1	32	19.8	35	21.0				9.3	31.5	10.3	45.9
Viet Nam													
Total	5.0	100.0	6.1	100.0	6.1	100.0				(0.4)	28.2	(0.5)	21.5
Total Bills	0.3	7.0	0.5	7.5	0.4	6.4	0.08	0.08	0.07	(14.7)	17.1	(14.7)	11.0
Treasury Bills	0.3	5.1	0.5	7.5	0.4	6.4	0.06	0.08	0.07	(14.7)	60.3	(14.7)	51.9
Central Bank Bills	0.1	1.9	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Total Bonds	4.6	93.0	5.6	92.5	5.7	93.6				0.7	29.0	0.7	22.2
Treasury Bonds	4.6	93.0	5.6	92.5	5.7	93.6				0.7	29.0	0.7	22.2
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
Emerging East Asia (EEA)													
Total	2,300	100.0	2,594	100.0	2,606	100.0				(0.7)	8.6	0.4	13.3
Total Bills	814	35.4	860	33.2	821	31.5	0.55	0.50	0.46	(5.6)	(2.9)	(4.6)	0.8
Treasury Bills	173	7.5	166	6.4	175	6.7	0.14	0.12	0.12	4.1	(3.4)	5.6	1.5
Central Bank Bills	641	27.9	694	26.8	645	24.8	2.41	2.13	1.92	(8.0)	(2.8)	(7.1)	0.6
Total Bonds	1,486	64.6	1,734	66.8	1,785	68.5				1.8	14.8	2.9	20.1
Treasury Bonds	1,221	53.1	1,408	54.3	1,449	55.6				1.7	13.3	2.8	18.7
Central Bank Bonds	266	11.6	325	12.5	336	12.9				2.2	21.8	3.4	26.6
EEA Less PRC													
Total	900	100.0	1,072	100.0	1,085	100.0				0.4	13.8	1.2	20.5
Total Bills	226	25.1	273	25.5	275	25.4	0.33	0.34	0.34	0.1	15.7	0.8	21.8
Treasury Bills	61	6.8	65	6.1	64	5.9	0.11	0.10	0.10	(2.9)	(3.0)	(1.2)	5.2
Central Bank Bills	165	18.3	208	19.4	211	19.4	1.34	1.40	1.38	1.1	22.9	1.4	28.0
Total Bonds	674	74.9	799	74.5	810	74.6				0.4	13.2	1.4	20.1
Treasury Bonds	551	61.2	650	60.6	657	60.6				0.2	12.0	1.1	19.2
Central Bank Bonds	123	13.7	149	13.9	153	14.1				1.4	18.4	2.5	23.8
Japan													
Total	7,536	100.0	8,825	100.0	9,240	100.0				1.7	6.9	4.7	22.6
Total Bills	274	3.6	357	4.0	370	4.0	0.04	0.04	0.04	0.7	17.9	3.7	35.2
Treasury Bills	274	3.6	357	4.0	370	4.0	0.04	0.04	0.04	0.7	17.9	3.7	35.2
Central Bank Bills	0	0.0	0	0.0	0	0.0	—	—	—	—	—	—	—
Total Bonds	7,262	96.4	8,468	96.0	8,870	96.0				1.7	6.5	4.7	22.1
Treasury Bonds	7,262	96.4	8,468	96.0	8,870	96.0				1.7	6.5	4.7	22.1
Central Bank Bonds	0	0.0	0	0.0	0	0.0				—	—	—	—

— = not applicable, LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:

1. Bloomberg LP end-of-period LCY—USD rates are used.

2. For LCY-base, total emerging East Asia growth figures are based on end-December 2010 currency exchange rates and do not include currency effects.

3. Total figures per market refer to bills and bonds issued by the central government and the central bank. It excludes bonds issued by policy banks and state-owned enterprises. Bills are defined as securities with original maturities of less than 1 year.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Japan (Japan Securities Dealers Association); Republic of Korea (Bloomberg LP); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); Singapore (Monetary Authority of Singapore); Thailand (Bloomberg LP); and Viet Nam (Bloomberg LP).

Foreign Holdings

Foreign holdings of local domestic bonds continued to rise in 4Q10.

Foreign holdings of emerging East Asian LCY bonds soared in 4Q10 as investors chased yields and sought additional gains from the anticipated appreciation of regional currencies.

At the end of December, foreigners held 30.5% of Indonesia’s government debt, reflecting the continuation of high yields on Indonesian government securities (**Figure 6**). Foreign holdings of Malaysian debt rose to 20.3% at the end of September, compared with 18.1% at the end of June, due to rising yields during the year and prospects for a stronger ringgit.

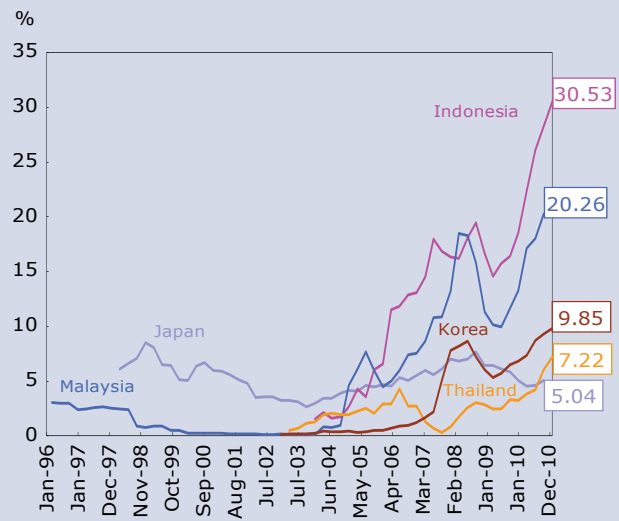
The Republic of Korea saw a substantial rise in foreign holdings of its debt in late 2010, reflecting the (i) removal of the withholding tax on foreign investment in Korean debt in May 2009; and (ii) improving performance of the KTB futures market, making it easier for market participants to hedge their investment positions. However, Parliament’s November approval of the re-imposition of withholding and capital gains taxes has slowed in flows in recent months.

Maturity Profiles

The maturity profiles for emerging East Asia bond markets have generally lengthened over the last year.

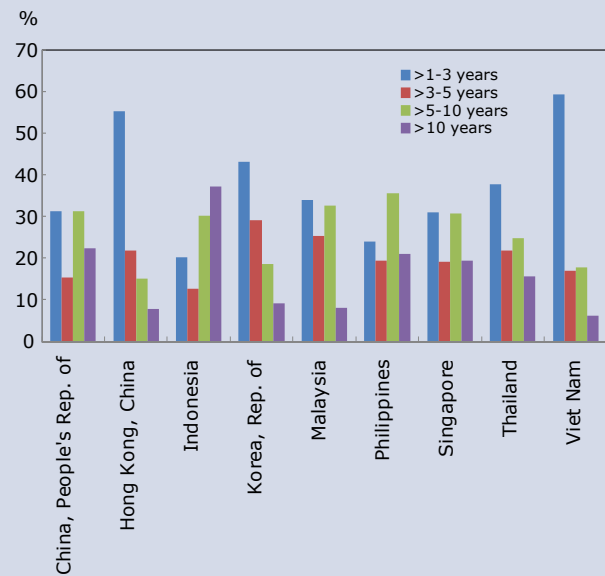
Maturities in government bond markets are concentrated at the shorter-end of the yield curve in Hong Kong, China; Republic of Korea; Malaysia; Thailand; and Viet Nam (**Figure 7**). Maturities of 10 years or more comprise less than 15% of total bonds outstanding in the 5 government bond markets listed above except for Thailand (15.7%). In comparison, the PRC, Philippines, and Singapore have a proportionally larger share of their bonds outstanding in maturities greater than 10 years. Indonesia has structured its government

Figure 6: Foreign Holdings of LCY Government Bonds in Select Asian Economies



LCY = local currency.
 Note: Data for Japan and Malaysia as of September 2010; Indonesia, Republic of Korea, and Thailand as of December 2010.
 Source: *AsianBondsOnline*.

Figure 7: Government Maturity Profiles (individual maturities as % of total)



Source: *AsianBondsOnline*.

debt so that maturities of more than 10 years are the largest segment of its market.

The PRC has a large proportion of its government debt—22.3% of the total—in maturities of 10 years or more. The Philippines has 21.1% of its government bonds outstanding in maturities of 10 years or more, slightly more than Singapore, which has issued 19.3% of its debt in maturities of 10 years or more. The long-end of the Philippine government bond market curve significantly lengthened during the course of 4Q10 due to a bond exchange program conducted on 16 December. Under the program, the Philippines accepted PHP173 billion of eligible government bonds with an average maturity of 6.7 years, and issued PHP199 billion of new peso bonds, comprising a mix of 10- and 25-year maturities, with an average maturity of 22.5 years. Of the newly issued bonds, PHP166 billion worth had maturities of 25 years and paid a coupon of 8.125%, while the remaining PHP33 billion were issued with a maturity of 10 years and a coupon of 5.875%.

Maturity structures in the LCY corporate bond markets of emerging East Asia are highly diverse (**Figure 8**). There is a great deal of similarity in the maturity structures of the corporate and government bond markets of Hong Kong, China; Republic of Korea; Singapore; and Viet Nam.

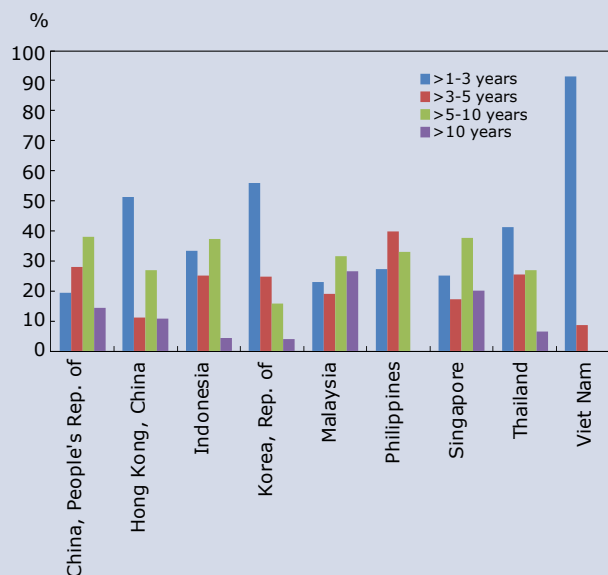
Thailand is something of a middling case. The maturity structures of Thai government and corporate bonds are roughly similar for maturities up to 10 years. However, 15.7% of Thai government bonds had maturities of 10 years or more at end-December, while this was the case for only 6.5% of Thai corporate bonds.

A disproportionately large amount of total issuance in the government and corporate bond markets of Hong Kong, China; the Republic of Korea; and Viet Nam consists of 1–3 year maturities. Singapore’s government and corporate bonds, however, have a much more balanced maturity structure. In fact, maturities of 10 years or more

account for about 20% of both government and corporate bonds in Singapore.

The only market in emerging East Asia where corporate bonds account for a significantly larger share of total bonds outstanding at the end of the credit curve than government bonds is Malaysia’s, where corporate bonds with maturities of 10 years or more account for about 26% of total corporate bonds outstanding. The main reason for the long-dated structure of the Malaysian corporate bond market appears to be a combination of the availability of *sukuk* (Islamic bonds), which are long-dated instruments, and the large proportion of infrastructure company issuance in the Malaysian market. However, only 8% of Malaysian government bonds have maturities of 10 years or more. This mismatch at the long-end of the curve and the fact that about one-third of Malaysian government bonds are short-dated (maturities of 1–3 years) are the principal reasons Malaysian corporate and government bonds are categorized as having different maturity structures.

Figure 8: Corporate Maturity Profiles
(individual maturities as % of total)



Source: AsianBondsOnline.

The principal difference between the maturity structures of Philippine government and corporate bonds is a complete absence of long-dated bonds in the corporate market. The situation in Indonesia is roughly the same; few corporate bonds have maturities greater than 10 years. In the case of the PRC, bonds with maturities of 10 years or more account for 22.3% of government bonds, but only 14.5% of corporate bonds.

Bond Turnover Ratios

Bond turnover ratios for most emerging East Asian LCY bond markets—both government and corporate—fell in 4Q10.

The decline of bond turnover ratios in most markets in 4Q10 appears to reflect the decline in issuance for the region as whole in 4Q10, which fell by 27.6% q-o-q, resulting in growth of bonds outstanding of only 1.2% q-o-q. On the other hand, the turnover ratio for the government bond market of Hong Kong, China rose from 34.7 in 3Q10 to 49.6 in 4Q10 (**Figure 9a**). Hong Kong, China's high government bond turnover ratio is simply on a different scale from that of any other market in emerging East Asia due to the unique nature of EFBNs, which are instruments of monetary policy. EFBNs are not used as instruments to finance the government budget deficit, but can be used as margin collateral for stock options and futures trading.

Along with other government bond markets in the region, the Philippines' turnover ratio rose to 1.3 in 4Q10 from 0.99 in 3Q10. This increase likely reflects the aforementioned debt exchange transaction in December. The only other market to experience a (slight) rise in its government bond turnover ratio was Thailand's, which can be attributed entirely to the dramatic 15.7% q-o-q growth of central bank bond issuance in 4Q10.

Corporate bond turnover ratios fell for most markets in 4Q10 (**Figure 9b**). This seems to reflect a moderation of corporate bond market growth from 23.7% y-o-y in 3Q10 to 20.3% in 4Q10, as well as a corresponding decline in

the q-o-q growth rates for most corporate bond markets. The most dramatic decline in q-o-q corporate bond market growth in 4Q10 was in the PRC. The second-largest corporate bond market in the region saw its q-o-q growth rate fall to 3.6%

Figure 9a: Government Bond Turnover Ratios¹

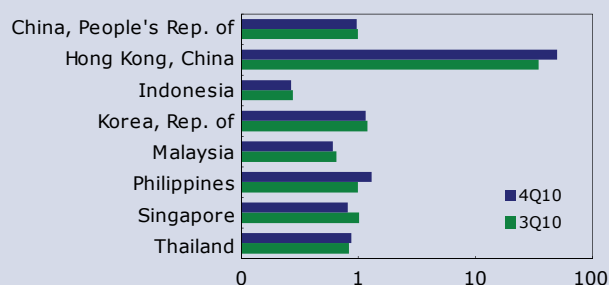
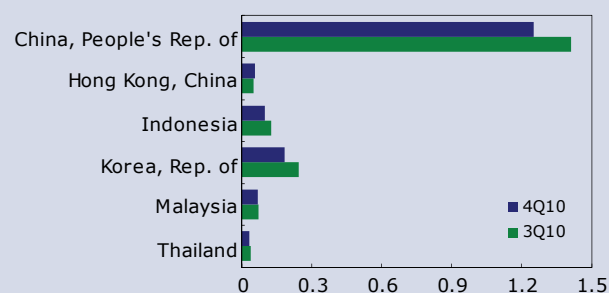


Figure 9b: Corporate Bond Turnover Ratios¹



Notes:

1. Government and corporate bond turnover ratios are calculated as local currency (LCY) trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.

2. Figure 9a is based on a logarithmic scale.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Republic of Korea (*KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); Singapore (Monetary Authority of Singapore and Singapore Government Securities); and Thailand (Bank of Thailand and Thai Bond Market Association).

in 4Q10 from 10.9% in 3Q10. The only corporate bond market to experience a rise in its bond turnover ratio in 4Q10 was Hong Kong, China's, which only saw a 2.5% q-o-q rise in corporate bonds outstanding in 4Q10. Interestingly, 51.1% of Hong Kong, China's corporate issues are short-dated (1–3 years), which would seem to make them less attractive to buy-and-hold investors.

Government Bond Yield Curves

Yield curves for LCY government bonds have flattened for most markets since the beginning of the year amid market concerns over rising inflationary pressures and the fear of further policy rate hikes.

In 2010, government bond yield curves in the region flattened, especially at the longer-end of the curve, and in some cases shifted downward, reflecting strengthened demand for East Asian government bonds. This bullish flattening in 2010 can be attributed to four factors: (i) attractive yields and strong growth prospects for the region, (ii) reserve diversification among central banks and monetary authorities, (iii) continued appreciation of regional currencies against the US dollar for most of the year, and (iv) the availability of better hedging and risk management products (**Figure 10**). The most dramatic cases of a downward shift in yield curves in 2010 took place in Indonesia, the Philippines, and the Republic of Korea. Yield curves shifted downward—except at the very short-end of the curve—in Malaysia and Thailand as well. In Singapore, yields fell for 2- and 15-year maturities, but rose slightly for 7-year maturities.

The only cases in which government bond yields at year-end 2010 had risen above their end-2009 levels were the PRC and Hong Kong, China at the long-end of the curve, Thailand and Malaysia at the short-end, Singapore for some maturities in the belly of the curve, and Viet Nam at the long-end of its curve. The rise in PRC yields at the short-end was exceptional, with increases of almost 200 basis points on the back of gradual tightening of monetary policy during the course of the year.

Between end-December 2010 and 11 March 2011, however, the trend of rising short-term yields accelerated, resulting in a further flattening of most government bond yield curves in the region, and an upward shift along most of the curve in many cases. Most curves are flattening, but they are doing so by shifting upward. This is the

opposite of 2010's overall trend in which curves flattened while shifting downward, with long-term yields falling relative to short-term yields.

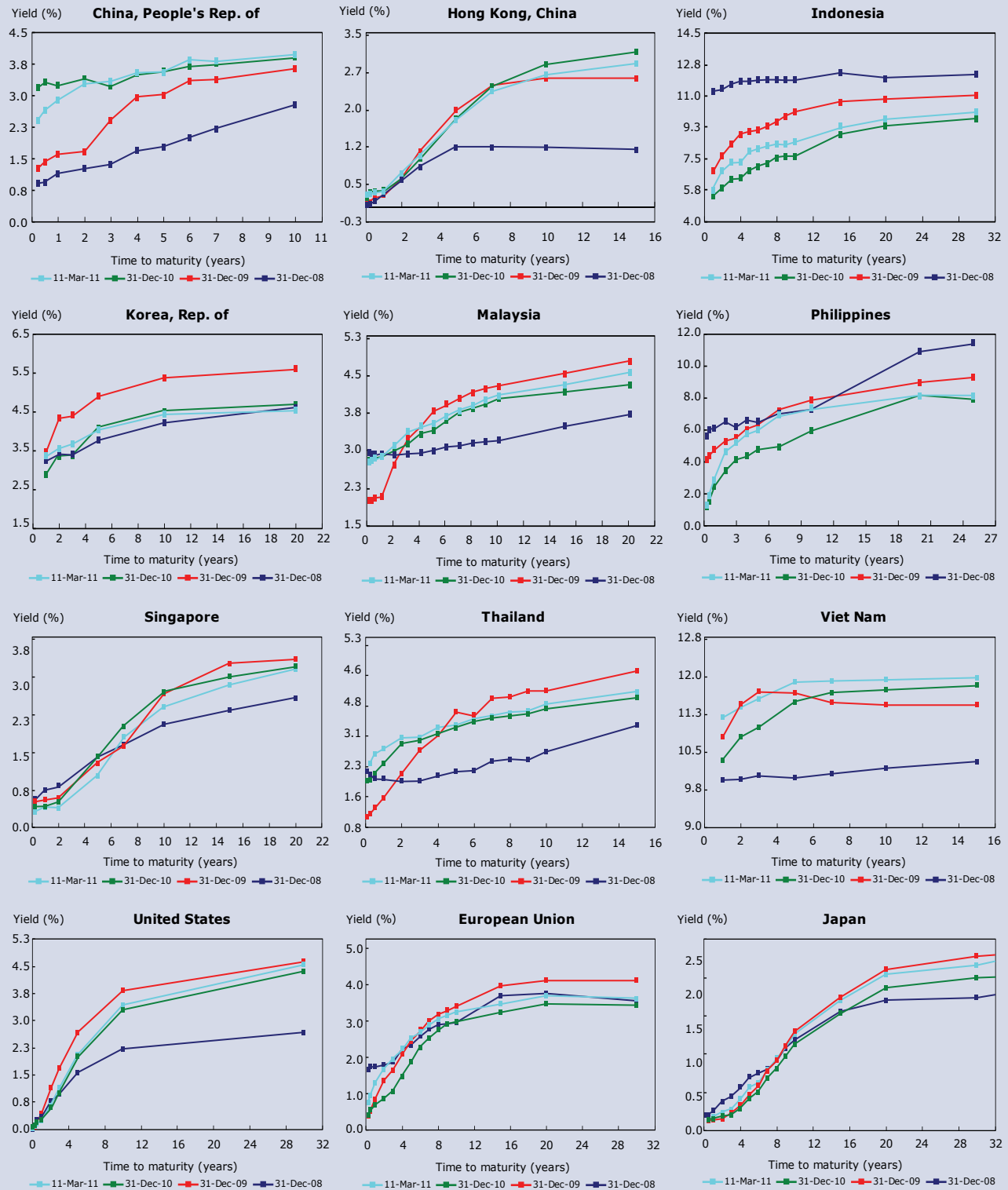
The PRC curve steepened, rather than flattened, between end-December and 11 March, as yields fell sharply at the short-end of the curve, while rising slightly at the long-end. Singapore's yields fell along its entire curve. However, they fell by 38 basis points for the 5-year maturity, while falling less for most longer-dated maturities, resulting in a modest steepening of the Singapore curve between its belly and longer-end.

The yield spread between 2-year and 10-year maturities tightened in most markets between the end of December and 11 March. The only exceptions to this trend were the PRC and the Philippines, where yield spreads widened during this period (**Figure 11**).

The Philippine curve is another exception to the overall flattening trend observed between end-December and 11 March. Yields in the belly of the curve for maturities between 7 and 10 years rose dramatically by over 100 basis points, while yields at the short- and long-end rose much less. This reflects the fact that bonds at the short- and long-ends of the curve are held mostly by retail and institutional investors, respectively, and are rarely traded. Bonds with maturities between 7 and 10 years, however, are actively traded by banks and much more liquid, and have experienced a much larger rise in yields over the last several months.

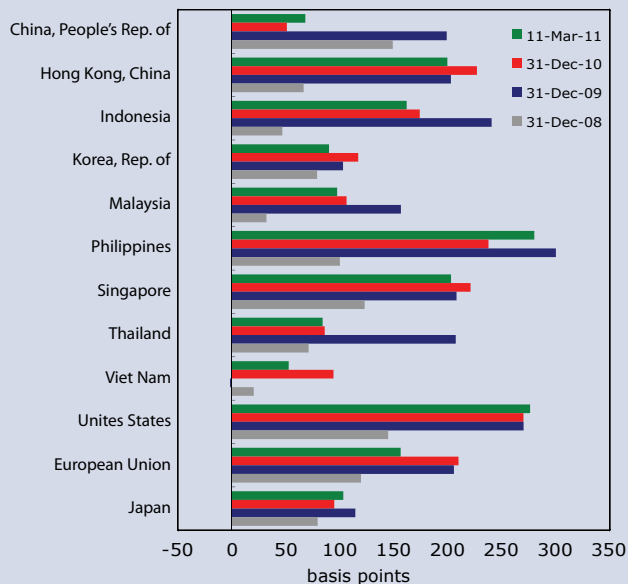
Government bond yields are generally expected to rise further this year on the back of rising inflation rates (**Figure 12**) and further expected hikes in policy interest rates for many markets in emerging East Asia (**Figure 13**). Indonesian inflation rose to 7.02% y-o-y in January from just under 7.00% in December, before falling back to 6.84% in February. Hong Kong, China's inflation rate in January rose to 3.6% from 3.1% in December; inflation in Viet Nam rose to 12.3% in February from 12.1% in January; and inflation in the Republic of Korea rose to 4.5% in February from 4.1% in January

Figure 10: Benchmark Yield Curves—LCY Bonds



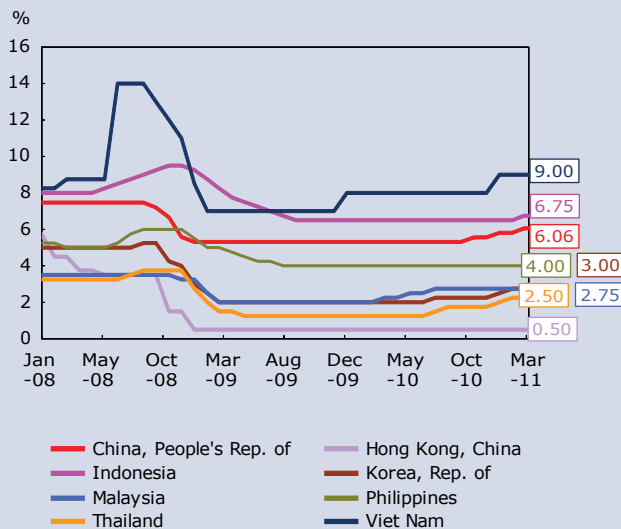
LCY = local currency.
Source: Based on data from Bloomberg LP.

Figure 11: Yield Spreads Between 2- and 10-Year Government Bonds



Source: Based on data from Bloomberg LP.

Figure 13: Policy Rates



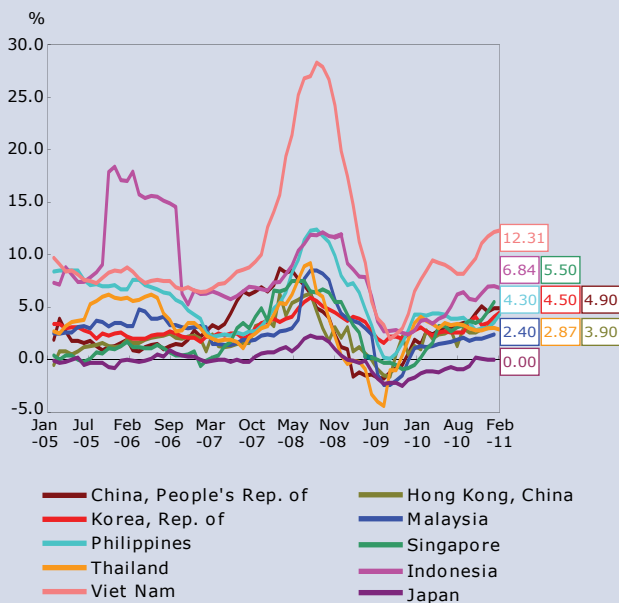
Note: Data as of 11 March 2011.
Source: Bloomberg LP except for Viet Nam (State Bank of Viet Nam).

and 3.5% in December. Thai inflation in February fell to 2.87% from 3.03% in January; Malaysian inflation rose to 2.4% in January from 2.2% in December. Singapore's inflation rate rose to 5.5% in January, its highest level in 5 years. The PRC's inflation rate in February remained at its January level of 4.9%.

Philippine inflation rose to 4.3% in February from 3.6% in January, which was still within the 3.0%–5.0% target band of Bangko Sentral ng Pilipinas (BSP). A BSP spokesman has said that the Philippine central bank is closely monitoring the situation and is prepared to take appropriate action if necessary. The Bank of Thailand has stated that it is still monitoring inflationary pressures, and will raise interest rates further if necessary.

The PBOC raised its policy rate a number of times in 2010, while also increasing its required reserve ratios for banks. On 8 February, the PBOC raised its 1-year lending rate by 25 basis points to 6.06% and its 1-year deposit rate to 3.0%. Bank Indonesia raised its policy rate by 25 basis points to 6.75% on 4 February, shortly after the rise in Indonesia's January inflation rate had been announced.

Figure 12: Headline Inflation Rates (February 2011)



Note: Inflation for Hong Kong, China; Japan; Malaysia; and Singapore are January figures.
Source: Bloomberg LP.

The Bank of Korea and Bank Negara Malaysia raised their policy rates two and three times, respectively, during the course of 2010, ending the year with policy rates of 2.5% and 2.75%. Bank Negara Malaysia left its key policy rate unchanged at its last meeting on 11 March, while the Bank of Korea raised its policy rate by 25 basis points on 13 January and again on 10 March, bringing the new rate to 3.0%. The Bank of Thailand raised its policy rate by 25 basis points on three separate occasions in 2010 to finish the year with a policy rate of 2.0%. On 12 January, the Bank of Thailand raised its policy rate by a further 25 basis points to 2.25%, and did so again on 9 March to 2.5%.

In November, the State Bank of Vietnam (SBV) raised its three key policy rates—the base rate, refinancing rate, and discount rate—by 100 basis points each to 9.0%, 9.0%, and 7.0%. The SBV raised its refinancing rate by 200 basis points to 11.0% on 17 February, and, more recently, raised it again by 100 basis points to 12.0% on 8 March. The SBV also raised its reverse repurchase rate by 100 basis points to 12.0% on 22 February.

Corporate Credit Spreads

High-grade credit spreads tightened in 2010 compared with their end-2009 levels, while credit spread movements of lower-rated bonds differed a great deal from market to market.

Credit spreads on high-grade corporate bonds (rated AAA) tightened between end-December 2009 and end-December 2010 along the entire length of the credit curve for the PRC, Republic of Korea, and Thailand (**Figure 14a**). In Malaysia, however, credit spreads widened modestly along the entire length of the curve over the same period. The shape of these curves, however, remained broadly the same, simply shifting downward for the PRC and Republic of Korea, while shifting upward in the case of Malaysia. In Thailand, credit spreads at end-2010 fell from their end-2009 levels along the entire length of the credit curve, except for the

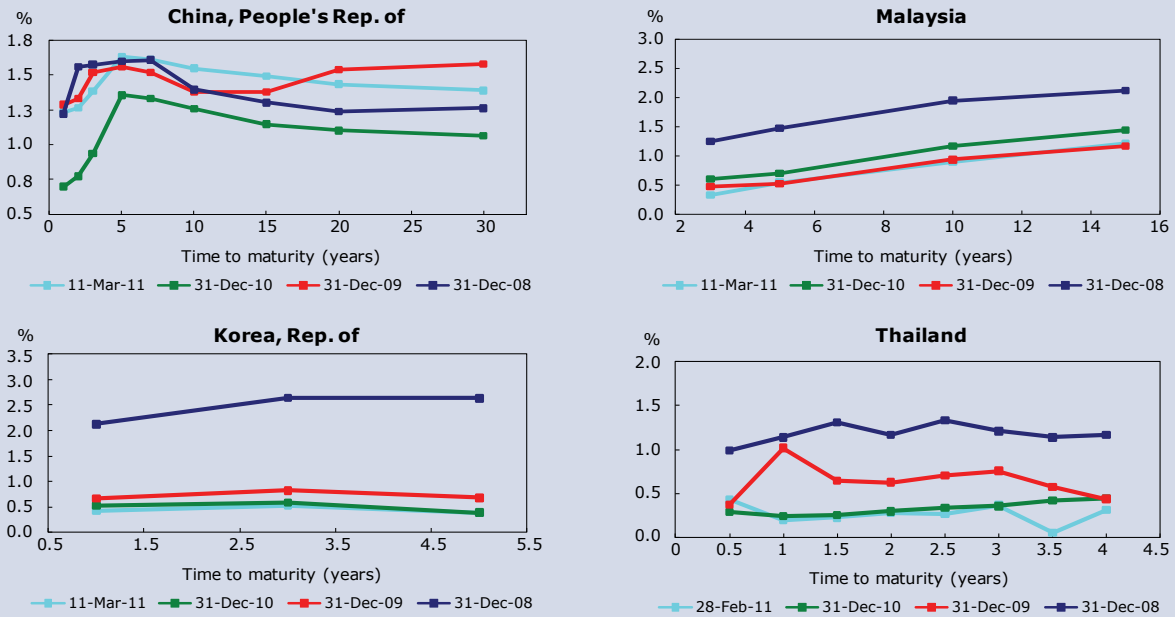
very short- and long-ends, where they remained almost the same as they were at end-2009.

Since the end of 2010, credit spreads for AAA-rated corporate bonds in the Republic of Korea, Malaysia, and Thailand have generally tightened along most of their respective curves. The PRC credit curve, however, has widened significantly along its entire length and shifted upwards.

Trends for lower-rated corporate bonds (**Figure 14b**) have been unique over the last year for each of the four markets for which data is available:

- (i) In the PRC, credit spreads for lower-rated bonds as of 11 March were essentially unchanged from end-December 2010, after having fallen sharply over the course of 2010 from their end-2009 levels, especially at the shorter-end of the curve.
- (ii) In the Republic of Korea, credit spreads for lower-rated corporate bonds tightened further between end-December and 11 March, after having tightened slightly over the course of 2010.
- (iii) In Malaysia, credit spreads on lower-rated corporate bonds widened slightly along most of the credit curve between end-2009 and end-2010, and continued to widen further between end-December and 11 March.
- (iv) In Thailand, credit spreads tightened between end-2009 and end-2010, except for maturities of 3 and 3.5 years. Between end-December and end-February, credit spreads widened slightly at the short-end of the curve, as well as for maturities above 4 years, but tightened at most other points on the curve.

Figure 14a: Credit Spreads—LCY Corporates Rated AAA vs. Government Bonds



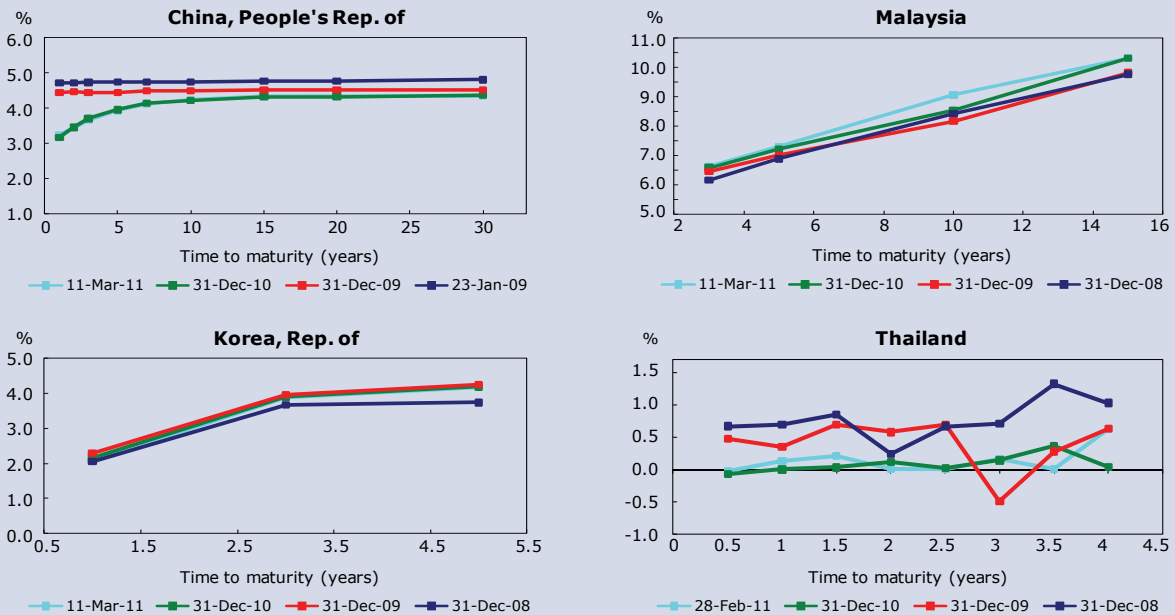
LCY = local currency.

Note:

1. Credit spreads are obtained by subtracting government yields from corporate indicative yields.

Source: People's Republic of China (*ChinaBond*); Republic of Korea (*KoreaBondWeb*); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).

Figure 14b: Credit Spreads—Lower Rated LCY Corporates vs. AAA



LCY = local currency.

Notes:

1. For the People's Republic of China, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.

2. For Malaysia, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.

3. For the Republic of Korea, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB+.

4. For Thailand, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as A.

Source: People's Republic of China (*ChinaBond*); Republic of Korea (*KoreaBondWeb*); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).

Ratio of Equity Market Capitalization to Corporate Bonds Outstanding

The ratio of equity market capitalization to corporate bonds outstanding recovered in most emerging East Asian markets in 4Q10.

The recovery of the ratio of equity market capitalization to corporate bonds outstanding in 4Q10 (**Figure 15**) reflects the importance of corporate bond markets in the capital markets of emerging East Asia. The higher this ratio the greater the state of the local corporate bond market's underdevelopment. The highest ratios in Figure 15 are for Hong Kong, China; Indonesia; the Philippines; and Viet Nam, reflecting the fact that these are the four least-developed corporate bond markets in the region. The Republic of Korea, Malaysia, and Thailand have the most developed corporate bond markets and, hence, the lowest ratios. What is most interesting, however, is that the ratios for the PRC and Singapore dropped significantly in 4Q10. While this may reflect sluggishness in the PRC stock market in the

second half of the year, it also signals that the PRC corporate bond market has been growing at high double-digit rates for several years now. In addition, Singapore's corporate bond market experienced robust growth in the second half of the year. Although the y-o-y growth rate of the PRC's corporate bond market has dropped considerably from levels close to 100% in recent years, it still expanded 37.2% y-o-y in 4Q10. At the same time, Singapore's corporate bond market's growth rose to 30.9% y-o-y in 4Q10.

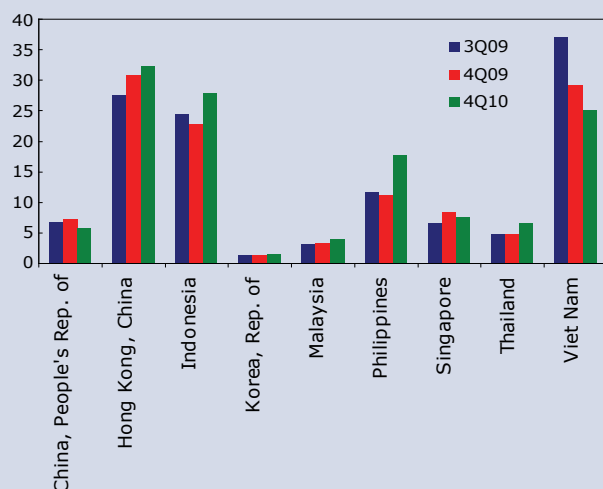
G3 Bond Currency Issuance

G3 currency issuance from emerging East Asia in 2010 reached USD87.2 billion, a 40% increase over 2009, while 2011 could be another record year for G3 currency bond issuance.²

For the full-year 2010, G3 currency issuance from emerging East Asia reached USD87.2 billion, which was up by about 40% from 2009 (**Table 5**). The largest G3 currency issuance in the region came from the Republic of Korea with USD28.4 billion, of which the top three bonds in terms of issue size were all from the Export-Import Bank of Korea totalling USD3.3 billion. Hong Kong, China came in second at USD18.6 billion, led by Hutch Whampoa's USD2.0 billion perpetual bond, a USD1.6 billion 10-year bond sold by Bank of China (Hong Kong), and Sinochem's USD1.5 billion 10-year bond. The PRC recorded USD16.0 billion of G3 currency issuance, spearheaded by Evergrande's high-yield 5-year bond of USD1.4 billion (13.0% coupon) and China Overseas Finance's USD1.0 billion 10-year bond.

G3 currency issuance in the Philippines amounted to USD8.1 billion in 2010, most of which came from the Philippine government, including (i) two sovereign bonds issued in October totaling USD3.2 billion under the government's US dollar bond exchange program, and (ii) a *samurai* bond issued in March worth JPY100 billion (USD1.1 billion). Indonesia raised USD6.8 billion worth of G3 currency bonds, the largest being the Indonesian government's

Figure 15: Ratios of Equity Market Capitalization to Corporate Bonds Outstanding



Source: Bloomberg LP and *AsianBondsOnline* calculations.

² G3 currencies include the euro, Japanese yen, and US dollar.

Table 5: G3 Currency Bond Issuance (2010 and 1 January–11 March 2011)

2010			1 January–11 March 2011		
Issuer	USD million	Issue Date	Issuer	USD million	Issue Date
People's Republic of China	15,950		China, People's Rep. of	4,000	
Evergrande 13% 2015	1,350	27-Jan-10	CNOOC Finance 4.25% 2021	1,500	26-Jan-11
China Overseas Finance 5.5% 2020	1,000	10-Nov-10	Country Garden 11.125% 2018	900	23-Feb-11
Sino-Ocean Land Capital 8.0% Perpetual	900	27-Jul-10	CNOOC Finance 5.75% 2041	500	26-Jan-11
Agile Property 8.875% 2017	650	28-Apr-10	West China Cement 7.5% 2016	400	25-Jan-11
Franshion Capital 6.8% Perpetual	600	12-Oct-10	Shimao Property 11.0% 2018	350	8-Mar-11
MCE Finance 10.25% 2017	600	17-May-10	China South City Holdings 13.5% 2016	250	14-Jan-11
Others	10,850		ICBC Asia 0.87% 2012	100	18-Jan-11
Hong Kong, China	18,634		Hong Kong, China	595	
Hutch Whampoa 6.0% Perpetual	2,000	28-Oct-10	Hopson Development 11.75% 2016	300	11-Jan-11
Bank of China (Hong Kong) 5.55% 2020	1,600	11-Feb-10	Texhong Textile Group 7.625% 2016	200	19-Jan-11
Sinochem 4.5% 2020	1,500	12-Nov-10	Others	95	
PHBS 6.625% Perpetual	1,000	29-Sep-10	Indonesia	248	
Bank of China (Hong Kong) 5.55% 2020	900	19-Apr-10	Lippo Karawaci 9% 2015	125	10-Feb-11
Hongkong Electric Finance 4.25% 2020	750	14-Dec-10	Others	123	
Others	10,884		Korea, Rep. of	5,796	
Indonesia	6,784		Korea Development Bank 4.0% 2016	750	9-Mar-11
Indonesia Sovereign 5.875% 2020	2,000	19-Jan-10	Hyundai Capital 4.375% 2016	700	27-Jan-11
Indonesia Sovereign (<i>Samurai</i>) 1.6% 2020	717	12-Nov-10	Export-Import Bank of Korea 1.05% 2015	483	17-Feb-11
Indosat 7.375% 2020	650	29-Jul-10	KT Corp. (<i>Samurai</i>) 1.58% 2013	427	26-Jan-11
Others	3,417		Woori Bank (<i>Samurai</i>) 1.82% 2013	320	1-Feb-11
Republic of Korea	28,353		Kia Motors 1.912% 2014	300	25-Feb-11
Export-Import Bank of Korea 5.125% 2020	1,250	29-Jun-10	Cyprus Investments 3.165% 2014	290	7-Feb-11
Export-Import Bank of Korea 4.125% 2015	1,000	9-Mar-10	Woori Bank (<i>Samurai</i>) 1.57% 2012	253	1-Feb-11
Export-Import Bank of Korea 4.0% 2021	1,000	20-Oct-10	Busan Bank (<i>Samurai</i>) 1.79% 2012	199	17-Feb-11
Polyvision 0.0% 2013	990	1-Oct-10	Kia Motors 2.2115% 2016	150	25-Feb-11
Korea Development Bank 3.25% 2016	900	9-Sep-10	Samsung Total Petrochemicals 1.413% 2014	140	22-Feb-11
Korea Finance Corp. 3.25% 2016	750	20-Sep-10	Hotel Lotte 1.111% 2014	100	28-Feb-11
Korea National Oil Corp. 2.875% 2015	700	9-Nov-10	KEPCO 1.314% 2014	100	18-Feb-11
Others	21,763		Korea Development Bank 1.245% 2012	100	31-Jan-11
Malaysia	1,950		Korea Water Resources 1.303% 2014	100	18-Jan-11
1Malaysia <i>Sukuk</i> 3.928% 2015	1,250	4-Jun-10	Others	1,384	
Others	700		Malaysia	0	
Philippines	8,084		Philippines	600	
Philippines Sovereign 4.0% 2021	2,242	6-Oct-10	Energy Development Corp. 6.5% 2021	300	20-Jan-11
Philippines Sovereign (<i>Samurai</i>) 2.32% 2020	1,070	2-Mar-10	SMC Global Power Holdings 7.0% 2016	300	28-Jan-11
Philippines Sovereign 6.375% 2034	950	6-Oct-10	Singapore	1,060	
Others	3,822		SingTel 4.5% 2018	600	8-Mar-11
Singapore	4,111		Stats ChipPac 5.375% 2016	200	12-Jan-11
DBS Bank 2.375% 2015	1,000	14-Sep-10	Others	260	
Others	3,111		Thailand	0	
Thailand	2,350		Viet Nam	0	
Bangkok Bank 4.8% 2020	800	18-Oct-10	Emerging East Asia Grand Total	12,299	
Others	1,550		Memo Items:		
Viet Nam	1,000		India	2,942	
Viet Nam Sovereign 6.75% 2020	1,000	29-Jan-10	Essar Energy 4.25% 2016	550	1-Feb-11
Emerging East Asia Grand Total	87,217		Bank of India 6.25% 2021	500	16-Feb-11
Memo Items:			Rural Electrification Corp. 4.25% 2016	500	25-Jan-11
India	13,023		Bank of Baroda 5.0% 2016	500	24-Feb-11
Novelis 8.75% 2020	1,400	17-Dec-10	Canara Bank (London) 5.125% 2016	350	9-Mar-11
ICICI Bank 5.75% 2020	1,000	16-Nov-10	Export-Import Bank of India (<i>Samurai</i>) 1.88% 2021	242	11-Mar-11
State Bank of India (London) 4.5% 2015	1,000	27-Jul-10	ICICI Bank (Singapore) 2.063% 2014	200	24-Feb-11
Others	9,623		State Bank of India (London) 2.453% 2016	100	21-Jan-11
Sri Lanka	1,573		Sri Lanka	0	
Others	9,623				
Sri Lanka	1,573				

Note: The Philippines' USD2.2 billion 2021 bond and USD950 million 2034 bond were part of a dollar bond exchange program. In addition, the Philippines two sovereign global peso bond issuances—a PHP54.77 billion (USD1.24 billion) 25-year bond in January and a PHP44.1 billion (USD1 billion) 10-year bond in September—and Petron's 7-year global peso bond of PHP20 billion (USD454 million) issued in November are not included in this table.

Source: Bloomberg LP, newspaper and wire reports.

USD2.0 billion 10-year bond and a JPY60 billion *samurai* bond (USD717 million). Singapore issued USD4.1 billion of G3 currency bonds, led by DBS Bank's USD1.0 billion 5-year bond issue. In Thailand, total G3 currency issuance stood at USD2.4 billion, of which USD800 million was a 10-year bond of Bangkok Bank. Finally, Malaysia and Viet Nam sold G3 currency bonds last year amounting to USD2.0 billion and USD1.0 billion, respectively.

Between 1 January and 11 March, G3 currency issuance from emerging East Asia surged to USD12.3 billion. The largest issuance in the region came from the Republic of Korea with USD5.8 billion, led by the Korea Development Bank's USD750 million 5-year bond, Hyundai Capital's USD700 million 5.5-year bond, and *samurai* bond issues (USD1.2 billion) from KT Corp and two local banks—Busan Bank and Woori Bank. The PRC had the second-largest G3 currency issuance in the region at USD4.0 billion, with CNOOC Finance selling a USD1.5 billion 10-year bond and a USD500 million 30-year bond.

In the Philippines, Energy Development Corp, and SMC Global Power Holdings both sold G3 currency bonds worth USD300 million. In Hong Kong, China, a total of USD595 million was raised from the sale of G3 currency bonds, led by Hopson Development's high-yield USD300 million 5-year bond (11.75% coupon). G3 currency issuance totalled USD1.1 billion in Singapore, spearheaded by Singtel's USD600 million bond in early March and Stats ChipPac's USD200 million 5-year bond in January. G3 currency issuance amounted to USD248 million in Indonesia.

Bond Market Returns

Returns on LCY bonds for most markets in the region were buoyant in 2010.

The Asian Bond Fund (ABF) Pan-Asian Bond Index gained 10.2% in 2010, led by Indonesia (23.7%), Philippines (19.7%), Malaysia (15.6%), and Thailand (15.4%) (**Table 6**). This performance reversed sharply between end-December 2010 and 11 March 2011, with year-to-date losses

Table 6: iBoxx Asia Bond Fund Index Family Returns

Market	Modified Duration (years)	2009 Returns (%)		2010 Returns (%)		2011 YTD Returns (%)	
		LCY Total Return Index	USD Unhedged Total Return Index	LCY Total Return Index	USD Unhedged Total Return Index	LCY Total Return Index	USD Unhedged Total Return Index
China, People's Rep. of	5.83	(0.64)	(0.69)	1.55	5.06	0.45	0.68
Hong Kong, China	3.89	(0.76)	(0.82)	2.04	1.79	0.71	0.47
Indonesia	5.58	20.22	35.61	19.30	23.70	(1.60)	0.76
Korea, Rep. of	3.94	1.94	9.73	8.00	10.64	0.77	1.71
Malaysia	4.54	0.48	1.64	5.16	15.64	0.39	1.80
Philippines	5.11	9.00	11.88	14.30	19.67	(2.94)	(2.51)
Singapore	5.48	0.48	3.06	2.51	11.34	1.63	2.27
Thailand	4.91	(3.47)	0.73	5.38	15.41	0.05	(0.90)
Pan-Asian Index	4.84	—	5.00	—	10.21	—	0.85
HSBC ALBI	7.87	—	6.13	—	11.49	—	0.74
US Govt. 1-10 years	3.95	—	(1.38)	—	5.26	—	0.38

— = not applicable, ALBI = Asian Local Bond Index, LCY = local currency, US = United States, YTD = year-to-date.

Notes:

1. The Asian Bond Fund (ABF) indices contain only government debt and government-guaranteed debt obligations.
2. Market bond indices are from iBoxx Index Family. Returns for 2011 are year-to-date as of 11 March 2011.
3. Annual returns are computed for each year using natural logarithm of end-of-year index value/beginning year index value.
4. Duration as of 11 March 2011.

Source: *AsianBondsOnline* and Bloomberg LP.

Table 7: MSCI Index Returns

Market	2009 Returns (%)		2010 Returns (%)		2011 YTD Returns (%)	
	LCY terms	USD terms	LCY terms	USD terms	LCY terms	USD terms
China, People's Rep. of	58.89	58.80	2.58	2.32	(0.29)	(0.48)
Hong Kong, China	55.28	55.20	19.98	19.67	(1.43)	(1.62)
Indonesia	90.27	120.75	25.82	31.19	(3.72)	(1.17)
Korea, Republic of	56.63	69.42	22.11	25.29	(5.08)	(4.19)
Malaysia	46.25	47.78	19.33	32.51	(1.96)	(0.56)
Philippines	55.79	60.24	23.47	30.29	(8.52)	(8.13)
Singapore	63.02	67.29	8.08	18.45	(5.02)	(4.13)
Thailand	63.00	70.04	36.36	50.81	(0.58)	(1.60)
Far East ex-Japan Index	60.32	65.01	12.50	16.69	(2.92)	(2.85)
MSCI USA	—	24.20	—	13.18	—	3.62

— = not applicable, LCY= local currency, MSCI = Morgan Stanley Capital International, YTD = year-to-date.

Notes:

1. Market indices are from MSCI country indexes. 2011 returns are year-to-date as of 11 March 2011.
2. Far East ex-Japan includes People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

Source: *AsianBondsOnline* and Bloomberg LP.

in the Philippines (2.5%) and Thailand (0.9%), and only modest gains in the Republic of Korea (1.7%), Malaysia (1.8%), and Singapore (2.3%). Other markets were essentially flat. The Pan-Asian index as a whole was also essentially flat through 11 March, rising only 0.9%.

The MSCI equity index gained 12.5% in LCY terms and 16.7% in US dollar terms in 2010 (**Table 7**). Thai equities were the best performer in 2010, gaining 50.8% in US dollar terms, followed by Malaysia (32.5%), Indonesia (31.2%), and the Philippines (30.3%). All emerging East Asian equity markets—except the PRC and Hong Kong, China—performed better in US dollar terms than in LCY terms.

However, the performance of Asian equity markets sharply deteriorated between end-December and 11 March. The market as a whole fell by 2.8% in US dollar terms and 2.9% in LCY terms over this period. All markets reported losses, with the largest losses coming from the Philippines and the smallest losses coming from the PRC. Losses were generally less when expressed in US dollar terms than when expressed in LCY terms, except for the PRC; Thailand; and Hong Kong, China.

The region's FCY markets followed a somewhat different trend. Most of the region's currencies achieved substantial gains in 2010 vis-à-vis the US dollar, led by the Japanese yen (13.7%), Malaysian ringgit (11.7%), Thai baht (10.5%), and Singapore dollar (9.0%) (**Table 8**).

The region's FCY markets, however, still remained robust in mid-March. As of 11 March, the Japanese yen had risen 10.1% on a y-o-y basis, followed by the Singapore dollar (9.8%), Malaysian ringgit (8.8%), and Thai baht (7.3%). The Vietnamese dong, on the other hand, had fallen 9.0% y-o-y. The strong y-o-y performances of the Singapore dollar and Malaysian ringgit were accompanied by strong q-o-q performances of 1.2% and 0.8%, respectively. The strongest q-o-q performance, however, was that of the Indonesian rupiah, which rose 2.4% q-o-q, compared with its y-o-y return of 4.6%.

Table 8: Appreciation-Depreciation of Emerging East Asian Currencies (%)

Currency	2009	2010	As of 11 March 2011	
	y-o-y	y-o-y	y-o-y	q-o-q
CNY	0.01	3.5	3.8	0.5
HKD	(0.1)	(0.2)	(0.4)	(0.2)
IDR	16.8	5.4	4.6	2.4
KRW	7.9	2.8	0.8	0.2
MYR	1.2	11.7	8.8	0.8
PHP	2.9	5.6	4.6	0.3
SGD	1.8	9.0	9.8	1.2
THB	4.0	10.5	7.3	(1.0)
VND	(5.5)	(5.4)	(9.0)	(6.8)
JPY	(2.6)	13.7	10.1	(0.9)

q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:

1. Appreciation-depreciation is equal to $-\text{LN}(\text{end-of-period rate} / \text{start-of-period rate})$.
2. For 11 March 2011 q-o-q figures, appreciation-depreciation is equal to $-\text{LN}(11 \text{ March 2011 rate} / \text{end-4Q10 rate})$.

Source: Bloomberg LP.