

Bond Market Developments in the Fourth Quarter of 2009

Size and Composition

The total amount of bonds outstanding in emerging East Asia's¹ local currency (LCY) bond market rose to USD4.4 trillion at the end of 4Q09 for a year-on-year (y-o-y) increase of 16.5%.

Total bonds outstanding in emerging East Asia's LCY bond market grew 16.5% y-o-y in 4Q09 to reach USD4.4 trillion (**Table 1**). At the same time, the market's q-o-q growth rate was 4.4% in 4Q09. Growth of the emerging East Asian bond market excluding the People's Republic of China (ex PRC) was 17.3%, somewhat higher than the regional growth rate of 16.5%. This reflects broad-based and strong y-o-y growth in Hong Kong, China (55.8%); Thailand (20.5%); Indonesia (19.4%); Singapore (15.6%); and the Republic of Korea (Korea) (15.0%) (**Figure 1a**).

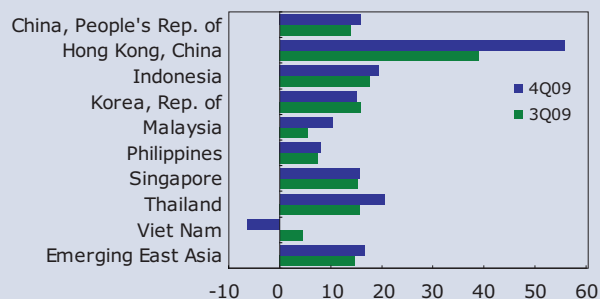
The PRC's corporate and government bond markets grew 16.0% y-o-y in 2009 on an LCY basis, compared to 13.9% y-o-y as of end-3Q09. This reflected recovery in the growth of the PRC's government bond sector to 8.0% y-o-y for 2009, compared to 5.7% y-o-y at the end of 3Q09. The recovery of the PRC's dominant government bond market occurred alongside the corporate bond market's y-o-y growth rate of 77.5% at the end of 2009, down from 87.7% at the end of 3Q09. The moderation in the corporate bond sector's growth primarily reflects a slowdown in the explosive growth of the medium-term note (MTN) sector to 415% y-o-y at the end of 2009 compared to 910% at the end of 3Q09.

The broadly-based 2009 growth trends for LCY bond markets other than the PRC have influenced both government and corporate bond markets.

In Indonesia, the government and corporate bond markets grew 19.2% and 21.2% y-o-y, respectively. In Thailand, the annual growth rates of the government bond market and the corporate bond market were well matched at 21.0% and 18.8%, respectively. Similar trends of balanced corporate and government bond market growth can be seen in Malaysia where in 2009 the government bond and corporate bond markets grew 10.9% and 9.6%, respectively. The y-o-y growth trends for the government and corporate bond markets of emerging East Asia ex-PRC as a whole were 18.7% and 15.6%, respectively. The size of the Viet Nam market, however, fell 6.3% in 2009, due to a 9.8% decline in the size of its government bond market.

In spite of the y-o-y gains, growth on a q-o-q basis was essentially flat in Korea and Malaysia,

Figure 1a: Growth of Emerging East Asian Local Currency Bond Markets in 3Q09 and 4Q09 (y-o-y %)



y-o-y = year on year.

Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from local currency (LCY) base and do not include currency effects.
3. Emerging East Asia growth figure is based on end-December 2009 currency exchange rates and do not include currency effects.

Source:

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

¹In this report 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 Emerging East Asian Local Currency Bond Markets

	4Q08		3Q09		4Q09		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	4Q08		4Q09		4Q08		4Q09	
							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	2,213	100.0	2,415	100.0	2,567	100.0	4.4	22.5	6.3	16.0	4.7	31.0	6.3	16.0
Government	1,957	88.4	2,015	83.4	2,113	82.3	2.6	19.4	4.9	8.0	3.0	27.7	4.9	7.9
Corporate	256	11.6	400	16.6	454	17.7	20.2	52.8	13.6	77.5	20.6	63.4	13.6	77.4
Hong Kong, China														
Total	92	100.0	129	100.0	144	100.0	0.0	(6.2)	12.1	55.8	0.2	(5.6)	12.1	55.8
Government	20	22.0	54	41.8	70	48.3	8.7	15.4	29.5	242.2	8.9	16.1	29.5	242.1
Corporate	72	78.0	75	58.2	74	51.7	(2.2)	(10.9)	(0.4)	3.3	(2.0)	(10.4)	(0.4)	3.2
Indonesia														
Total	69	100.0	90	100.0	98	100.0	5.7	(2.7)	7.3	19.4	(10.5)	(19.3)	9.4	42.7
Government	62	90.6	82	90.9	89	90.5	7.2	(2.2)	6.8	19.2	(9.3)	(18.9)	8.9	42.4
Corporate	6	9.4	8	9.1	9	9.5	(6.3)	(7.7)	12.1	21.2	(20.6)	(23.4)	14.3	44.7
Korea, Rep. of														
Total	817	100.0	1,001	100.0	1,021	100.0	1.4	7.0	0.5	15.0	(3.9)	(20.5)	2.0	25.1
Government	368	45.1	460	45.9	446	43.7	0.6	(0.4)	(4.3)	11.4	(4.7)	(26.0)	(2.9)	21.1
Corporate	448	54.9	542	54.1	575	56.3	2.0	14.1	4.6	18.0	(3.3)	(15.2)	6.2	28.3
Malaysia														
Total	166	100.0	181	100.0	185	100.0	(3.0)	5.7	1.4	10.3	(3.5)	1.0	2.2	11.0
Government	90	54.3	101	55.6	101	54.6	(6.1)	(0.5)	(0.5)	10.9	(6.6)	(4.9)	0.3	11.6
Corporate	76	45.7	80	44.4	84	45.4	0.9	14.2	3.7	9.6	0.4	9.1	4.6	10.2
Philippines														
Total	57	100.0	59	100.0	63	100.0	2.8	12.6	3.4	8.1	2.1	(2.0)	6.7	11.1
Government	52	92.2	53	88.9	56	87.9	2.1	10.4	2.3	3.1	1.4	(3.9)	5.5	6.0
Corporate	4	7.8	7	11.1	8	12.1	12.0	46.6	12.4	66.5	11.2	27.5	16.0	71.1
Singapore														
Total	127	100.0	150	100.0	150	100.0	(0.7)	4.1	(0.4)	15.6	(0.8)	4.2	(0.2)	18.2
Government	73	57.3	87	57.9	88	58.7	3.0	6.6	0.9	18.3	2.8	6.8	1.1	20.9
Corporate	54	42.7	63	42.1	62	41.3	(5.2)	0.9	(2.2)	12.1	(5.3)	1.0	(2.0)	14.6
Thailand														
Total	141	100.0	172	100.0	177	100.0	(1.6)	4.3	2.5	20.5	(4.1)	1.2	2.7	25.4
Government	112	79.5	136	79.2	141	79.8	(3.4)	3.6	3.3	21.0	(6.0)	0.5	3.5	25.8
Corporate	29	20.5	36	20.8	36	20.2	6.5	7.2	(0.5)	18.8	3.7	4.0	(0.3)	23.6
Viet Nam														
Total	13	100.0	13	100.0	12	100.0	8.5	46.7	(2.8)	(6.3)	3.0	34.4	(6.1)	(11.4)
Government	13	95.5	12	93.8	11	92.0	8.8	45.0	(4.7)	(9.8)	3.3	32.9	(8.0)	(14.7)
Corporate	0.6	4.5	0.8	6.2	0.9	8.0	2.0	94.7	26.8	68.4	(3.2)	78.4	22.5	59.3
Total Emerging East Asia														
Total	3,696	100.0	4,209	100.0	4,417	100.0	2.8	14.8	4.4	16.5	1.3	8.9	4.9	19.5
Government	2,749	74.4	2,998	71.2	3,114	70.5	1.9	13.6	3.5	11.2	0.8	11.5	3.9	13.3
Corporate	947	25.6	1,211	28.8	1,303	29.5	5.4	18.3	6.8	31.6	2.6	1.9	7.6	37.6
Less PRC:														
Total	1,483	100.0	1,794	100.0	1,850	100.0	0.7	5.4	1.9	17.3	(3.5)	(13.0)	3.1	24.8
Government	792	53.4	983	54.8	1,001	54.1	0.4	2.0	0.7	18.7	(4.0)	(15.0)	1.8	26.5
Corporate	691	46.6	811	45.2	849	45.9	1.0	9.6	3.5	15.6	(2.8)	(10.6)	4.7	22.9
Japan														
Total	9,512	100.0	9,831	100.0	9,612	100.0	0.2	1.1	1.5	3.7	17.3	24.4	(2.2)	1.0
Government	8,550	89.9	8,829	89.8	8,648	90.0	0.3	1.1	1.7	3.8	17.3	24.4	(2.1)	1.1
Corporate	962	10.1	1,001	10.2	964	10.0	(0.5)	1.1	(0.04)	2.8	16.4	24.4	(3.8)	0.2

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.

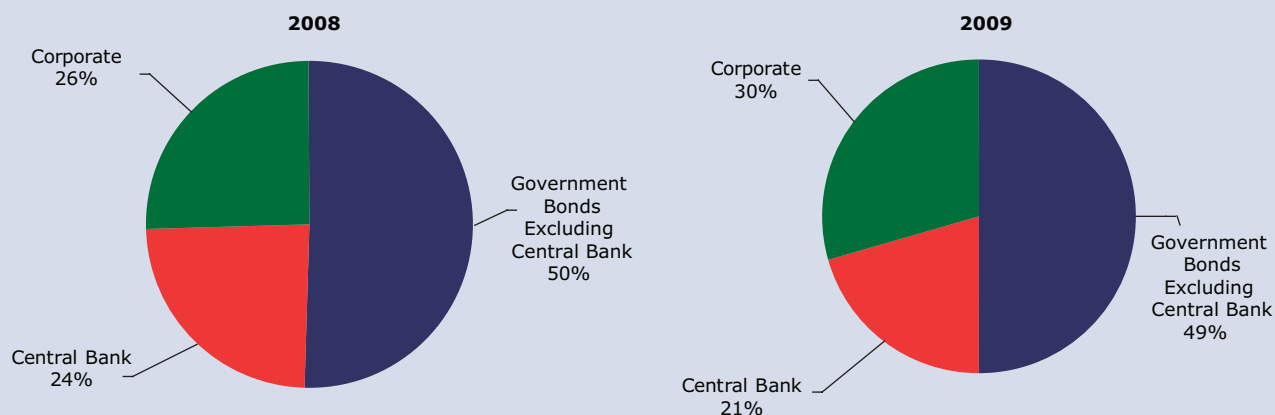
3. Bloomberg LP end-of-period LCY—USD rates are used.

4. For LCY base, total emerging East Asia growth figures are based on end-December 2009 currency exchange rates and do not include currency effects.

Source:

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

Figure 1b: Emerging East Asian Local Currency Bond Market



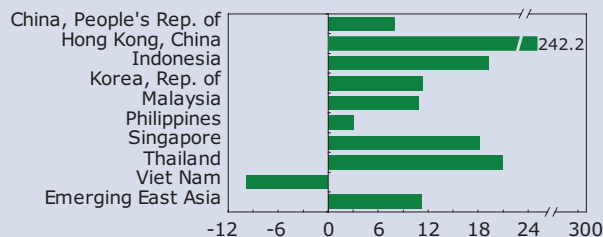
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Figure 2: Growth of Emerging East Asian Local Currency Government Bond Markets in 4Q09 (y-o-y %)



y-o-y = year-on-year.

Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from local currency (LCY) base and do not include currency effects.
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and even declined slightly in Singapore and Viet Nam. This leveling-out trend was strongest in the region's government bond market on q-o-q basis.

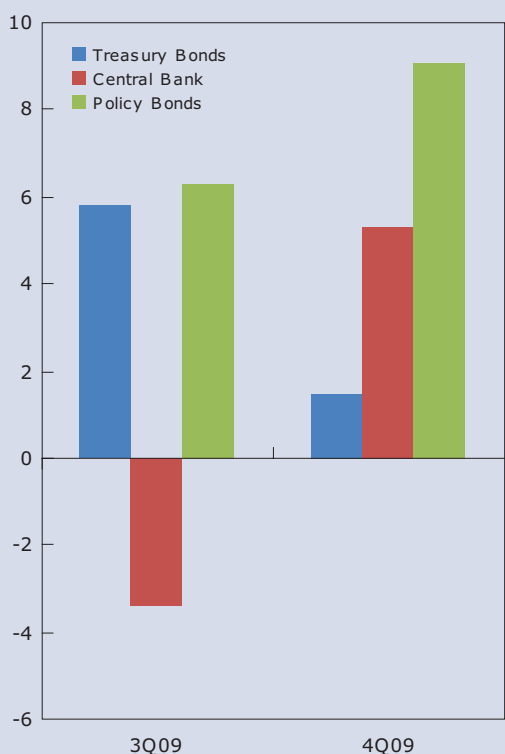
Government bonds excluding central bank accounted for 49% of total bonds outstanding in 2009 (**Figure 1b**), central banks 21%, and corporates 30%.

Growth in government bond markets in 4Q09 was led by Hong Kong, China; Thailand; Indonesia; and Singapore.

The main drivers of government bond market growth in 4Q09 vs. 4Q08 were Hong Kong, China (242.2%); Thailand (21.0%); Indonesia (19.2%); and Singapore (18.3%) (**Figure 2**). The government bond markets of Korea and Malaysia also grew a substantial 11.4% and 10.9%, respectively. The Philippine market grew only 3.1% and Viet Nam's market actually shrank 9.8%.

On a q-o-q basis, however, the story is quite different. The PRC government bond market modestly accelerated its q-o-q growth rate in 4Q09 to 4.9% from 3.1% in 3Q09, which contributed to regional government bond market growth of 3.5%

Figure 3: PRC Government Bond Market Growth Rates (q-o-q %)



PRC = People's Republic of China, q-o-q = quarter-on-quarter.
Source: *AsianBondsOnline*.

q-o-q in 4Q09. Without the PRC, the regional government bond market grew only 0.7% in 4Q09. The principal reason for this improvement in the PRC government bond market's growth rate was the recovery of the central bank segment—bills issued by the People's Bank of China (PBOC). In 3Q09, central bank paper declined 3.4% on a q-o-q basis, but recovered to rise 5.3% in 4Q09. At the same time, the policy bank segment of the government bond market accelerated its growth rate on a q-o-q basis from 6.3% in 3Q09 to 9.1% in 4Q09, even as the growth rate for treasuries and other government bonds declined to 1.5% in 4Q09 from 5.8% in 3Q09 (**Figure 3**). At the end of 4Q09, policy bank bonds outstanding amounted to USD652 billion, which was slightly larger than the USD620 billion of outstanding PBOC bills and bonds, but smaller than the USD841 billion in

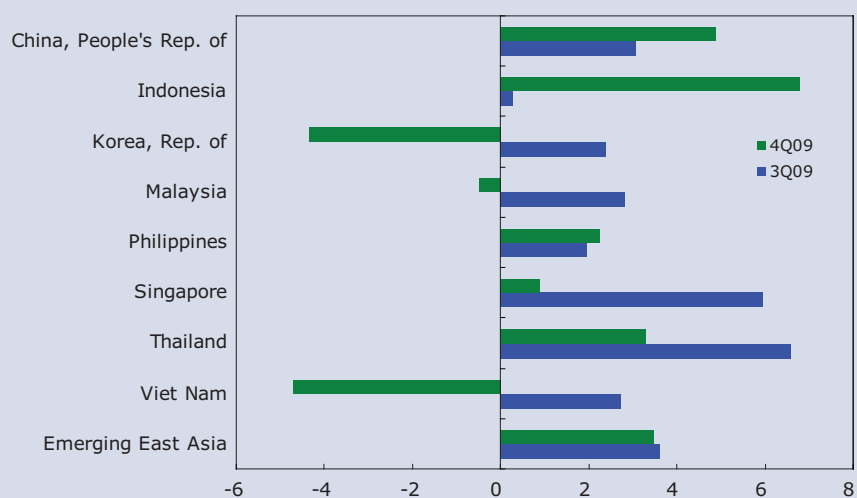
bonds of other government entities. The bulk of PBOC paper outstanding was in the form of bills.

The emerging East Asian government LCY bond market ex-PRC only grew 0.7% q-o-q in 4Q09, which was down sharply from the q-o-q growth rate of 4.8% in 3Q09. The substantial y-o-y growth rates for individual government bond markets were achieved in the earlier part of 2009. Most individual government bond markets ex-PRC grew only marginally in 4Q09 on a q-o-q basis (**Figure 4**). The two exceptions were the government bond markets of Hong Kong, China, which grew 29.5% q-o-q; and Indonesia, which grew 6.8%.

The rapid growth of Hong Kong, China's bond market has been primarily driven by issuance of Exchange Fund Bills and Notes (EFBNs) issued by the Hong Kong Monetary Authority (HKMA) for monetary policy purposes. In July 2009, Hong Kong, China's Legislative Council approved the Special Administrative Region's Institutional Issuance Program. Under the program, Hong Kong, China's government can issue debt amounting to HKD100 billion over the next few years, with the aim of ensuring a steady supply of public-debt paper, meeting demand of institutional and retail investors, and providing a benchmark for the pricing of corporate debt. Bonds issued under the program are liabilities of the Government of the Hong Kong Special Administrative Region, unlike EFBNs, which are backed by foreign reserves under Hong Kong, China's currency board system. Following the initial sale in September 2009 of HKD3.5 billion of bonds under the program, HKD2.0 billion of 5-year bonds and HKD2.5 billion of 10-year bonds were issued in November and January, respectively.

In Indonesia, the Ministry of Finance in November cancelled its remaining treasury bond auctions for the year, stating that it had met its 2009 gross issuance target of IDR144.54 trillion. The government limited its domestic borrowing to moderate market interest rates and issued over USD4.0 billion in foreign currency bonds in 2009, which was followed by an additional USD2.0 billion issue in January of this year. The overall growth

Figure 4: Growth of Emerging East Asian Local Currency Government Bond Markets in 3Q09 and 4Q09 (q-o-q %)



q-o-q = quarter-on-quarter.

Notes:

1. Calculated using data from national sources.

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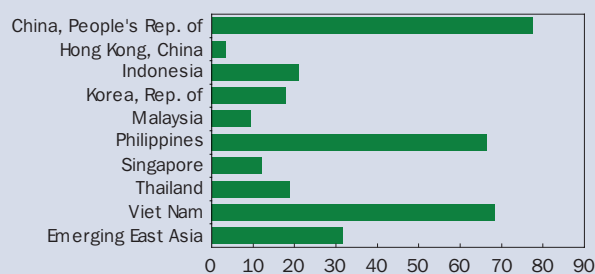
rate of 19.2% y-o-y for total government sector bonds was driven by the 44.3% increase in bills issued by Bank Indonesia known as *Sertifikat Bank Indonesia* (SBI).

In 4Q09, the Korean government LCY bond market grew 11.4% y-o-y, but declined 4.3% q-o-q. The Korean government bond market rose to a high of USD454 billion at the end of November before falling slightly to USD446 billion at the end of December.

The size of the Philippine government LCY bond market stood at PHP2.56 trillion (USD56.0 billion) at the end of December, with little growth over the last year as the government issued aggressively in the international bond market. In Malaysia, the government issued MYR3.5 billion of Government Investment Issues (GII) in October and MYR3.0 billion of Malaysian Government Securities (MGS) in November. Additionally, the government

re-opened a number of previously-issued securities in the last quarter of 2009.

The q-o-q growth rate for the Thai market was 3.3% in 4Q09, with no major new developments in terms of market structure during the last quarter of 2009. In February 2010, however, the Thai Cabinet approved the issuance of THB100 billion of government savings bonds with a 6-year maturity. The bonds will be offered at a premium over current market yields with a step-up coupon rate. In Singapore, in October the government issued SGD2.2 billion of Singapore Government Securities (SGS) maturing in 2014. Finally, in 4Q09 the Vietnamese government issued VND200 billion of government bonds, VND1.4 trillion of treasury bills, and VND255 billion of Vietnam Development Bank bonds.

Figure 5: Growth of Emerging East Asian Local Currency Corporate Bond Markets in 4Q09 (y-o-y %)

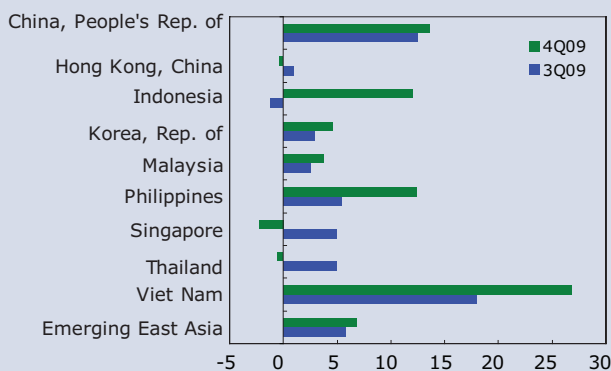
y-o-y = year on year.

Notes:

1. For Singapore, corporate bonds outstanding figure are based on *AsianBondsOnline* estimates.
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4. Growth rates are calculated from local currency (LCY) base and do not include currency effects.
5. Emerging East Asia growth figure is based on end-December 2009 currency exchange rates and do not include currency effects.

Source:

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Figure 6: Growth of Emerging East Asian Local Currency Corporate Bond Markets in 3Q09 and 4Q09 (q-o-q %)

q-o-q = quarter-on-quarter.

Notes:

1. For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.
2. Calculated using data from national sources.
3. Corporate bonds include issues by financial institutions.
4. Growth rates are calculated from local currency (LCY) base and do not include currency effects.
5. Emerging East Asia growth figure is based on end-December 2009 currency exchange rates and do not include currency effects.

Source:

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The corporate bond market in emerging East Asia continued to grow steadily in 4Q09, led by Viet Nam, the PRC, the Philippines, and Indonesia.

The PRC's corporate bond market remained the most rapidly growing in the region on a y-o-y basis in 4Q09 (**Figure 5**), despite a moderation in the PRC corporate bond market's growth rate to 77.5% from 87.7% in 3Q09. The moderation resulted from a cooling of growth in the MTN segment. On a q-o-q basis, the MTN sector grew 16.2% in 4Q09, compared to 25.3% in 3Q09 and 73.7% in 2Q09. However, growth in other sectors of the corporate bond market accelerated in 4Q09: commercial paper rose 29.2% y-o-y, compared to a decline of 8.1% in 3Q09; local corporate bonds (bonds issued by corporates in provinces and major cities) rose 14.6% q-o-q, compared to 11.2% in 3Q09; and state-owned corporate bonds rose 16.3%, compared to 9.6% in 3Q09. Commercial bank bonds were flat in 4Q09 after having risen at double-digit rates for most of 2009 when issuance of subordinated debt bonds helped banks maintain adequate capital adequacy standards in the face of rapid loan growth.

However, Viet Nam's corporate bond market posted the fastest growth in the region on a q-o-q basis (**Figure 6**). Issues during 4Q09 included Viet Nam Technological and Commercial Joint Stock Bank's (Techcombank) raising of VND2.1 trillion of senior unsecured bonds in October and Vincom Joint Stock Company's (VINCOM JSC) sale of VND1 trillion of 3-year bonds in December.

The Indonesian corporate bond market staged a q-o-q recovery in 4Q09, growing nearly as fast as the Philippine market. Indonesian corporate sector issuance in 4Q09 included subordinated debt bonds from Bank Mandiri (IDR3.5 trillion) and Bank Rakyat Indonesia (IDR2.0 trillion). In the Philippines, two of the larger issues were JG Summit's PHP9.0 billion bond and Energy Development Corporation's PHP12.0 billion bond.

The LCY corporate bond markets of Indonesia, the Philippines, and Viet Nam are relatively small. Therefore, the impressive growth rates came from very small bases. The interesting point to watch in coming quarters will be whether these rapid growth rates in some of the smaller markets can be sustained.

The more developed corporate bond markets of Korea and Thailand grew roughly 18% y-o-y in 4Q09, while the Malaysian corporate bond market grew at a slower pace of 9.6%. Korea's top LCY corporate bond issues included KRW2.58 trillion of bank bonds issued by Hana, Woori, and IBK; as well as KRW520 billion of bonds issued by Korea Electric Power (KEPCO). In Thailand, Krung Thai Bank sold THB13.0 billion of subordinated debt, Thanachart Capital sold THB9.0 billion of 5-year senior unsecured bonds, and Thai Military Bank sold THB5.3 billion of 10-year bonds. Additionally, Siam Cement, Thailand's biggest industrial conglomerate, sold THB10 billion of bonds in October.

Subordinated Bank Bonds. One important segment of the regional market is the market for subordinated bonds issued by financial institutions, which can be counted as Tier II capital under the capital adequacy rules of the Bank for International Settlements.

Most subordinated bonds issued by banks in the region have been "Lower Tier II" bonds. They are ordinary subordinated bonds with no provisions for missing interest payments under certain defined conditions without constituting an event of default. The top ten subordinated bank bond issues in six of the major East Asian subdebt bond markets are presented in **Table 2**. The largest amount of subdebt bonds outstanding (USD equivalent) is in the PRC (USD103.6 billion), followed by Korea (USD32.1 billion), Malaysia (USD7.8 billion), and Thailand (USD3.3 billion). Subdebt bonds outstanding in the Philippines and Indonesia are USD2.5 billion and USD1.2 billion, respectively.

The growth rate of the subdebt bond market may slow later this year if banks begin to issue larger amounts of new equity to (i) help stabilize their capital adequacy ratios, following the rapid increase of their loan books over the last year; and (ii) provide additional equity to offset any deterioration of asset quality.

Ratio of Bonds Outstanding to Gross Domestic Product

The ratio of LCY bonds outstanding to GDP for emerging East Asia rose slightly in 4Q09 to 58.7% from 57.8% in 3Q09.

The largest increase in the LCY-debt-to-GDP ratio occurred in Hong Kong, China, where it rose to 68.4% in 4Q09 from 61.4% in 3Q09 (**Table 3**). The LCY-debt-to-GDP ratio also rose in most other markets in the region. However, the increases in Thailand and Malaysia were marginal. The ratio of bonds outstanding to GDP fell in Korea, Singapore, and Viet Nam in 4Q09.

Issuance

LCY bond issuance in 2009 totaled USD3.34 trillion, a 39.3% increase over 2008.

Central bank issuance for 2009 as a whole was USD2.00 trillion—or 60.0% of total issuance for 2009 (**Table 4a**). Government bond issuance was USD726 billion—or 21.7% of the total—and corporate bond issuance was USD613 billion—or 18.4% of the total. Government bond issuance (excluding central banks) grew by 46.7% on an LCY basis for the year as a whole. The growth rates for issuance by corporates and central banks were more moderate at 41.8% and 36.0%, respectively.

Total issuance in emerging East Asia in 4Q09 amounted to USD911 billion, with central bank issuance of USD576 billion accounting for 63% of the total, compared to 21% for government issuances and 16% for corporate bonds (**Table 4b**). Of the total of USD576 billion in central

Table 2: Subdebt Bond Tables

People's Republic of China			
Issuer	Coupon (%)	Amount (CNY billion)	
China Development Bank	5.00	30	
China Development Bank	4.07	30	
China Construction Bank	4.00	28	
Agricultural Bank of China	4.00	25	
Industrial and Commercial Bank of China	4.00	24	
Bank of China	4.00	24	
Agricultural Bank of China	3.30	20	
China Development Bank	3.82	20	
China Development Bank	5.42	20	
China Development Bank	4.17	20	
Subtotal - Top 10 bank subdebt issues		241	(USD35.30 billion)
Total bank (commercial and policy bank) subdebt		707	(USD103.56 billion)
Total commercial bank bonds		588	(USD86.19 billion)
Total policy bank bonds		4,450	(USD651.79 billion)

Note:
CNY6.8271—USD1.00 as of 31 December 2009
Source: *ChinaBond*.

Republic of Korea			
Issuer	Coupon (%)	Amount (KRW billion)	
Kookmin Bank	5.70	1,544	
Kookmin Bank	6.46	1,000	
Woori Bank	6.66	1,000	
Woori Bank	5.05	800	
NACF	6.76	750	
Shinhan Bank	5.95	700	
Industrial Bank of Korea	6.36	600	
NACF	5.90	596	
Shinhan Bank	7.02	510	
Hana Bank	5.43	500	
Subtotal - Top 10 bank subdebt issues		8,000	(USD6.91 billion)
Total bank subdebt		37,149	(USD32.08 billion)
Total commercial bank bonds (excl. IFDs)		132,443	(USD114.37 billion)
Memo Item: KDB Industrial Finance Debentures (IFDs)		34,980	(USD30.21 billion)

Note:
KRW1158.05—USD1.00 as of 31 December 2009.
Source: Bloomberg LP.

Indonesia			
Issuer	Coupon (%)	Amount (IDR billion)	
Bank Mandiri	11.85	3,500	
Bank Rakyat Indonesia	13.50	2,000	
Bank Pan Indonesia	11.60	1,500	
Bank Mega	11.50	1,000	
Bank NISP Tbk	11.10	600	
Bank Rakyat Indonesia	13.50	500	
Bank Permata Tbk	12.25	500	
Bank Global International	14.88	400	
Bank Muamalat	0.25	400	
Bank UOB Buana	22.05	297	
Subtotal - Top 10 bank subdebt issues		10,697	(USD1.13 billion)
Total bank subdebt		11,293	(USD1.19 billion)
Total commercial bank bonds		26,529	(USD2.80 billion)

Note:
IDR9480—USD1.00 as of 31 December 2009.
Source: Bloomberg LP.

Malaysia			
Issuer	Coupon (%)	Amount (MYR billion)	
Maybank	4.00	1.50	
Maybank	5.00	1.50	
CIMB	4.90	1.50	
Public Bank	4.73	1.40	
Bumiputra-Commerce	7.30	1.38	
RHB	5.00	1.30	
Public Bank	5.10	1.20	
Maybank	6.30	1.10	
CIMB	6.70	1.00	
CIMB	7.20	1.00	
Subtotal - Top 10 bank subdebt issues		12.88	(USD 3.75 billion)
Total bank subdebt		26.68	(USD 7.76 billion)
Total commercial bank bonds		35.88	(USD 10.43 billion)

Note:
MYR3.439—USD1.00 as of 31 December 2009.
Source: Bloomberg LP.

Continued on next page

Table 2 continued

Philippines			
Issuer	Coupon (%)	Amount (PHP billion)	
Banco de Oro Unibank Inc.	8.50	10	
Banco de Oro Unibank Inc.	7.00	10	
Metropolitan Bank and Trust Co.	7.00	9	
Rizal Commercial Banking Corp.	7.00	7	
Land Bank of the Philippines	7.25	7	
Development Bank of the Philippines	7.75	7	
Philippine National Bank	8.50	6	
Philippine National Bank	10.00	5	
Bank of the Philippine Islands	8.45	5	
China Banking Corp.	8.25	5	
Subtotal - Top 10 bank subdebt issues		70	(USD1.52 billion)
Total bank subdebt		114	(USD2.48 billion)
Total commercial bank bonds		146	(USD3.16 billion)

Note:
PHP46.10—USD1.00 as of 31 December 2009.
Source: Bloomberg LP.

bank issuance in the region, 66% originated in the PRC and Hong Kong, China. The share of central bank and monetary authority issuance as a portion of a local market's total in 4Q09 was highest in Hong Kong, China (97.8%); Indonesia (97.8%); and Thailand (76.4%). The Bangko Sentral ng Pilipinas (BSP) does not issue LCY bonds, but does have a small amount of foreign currency bonds outstanding. The Monetary Authority of Singapore issues bonds (SGS) in the name of the Government of Singapore. The State Bank of Vietnam does not issue bonds, but has a miniscule amount of bills outstanding. Treasury bills are the more significant short-term money market instrument in Viet Nam. The State Treasury of Viet Nam issues treasury bills to develop the country's monetary market and to raise funds to finance its budget deficit. In the remaining three markets—the PRC, Korea, and Malaysia—central bank issuance accounted for roughly 48% of total issuance in 4Q09. The share of central bank issuance as a portion of total

Thailand			
Issuer	Coupon (%)	Amount (THB billion)	
Krung Thai Bank PCL	5.00	21	
Kasikorn Bank PCL	5.25	17	
Krung Thai Bank PCL	4.80	13	
Kasikorn Bank PCL	4.25	12	
Bank of Ayudhya	4.75	12	
Krung Thai Bank PCL	4.60	10	
Siam City Bank PCL	5.50	10	
Thanachart Bank PCL	5.10	5	
Thanachart Bank PCL	5.25	4	
Thanachart Bank PCL	5.25	2	
Subtotal - Top 10 bank subdebt issues		106	(USD3.17 billion)
Total bank subdebt		111	(USD3.33 billion)
Total commercial bank bonds		354	(USD10.61 billion)

Note:
THB33.39—USD1.00 as of 31 December 2009.
Source: Bloomberg LP.

issuance was unusually high for Indonesia in 4Q09, due to minimal treasury bond issuance.

The increase in y-o-y growth rates for total issuance in Indonesia, Malaysia, and Singapore was substantial in 4Q09, rising by 80.7% in Indonesia, 24.3% in Malaysia, and 72.0% in Singapore.

The y-o-y increase in PRC issuance was also strong, rising from 69.8% in 3Q09 to 76.2% in 4Q09. The most important driver in the PRC market was issuance by the PBOC, which rose 196% in 4Q09. Over the past year, the PBOC has increased bill issuance and reduced bond issuance. This is discussed in more detail in the section on money market trends (**Table 5**). PBOC bills outstanding in 4Q09 grew 34.5%, while PBOC bonds outstanding fell almost 60%, resulting in a tripling of the PBOC bills-to-bonds ratio from 1.01 at the end of 4Q08 to 3.34 at the end of 4Q09.

Table 3: Size and Composition of Emerging East Asian Local Currency Bond Markets
(% of GDP)

	2008	3Q09	2009
China, People's Rep. of			
Total	48.1	50.9	52.3
Government	42.5	42.5	43.0
Corporate	5.6	8.4	9.2
Hong Kong, China			
Total	42.8	61.4	68.4
Government	9.4	25.7	33.0
Corporate	33.4	35.7	35.3
Indonesia			
Total	15.7	15.9	16.6
Government	14.3	14.4	15.0
Corporate	1.5	1.4	1.6
Korea, Rep. of			
Total	100.5	113.8	113.4
Government	45.3	52.3	49.6
Corporate	55.1	61.6	63.8
Malaysia			
Total	78.0	94.0	94.2
Government	42.3	52.3	51.4
Corporate	35.6	41.7	42.8
Philippines			
Total	36.3	37.4	38.0
Government	33.4	33.2	33.4
Corporate	2.8	4.1	4.6
Singapore			
Total	68.5	83.0	81.9
Government	39.3	48.0	48.0
Corporate	29.2	34.9	33.8
Thailand			
Total	54.0	65.1	65.2
Government	42.9	51.6	52.1
Corporate	11.0	13.5	13.2
Viet Nam			
Total	15.7	13.8	13.2
Government	15.0	13.0	12.2
Corporate	0.7	0.9	1.1
Total Emerging East Asia			
Total	53.0	57.8	58.7
Government	39.4	41.2	41.4
Corporate	13.6	16.6	17.3
Japan			
Total	171.0	184.0	188.5
Government	153.7	165.2	169.6
Corporate	17.3	18.7	18.9

Note:
2009 GDP is from CEIC except for the Republic of Korea which is from the *World Economic Outlook Database, October 2009*, International Monetary Fund.

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

Table 4a: Annual Local Currency-Denominated Bond Issuance (Gross)

	2008 (USD billion)	2009 (USD billion)	Growth Rate (%)
Total Emerging East Asia	2,398	3,340	39.3
Government	1,965	2,726	38.7
Central Bank	1,470	2,000	36.0
Treasury and Other Govt	495	726	46.7
Corporate	433	613	41.8

Notes:

1. Corporate bonds include issues by financial institutions.
2. Bloomberg LP end-of-period LCY—USD rates are used.
3. Growth figures are based on end-December 2009 currency exchange rate and do not include currency effects.

Source: *AsianBondsOnline*.

In the Philippines, the y-o-y growth rate fell from 6.5% in 3Q09 to 5.6% in 4Q09 as the Philippines sold dollar bonds.

In Thailand, y-o-y issuance growth rates were negative in both 3Q09 and 4Q09.

In Korea, most types of government sector bonds outstanding peaked at the end of November and fell slightly at the end of December. Thus, it is not surprising that Korea's q-o-q issuance fell 23.2% in 4Q09. Negative q-o-q growth rates were also observed in the PRC, Malaysia, Philippines, Thailand, and Viet Nam in 4Q09. Meanwhile, q-o-q issuance growth rates were positive in 4Q09 only in Hong Kong, China; Indonesia; and Singapore.

Figure 7a depicts the issuance of central bank bonds versus the trend in issuance of central government bonds (i.e., central government entities other than the central bank). **Figure 7b** shows issuance trends for central government issuance versus corporate bond issuance. Finally, **Figure 7c** shows emerging East Asian (ex PRC) total LCY bond issuance versus total yuan bond issuance in the PRC.

These three graphs clearly depict a fall-off in government issuance (excluding central banks) in 4Q09, confirming that the bulk of issuance for financing economic stimulus programs and raising funds to plug fiscal deficits (**Figure 8**) occurred in the second and third quarters of 2009 to take

Table 4b: Local Currency Denominated Bond Issuance (Gross)

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	4Q09	% share	4Q09	% share	4Q09		4Q09	
					q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)								
Total	2,347	100.0	344	100.0	(20.8)	76.2	(20.8)	76.2
Government	1,876	79.9	275	79.9	(23.2)	96.4	(23.2)	96.4
Central Bank	1,098	46.8	161	46.8	(25.4)	196.0	(25.4)	195.9
Treasury and Other Govt	778	33.2	114	33.2	(20.0)	33.2	(20.0)	33.2
Corporate	471	20.1	69	20.1	(9.6)	24.9	(9.6)	24.9
Hong Kong, China								
Total	1,725	100.0	222	100.0	31.7	354.0	31.6	353.8
Government	1,688	97.9	218	97.9	33.8	374.7	33.7	374.5
Central Bank	1,686	97.8	217	97.8	34.0	374.1	34.0	373.9
Treasury and Other Govt	2	0.1	0.3	0.1	(42.9)	—	(42.9)	—
Corporate	36	2.1	5	2.1	(23.7)	50.3	(23.8)	50.2
Indonesia								
Total	695,158	100.0	73	100.0	75.2	80.7	78.6	115.8
Government	682,368	98.2	72	98.2	73.5	79.7	76.9	114.6
Central Bank	679,836	97.8	72	97.8	80.9	79.0	84.4	113.8
Treasury and Other Govt	2,532	0.4	0.3	0.4	(85.5)	—	(85.2)	—
Corporate	12,790	1.8	1.3	1.8	265.4	155.8	272.6	205.6
Korea, Rep. of								
Total	165,936	100.0	143	100.0	(23.2)	51.6	(22.1)	64.9
Government	104,561	63.0	90	63.0	(30.1)	116.3	(29.1)	135.2
Central Bank	78,230	47.1	68	47.1	(32.3)	185.7	(31.3)	210.8
Treasury and Other Govt	26,331	15.9	23	15.9	(22.7)	25.6	(21.5)	36.6
Corporate	61,376	37.0	53	37.0	(7.7)	0.5	(6.3)	9.3
Malaysia								
Total	65	100.0	19	100.0	(16.3)	24.3	(15.6)	25.0
Government	43	65.5	12	65.5	(29.6)	12.7	(29.0)	13.4
Central Bank	31	48.0	9	48.0	(13.1)	43.2	(12.3)	44.1
Treasury and Other Govt	11	17.5	3	17.5	(53.8)	(28.9)	(53.4)	(28.4)
Corporate	23	34.5	7	34.5	30.6	54.4	31.7	55.4
Philippines								
Total	139	100.0	3	100.0	(42.7)	5.6	(40.9)	8.6
Government	97	70.0	2	70.0	(58.2)	(10.8)	(56.8)	(8.3)
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	97	70.0	2	70.0	(58.2)	(10.8)	(56.8)	(8.3)
Corporate	42	30.0	1	30.0	317.5	84.8	330.9	89.9

Continued on next page

Table 4b continued

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	4Q09	% share	4Q09	% share	4Q09		4Q09	
					q-o-q	y-o-y	q-o-q	y-o-y
Singapore								
Total	57	100.0	40	100.0	19.7	72.0	19.9	75.9
Government	54	95.8	39	95.8	22.0	65.9	22.2	69.6
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	54	95.8	39	95.8	22.0	65.9	22.2	69.6
Corporate	2	4.2	2	4.2	(15.9)	1000.9	(15.7)	1025.7
Thailand								
Total	2,173	100.0	65	100.0	(20.2)	(22.6)	(20.1)	(19.5)
Government	1,917	88.2	57	88.2	(22.6)	(24.4)	(22.5)	(21.4)
Central Bank	1,660	76.4	50	76.4	(15.8)	(31.4)	(15.7)	(28.7)
Treasury and Other Govt	256	11.8	8	11.8	(49.1)	124.4	(49.0)	133.4
Corporate	256	11.8	8	11.8	3.9	(5.5)	4.1	(1.7)
Viet Nam								
Total	8,355	100.0	0.5	100.0	(39.8)	(66.0)	(41.9)	(67.8)
Government	4,655	55.7	0.3	55.7	(60.0)	(80.9)	(61.4)	(81.9)
Central Bank	0	0.0	0.0	0.0	(100.0)	—	(100.0)	—
Treasury and Other Govt	4,655	55.7	0.3	55.7	(53.0)	(80.9)	(54.6)	(81.9)
Corporate	3,700	44.3	0.2	44.3	65.5	1750.0	59.8	1650.3
Total Emerging East Asia								
Total	—	—	911	100.0	(6.7)	79.9	(6.3)	86.6
Government	—	—	766	84.1	(6.7)	100.7	(6.3)	107.9
Central Bank	—	—	576	63.3	(1.8)	137.4	(1.4)	148.9
Treasury and Other Govt	—	—	189	20.8	(19.0)	36.4	(18.8)	38.5
Corporate	—	—	145	15.9	(6.4)	16.4	(5.9)	20.9
Less PRC:								
Total	—	—	567	100.0	4.7	82.3	5.5	93.5
Government	—	—	491	86.6	6.1	103.1	6.8	(67.0)
Central Bank	—	—	416	73.3	11.9	120.5	12.6	(57.1)
Treasury and Other Govt	—	—	75	13.3	(17.5)	41.5	(16.8)	(100.0)
Corporate	—	—	76	13.4	(3.4)	9.6	(2.2)	17.5
Japan								
Total	47,621	100.0	511	100.0	(0.9)	31.9	(4.5)	28.6
Government	43,676	91.7	469	91.7	(0.0)	33.5	(3.7)	30.2
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	43,676	91.7	469	91.7	(0.0)	33.5	(3.7)	30.2
Corporate	3,945	8.3	42	8.3	(9.5)	16.1	(12.9)	13.2

— = data not applicable, 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, total emerging East Asia growth figures are based on end-December 2009 currency exchange rates and do not include currency effects.

Source:

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

Table 5: Government Bills-to-Bonds Ratios of Emerging East Asian Local Currency Bond Markets

	4Q08		3Q09		4Q09		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	4Q08	3Q09	4Q09	4Q09		4Q09	
										q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)													
Total	1,405.8	100.0	1,358.6	100.0	1,400.2	100.0				3.1	(0.4)	3.1	(0.4)
Total Bills	436.5	31.0	524.8	38.6	588.2	42.0	0.45	0.63	0.72	12.1	34.8	12.1	34.8
Treasury Bills	82.1	5.8	110.1	8.1	111.7	8.0	0.13	0.17	0.17	1.4	36.0	1.4	36.0
Central Bank Bills	354.3	25.2	414.7	30.5	476.6	34.0	1.01	2.39	3.34	14.9	34.5	14.9	34.5
Total Bonds	969.3	69.0	833.7	61.4	812.0	58.0				(2.6)	(16.2)	(2.6)	(16.2)
Treasury Bonds	619.5	44.1	660.5	48.6	669.4	47.8				1.4	8.1	1.4	8.1
Central Bank Bonds	349.8	24.9	173.2	12.8	142.5	10.2				(17.7)	(59.2)	(17.7)	(59.3)
Hong Kong, China													
Total	20.3	100.0	53.7	100.0	69.6	100.0				29.5	242.2	29.5	242.1
Total Bills	11.7	57.6	44.3	82.5	59.9	86.1	1.36	4.70	6.18	35.2	411.7	35.2	411.5
Treasury Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Central Bank Bills	11.7	57.6	44.3	82.5	59.9	86.1	1.36	4.93	6.66	35.2	411.7	35.2	411.5
Total Bonds	8.6	42.4	9.4	17.5	9.7	13.9				2.9	12.4	2.8	12.4
Treasury Bonds	0.0	0.0	0.5	0.8	0.7	1.0				57.1	—	57.1	—
Central Bank Bonds	8.6	42.4	9.0	16.7	9.0	12.9				0.1	4.2	0.1	4.1
Indonesia													
Total	62.3	100.0	81.7	100.0	88.8	100.0				6.5	19.2	8.6	42.4
Total Bills	16.8	26.9	25.3	30.9	30.0	33.8	0.37	0.45	0.51	16.5	49.7	18.8	78.8
Treasury Bills	0.9	1.4	2.4	3.0	2.6	2.9	0.02	0.04	0.04	5.1	146.7	7.2	194.7
Central Bank Bills	15.9	25.5	22.8	27.9	27.4	30.9	—	—	—	17.8	44.3	20.1	72.3
Total Bonds	45.5	73.1	56.5	69.1	58.8	66.2				2.0	8.0	4.0	29.0
Treasury Bonds	45.5	73.1	56.5	69.1	58.8	66.2				2.0	8.0	4.0	29.0
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
Korea, Rep. of													
Total	285.9	100.0	361.1	100.0	373.1	100.0				1.8	20.0	3.3	30.5
Total Bills	12.9	4.5	34.8	9.6	38.1	10.2	0.05	0.11	0.11	7.7	171.8	9.4	195.6
Treasury Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Central Bank Bills	12.9	4.5	34.8	9.6	38.1	10.2	0.16	0.42	0.41	7.7	171.8	9.4	195.6
Total Bonds	273.0	95.5	326.3	90.4	335.1	89.8				1.1	12.8	2.7	22.7
Treasury Bonds	194.8	68.1	243.7	67.5	242.5	65.0				(2.0)	14.4	(0.5)	24.5
Central Bank Bonds	78.2	27.4	82.6	22.9	92.6	24.8				10.4	8.8	12.1	18.4
Malaysia													
Total	87.5	100.0	99.2	100.0	99.5	100.0				(0.5)	13.1	0.3	13.8
Total Bills	13.4	15.3	11.9	12.0	9.9	9.9	0.18	0.14	0.11	(17.9)	(26.8)	(17.2)	(26.3)
Treasury Bills	1.2	1.4	1.2	1.3	1.3	1.3	0.02	0.01	0.01	0.0	0.0	0.8	0.6
Central Bank Bills	12.1	13.9	10.7	10.8	8.6	8.7	—	—	—	(20.0)	(29.5)	(19.3)	(29.1)
Total Bonds	74.1	84.7	87.3	88.0	89.6	90.1				1.9	20.3	2.7	21.0
Treasury Bonds	74.1	84.7	87.3	88.0	89.6	90.1				1.9	20.3	2.7	21.0
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
Philippines													
Total	50.6	100.0	50.8	100.0	53.4	100.0				1.9	2.6	5.2	5.4
Total Bills	16.3	32.1	12.8	25.2	13.5	25.3	0.47	0.34	0.34	2.4	(19.2)	5.7	(17.0)
Treasury Bills	16.3	32.1	12.8	25.2	13.5	25.3	0.47	0.34	0.34	2.4	(19.2)	5.7	(17.0)
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Total Bonds	34.4	67.9	38.0	74.8	39.9	74.7				1.7	12.9	5.0	16.0
Treasury Bonds	34.4	67.9	38.0	74.8	39.9	74.7				1.7	12.9	5.0	16.0
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—

Continued on next page

Table 5 continued

	4Q08		3Q09		4Q09		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	4Q08	3Q09	4Q09	4Q09		4Q09	
										q-o-q	y-o-y	q-o-q	y-o-y
Singapore													
Total	72.8	100.0	87.1	100.0	88.1	100.0				0.9	18.3	1.1	20.9
Total Bills	25.0	34.3	35.0	40.2	37.1	42.1	0.52	0.67	0.73	5.7	45.1	5.9	48.4
Treasury Bills	25.0	34.3	35.0	40.2	37.1	42.1	0.52	0.67	0.73	5.7	45.1	5.9	48.4
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Total Bonds	47.8	65.7	52.1	59.8	51.0	57.9				(2.3)	4.2	(2.1)	6.6
Treasury Bonds	47.8	65.7	52.1	59.8	51.0	57.9				(2.3)	4.2	(2.1)	6.6
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
Thailand													
Total	97.8	100.0	120.5	100.0	125.2	100.0				3.7	23.1	3.9	28.0
Total Bills	25.5	26.1	33.1	27.5	35.8	28.6	0.35	0.38	0.40	8.1	35.0	8.3	40.4
Treasury Bills	2.3	2.4	8.4	7.0	6.2	4.9	0.04	0.13	0.10	(26.5)	155.0	(26.4)	165.2
Central Bank Bills	23.2	23.7	24.7	20.5	29.7	23.7	1.22	1.00	1.19	19.9	22.9	20.1	27.8
Total Bonds	72.3	73.9	87.4	72.5	89.4	71.4				2.1	18.9	2.3	23.7
Treasury Bonds	53.3	54.5	62.8	52.1	64.6	51.5				2.7	16.5	2.9	21.2
Central Bank Bonds	19.0	19.4	24.6	20.4	24.8	19.8				0.6	25.7	0.8	30.8
Viet Nam													
Total	7.0	100.0	5.8	100.0	5.0	100.0				(11.4)	(25.1)	(14.4)	(29.1)
Total Bills	1.8	25.0	0.7	11.9	0.3	7.0	0.33	0.13	0.08	(47.8)	(79.0)	(49.6)	(80.1)
Treasury Bills	0.6	8.5	0.6	10.2	0.3	5.1	0.11	0.12	0.06	(55.6)	(54.7)	(57.1)	(57.1)
Central Bank Bills	1.2	16.5	0.1	1.7	0.1	1.9	—	—	—	0.0	(91.4)	(3.5)	(91.9)
Total Bonds	5.3	75.0	5.1	88.1	4.6	93.0				(6.5)	(7.1)	(9.7)	(12.1)
Treasury Bonds	5.3	75.0	5.1	88.1	4.6	93.0				(6.5)	(7.1)	(9.7)	(12.1)
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
Total Emerging East Asia													
Total	2,090.1	100.0	2,218.6	100.0	2,302.9	100.0				3.4	7.9	3.8	10.2
Total Bills	559.8	26.8	722.7	32.6	812.9	35.3	0.37	0.48	0.55	12.2	43.6	12.5	45.2
Treasury Bills	128.5	6.1	170.6	7.7	172.6	7.5	0.12	0.14	0.14	0.9	33.1	1.2	34.3
Central Bank Bills	431.3	20.6	552.2	24.9	640.3	27.8	0.95	1.91	2.38	15.7	46.7	16.0	48.4
Total Bonds	1,530.3	73.2	1,495.9	67.4	1,490.0	64.7				(0.9)	(5.0)	(0.4)	(2.6)
Treasury Bonds	1,074.7	51.4	1,206.4	54.4	1,221.1	53.0				0.7	10.5	1.2	13.6
Central Bank Bonds	455.7	21.8	289.5	13.0	269.0	11.7				(7.5)	(41.9)	(7.1)	(41.0)
Less PRC:													
Total	684.3	100.0	860.0	100.0	902.7	100.0				3.8	23.9	5.0	31.9
Total Bills	123.3	18.0	197.9	23.9	224.6	24.9	0.22	0.30	0.33	12.6	73.2	13.5	82.2
Treasury Bills	46.3	6.8	60.5	7.0	60.9	6.7	0.10	0.11	0.11	(0.2)	28.0	0.7	31.5
Central Bank Bills	77.0	11.3	137.4	16.0	163.7	18.1	0.73	1.18	1.30	18.2	99.3	19.1	112.7
Total Bonds	561.0	82.0	662.1	77.0	678.1	75.1				1.2	13.2	2.4	20.9
Treasury Bonds	455.2	66.5	545.9	63.5	551.6	61.1				(0.2)	13.6	1.1	21.2
Central Bank Bonds	105.8	15.5	116.2	13.5	126.4	14.0				7.6	11.4	8.8	19.4
Japan													
Total	7,473.2	100.0	7,693.3	100.0	7,525.9	100.0				1.6	3.3	(2.2)	0.7
Total Bills	188.3	2.5	247.5	3.2	273.2	3.6	0.03	0.03	0.04	14.6	48.8	10.4	45.1
Treasury Bills	188.3	2.5	247.5	3.2	273.2	3.6	0.03	0.03	0.04	14.6	48.8	10.4	45.1
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Total Bonds	7,284.9	97.5	7,445.7	96.8	7,252.6	96.4				1.2	2.1	(2.6)	(0.4)
Treasury Bonds	7,284.9	97.5	7,445.7	96.8	7,252.6	96.4				1.2	2.1	(2.6)	(0.4)
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—

— = not applicable, 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 2009 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 one year.

Source:

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

Figure 7a: Government and Central Bank Bond Issuance¹

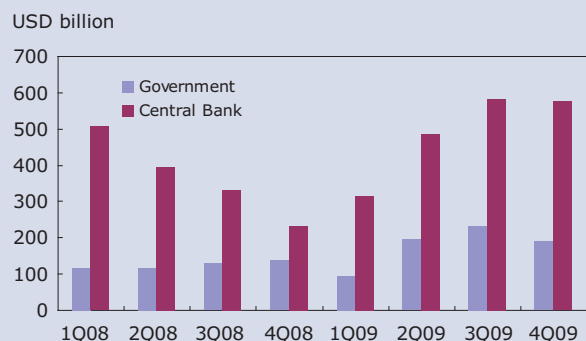


Figure 7b: Government (excluding Central Bank) and Corporate Bond Issuance¹

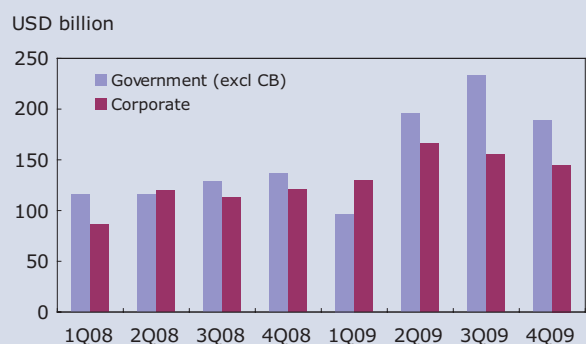
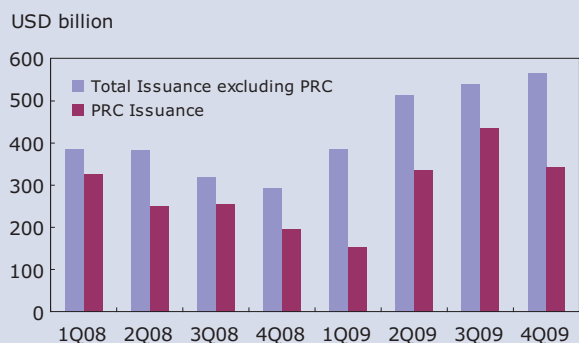
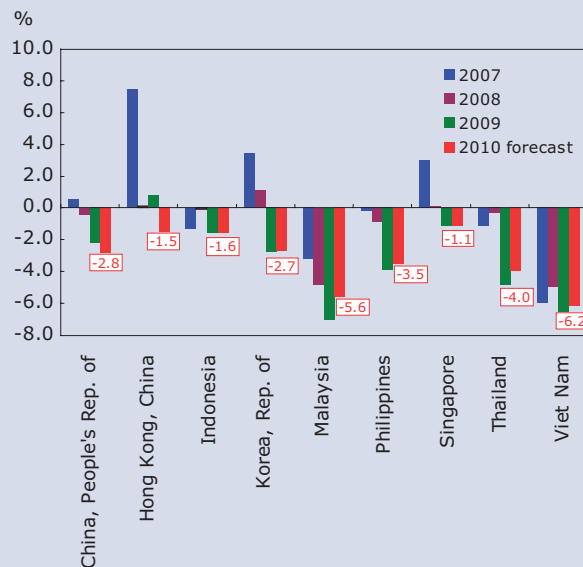


Figure 7c: Total Local Currency Bond Issuance



CB = Central Bank, PRC = People's Republic of China.
¹These data include both bonds and bills issued by governments and central banks as well as commercial paper issued by corporate entities.
 Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bloomberg LP); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bloomberg LP); Philippines (Bloomberg LP); Singapore (Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

Figure 8: Fiscal Balance (% of GDP)

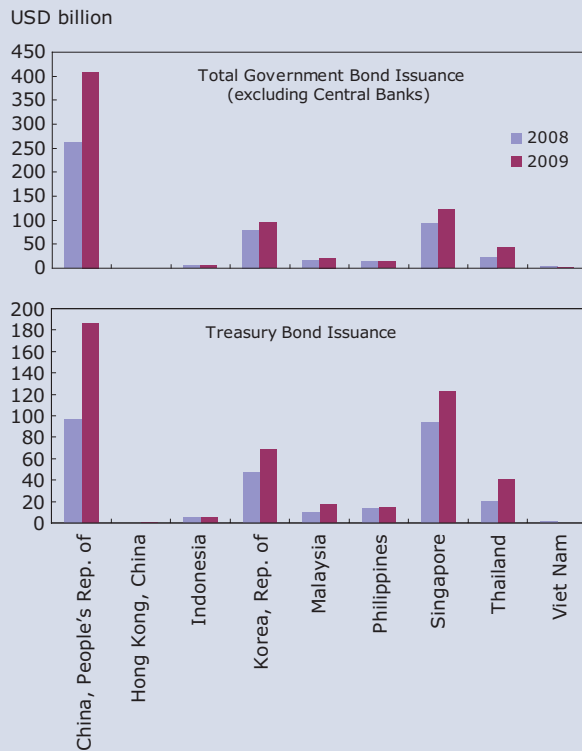


Note:
 Data for Hong Kong, China based on estimates from *Budget 2010–2011*. Data for the Republic of Korea based on estimates from *IMF World Economic Outlook, October 2009*. Data for other markets are official figures as released by national authorities.
 Source: People's Republic of China (Ministry of Finance and CEIC); Hong Kong, China (Hong Kong Monetary Authority and Budget.gov.hk); Indonesia (Indonesia Debt Management Office); Republic of Korea (*IMF World Economic Outlook, October 2009*); Malaysia (Bank Negara Malaysia and Ministry of Finance); Philippines (Bangko Sentral ng Pilipinas and Bureau of the Treasury); Singapore (Monetary Authority of Singapore and Ministry of Finance); Thailand (Bank of Thailand); and Viet Nam (Viet Nam Ministry of Finance and General Statistics Office of Viet Nam).

advantage of low interest rates and substantial liquidity in the market. **Figure 9** displays this trend of government bond issuance on an annualized basis, comparing issuance for all of 2009 and 2008. Furthermore, Figure 9 provides issuance for two categories of government debt.

Issuance of government bonds for 2009 as a whole rose 55% for the PRC and 22% for Korea. In 4Q09, issuance rose by 33.2% and 25.6% y-o-y, respectively.

Figure 9: Total Government Bond Issuance and Treasury Bond Issuance



Note:
Total government bond issuance includes issuance of treasuries and other government bonds except for central bank bonds.
Source: *AsianBondsOnline*.

Figure 10a: Government Bond Turnover Ratios¹

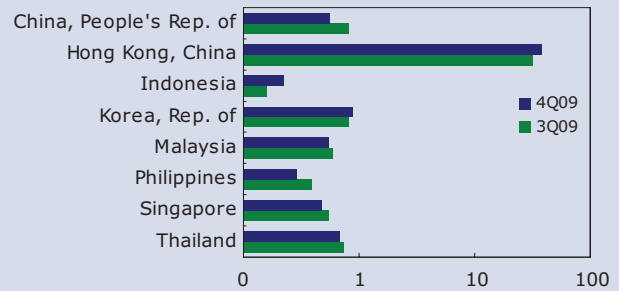
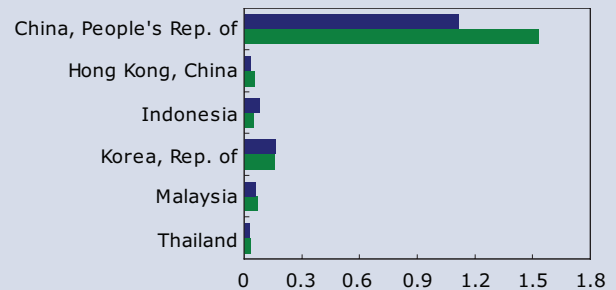


Figure 10b: Corporate Bond Turnover Ratios¹



¹Calculated as local currency (LCY) trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period. Figure 10a is based on a logarithmic scale.
Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); 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).

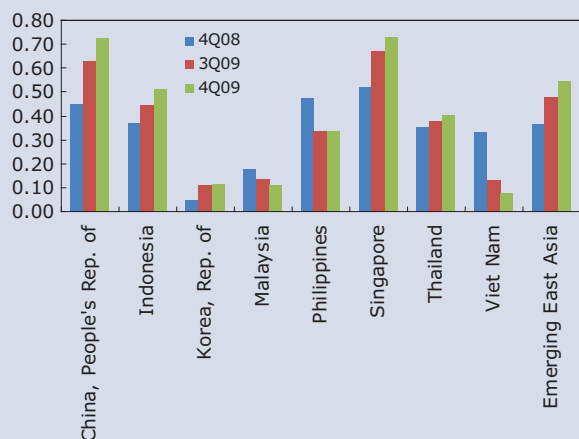
Bond Turnover Ratios

One consequence of higher issuance in 4Q09 was a rise in bond turnover ratios in several markets.

Asian government bond market liquidity can be characterized as moderately good. However, corporate bonds are largely illiquid, except in the PRC and Korea.

Government bond turnover ratios rose for Hong Kong, China; Indonesia; and Korea (**Figure 10a**). Government bond turnover in Hong Kong, China is high as monetary authorities issue paper to manage capital flows. Turnover ratios for other government

bond markets, however, fell. The countries where government bond turnover ratios fell the most were the PRC, Philippines, and Singapore. In the corporate bond market, turnover ratios in 4Q09 fell in most markets (**Figure 10b**). However, corporate turnover is high in the PRC due to heavy issuance, which is mainly traded in the interbank market.

Figure 11: Total Bills-To-Bonds Ratios

Note:
Total bills comprise central bank bills plus treasury bills. Bonds comprise long-term bonds (more than 1 year in maturity) issued by central governments and central banks.
Source: *AsianBondsOnline*.

Money Market Trends and Bills-To-Bonds Ratios

The bills-to-bonds ratio for most emerging East Asian markets rose during 4Q09, driven mainly by a rise in the ratio of central bank bills to bonds (rather than the ratio of treasury bills to bonds).

The rise in the bills-to-bonds ratio in most emerging Asian markets reflected an acceleration of the growth rate of central bank bills on both a y-o-y and q-o-q basis for most markets that issue central bank bills, including the PRC; Hong Kong, China; Indonesia; Korea; and Thailand (**Figure 11**). The rise in the central bank bills-to-bonds ratio was also driven by negative growth rates for central bank bonds outstanding (as opposed to central bank bills) on both a q-o-q and y-o-y basis in markets that issue central bank bonds.

The only market to see an overall decline in its growth rate for central bank bills on both a q-o-q and y-o-y basis in 4Q09 was Malaysia. Meanwhile,

the y-o-y growth rate for central bank bills in Indonesia declined to 44.3% in 4Q09, compared to 88.7% in 3Q09. The q-o-q growth rate for Indonesia's central bank bills rose, however, from -5.2% in 3Q09 to 17.8% in 4Q09.

The region's overall ratio of treasury bills to treasury bonds was virtually unchanged on a q-o-q basis at 0.14 in 4Q09. This reflected primarily the stability of the treasury bills-to-bonds ratios in the Philippines, PRC, Indonesia, and Malaysia, which were 0.34, 0.17, 0.04, and 0.01, respectively. Meanwhile, the rise in the treasury bills-to-bonds ratio of Singapore from 0.67 in 3Q09 to 0.73 in 4Q09 broadly matched the decline of the Thai treasury bills-to-bonds ratio from 0.13 to 0.10 over the same period.

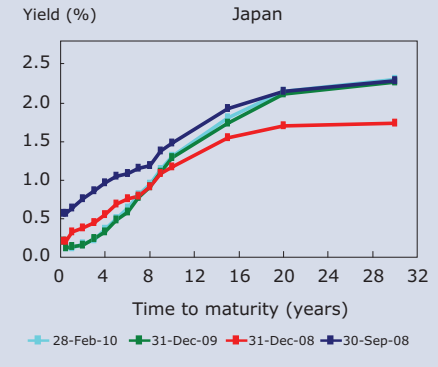
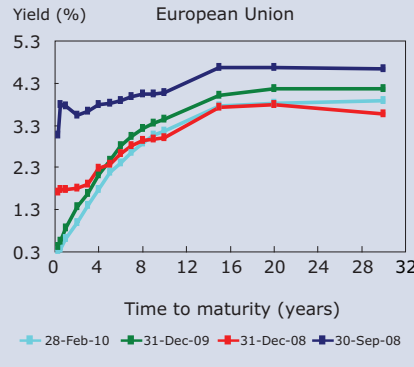
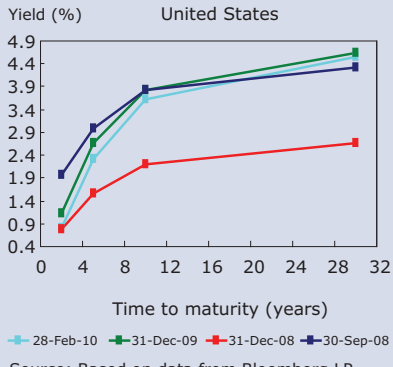
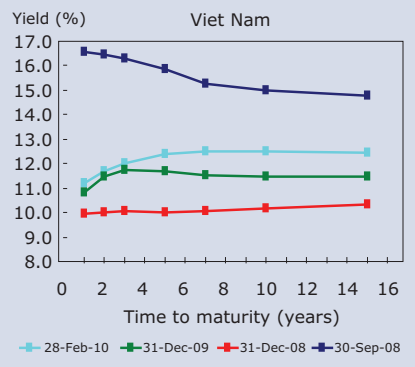
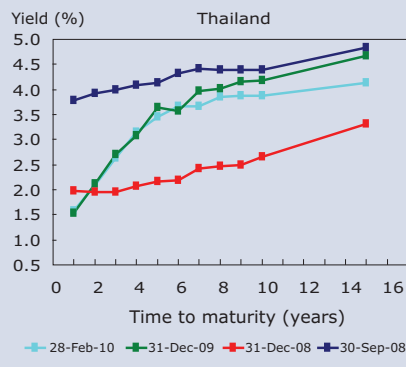
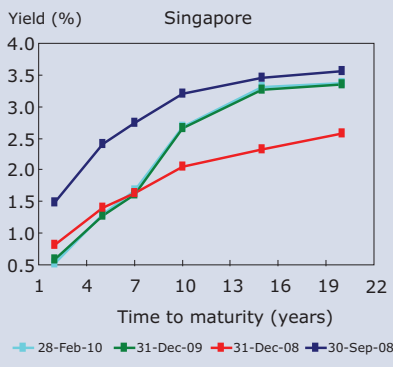
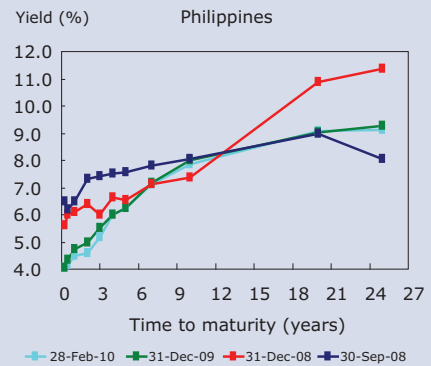
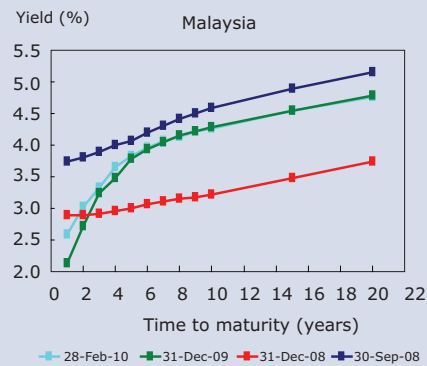
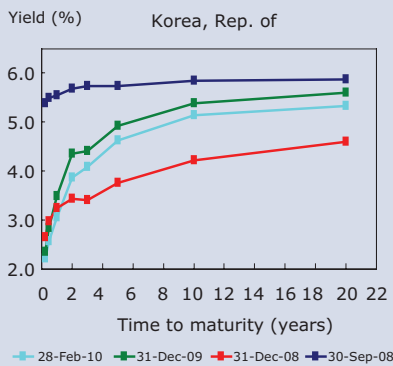
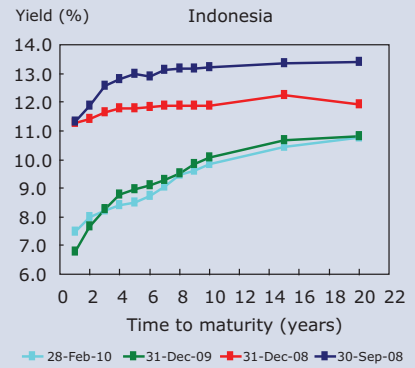
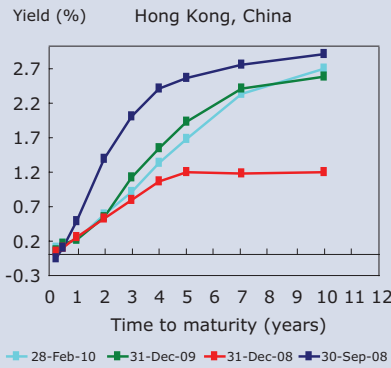
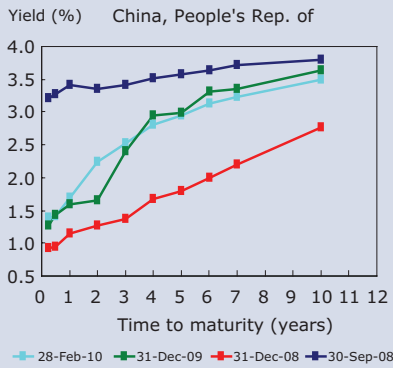
These two trends resulted in a sharp rise in the total bills-to-bonds ratio for the region as a whole from 0.48 to 0.55 between 3Q09 and 4Q09, continuing a trend that has been in place since the end of 2008. The only markets to have seen a decline in their total bills-to-bonds ratio since the end of 2008 were Malaysia, Viet Nam, and the Philippines. The Philippine bills-to-bonds ratio fell from the end of 4Q08 through 3Q09, but then was virtually unchanged in 4Q09.

Government Bond Yields

Most government bond yield curves in the region steepened in 2009, reflecting a combination of supply concerns, buildup of public debt, and strong recovery in other asset markets.

The government bond market yield curves that steepened at their longer-ends—hovering near post-Lehman levels as of the end of 2009—were the PRC; Hong Kong, China; Korea; Thailand; Singapore; and Malaysia (**Figure 12**). However, this trend for Malaysia is more pronounced in the belly rather than the long-end of the curve as the long-end flattened somewhat in the second half of 2009. Also, the longer-end of the Thai curve flattened significantly between end-December 2009 and end-February 2010. In most of these

Figure 12: Benchmark Yield Curves—Local Currency Bonds



Source: Based on data from Bloomberg LP.

cases, the very short-end of the curve at end-February 2010 was still low and either at the same level as end-December 2009 or just slightly above it.

The major exception to this overall steepening trend is Indonesia, whose government bond yield curve has fallen well below its end-2008 levels. This seems to reflect a relatively stable level of rupiah bond issuance over the last 2 years, as the Indonesian government has worked hard to limit the expansion of the budget deficit and placed around one-half of its bond issuance in the USD market in both 2008 and 2009. Nevertheless, the Indonesian curve has steepened at its newly acquired lower level for bond yields, given the fact that Indonesian bond yields remain among the highest in the region. The steepness of the Indonesian LCY bond yield curve also seems to reflect the sharp reduction of policy rates over the last year, which has resulted in much lower short-term yields.

The Philippine yield curves in February 2010 and December 2009 were well below their immediate post-Lehman levels of September 2008 for maturities under 10 years and below end-December 2008 levels for maturities under 6 years. Yields for maturities between 10 and 20 years remain roughly at post-Lehman levels. Yields for maturities above 20 years remain below end-December 2008 levels, but above September 2008 levels. This trend likely reflects (i) market concerns over the financing requirement for a budget deficit projected to remain above 3% of GDP in 2010, and (ii) uncertainty over the outcome of the upcoming presidential election in May. Philippine government LCY bond issuance rose only 9.0% y-o-y in 2009 as the government issued USD3.25 billion offshore to take pressure off of the domestic market.

Finally, Viet Nam's yield curve shifted upward at end-December 2009 and end-February 2010 relative to its levels at end-December 2008. Viet Nam's recent dollar bond issuance appears to have helped to contain any further rise in yields for the time being. Viet Nam's end-December

2009 yield curve was nevertheless well below the immediate post-Lehman levels of September 2008.

These trends have resulted in a very mixed picture for changes in the yield spread between 2- and 10-year bonds for the period between end-December 2009 and end-February 2010 (**Figure 13**). The 2- versus 10-year yield spread has risen for Hong Kong, China; Korea; the Philippines; Singapore; and Viet Nam; but has fallen for the PRC, Indonesia, Malaysia, and Thailand. The fall in the yield spreads for the PRC, Indonesia, and Malaysia likely reflects an increase since end-December 2009 of yields for 2-years or less. In the case of Thailand, it would seem to reflect the decline in yields at the longer-end of the Thai curve since the end of 2009.

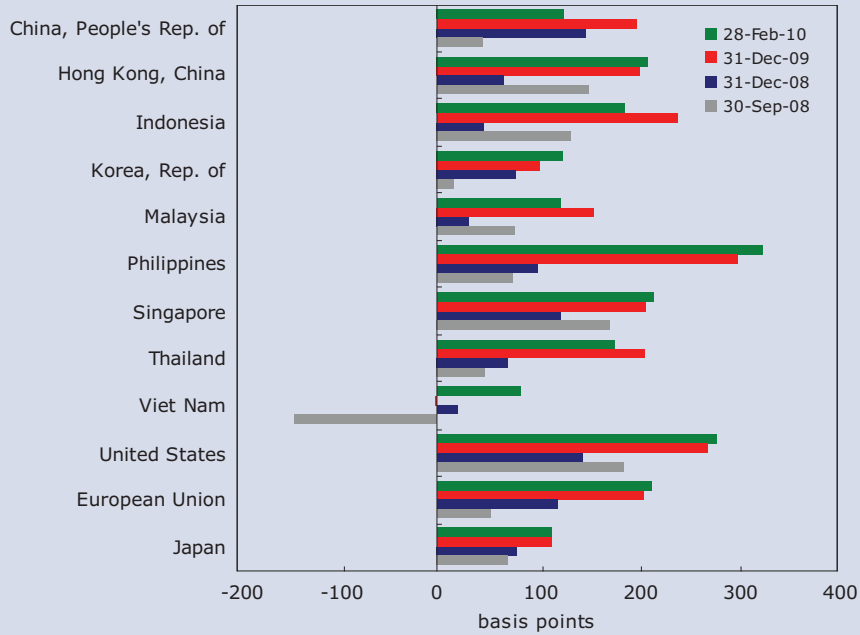
Yields on government bonds could rise further in 2010, given the uptick in inflation in recent months (**Figure 14**). As growth gains traction, authorities will be looking at the most appropriate timing for normalizing accommodative monetary policies and the unusually low policy rates of the last year (**Figure 15**). Malaysia's central bank raised its policy rate to 2.25% at the beginning of March. The People's Bank of China's has accepted mildly higher PBOC bill yields since January. Viet Nam increased its policy interest rate in December of last year, but has left it unchanged since then.

Corporate Bond Credit Spreads

Higher-grade corporate bond spreads have tightened, while risk premiums for lower-rated corporate bonds rose over certain sections of their respective curves.

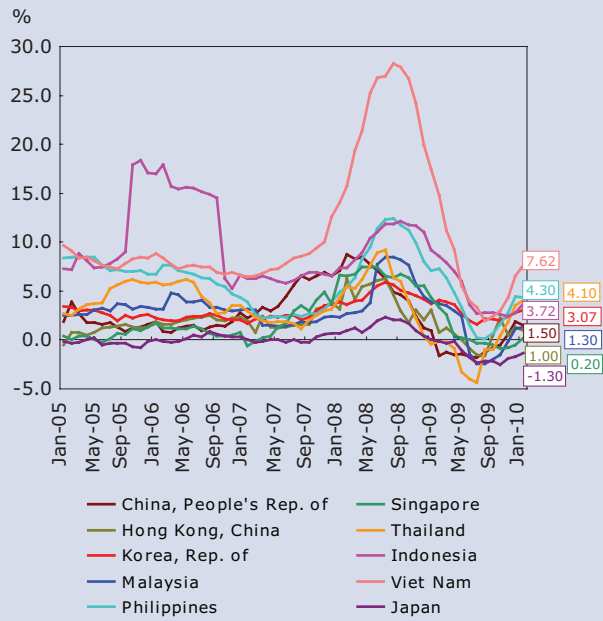
Credit spreads on higher-grade corporate bonds—rated AAA—fell between end-December and end-February, especially at the shorter-end of the curve, for all four of the markets presented in **Figure 16a**. In Korea, credit spreads fell along the entire length of the relatively short-dated curve. This resulted in a downward shift of the Korean curve, with credit spreads for maturities beyond 2

Figure 13: Yield Spreads Between 2- and 10-Year Government Bonds



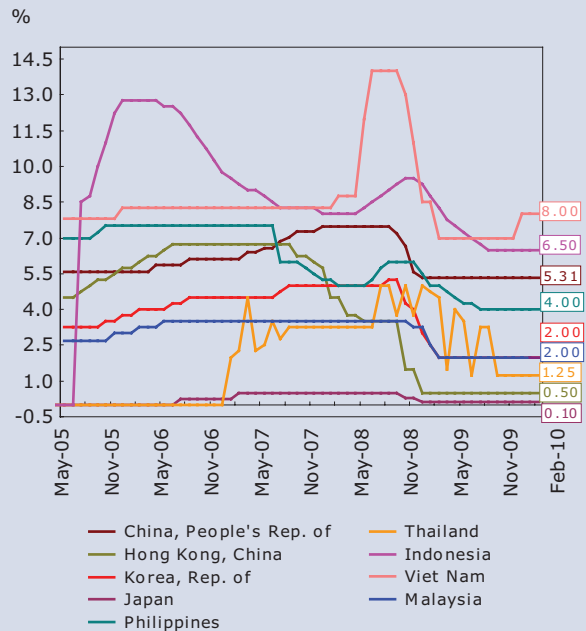
Source: Bloomberg LP.

Figure 14: Headline Inflation Rates (January 2010)



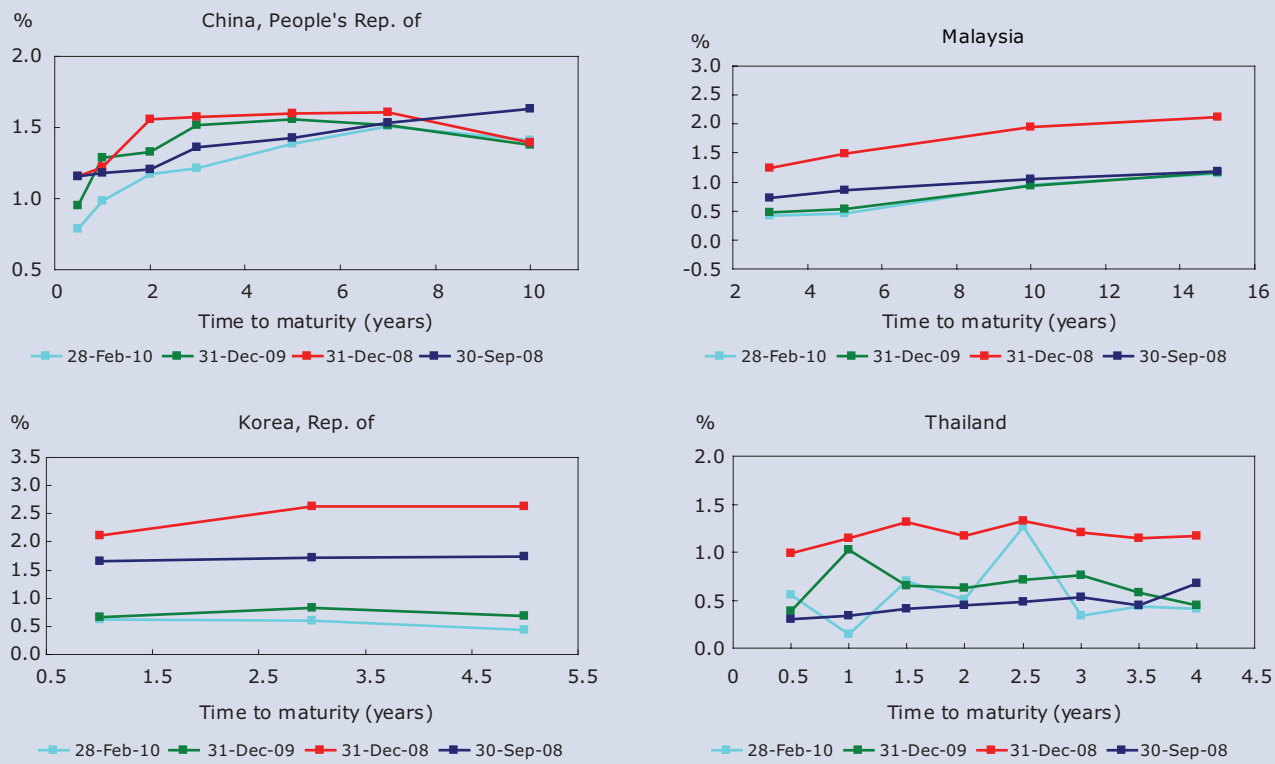
Source: Bloomberg LP.

Figure 15: Policy Rates (February 2010)



Source: Bloomberg LP except for Viet Nam (State Bank of Viet Nam).

Figure 16a: Credit Spreads—Local Currency Corporates Rated AAA vs. Government Bonds



Note:
 Credit spreads are obtained by subtracting the government yields from corporate indicative yields.
 Source: People’s Republic of China (*ChinaBond*); Republic of Korea (*KoreaBondWeb*); Malaysia (*Bank Negara Malaysia*); and Thailand (*ThaiBMA*).

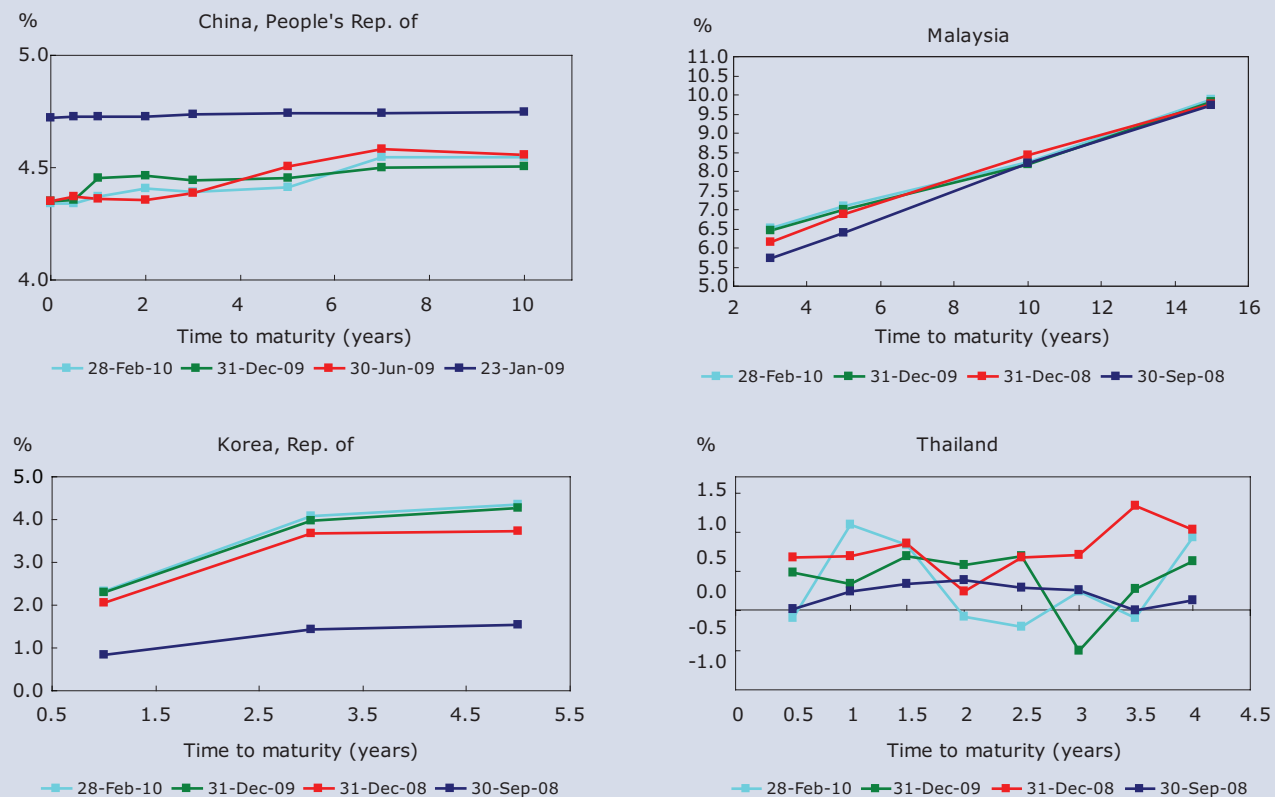
years being significantly lower than maturities of less than 2 years.

The Malaysian curve flattened at its short-end, but steepened slightly for credit spreads between 5 and 10 years. The Thai credit spread curve resumed its previous zig-zag pattern, with spreads for 1-year maturities falling and spreads for 2.5-year maturities rising. This contrasts with Thai credit spreads at the end of 2009, when the credit spread curve for AAA-rated credits actually flattened over its relatively short length.

The credit spread curve for the PRC steepened for maturities under 2 years. It steepened somewhat less for maturities between 3 and 7 years, before falling for maturities beyond 7 years.

Credit spreads for corporate bonds rated between BBB and AAA generally rose between the end of December and the end of February (**Figure 16b**). However, the performance of each of the four high-yield markets discussed below was quite distinctive:

- Credit spreads in the PRC market fell from the short-end of the credit spread curve to the belly, while rising along the longer-end of the curve. Credit spreads of less than 1 year were largely unchanged.
- Credit spreads along the entire Korean curve rose, resuming the trend in place between end-December 2008 and end-December 2009, when credit spreads rose along the entire curve.

Figure 16b: Credit Spreads—Lower Rated Local Currency Corporates vs. AAA**Notes:**

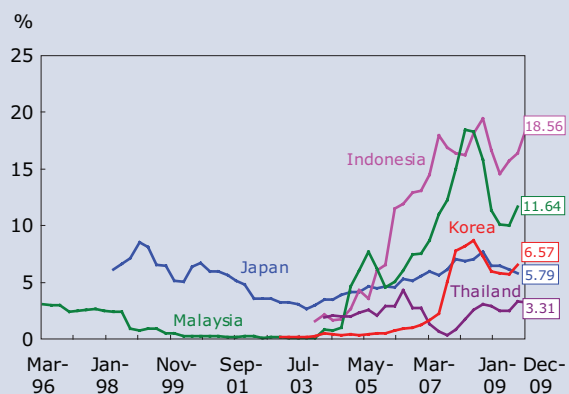
1. For the People's Republic of China, credit spreads are obtained by subtracting the corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.
 2. For Malaysia, credit spreads are obtained by subtracting the corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.
 3. For the Republic of Korea, credit spreads are obtained by subtracting the corporate indicative yields rated as AAA from corporate indicative yields rated as BBB+.
 4. For Thailand, credit spreads are obtained by subtracting the 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*).

- Credit spreads on Malaysian high-yield bonds rose mostly at the shorter-end of the curve compared to end-December 2009 levels. These credit spreads, however, were still above levels for September and December 2008.
- The most complex case is Thailand. The traditionally zig-zag pattern of its credit spread curve was retained between end-December and end-February, but credit spreads with maturities under 1.5 years rose dramatically above both end-2009 and end-2008 levels.

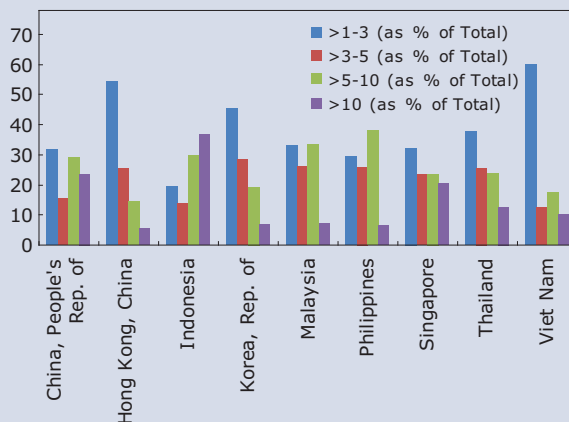
Foreign Holdings

Foreign investors' holdings in the region's bond markets are rising.

This rise in foreign investors' holdings reflects (i) Asia's quick economic recovery, (ii) appreciation pressures on the region's currencies, and (iii) higher returns in several markets (**Figure 17**). The rapid growth of G3 currency issuance in 2009 has also focused attention on the region's overall bond market, especially with many corporate issuers increasingly tapping the LCY bond market.

Figure 17: Foreign Holdings of Local Currency Government Bonds (December 2009)

Note:
Data for Japan, Republic of Korea, and Malaysia as of September 2009.
Source: *AsianBondsOnline*.

Figure 18: Maturity Profile
(individual maturities as % of total)

Source: *AsianBondsOnline*.

Maturity Profile

The maturity profile in most emerging East Asian bond markets—defined as debt securities with maturities exceeding 1 year—favors the shorter-end of the profile.

Maturities in the emerging East Asian market have been concentrated at the shorter-end of the market especially in Hong Kong, China; Viet Nam; and Korea (**Figure 18**). These three markets, as well as Malaysia and the Philippines, have 10% or less of their bonds outstanding in maturities of more than 10 years. Thailand's long-dated maturities are just slightly above 10% of the total. Indonesia, on the other hand, has structured almost 40% of its total bonds outstanding to have maturities of more than 10 years.

Other markets have concentrated their maturities in the 3–5 year and 5–10 year ranges. The maturity structures of the PRC and Singapore are more balanced than that of other markets at the present time, with a relatively large portion of their maturities in both the 5–10 year and 10 year and above ranges.

However, most markets significantly increased the portion of their government and central bank bills in the market, while reducing the corresponding portion of government and central bank liabilities in the bond markets (obligations with maturities exceeding 1 year).

G3 Currency Bonds

Issuance of G3 currency bonds in emerging East Asia in 2009 totaled USD63.2 billion.

The amount of G3 currency bonds issued in emerging East Asia in 2009 (USD63.2 billion) almost doubled total issuance in 2008 (USD33.3 billion) (**Table 6**). This upsurge in G3 currency issuance reflects the return of investor appetite for bonds of major Asian governments, corporations, and financial institutions, as well as the low level of US interest rates and a renewed search for yield. The low level of US interest rates allowed many banks and corporations in Korea to issue bonds at coupons of 5% or lower. Singapore's Temasek issued a 10-year bond at 4.3% in October, and Malaysia's Petronas issued 10-year bonds in August of last year at a coupon of 5.25%.

Table 6: G3 Currency Bond Issuance (Jan 2009—Dec 2009)

Issued in 1H09			Issued in 2H09		
Issuer	USD million	Issue Date	Issuer	USD million	Issue Date
Republic of Korea	18,651		Republic of Korea	11,862	
Korea Sovereign 5.75% 2014	1,500	16-Apr-09	KEXIM 5.875% 2015	1,500	14-Jul-09
Korea Sovereign 7.125% 2019	1,500	16-Apr-09	KNOC 5.375% 2014	1,000	30-Jul-09
KDB 8.0% 2014	2,000	23-Jan-09	Woori Bank 7.0% 2015	800	31-Jul-09
KEXIM 8.125% 2014	2,000	20-Jan-09	Korea National Housing 4.875% 2014	750	10-Sep-09
Kookmin Covered Bond 7.25% 2014	1,000	14-May-09	Korea Expressway 4.5% 2015	700	22-Oct-09
IBK 7.125% 2014	1,000	23-Apr-09	NACF 5.0% 2014	500	30-Sep-09
KHNP 6.25% 2014	1,000	17-Jun-09	Korea Electric Power 5.5% 2014	500	21-Jul-09
Hana Bank 6.5% 2012	1,000	9-Apr-09	Korea Gas Corp. 6.0% 2014	500	16-Jul-09
Posco 8.75% 2014	700	26-Mar-09	Others	5,612	
Shinhan Bank 6.0% 2012	500	29-Jun-09			
SK Telecom 1.75% 2014	333	7-Apr-09	People's Republic of China	1,050	
Kookmin Bank 5.875% 2012	300	11-Jun-09	Sinochem 1.4306% 2014	500	28-Dec-09
KNOC 3.86438% 2012	270	15-Jun-09	Country Garden 11.75% 2014	300	10-Sep-09
KCC Corporation 3.5% 2014	250	6-May-09	Lumena Resources 12.0% 2014	250	21-Oct-09
SK Telecom 3.61438% 2012	220	29-Apr-09			
KNOC 4.40875% 2012	220	4-Feb-09	Hong Kong, China	5,050	
KDB 5.75% 2012	200	13-May-09	Hutchison 4.625% 2015	2,000	11-Sep-09
NACF 8.5% 2014	180	5-Feb-09	Hutchison 5.75% 2019	1,000	11-Sep-09
Korea Water Resources 3.25188% 2012	130	24-Apr-09	Noble Group 6.75% 2020	850	29-Oct-09
KDB 5.15% 2010	125	2-Feb-09	HKMC 3.5% 2014	500	4-Aug-09
KEXIM 4.9% 2010	122	28-Apr-09	Others	700	
Korea Expressway 3.21438% 2012	120	13-May-09			
Others	3,981		Philippines	3,622	
			PSALM 7.39% 2024	1,179	2-Dec-09
People's Republic of China	1,000		Philippines Sovereign 6.375% 2034	1,000	23-Oct-09
Petrochina 2.0825% 2012	1,000	12-May-09	Philippines Sovereign 6.5% 2020	750	20-Jul-09
			SM Investments 6.0% 2014	500	22-Sep-09
			Others	193	
Hong Kong, China	1,320		Indonesia	4,795	
KCRC 5.125% 2019	750	18-May-09	PLN (Majapahit Hldg) 7.75% 2020	1,250	6-Nov-09
China Construction Bank 0.58563% 2010	170	24-Mar-09	PT Adaro 7.625% 2019	800	22-Oct-09
Techtronic 8.5% 2014	150	30-Apr-09	PLN 8.0% 2019	750	3-Aug-09
Others	250		PT Bukit Mutiara 8.0% 2010	580	30-Dec-09
			Indonesia Sovereign (<i>Samurai</i>) 2.73% 2019	370	29-Jul-09
Philippines	2,500		Bumi 12.0% 2016	300	13-Nov-09
Philippines Sovereign 8.375% 2019	1,500	14-Jan-09	Indika Energy 9.75% 2016	230	5-Nov-09
PSALM 7.25% 2019	1,000	19-May-09	Others	515	
			Malaysia	4,500	
Indonesia	3,650		Petronas 5.25% 2019	3,000	12-Aug-09
Indonesia Sovereign 10.375% 2014	1,000	4-Mar-09	Petronas <i>Sukuk</i> 4.25% 2014	1,500	12-Aug-09
Indonesia Sovereign 11.625% 2019	2,000	4-Mar-09			
Sovereign <i>Sukuk</i> 8.8% 2014	650	23-Apr-09			
			Singapore	5,092	
Singapore	123		Temasek 4.3% 2019	1,500	26-Oct-09
Olam International 1.2821% 2013	123	4-Mar-09	Olam International 6.0% 2016	500	16-Oct-09
			OCBC 4.25% 2019	500	18-Nov-09
Emerging East Asia Grand Total	27,244		PSA International 4.625% 2019	500	11-Sep-09
			Temasek 5.375% 2039	500	23-Nov-09
Memo Items:			Others	1,592	
India	90		Emerging East Asia Grand Total	35,971	
Sri Lanka	300		Memo Items:		
Sri Lanka Sovereign 6.07625% 2011	184	16-Mar-09	India	4,572	
Sri Lanka Sovereign 6.08375% 2011	116	29-Jun-09	ICICI Bank 5.5% 2015	750	25-Nov-09
			SBI 4.5% 2014	750	23-Oct-09
			Tata Steel 4.5% 2014	547	20-Nov-09
			Sesa Goa 5.0% 2014	500	30-Oct-09
			Sterlite Industries 4.0% 2014	500	29-Oct-09
			Others	1,525	
			Sri Lanka	690	
			Sri Lanka Sovereign 7.4% 2015	500	22-Oct-09
			Sri Lanka Sovereign 5.33188% 2011	190	18-Aug-09

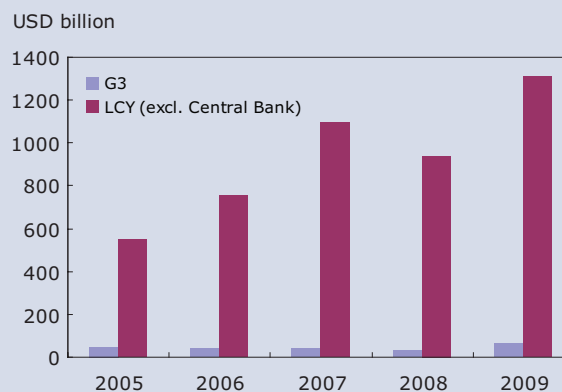
Source: Compilation from newspaper and wire reports.

The G3 currency market is also satisfying investors searching for higher yields. Two important examples of this were the USD1.25 billion bond from Indonesian state-owned power producer PLN in November, which carried a coupon of 7.75%; and an USD1.18 billion issue from Philippine power sector holding company PSALM in December, with a coupon of 7.39%. Both of these transactions offered coupons that were 100 basis points or more higher than straight sovereign bonds, while providing investors the comfort of buying a quasi-sovereign instrument. The recovery of G3 currency bond issuance in 2009 was impressive, but G3 issuance is still small compared to total LCY bond issuance in emerging East Asia, even when removing central bank bond issuance to make the numbers more comparable (**Figure 19**).

Nevertheless, G3 currency issuance has retained its rapid pace of 2009 into the early months of 2010. G3 issuance through the end of February reached USD15 billion, or slightly above the USD13.9 billion issued in G3 currencies in 4Q09. This new surge in issuance reflected large sovereign issues from Indonesia and the Philippines, including the JPY100 billion *samurai* bond of the Philippine sovereign; a new USD1 billion issue from the Export-Import Bank of Korea; as well as a number of interesting high-yield bonds such as the USD350 million issue of Indonesian private power producer Star Energy, which bears a coupon of 11.5%.

Foreign currency bonds outstanding at the end of 2009 totaled USD235 billion, representing a 15.0% increase over end-2008 (**Table 7**). The largest market for such bonds is Korea, which accounts for 31.8% of the total. The most rapidly growing foreign currency bond market in 2009 was Indonesia, which grew 37.4% y-o-y. The second most rapidly growing market was Singapore, which grew 32.4%. Much of the debt issued in Singapore was from government-linked companies and financial institutions. Foreign currency bonds increased in Korea and the Philippines in 2009 by broadly similar percentages, 15.8% and 17.6%, respectively. Most Indonesian bonds issued were

Figure 19: G3 Currency Bond Issuance vs. Local Currency Bond Issuance
(excl. Central Bank)



LCY = local currency.

Note:

G3 refers to the European Union, Japan, and the United States.

Source: AsianBondsOnline.

from the government or government-owned entities, while in Korea the issuers were more broadly based.

Bond Market Returns

Returns on LCY bonds rose at the end of 2009 on an annual basis compared to the lackluster returns in the first half of 2009.

The Asian Bond Fund (ABF) Pan-Asian Bond Index (**Table 8**) rose by 5.0% at the end of 2009 from 4.14% at the end of 2008, much higher than the almost negligible return of 0.15% for the first half of 2009.

However, this recovery was narrowly based, driven by a spectacular return of 35.61% for Indonesia and more modest returns of 9.73% for Korea and 11.88% for the Philippines. Returns for the PRC and Hong Kong, China were negative; while returns were almost negligible for Thailand and Malaysia, and only 3.06% for Singapore.

Table 7: Foreign Currency Denominated Bonds Outstanding (USD billion)

	4Q08	% share	2Q09	% share	4Q09	% share
China, People's Rep. of (PRC)						
Total	20	100.0	21	100.0	23	100.0
Government	13	64.4	13	61.0	13	58.0
Banks and FIs	5	23.4	5	22.7	6	24.7
Corporate	2	12.2	3	16.3	4	17.3
Hong Kong, China						
Total	16	100.0	16	100.0	17	100.0
Government	2	9.8	2	10.0	2	9.6
Banks and FIs	10	63.0	10	60.5	12	69.1
Corporate	4	27.3	5	29.5	4	21.4
Indonesia						
Total	14	100.0	18	100.0	20	100.0
Government	13	87.5	16	90.0	17	84.1
Banks and FIs	1	4.5	1	3.6	1	3.2
Corporate	1	8.1	1	6.4	2	12.6
Korea, Rep. of						
Total	64	100.0	70	100.0	75	100.0
Government	6	9.7	9	12.6	10	12.8
Banks and FIs	26	39.7	28	39.6	30	40.5
Corporate	33	50.6	33	47.8	35	46.7
Malaysia						
Total	23	100.0	21	100.0	22	100.0
Government	4	16.5	2	11.7	2	7.9
Banks and FIs	7	27.7	7	31.6	6	25.7
Corporate	13	55.8	12	56.7	15	66.4
Philippines						
Total	34	100.0	35	100.0	40	100.0
Government	31	89.9	32	90.8	36	90.5
Banks and FIs	1	2.1	1	2.0	1	2.0
Corporate	3	7.9	3	7.2	3	7.5
Singapore						
Total	23	100.0	22	100.0	30	100.0
Government	0	0.0	0	0.0	0	0.0
Banks and FIs	14	60.6	13	59.2	18	59.1
Corporate	9	39.4	9	40.8	12	40.9
Thailand						
Total	8	100.0	7	100.0	7	100.0
Government	2	21.8	1	20.8	1	19.7
Banks and FIs	2	28.6	2	25.4	2	24.2
Corporate	4	49.6	4	53.8	4	56.1
Viet Nam						
Total	1	100.0	1	100.0	2	100.0
Government	1	100.0	1	100.0	2	94.3
Banks and FIs	0	0.0	0	0.0	0	0.0
Corporate	0	0.0	0	0.0	0	5.7
Total Emerging East Asia						
Total	204	100.0	210	100.0	235	100.0
Government	71	34.6	77	36.4	82	34.9
Banks and FIs	64	31.5	64	30.6	74	31.5
Corporate	69	33.9	69	33.0	79	33.6
Less PRC:						
Total	184	100.0	189	100.0	212	100.0
Government	58	31.4	64	33.7	69	32.5
Banks and FIs	60	32.4	60	31.5	68	32.2
Corporate	67	36.2	66	34.9	75	35.3

FIs = financial institutions.
Source: Bloomberg LP.

Table 8: iBoxx Asia Bond Fund Index Family Returns

Market	Modified Duration (years)	2008 Returns (%)		1H09 Returns (%)		2009 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	4.76	11.91	18.71	(0.48)	(0.60)	(0.64)	(0.69)
Hong Kong, China	3.41	10.22	10.85	(2.09)	(2.09)	(0.76)	(0.82)
Indonesia	4.87	3.22	(12.30)	9.62	16.89	20.22	35.61
Korea, Rep. of	3.54	11.46	(18.20)	0.29	(0.84)	1.94	9.73
Malaysia	4.55	7.58	2.89	(1.64)	(3.16)	0.48	1.64
Philippines	3.98	1.63	(12.55)	5.07	3.95	9.00	11.88
Singapore	5.13	6.75	6.80	(0.41)	(1.16)	0.48	3.06
Thailand	4.75	16.88	13.72	(3.91)	(1.82)	(3.47)	0.73
Pan-Asian Index	4.32	n.a.	4.14	n.a.	0.15	n.a.	5.00
HSBC ALBI	5.75	n.a.	0.97	n.a.	0.26	n.a.	6.13
US Govt. 1–10 years	3.90	n.a.	10.95	n.a.	(2.50)	n.a.	(1.38)

ALBI = Asian Local Bond Index, LCY = local currency, n.a. = not applicable, US = United States.

Notes:

1. The Asia Bond Fund (ABF) indices contain only government debt and government-guaranteed debt obligations.
2. Market bond indices are from iBoxx Index Family. 2009 returns year-to-date are as of 31 December 2009.
3. Annual return is computed for each year using natural logarithm of end-of-year index value/beginning year index value.
4. Duration as of 31 December 2009.

Source: *AsianBondsOnline* and Bloomberg/EFFAS for US Government Bond Index.

The LCY bond market returns for Indonesia and Korea, in particular, appear to have been supported by the recovery of each market's currency in 2009 (**Table 9**). The Indonesian rupiah, in particular, rose 17.8% y-o-y against the US dollar in 2009, while the Korean won rose 8.4%. The y-o-y appreciation of the Philippine peso was only 2.7%,

but the peso's q-o-q increase of 3.2% was the largest of any regional currency in 4Q09. The Singapore dollar rose almost as much on a y-o-y basis (2.2%), but rose only 0.2% on a q-o-q basis.

Table 9: Appreciation (Depreciation) of Emerging East Asian Currencies (%)

Currency	2007	2008	3Q09		4Q09	
	y-o-y	y-o-y	y-o-y	q-o-q	y-o-y	q-o-q
CNY	6.7	6.7	0.3	0.1	(0.02)	(0.01)
HKD	(0.3)	0.6	0.2	0.0	(0.04)	(0.04)
IDR	(4.3)	(18.7)	(0.8)	5.5	17.8	1.9
KRW	(0.6)	(29.7)	1.5	7.9	8.4	1.5
MYR	6.5	(4.5)	(0.7)	1.4	0.6	0.8
PHP	17.3	(13.9)	(1.1)	1.0	2.7	3.2
SGD	6.5	0.1	1.9	2.9	2.2	0.2
THB	6.9	(3.1)	1.1	1.9	3.9	0.2
VND	0.2	(8.8)	(7.2)	(0.2)	(5.5)	(3.5)
JPY	6.3	20.8	16.9	7.1	(2.6)	(3.8)

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

Note: Appreciation (depreciation) is computed as follows: $-\ln(\text{end-of-period rate}/\text{start-of-period rate}) \times 100$.

Source: Bloomberg LP.

Finally, returns on LCY bonds remained significantly lower than gains in the region's equity markets. The rise of the ABF Pan-Asian Bond Index in 2009 by 5.0% pales in comparison to the 60.3% rise of the MSCI Far East Ex-Japan Index (65.0% in USD terms) (**Table 10**). The star performer was Indonesia, whose bourse rose 90.3% in LCY terms and 120.8% in USD terms. Indonesia was followed by Singapore and Thailand in LCY terms, whose stock market indexes both rose roughly 63% y-o-y; and then by the PRC, whose key index rose 58.9%. The weaker performers were Hong Kong, China; Korea; and the Philippines; with gains of between 55% and 57%.

Table 10: MSCI Index Returns

Market	2008 Returns (%)		1H09 Returns (%)		2009 Returns (%)	
	LCY terms	USD terms	LCY terms	USD terms	LCY terms	USD terms
China, People's Rep. of	(52.23)	(51.94)	35.10	35.10	58.89	58.80
Hong Kong, China	(53.16)	(52.88)	32.56	32.56	55.28	55.20
Indonesia	(50.76)	(57.57)	44.65	54.46	90.27	120.75
Korea, Republic of	(40.62)	(55.87)	24.60	23.19	56.63	69.42
Malaysia	(40.77)	(43.39)	24.45	22.50	46.25	47.78
Philippines	(46.77)	(53.79)	30.10	28.54	55.79	60.24
Singapore	(49.50)	(49.55)	30.59	30.00	63.02	67.29
Thailand	(48.72)	(50.34)	39.10	42.00	63.00	70.04
Far East ex-Japan Index	(48.14)	(51.96)	31.80	31.66	60.32	65.01
MSCI USA	n.a.	(38.58)	n.a.	2.39	n.a.	24.20

LCY = local currency, n.a. = not applicable.

Notes:

1. Market indices are from MSCI country indexes. 2009 returns are year-to-date as of 31 December 2009.

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.