

# Bond Market Developments in the Third Quarter of 2010

## Size and Composition

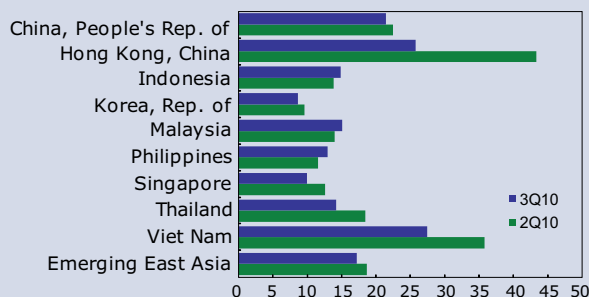
**Total bonds outstanding in emerging East Asia's LCY market rose by 17.2% y-o-y and 3.0% q-o-q in 3Q10 to reach USD5.1 trillion, driven by strong growth in corporate bonds.<sup>2</sup>**

The 3.0% quarter-on-quarter (q-o-q) growth rate in 3Q10 for emerging East Asia's local currency (LCY) bond market, which was down from 5.0% in 2Q10, reflected a sharp decline in government bond issuance—especially by central banks—in most markets across the region. While it still may be early to draw any conclusion from this data, the drop in central bank issuance in 3Q10 could be attributed to one or both of the following factors: (i) Monetary authorities in markets where inflation has risen in recent months may be allowing currencies to gradually appreciate to contain the prices of imported goods. This may have led to a decrease in sterilization activities by some central banks in the region. (ii) Alternatively, some authorities may be relying on other measures to counter the massive inflows of foreign capital instead of aggressively selling bills to mop up liquidity from local markets. Year-on-year (y-o-y) growth rates, however, remained robust (**Figure 1**) and serve as a reminder that 2010 has been an active year in emerging East Asia's LCY bond market.

Growth in the People's Republic of China's (PRC) LCY bond market fell to 3.6% q-o-q in 3Q10 from 6.9% in 2Q10 (**Table 1**). The market contracted 1.0% q-o-q in Viet Nam. The market in the Republic of Korea expanded 1.8% q-o-q and the Indonesian market grew by 1.1% q-o-q. Malaysia reported the highest q-o-q growth rate in the region in 3Q10 at 3.7%, although this was slower than its 7.4% growth rate in 2Q10.

<sup>2</sup> Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Thailand; and Viet Nam.

**Figure 1: Growth of Emerging East Asian LCY Bond Markets in 2Q10 and 3Q10 (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-September 2010 currency exchange rates and does 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 (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).

The only markets to accelerate their q-o-q growth rates in 3Q10 were Indonesia, the Republic of Korea, Philippines, and Singapore. The Philippines' q-o-q growth rate rose to 3.6% in 3Q10 from 2.5% in 2Q10. Singapore's growth rate rose to 3.1% q-o-q from 1.8%, almost entirely due to growth in the corporate bond market of 7.1% q-o-q. The same was true in Indonesia, where q-o-q growth in the government bond market was flat in 3Q10, while the corporate bond market expanded 10.9%.

Total LCY government bonds outstanding in the region grew only 1.9% q-o-q in 3Q10, compared with 5.1% in 2Q10. The driver of overall bond market growth in emerging East Asia in 3Q10 was the corporate bond market, which exceeded its 2Q10 growth rate of 5.0% q-o-q to expand 5.7% q-o-q in 3Q10. The corporate bond market has grown rapidly in recent years and now accounts for 30% of the total emerging East Asian

**Table 1: Size and Composition of Emerging East Asian LCY Bond Markets**

	3Q09		2Q10		3Q10		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	3Q09		3Q10		3Q09		3Q10	
							q-o-q	y-o-y	q-o-q	y-o-y	q-o-q	y-o-y	q-o-q	y-o-y
<b>China, People's Rep. of (PRC)</b>														
Total	2,415	100.0	2,848	100.0	2,991	100.0	4.5	13.9	3.6	21.4	4.6	14.2	5.0	23.9
Government	2,015	83.4	2,302	80.8	2,377	79.5	3.1	5.7	1.9	15.6	3.1	6.0	3.3	18.0
Corporate	400	16.6	546	19.2	614	20.5	12.5	87.7	10.9	50.5	12.6	88.2	12.4	53.6
<b>Hong Kong, China</b>														
Total	129	100.0	159	100.0	161	100.0	15.4	39.0	1.3	25.8	15.4	39.3	1.7	25.6
Government	54	41.8	86	54.0	87	53.6	44.4	187.3	0.6	61.2	44.4	187.8	1.0	61.0
Corporate	75	58.2	73	46.0	75	46.4	0.9	1.4	2.1	0.3	0.9	1.6	2.4	0.2
<b>Indonesia</b>														
Total	90	100.0	109	100.0	112	100.0	0.1	17.7	1.1	14.9	5.8	16.8	2.6	24.6
Government	82	90.9	99	90.6	100	89.6	0.3	19.6	0.04	13.3	5.9	18.7	1.6	22.8
Corporate	8	9.1	10	9.4	12	10.4	(1.2)	1.3	10.9	30.7	4.4	0.5	12.6	41.7
<b>Korea, Rep. of</b>														
Total	1,001	100.0	1,029	100.0	1,126	100.0	2.6	16.0	1.8	8.7	11.1	17.7	9.5	12.5
Government	460	45.9	458	44.5	498	44.2	2.4	17.1	1.2	4.6	10.8	18.9	8.8	8.3
Corporate	542	54.1	571	55.5	628	55.8	2.9	15.1	2.3	12.1	11.3	16.8	10.0	16.1
<b>Malaysia</b>														
Total	181	100.0	216	100.0	234	100.0	2.7	5.5	3.7	15.1	4.1	4.7	8.4	29.4
Government	101	55.6	124	57.7	137	58.4	2.8	4.7	5.1	20.9	4.2	3.9	9.9	35.9
Corporate	80	44.4	91	42.3	97	41.6	2.5	6.5	1.7	7.8	3.9	5.8	6.4	21.2
<b>Philippines</b>														
Total	59	100.0	66	100.0	72	100.0	2.3	7.5	3.6	13.0	3.4	6.3	9.4	22.4
Government	53	88.9	58	87.8	64	88.0	2.0	3.0	3.8	11.8	3.0	1.8	9.7	21.1
Corporate	7	11.1	8	12.2	9	12.0	5.4	65.8	1.7	22.4	6.5	63.9	7.4	32.6
<b>Singapore</b>														
Total	150	100.0	162	100.0	177	100.0	5.6	15.3	3.1	9.9	8.6	17.5	9.4	17.5
Government	87	57.9	92	56.7	97	55.0	6.0	20.7	0.0	4.5	9.1	23.0	6.1	11.7
Corporate	63	42.1	70	43.3	80	45.0	5.0	8.6	7.1	17.5	8.1	10.7	13.7	25.6
<b>Thailand</b>														
Total	172	100.0	198	100.0	217	100.0	6.2	15.8	2.5	14.2	8.3	17.0	9.5	26.0
Government	136	79.2	160	80.7	176	81.3	6.6	13.1	3.3	17.3	8.6	14.4	10.4	29.4
Corporate	36	20.8	38	19.3	40	18.7	5.0	27.2	(1.2)	2.6	7.0	28.6	5.6	13.1
<b>Viet Nam</b>														
Total	13	100.0	15	100.0	15	100.0	5.5	6.4	(1.0)	27.4	5.2	(1.0)	(3.1)	16.7
Government	12	92.7	14	90.8	14	91.3	2.8	3.3	(0.5)	25.5	2.6	(3.9)	(2.6)	15.0
Corporate	0.9	7.3	1	9.2	1	8.7	55.9	72.0	(6.1)	51.9	55.5	60.0	(8.1)	39.2
<b>Emerging East Asia (EEA)</b>														
Total	4,209	100.0	4,802	100.0	5,106	100.0	4.2	14.7	3.0	17.2	6.7	15.3	6.3	21.3
Government	2,998	71.2	3,392	70.6	3,550	69.5	3.6	9.5	1.9	14.6	5.3	10.0	4.7	18.4
Corporate	1,211	28.8	1,410	29.4	1,556	30.5	5.8	29.7	5.7	23.8	10.1	31.2	10.4	28.5
<b>EEA Less PRC</b>														
Total	1,795	100.0	1,954	100.0	2,115	100.0	3.9	15.7	2.1	11.8	9.6	16.9	8.2	17.8
Government	983	54.8	1,090	55.8	1,172	55.4	4.7	18.1	1.8	12.5	10.1	19.2	7.6	19.2
Corporate	811	45.2	864	44.2	942	44.6	2.9	12.9	2.5	10.9	9.0	14.1	9.1	16.1
<b>Japan</b>														
Total	9,831	100.0	10,466	100.0	11,228	100.0	1.3	2.3	1.1	6.3	8.8	21.2	7.3	14.2
Government	8,829	89.8	9,453	90.3	10,149	90.4	1.3	2.3	1.2	7.0	8.8	21.2	7.4	15.0
Corporate	1,001	10.2	1,013	9.7	1,079	9.6	1.2	2.4	0.3	0.2	8.6	21.2	6.5	7.7

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, emerging East Asia growth figures are based on end-September 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 (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 (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

bond market. Much attention has been given to the large inflows of foreign capital into the region's government bond markets, but there is also evidence of inflows of foreign capital into the region's corporate bond markets. Easy monetary conditions in mature markets, and more recently the quantitative easing policy of the United States (US) Federal Reserve, means that foreign investors may increase their exposure to LCY corporate bonds.

**Total government bonds outstanding grew by 1.9% q-o-q in 3Q10, reflecting low growth rates for all markets except Malaysia, the Philippines, and Thailand.**

The rapid growth of the government bond market was supported in 2Q10 by reform and restructuring measures in almost all emerging East Asian markets. However, in 3Q10 this strong growth trend was slowed by (i) a sharp reduction in issuance by the People's Bank of China (PBOC), (ii) an overall reduction in LCY bond issuance by the governments and central banks of both Indonesia and the Republic of Korea, and (iii) decreased issuance of treasury and other types of government bonds in Hong Kong, China; Thailand; and Viet Nam. The only markets to report significant growth in government bonds outstanding were Malaysia, the Philippines, and Thailand, which expanded 5.1%, 3.8%, and 3.3% q-o-q, respectively, and 20.9%, 11.8%, and 17.3% y-o-y, respectively.

In Malaysia, outstanding government LCY bonds surged 20.9% y-o-y to MYR421.6 billion, mainly due to the increase in outstanding central bank bills as Bank Negara Malaysia (BNM) continued to mop up excess liquidity in the market. Consumer price inflation in Malaysia rose between January and August due to an increase in domestic demand as public sector spending fueled economic growth. In September, consumer price inflation slid to 1.8% y-o-y from 2.1% in August.

Also, with the relaxation of foreign exchange rules, the Malaysian ringgit gained against the US dollar in 2Q10 and government bonds rallied on expectations of the ringgit's further appreciation,

which has already gained 8.7% against the US dollar since the beginning of the year.

Meanwhile, outstanding government LCY bonds in the Philippines rose 11.8% y-o-y to PHP2.8 trillion as of end-September, mainly due to the 15.6% y-o-y increase in outstanding government treasury bonds. In 3Q10, the government issued a total of PHP113.3 billion in government bonds (including PHP97.5 billion worth of 5-, 7-, and 10-year retail treasury bonds) to finance the fiscal deficit. The Philippine government posted a PHP259.8 billion fiscal deficit in the first 9 months of 2010 and has set its budget deficit ceiling for all of 2010 at PHP325 billion, or approximately 3.9% of gross domestic product (GDP).

The growth of outstanding government bonds in Thailand was driven more by issuance from the Bank of Thailand (BOT), resulting in BOT bonds and bills growing by 7.3% q-o-q compared with a 1.2% increase for central government bonds and a 2.2% decline for bonds of state-owned companies. Issuance by the central government in 3Q10 fell by 22.6% q-o-q due to a reduction of the expected budget deficit to 3.8% of GDP in the fiscal year 2010 (ending 30 September) compared with 4.3% in fiscal 2009.

**The corporate bond market in emerging East Asia expanded 5.7% q-o-q in 3Q10, compared with 4.9% in the previous quarter, led by the PRC, Indonesia, and Singapore.**

The Indonesian and Singaporean corporate bond markets grew 10.9% and 7.1% q-o-q, respectively, and were followed by the Republic of Korea's corporate bond market, which grew 2.3% in 3Q10. The fast-growing PRC corporate bond market expanded by 10.9% q-o-q and 50.5% y-o-y in 3Q10 on the back of continued growth in the medium-term note (MTN) and commercial paper markets, while the state-owned enterprise (SOE) segment staged a recovery from a slowdown in 2Q10. These trends offset the decline in bond issuance by commercial banks in the PRC since the beginning of the year. Commercial bank

bond issuance in the PRC is mostly in the form of subordinated notes, which can be counted as Tier II capital under the rules of the Bank for International Settlements. Banks in the PRC issued large amounts of subordinated bonds in 2008 and 2009, but have issued much less this year amid new equity issues.

The MTN market, which has helped spur massive growth in domestic corporate bonds over the past 2 years, posted substantial growth of 12.0% q-o-q in 3Q10, although this was down from 17.9% in the previous quarter. The q-o-q growth rate of the commercial paper market—the third largest sector within the PRC’s corporate bond market—fell to 9.0% in 3Q10 from 21.0% in 2Q10. These declines were largely offset by the SOE sector’s q-o-q growth rate of 7.9% in 3Q10, which was up from only 1.3% in 2Q10. The rise in q-o-q growth for SOE bonds may reflect a shift in corporate funding requirements to more long-term bonds, compared with the short- to medium-term funds available in the MTN and commercial paper markets.

The growth of the Indonesian and Singaporean corporate bond markets, however, was in many ways more impressive, because their growth reflects foreign investment funds’ interest in these markets as being home to desirable investment securities. Furthermore, both of these corporate bond markets benefit from relatively open investment environments. As a result, they are becoming more liquid and attracting greater interest from foreign and domestic investors alike.

The 2.3% q-o-q growth rate for the Republic of Korea’s corporate bond market in 3Q10 reflects major differences in growth rates for the major sectors of its large and diverse corporate bond sector. The commercial bank debenture sector, which accounts for about 29% of total corporate bonds, declined in size by 1.4% q-o-q and 4.1% y-o-y in 3Q10. However, the larger special public bond sector, which accounts for about 35% of the total corporate bond market, grew 6.6% q-o-q and 34.0% y-o-y, while the private corporate bond sector, which is about 36.0% of the total

corporate bond market, grew 1.3% q-o-q and 9.6% y-o-y.

The Philippine corporate bond market grew only 1.7% q-o-q in 3Q10, compared with 5.5% in 2Q10, in part due to large amounts of corporate issuance in US dollars during the quarter. However, market observers are hopeful for a recovery in peso bond corporate issuance during the rest of 2010 and early 2011, due to investment opportunities in the infrastructure and energy sectors, as well as increasing foreign interest in the Philippines and the higher returns offered by its corporate bonds.

The most important activity being financed by this rush of new corporate bond issuance in emerging East Asia is finance itself.<sup>3</sup> The largest volume of bonds outstanding was issued by companies in the financial sector, ranging from banks to securities companies to government-owned housing finance companies. Typically, the second- and third-largest volumes of corporate bonds outstanding in any particular market in 3Q10 were to be found in energy and infrastructure, respectively, although consumer goods companies were also important corporate bond issuers in some markets.

The only real exception to this generalization is the PRC, where energy companies have issued the largest stock of corporate bonds outstanding. Finance—mostly in the form of subordinated debt bonds issued by commercial banks—is second, followed closely by a category of diverse conglomerates, and then infrastructure.

Given the strong revival of the Asian growth outlook at present, a new cycle of energy and infrastructure investment can be expected to follow in the coming years, with much of it possibly financed by corporate bond issuance given the trend toward privatization of energy and infrastructure in emerging East Asia. There is also the possibility of expanded use of public-private partnerships for this purpose. More detail on individual corporate bond issuers can be found in the Market Summaries for each bond market at the end of this report.

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<sup>3</sup> This trend in the emerging East Asian corporate bond market was analyzed previously in the October issue of the *Asia Bond Monitor* (Chapter 2: Corporate Bond Market Developments).

## Ratio of Bonds Outstanding to Gross Domestic Product

**The ratio of LCY bonds outstanding to GDP in emerging East Asia was slightly larger in 3Q10 than in 2Q10.**

The ratio of LCY bonds outstanding to GDP in 3Q10 stood at 60.2%, which was slightly higher than the 58.7% reported for 2Q10 (**Table 2**). This reflected a slight rise in the ratio of government bonds to GDP from 41.5% in 2Q10 to 41.8% in 3Q10, and a somewhat larger increase in the ratio of corporate bonds to GDP from 17.2% in 2Q10 to 18.3% in 3Q10. The four markets that saw the greatest increase in their respective ratios of total bonds outstanding to GDP were the Republic of Korea, Malaysia, Singapore, and Thailand, while the only markets to see a decline in this ratio were Hong Kong, China; Indonesia; and Viet Nam. The PRC's ratio of total bonds to GDP was virtually unchanged.

## Issuance

**LCY bond issuance in emerging East Asia in 3Q10 totaled USD1.02 trillion, which represented increases of 6.0% q-o-q and 0.8% y-o-y.**

Total issuance of USD1.02 trillion in 3Q10 represented a 6.0% increase from USD938 billion in 2Q10, and a 0.8% increase from USD982 billion in 3Q09 (**Table 3**). Government bond issuance expanded 4.6% q-o-q, while corporate issuance grew 12.3%. In the government bond sector, issuance by central banks and monetary authorities rose by 4.2% q-o-q, while issuance of treasuries and other types of government bonds rose by 5.8% q-o-q, but fell by 7.2% on a y-o-y basis.

The 4.2% q-o-q growth rate for issuance by central banks and monetary authorities masked wider regional disparities. While issuance by the central banks of Thailand and Malaysia increased by 28.2% and 11.4% q-o-q, respectively, issuance by the central banks of the PRC, Indonesia, and the Republic of Korea actually declined.

**Table 2: Size and Composition of Emerging East Asian LCY Bond Markets (% of GDP)**

	3Q09	2Q10	3Q10
<b>China, People's Rep. of</b>			
<b>Total</b>	50.2	52.9	52.9
Government	41.9	42.7	42.1
Corporate	8.3	10.1	10.9
<b>Hong Kong, China</b>			
<b>Total</b>	61.5	72.9	72.2
Government	25.7	39.3	38.7
Corporate	35.8	33.6	33.5
<b>Indonesia</b>			
<b>Total</b>	15.9	16.5	16.1
Government	14.4	14.9	14.4
Corporate	1.4	1.6	1.7
<b>Korea, Rep. of</b>			
<b>Total</b>	113.3	112.5	123.2
Government	52.0	50.0	54.4
Corporate	61.3	62.4	68.7
<b>Malaysia</b>			
<b>Total</b>	93.3	95.3	103.3
Government	51.9	55.0	60.4
Corporate	41.4	40.4	42.9
<b>Philippines</b>			
<b>Total</b>	37.4	37.9	41.4
Government	33.2	33.2	36.4
Corporate	4.1	4.6	5.0
<b>Singapore</b>			
<b>Total</b>	80.7	79.2	86.6
Government	46.7	44.9	47.7
Corporate	34.0	34.3	39.0
<b>Thailand</b>			
<b>Total</b>	65.1	66.1	72.4
Government	51.6	53.3	58.9
Corporate	13.5	12.8	13.5
<b>Viet Nam</b>			
<b>Total</b>	14.0	16.5	15.6
Government	13.0	15.0	14.2
Corporate	1.0	1.5	1.4
<b>Emerging East Asia</b>			
<b>Total</b>	57.2	58.7	60.2
Government	40.7	41.5	41.8
Corporate	16.5	17.2	18.3
<b>Japan</b>			
<b>Total</b>	184.0	194.2	195.2
Government	165.2	175.4	176.5
Corporate	18.7	18.8	18.8

GDP = gross domestic product, LCY = local currency.

Notes:

1. Data for GDP is from CEIC. 3Q10 GDP figures for the Republic of Korea, Malaysia, Philippines, Singapore, and Thailand were carried over from 2Q10.  
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 (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 (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

**Table 3: LCY-Denominated Bond Issuance (gross)**

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	3Q10	% share	3Q10	% share	3Q10		3Q10	
					q-o-q	y-o-y	q-o-q	y-o-y
<b>China, People's Rep. of</b>								
<b>Total</b>	2,816	100.0	421	100.0	(0.1)	(5.0)	1.2	(3.1)
Government	2,222	78.9	332	78.9	(6.5)	(9.1)	(5.3)	(7.2)
Central Bank	1,274	45.2	190	45.2	(18.2)	(13.4)	(17.1)	(11.6)
Treasury and Other Govt	949	33.7	142	33.7	15.7	(2.5)	17.3	(0.5)
Corporate	594	21.1	89	21.1	34.3	14.0	36.2	16.3
<b>Hong Kong, China</b>								
<b>Total</b>	1,889	100.0	243	100.0	39.6	44.2	40.1	44.1
Government	1,844	97.6	238	97.6	40.3	46.2	40.7	46.0
Central Bank	1,841	97.5	237	97.5	40.5	46.3	40.9	46.1
Treasury and Other Govt	4	0.2	0.5	0.2	(22.2)	0.0	(22.0)	(0.1)
Corporate	45	2.4	6	2.4	16.8	(6.7)	17.2	(6.8)
<b>Indonesia</b>								
<b>Total</b>	264,115	100.0	30	100.0	(20.2)	(41.2)	(19.0)	(36.3)
Government	252,618	95.6	28	95.6	(22.0)	(43.4)	(20.7)	(38.7)
Central Bank	220,518	83.5	25	83.5	(21.5)	(47.5)	(20.3)	(43.1)
Treasury and Other Govt	32,100	12.2	4	12.2	(24.8)	22.2	(23.6)	32.5
Corporate	11,497	4.4	1	4.4	57.4	325.8	59.9	361.7
<b>Korea, Rep. of</b>								
<b>Total</b>	161,815	100.0	143	100.0	(12.8)	(25.2)	(6.2)	(22.5)
Government	80,457	49.7	71	49.7	(20.6)	(46.2)	(14.5)	(44.3)
Central Bank	57,190	35.3	50	35.3	(23.1)	(50.5)	(17.2)	(48.8)
Treasury and Other Govt	23,267	14.4	20	14.4	(13.6)	(31.7)	(7.1)	(29.2)
Corporate	81,358	50.3	72	50.3	(3.5)	22.3	3.8	26.6
<b>Malaysia</b>								
<b>Total</b>	115	100.0	37	100.0	7.7	29.6	12.6	45.7
Government	93	81.2	30	81.2	11.3	42.9	16.4	60.7
Central Bank	76	66.2	25	66.2	11.4	87.7	16.5	111.0
Treasury and Other Govt	17	15.0	6	15.0	11.0	(30.4)	16.0	(21.7)
Corporate	22	18.8	7	18.8	(5.8)	(7.6)	(1.5)	3.9
<b>Philippines</b>								
<b>Total</b>	181	100.0	4	100.0	24.0	(25.6)	31.0	(19.3)
Government	176	97.2	4	97.2	37.5	(24.6)	45.3	(18.2)
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	176	97.2	4	97.2	37.5	(24.6)	45.3	(18.2)
Corporate	5	2.8	0.1	2.8	(71.8)	(49.2)	(70.2)	(44.9)

continued on next page

Table 3 continued

	LCY billion		USD billion		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	3Q10	% share	3Q10	% share	3Q10		3Q10	
					q-o-q	y-o-y	q-o-q	y-o-y
<b>Singapore</b>								
<b>Total</b>	62	100.0	47	100.0	7.3	23.9	13.9	32.5
Government	56	90.6	42	90.6	3.5	19.0	9.9	27.2
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	56	90.6	42	90.6	3.5	19.0	9.9	27.2
Corporate	6	9.4	4	9.4	64.8	104.4	74.9	118.5
<b>Thailand</b>								
<b>Total</b>	2,991	100.0	99	100.0	16.5	9.8	24.5	21.1
Government	2,767	92.5	91	92.5	20.7	11.7	29.0	23.2
Central Bank	2,504	83.7	83	83.7	28.2	26.9	37.1	40.0
Treasury and Other Govt	263	8.8	9	8.8	(22.6)	(47.8)	(17.2)	(42.4)
Corporate	224	7.5	7	7.5	(18.5)	(8.9)	(12.9)	0.4
<b>Viet Nam</b>								
<b>Total</b>	8,650	100.0	0.4	100.0	(87.5)	(51.9)	(87.8)	(55.9)
Government	6,700	77.5	0.3	77.5	(89.4)	(43.6)	(89.6)	(48.3)
Central Bank	0	0.0	0.0	0.0	—	—	—	—
Treasury and Other Govt	6,700	77.5	0.3	77.5	(89.4)	(33.9)	(89.6)	(39.5)
Corporate	1,950	22.5	0.1	22.5	(66.7)	(68.0)	(67.4)	(70.7)
<b>Emerging East Asia (EEA)</b>								
<b>Total</b>	—	—	1,024	100.0	6.0	0.8	9.1	4.2
Government	—	—	837	81.8	4.6	(2.0)	7.4	1.4
Central Bank	—	—	610	59.6	4.2	0.1	6.8	3.3
Treasury and Other Govt	—	—	227	22.2	5.8	(7.2)	9.2	(3.5)
Corporate	—	—	187	18.2	12.3	15.6	17.5	19.5
<b>EEA Less PRC</b>								
<b>Total</b>	—	—	603	100.0	10.7	5.3	15.4	10.0
Government	—	—	505	83.8	13.5	3.3	17.8	7.9
Central Bank	—	—	420	69.6	19.1	7.7	22.8	11.9
Treasury and Other Govt	—	—	85	14.2	(7.5)	(14.0)	(2.0)	(8.2)
Corporate	—	—	98	16.2	(2.2)	17.1	4.4	22.6
<b>Japan</b>								
<b>Total</b>	50,046	100.0	600	100.0	5.3	4.2	11.8	11.9
Government	45,605	91.1	546	91.1	4.7	4.4	11.1	12.2
Central Bank	0	0.0	0	0.0	—	—	—	—
Treasury and Other Govt	45,605	91.1	546	91.1	4.7	4.4	11.1	12.2
Corporate	4,441	8.9	53	8.9	12.1	1.9	19.0	9.5

— = 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-September 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 (Indonesia Debt Management Office, Indonesia Stock Exchange, and Bank Indonesia); Republic of Korea (Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bloomberg LP); Singapore (Singapore Government Securities and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

The rise in overall central bank and monetary authority issuance in the region in 3Q10 is mostly explained by the 40.5% q-o-q increase in issuance by the Hong Kong Monetary Authority (HKMA). HKMA's issuance totaling USD237 billion (equivalent) in 3Q10 was larger than the USD190 billion (equivalent) of bonds and bills issued by the PBOC. HKMA's issuance pattern follows its currency board regime for managing Hong Kong, China's monetary policy and exchange rate.

Some monetary authorities have introduced capital controls and other administrative measures to offset the impact of rising capital inflows.

Bank Indonesia's issuance declined in 3Q10 because it began shifting most of its issuance from 1-month Sertifikat Bank Indonesia (SBIs) to 3-, 6-, and 9-month SBIs, sharply reducing roll-over financing requirements. Bank Indonesia also reduced its auction calendar from a weekly to monthly basis.

The Bank of Thailand's issuance reflected growing concerns over foreign capital inflows in 3Q10, which resulted in the imposition of a withholding tax on interest and capital gains for government securities, and the effective removal of all remaining controls on capital outflows.

In June, the Republic of Korea announced macro-prudential measures to mitigate the volatility of capital flows. On 18 November, the Republic of Korea's government announced it supported legislation being considered in the National Assembly to reimpose a 14% withholding tax on interest income and a 20% levy on capital gains from government bonds held by foreigners.

BNM increased its issuance of BNM bills in 3Q10 as the Malaysian central bank mopped up excess liquidity in the market amid concern over inflationary pressures in the economy.

In the PRC, issuance by the PBOC, which accounts for 31% of total central bank and monetary authority bond issuance in emerging East Asia,

declined by 18.2% q-o-q in 3Q10 as the PBOC began to tighten its monetary policy over concerns about inflation, particularly with respect to housing and food prices. On 20 October, the PBOC raised by 25 basis points each its 1-year lending rate to 5.56% and 1-year deposit rate to 2.50%, respectively.

Issuance by government entities (excluding central banks and monetary authorities) in 3Q10 was modest as governments in the region have generally begun to reduce their fiscal stimulus programs that were initiated in response to the global financial crisis. In fact, issuance of treasuries and other types of government bonds fell on a q-o-q basis 89.4% in Viet Nam; 24.8% in Indonesia; 22.6% in Thailand; 22.2% in Hong Kong, China; and 13.6% in the Republic of Korea. Government bond issuance grew 37.5% q-o-q in the Philippines as the new government responded to an increased 2010 budget deficit. PRC government bond issuance (including issuance by policy banks) rose 15.7% q-o-q, although it shrank 2.5% on a y-o-y basis.

Corporate issuance was the major driver of growth in overall issuance in the region in 3Q10, rising 12.3% q-o-q and 15.6% y-o-y. The q-o-q rise in corporate issuance was especially large in the PRC, Indonesia, and Singapore, growing at rates of 34.3%, 57.4%, and 64.8%, respectively. Corporate bond issuance declined sharply on a q-o-q basis in the Philippines, Thailand, and Viet Nam, with more modest declines seen in the Republic of Korea and Malaysia. Some of the region's declines in LCY corporate issuance may be the result of local companies arbitraging the LCY and foreign currency (FCY) markets in order to issue in US dollars or FCY while the monetary policy of the US Federal Reserve remains accommodative. Other market observers, however, believe that the downturn in LCY corporate bond issuance in some markets in 3Q10 merely reflected a respite from very active issuance in 1Q10 and 2Q10, and a new wave of issuance will take place in these markets—including the Philippines—in 4Q10 and early next year.



## Money Market Trends and Bills-to-Bonds Ratios

**The bills-to-bonds ratio fell in most emerging East Asian markets in 3Q10, mainly due to a decline in the ratio of central bank bills to bonds, rather than the ratio of treasury bills to bonds.**

The total bills-to-bonds ratio for five of the eight emerging East Asian markets surveyed fell in 3Q10 on a q-o-q basis (**Figure 2**). In addition, the bills-to-bonds ratio in Hong Kong, China also fell to 6.49 in 3Q10 from 6.74 in 2Q10. However, Hong Kong, China is not presented in Figure 2 as its ratio of bills to bonds is significantly higher than any other market in the region.

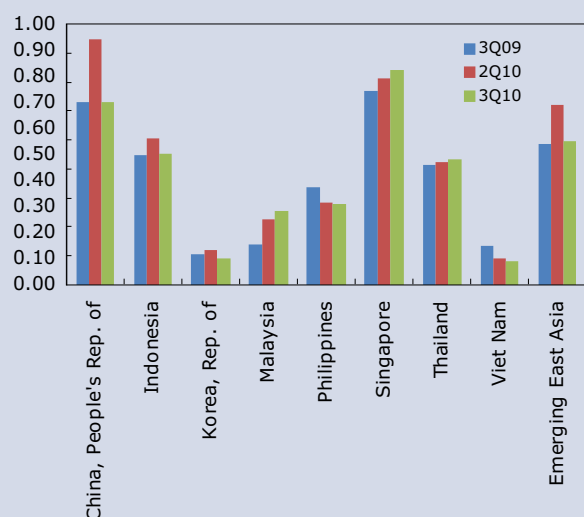
The primary reason for the drop in the total bills-to-bonds ratio in 3Q10 was the sharp decline in the region's ratio of central bank bills to bonds, which fell to 2.13 from 3.53 in 2Q10 (**Table 4**). This, in turn, reflected a drop in the PRC's ratio of central bank bills to bonds from 9.88 in 1Q10 to 6.37 in 2Q10, and then to 2.76 in 3Q10. In 2Q10, the

PRC's stock of central bank bonds rose by almost 60% q-o-q, and then again by 83.7% q-o-q in 3Q10. However, the PRC sharply cut its stock of central bank bills, which was more than six times larger than its stock of bonds at the end of 2Q10, by 20.5% q-o-q in 3Q10, resulting in an 18.2% reduction in the PBOC's total issuance.

The treasury bills-to-bond ratio for the region as a whole in 3Q10 was virtually unchanged from 2Q10 at 0.12. The ratio of treasury bills to bonds fell slightly in Viet Nam and Thailand, but these declines were more than offset by a rise in Singapore's ratio. Meanwhile, the ratio of treasury bills to bonds remained stable in Indonesia and the PRC.

The stabilization of the region's ratio of treasury bills to bonds has been a consequence of the reduction in growth rates for both treasury bonds and bills in recent quarters, as governments appear to be easing up on their various economic stimulus programs. The overall modest decline of the region's central bank bills-to-bonds ratio in 3Q10 indicates that central banks and monetary authorities have moderated their use of sterilization as a tool for dealing with the large capital inflows of the last year and, instead, may be focusing on selective capital controls and other administrative approaches to this problem.

**Figure 2: 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*.

## Foreign Holdings

**Foreign holdings of local domestic bonds continue to soar as investors chase yields, participate in the region's economic recovery, and seek to make additional gains from the anticipated appreciation of regional currencies.**

At the end of September, foreigners held 28.3% of Indonesian government debt. High yields and better economic prospects continued to attract foreign investors to Indonesian government bonds (**Figure 3**). Foreign holdings of Thai government bonds rose to 6.1% in 3Q10 from 4.2% in 2Q10. Meanwhile, the portion of foreign holdings at the end of June was 18.1% in Malaysia and 8.7%

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

	3Q09		2Q10		3Q10		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	3Q09	2Q10	3Q10	3Q10		3Q10	
										q-o-q	y-o-y	q-o-q	y-o-y
<b>China, People's Rep. of (PRC)</b>													
<b>Total</b>	1,358.6	100.0	1,516.6	100.0	1,523.0	100.0				(0.9)	9.9	0.4	12.1
<b>Total Bills</b>	524.8	38.6	695.8	45.9	587.7	38.6	0.63	0.85	0.63	(16.7)	9.7	(15.5)	12.0
Treasury Bills	110.1	8.1	92.1	6.1	101.1	6.6	0.17	0.13	0.13	8.3	(10.0)	9.8	(8.2)
Central Bank Bills	414.7	30.5	603.7	39.8	486.6	31.9	2.39	6.37	2.76	(20.5)	15.0	(19.4)	17.3
<b>Total Bonds</b>	833.7	61.4	820.8	54.1	935.3	61.4				12.4	9.9	14.0	12.2
Treasury Bonds	660.5	48.6	726.0	47.9	758.8	49.8				3.1	12.6	4.5	14.9
Central Bank Bonds	173.2	12.8	94.8	6.3	176.5	11.6				83.7	(0.1)	86.2	1.9
<b>Hong Kong, China</b>													
<b>Total</b>	53.7	100.0	85.7	100.0	86.5	100.0				0.6	61.2	1.0	61.0
<b>Total Bills</b>	44.3	82.5	74.6	87.1	75.0	86.6	4.70	6.74	6.49	0.1	69.4	0.5	69.2
Treasury Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Central Bank Bills	44.3	82.5	74.6	87.1	75.0	86.6	4.93	8.28	8.29	0.1	69.4	0.5	69.2
<b>Total Bonds</b>	9.4	17.5	11.1	12.9	11.6	13.4				4.1	22.7	4.4	22.6
Treasury Bonds	0.5	0.8	2.1	2.4	2.5	2.9				21.9	—	22.3	—
Central Bank Bonds	9.0	16.7	9.0	10.5	9.0	10.5				0.0	0.9	0.3	0.7
<b>Indonesia</b>													
<b>Total</b>	81.7	100.0	98.6	100.0	100.2	100.0				0.0	13.0	1.6	22.5
<b>Total Bills</b>	25.3	30.9	33.1	33.6	31.1	31.1	0.45	0.51	0.45	(7.4)	13.7	(5.9)	23.3
Treasury Bills	2.4	3.0	3.2	3.2	3.4	3.4	0.04	0.05	0.05	4.7	27.4	6.4	38.2
Central Bank Bills	22.8	27.9	29.9	30.4	27.8	27.7	—	—	—	(8.7)	12.2	(7.2)	21.7
<b>Total Bonds</b>	56.5	69.1	65.5	66.4	69.0	68.9				3.8	12.7	5.4	22.2
Treasury Bonds	56.5	69.1	65.5	66.4	69.0	68.9				3.8	12.7	5.4	22.2
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
<b>Korea, Rep. of</b>													
<b>Total</b>	361.1	100.0	393.0	100.0	426.0	100.0				0.8	13.9	8.4	18.0
<b>Total Bills</b>	34.8	9.6	41.6	10.6	36.3	8.5	0.11	0.12	0.09	(19.1)	0.6	(12.9)	4.1
Treasury Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
Central Bank Bills	34.8	9.6	41.6	10.6	36.3	8.5	0.42	0.43	0.33	(19.1)	0.6	(12.9)	4.1
<b>Total Bonds</b>	326.3	90.4	351.4	89.4	389.8	91.5				3.1	15.4	10.9	19.4
Treasury Bonds	243.7	67.5	253.8	64.6	281.2	66.0				3.0	11.4	10.8	15.4
Central Bank Bonds	82.6	22.9	97.6	24.8	108.6	25.5				3.4	27.0	11.2	31.5
<b>Malaysia</b>													
<b>Total</b>	99.3	100.0	124.1	100.0	136.4	100.0				5.1	22.1	9.9	37.3
<b>Total Bills</b>	12.0	12.1	22.7	18.3	27.6	20.2	0.14	0.22	0.25	16.0	104.0	21.3	129.4
Treasury Bills	1.2	1.3	1.3	1.1	1.4	1.0	0.01	0.01	0.01	0.0	0.0	4.6	12.4
Central Bank Bills	10.8	10.9	21.4	17.3	26.2	19.2	—	—	—	17.0	116.0	22.4	142.9
<b>Total Bonds</b>	87.3	87.9	101.3	81.7	108.8	79.8				2.6	10.9	7.3	24.6
Treasury Bonds	87.3	87.9	101.3	81.7	108.8	79.8				2.6	10.9	7.3	24.6
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
<b>Philippines</b>													
<b>Total</b>	50.8	100.0	55.3	100.0	60.7	100.0				4.0	10.5	9.9	19.7
<b>Total Bills</b>	12.8	25.2	12.2	22.1	13.2	21.7	0.34	0.28	0.28	1.9	(4.8)	7.7	3.2
Treasury Bills	12.8	25.2	12.2	22.1	13.2	21.7	0.34	0.28	0.28	1.9	(4.8)	7.7	3.2
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
<b>Total Bonds</b>	38.0	74.8	43.0	77.9	47.6	78.3				4.6	15.6	10.5	25.2
Treasury Bonds	38.0	74.8	43.0	77.9	47.6	78.3				4.6	15.6	10.5	25.2
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—

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Table 4 continued

	3Q09		2Q10		3Q10		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	3Q09	2Q10	3Q10	3Q10		3Q10	
										q-o-q	y-o-y	q-o-q	y-o-y
<b>Singapore</b>													
<b>Total</b>	87.1	100.0	91.7	100.0	97.3	100.0				0.0	4.5	6.1	11.7
<b>Total Bills</b>	35.0	40.2	38.0	41.5	41.4	42.5	0.67	0.71	0.74	2.6	10.5	8.9	18.2
Treasury Bills	35.0	40.2	38.0	41.5	41.4	42.5	0.67	0.71	0.74	2.6	10.5	8.9	18.2
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
<b>Total Bonds</b>	52.1	59.8	53.7	58.5	55.9	57.5				(1.9)	0.4	4.1	7.3
Treasury Bonds	52.1	59.8	53.7	58.5	55.9	57.5				(1.9)	0.4	4.1	7.3
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
<b>Thailand</b>													
<b>Total</b>	120.5	100.0	143.8	100.0	159.8	100.0				3.9	20.2	11.1	32.6
<b>Total Bills</b>	35.3	29.3	42.9	29.8	47.6	29.8	0.41	0.43	0.42	3.7	22.2	10.9	34.8
Treasury Bills	8.4	7.0	5.8	4.0	5.1	3.2	0.13	0.08	0.06	(17.6)	(45.2)	(12.0)	(39.6)
Central Bank Bills	26.9	22.3	37.1	25.8	42.5	26.6	1.20	1.35	1.34	7.1	43.2	14.4	58.0
<b>Total Bonds</b>	85.2	70.7	100.9	70.2	112.2	70.2				4.0	19.4	11.2	31.7
Treasury Bonds	62.8	52.1	73.4	51.0	80.5	50.4				2.6	16.3	9.7	28.3
Central Bank Bonds	22.4	18.6	27.5	19.1	31.7	19.8				7.6	28.1	15.1	41.3
<b>Viet Nam</b>													
<b>Total</b>	5.8	100.0	6.3	100.0	6.1	100.0				(1.7)	14.1	(3.8)	4.5
<b>Total Bills</b>	0.7	11.9	0.5	8.3	0.5	7.5	0.13	0.09	0.08	(11.9)	(28.3)	(13.8)	(34.3)
Treasury Bills	0.6	10.2	0.5	8.2	0.5	7.5	0.12	0.09	0.08	(10.2)	(16.5)	(12.0)	(23.5)
Central Bank Bills	0.1	1.7	0.0	0.2	0.0	0.0	—	—	—	(100.0)	—	(100.0)	—
<b>Total Bonds</b>	5.1	88.1	5.8	91.7	5.6	92.5				(0.8)	19.8	(2.9)	9.7
Treasury Bonds	5.1	88.1	5.8	91.7	5.6	92.5				(0.8)	19.8	(2.9)	9.7
Central Bank Bonds	0.0	0.0	0.0	0.0	0.0	0.0				—	—	—	—
<b>Emerging East Asia (EEA)</b>													
<b>Total</b>	2,218.7	100.0	2,515.1	100.0	2,596.1	100.0				0.2	12.8	3.2	17.0
<b>Total Bills</b>	725.1	32.7	961.6	38.2	860.3	33.1	0.49	0.62	0.50	(12.4)	15.1	(10.5)	18.6
Treasury Bills	170.6	7.7	153.1	6.1	166.0	6.4	0.14	0.12	0.12	5.1	(6.5)	8.4	(2.7)
Central Bank Bills	554.5	25.0	808.4	32.1	694.3	26.7	1.93	3.53	2.13	(15.7)	21.8	(14.1)	25.2
<b>Total Bonds</b>	1,493.6	67.3	1,553.5	61.8	1,735.8	66.9				7.8	11.8	11.7	16.2
Treasury Bonds	1,206.4	54.4	1,324.5	52.7	1,409.9	54.3				2.9	12.2	6.4	16.9
Central Bank Bonds	287.3	12.9	229.0	9.1	325.9	12.6				36.0	10.1	42.3	13.4
<b>EEA Less PRC</b>													
<b>Total</b>	860.1	100.0	998.5	100.0	1,073.0	100.0				1.8	17.4	7.5	24.8
<b>Total Bills</b>	200.2	23.3	265.8	26.6	272.6	25.4	0.30	0.36	0.34	(1.5)	28.5	2.6	36.1
Treasury Bills	60.5	7.0	61.0	6.1	64.9	6.0	0.11	0.10	0.10	0.5	(0.4)	6.3	7.3
Central Bank Bills	139.8	16.2	204.8	20.5	207.7	19.4	1.23	1.53	1.39	(2.1)	41.3	1.4	48.6
<b>Total Bonds</b>	659.9	76.7	732.7	73.4	800.5	74.6				2.9	14.0	9.2	21.3
Treasury Bonds	545.9	63.5	598.5	59.9	651.1	60.7				2.7	11.7	8.8	19.3
Central Bank Bonds	114.0	13.3	134.2	13.4	149.4	13.9				4.1	25.3	11.3	31.0
<b>Japan</b>													
<b>Total</b>	7,693.3	100.0	8,236.8	100.0	8,832.3	100.0				1.0	6.8	7.2	14.8
<b>Total Bills</b>	247.5	3.2	386.6	4.7	357.0	4.0	0.03	0.05	0.04	(13.0)	34.2	(7.7)	44.2
Treasury Bills	247.5	3.2	386.6	4.7	357.0	4.0	0.03	0.05	0.04	(13.0)	34.2	(7.7)	44.2
Central Bank Bills	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—
<b>Total Bonds</b>	7,445.7	96.8	7,850.1	95.3	8,475.3	96.0				1.7	5.9	8.0	13.8
Treasury Bonds	7,445.7	96.8	7,850.1	95.3	8,475.3	96.0				1.7	5.9	8.0	13.8
Central Bank Bonds	0.0	0.0	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, emerging East Asia growth figures are based on end-September 2010 currency exchange rates and do not include currency effects.

3. Total figures for each market refer to bills and bonds issued by the central government and the central bank. They exclude 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 (Indonesia Stock Exchange and Bank Indonesia); Republic of Korea (Bloomberg LP); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); Singapore (Singapore Government Securities); Thailand (Bloomberg LP); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

in the Republic of Korea. Malaysian government securities attracted greater attention from foreign investors due to higher yields during the year and prospects for a stronger ringgit, which were in large part realized in August when Malaysia reached an agreement with the PRC on currency trading.

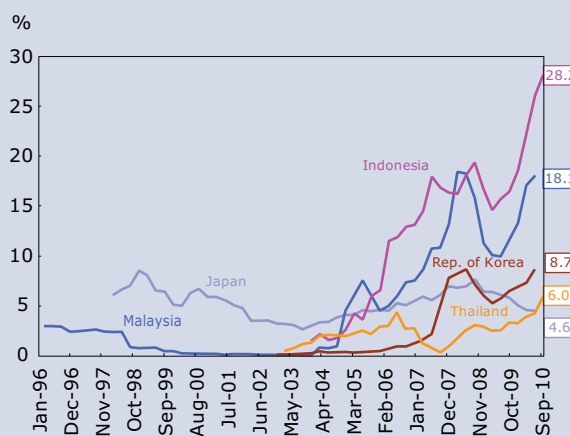
The Republic of Korea has seen a substantial rise in foreign holdings of its bonds this year, which reflects a number of factors: (i) removal of the withholding tax on government bonds in May 2009; (ii) improving performance of the Korea Treasury Bond (KTB) futures market, which makes it easier for market participants to hedge their investment positions; and (iii) entry of a new investor, the PRC, diversifying its foreign exchange holdings. The Financial Supervisory Service reported that the PRC’s net bond investments in the Republic of Korea for the first 9 months of 2010 stood at KRW3.3 trillion, which was second only to Luxembourg with KRW5.5 trillion.

## Maturity Profiles

**The maturity profiles for emerging East Asian government and corporate bond sectors stand—in many cases—in stark contrast to one another.**

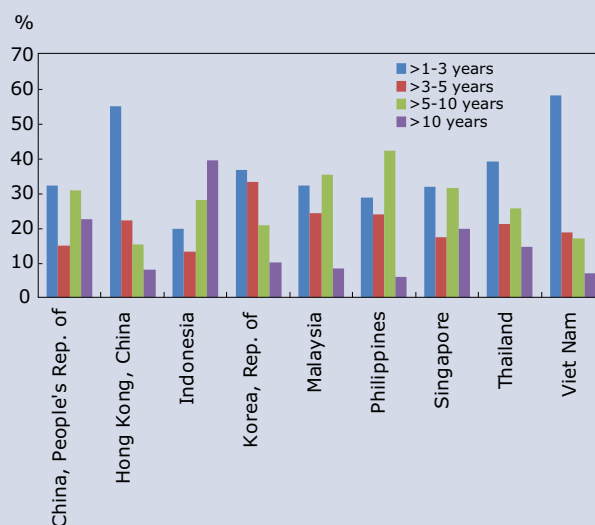
The maturity profile for most emerging East Asian government bond markets has changed little since the end of 2009. Maturities are concentrated at the shorter-end of the yield curve in Hong Kong, China; Republic of Korea; Thailand; and Viet Nam. These four markets, as well as markets in Malaysia and the Philippines, have 15% or less of their bonds outstanding in maturities of more than 10 years. The PRC and Singapore have a proportionately larger share of their bonds outstanding in maturities greater than 10 years. Indonesia, however, has structured its debt so that maturities of more than 10 years are the largest segment of its market (**Figure 4**). It remains to be seen whether the region’s governments will take advantage of lower bond yields to reduce the magnitude of their respective short-term maturities in the remaining months of 2010.

**Figure 3: Foreign Holdings of LCY Government Bonds (% of total)**



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

**Figure 4: Government Maturity Profile (individual maturities as % of total)**



Source: AsianBondsOnline.

The maturity profiles of emerging East Asia's individual corporate sectors generally stand in sharp contrast to their respective government bond sectors, reflecting their different funding requirements (**Figure 5**). The corporate bond markets of the Republic of Korea and Viet Nam have issued proportionately even more short-term debt, while the Hong Kong, China corporate sector's short-term debt is only 34% of the total. The short-term portion of Thai corporate debt was about 37% of the total.

The corporate bond markets of Malaysia, Philippines, Singapore, and Thailand carry proportionately less short-term debt than their respective government bond markets do. This may reflect the fact that many of the companies in these countries are involved in the property development, infrastructure, and energy sectors, and therefore need longer-term financing.

The maturity profiles of the corporate sector also tend to be bunched either in 3–5 or 5–10 year tenors. There is little exposure to tenors beyond 10 years in the corporate sector. Extending the tenor of corporate financing will be an objective of many

firms in the emerging East Asian corporate sector in coming years. In Singapore, the recent 40-year bond from Temasek provides a useful benchmark for extending corporate bond tenors.

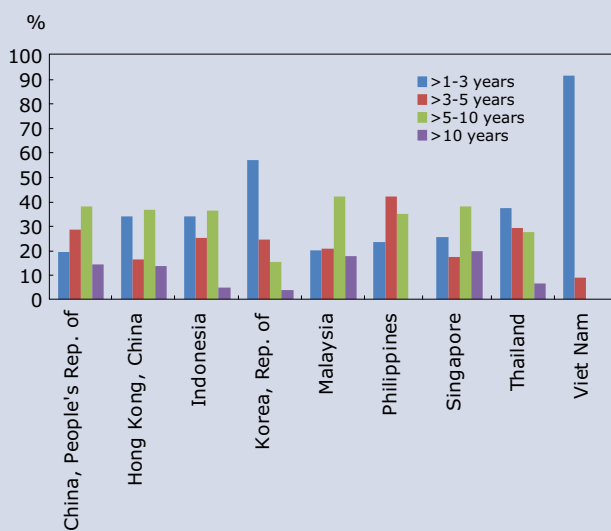
## Bond Turnover Ratios

**The government bond turnover ratios for Hong Kong, China; the Republic of Korea; Thailand; and the Philippines increased in 3Q10.**

In keeping with the experience from most quarters over the last several years, turnover ratios for government bonds in 3Q10 were much higher than for corporate bonds in all of the region's markets, except the PRC. However, turnover among government bonds varied greatly. Quarterly government bond turnover ratios in 3Q10 rose in six of the eight markets surveyed—the PRC; Hong Kong, China; Republic of Korea; Philippines; Singapore; and Thailand—but fell in the other two markets—Indonesia and Malaysia (**Figure 6a**). As has been the case in the past, the turnover ratio for government bonds in Hong Kong, China was higher than any other market by a factor of 10 or more. Most of Hong Kong, China's government sector debt consists of Exchange Fund Bills and Notes (EFBNs) issued by the HKMA for monetary policy purposes. One reason that the turnover ratio of EFBNs is consistently so high is that these instruments are important for bank liquidity management since they can be used as collateral when borrowing from the HKMA through repurchase agreements. Another factor contributing to the high liquidity of EFBNs is that they can be used as margin collateral for stock options and futures trading. Finally, recent changes in Hong Kong, China's market, especially the PRC's efforts to expand the role of the yuan in currency trading and bond purchases, seem to be benefiting liquidity in the Hong Kong, China market.

Past patterns also reasserted themselves once again in the region's turnover ratios for corporate bonds. The quarterly turnover ratio for the PRC's corporate bond market was larger than most other markets by a factor of four or more (**Figure 6b**).

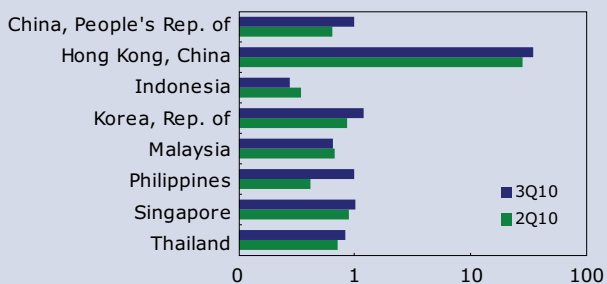
**Figure 5: Corporate Maturity Profile**  
(individual maturities as % of total)



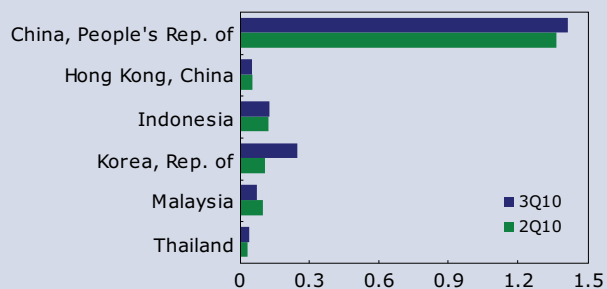
Source: AsianBondsOnline.

In addition, the PRC's corporate bond turnover ratio rose slightly in 3Q10, as did turnover ratios in most other markets. Only in Malaysia did the quarterly turnover ratio for corporate bonds decline in 3Q10.

**Figure 6a: Government Bond Turnover Ratios**



**Figure 6b: Corporate Bond Turnover Ratios**



**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 6a 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 (Bloomberg LP and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); and Thailand (Bank of Thailand and Thai Bond Market Association).

## Government Bond Yield Curves

**Yield curves for LCY government bonds have steepened recently on concerns of rising inflationary pressure and the impact of the US Federal Reserve's new round of quantitative easing.**

Between end-December 2009 and the end of 3Q10, yield curves for LCY government bonds flattened and in some cases shifted downward. Strengthened demand in 2Q10 for Asian government bonds

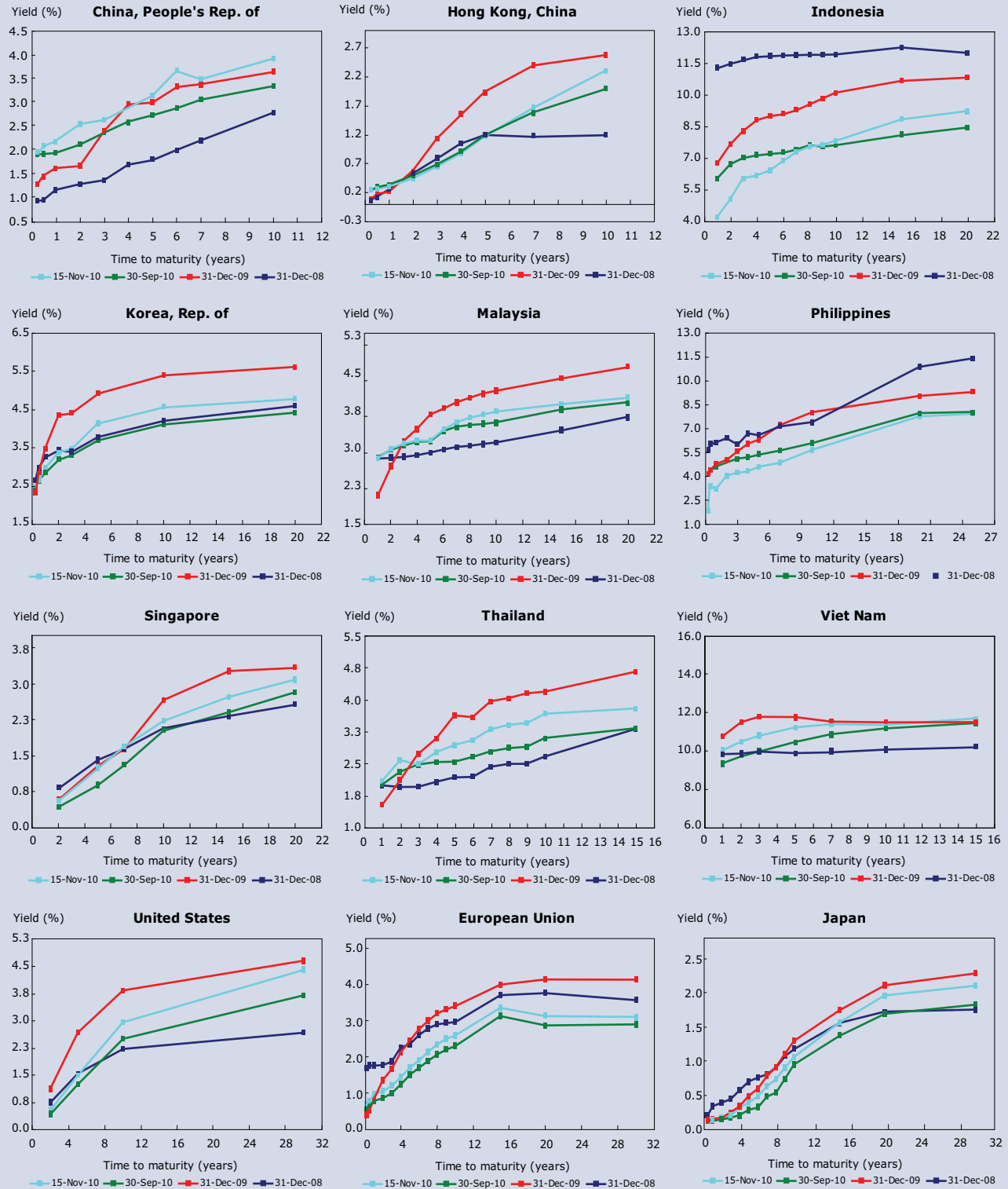
remained in 3Q10. The bullish flattening of the LCY government yield curves could be attributed to the following factors: (i) attractive yields and strong growth amid an uncertain global economic outlook, (ii) central banks' reserve diversification, (iii) anticipation of potential currency appreciations, and (iv) better hedging and risk management products.

Yield compression differed somewhat from market to market. Government bond yield curves for the PRC, Malaysia, Philippines, Singapore, and Thailand flattened from the belly to the long-end of the curve: (i) in the Philippines, yields beyond 5 years fell more than shorter-term tenors as the May presidential election reduced political uncertainty; (ii) the Indonesian yield curve flattened from the short-end through the very long-end of the curve; (iii) yield curves for Hong Kong, China and the Republic of Korea shifted downward except at very short-end; and (iv) the Vietnamese yield curve steepened, most dramatically for maturities under 5 years.

Since the end of 3Q10, these trends have reversed somewhat (**Figure 7**), as investors balanced their overall positive outlook against concerns over rising inflationary pressure in some markets; recent policy hikes in the PRC, the Republic of Korea, and Viet Nam; and concerns over the market impact of capital inflows and US quantitative easing:

(i) Government bond yield curves for the PRC; Hong Kong, China; Indonesia; and Thailand have steepened relative to end-3Q10 positions. However, this happened with a modest drop in yields since the end of 3Q10 at the short-end of the Hong Kong, China curve, and a sharp decline in yields at the short end of the Indonesian curve. (ii) Government bond yield curves for the Republic of Korea and Malaysia have also steepened through 10-year maturities and—in Singapore—through 15 years. (iii) Viet Nam's curve flattened relative to its end—3Q10 position, shifting sharply upward at its short-end. (iv) The Philippine yield curve was the exception—it has shifted sharply downward at its short-end since the end of 3Q10, resulting in a steepening of the overall curve, below 3Q10

**Figure 7: Benchmark Yield Curves—LCY Bonds**



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

levels. As of 15 November, several of the region’s curves had risen less for maturities over 10 years, suggesting that longer-term investors have retained their appetite for duration.

The underlying trend of declining long-term yields between the end of 2009 and the end of 3Q10—at a time when short-term yields were largely unchanged—resulted in a decline of the yield spread between 2- and 10-year government bond yields in all emerging East Asian bond markets except for Viet Nam (**Figure 8**). However, the sudden rise in 10-year yields between the end of September and 15 November reversed this trend, with yield spreads rising in all markets except Viet Nam.

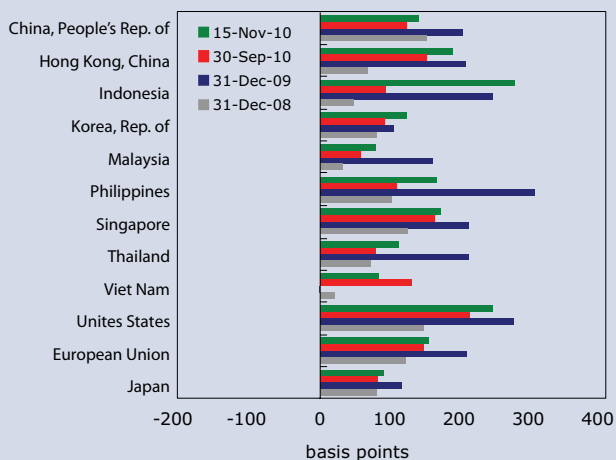
The near-term outlook for government bond yields is mixed. Bond yield curves might steepen further if inflationary expectations gain and East Asian central banks tighten further. On the other hand, ample global liquidity and sustained foreign capital inflows into LCY bond markets will continue to exert downward pressure on yield curves.

Some central banks are already normalizing rates (**Figure 9**) with others joining lately to keep a lid on rising inflationary pressures.

BNM raised its policy rate by 25 basis points in February, May, and July for a total increase of 75 basis points in 2010. Central banks in the Republic of Korea and Thailand raised their respective policy rates by 25 basis points in July, followed by the BOT in August and Bank of Korea in late November. In mid-October, the PBOC increased both its 1-year lending rate and 1-year deposit rate by 25 basis points each to 5.56% and 2.50%, respectively. The PBOC also raised its bank reserve ratio requirements twice in November. Finally, the State Bank of Vietnam raised its policy rate by 100 basis points to 9.0% in early November.

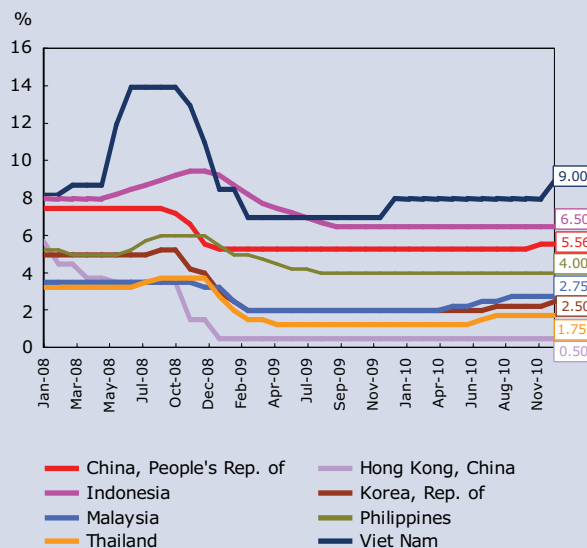
Current inflation trends in the region vary. (**Figure 10**). Inflation has risen recently in the PRC, the Republic of Korea, and Viet Nam, but fallen for several months in the Philippines, Thailand, and Indonesia.

**Figure 8: Yield Spread between 2- and 10-Year Government Bonds**



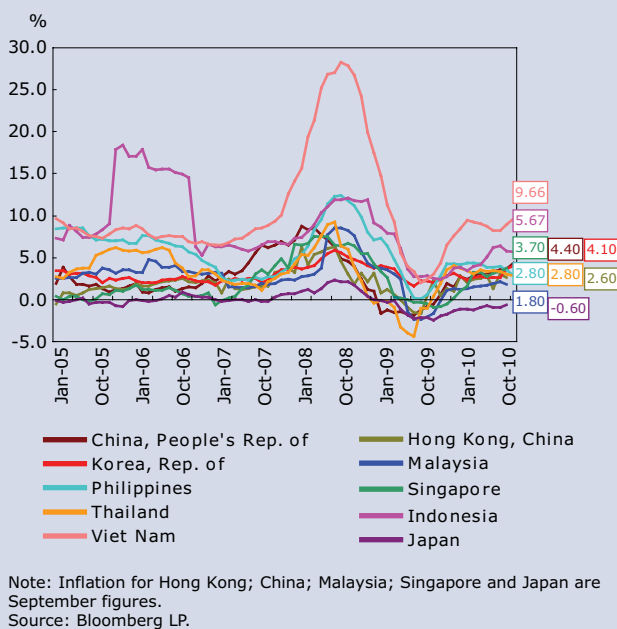
Source: Based on data from Bloomberg LP.

**Figure 9: Policy Rates (November 2010)**



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



**Figure 10: Headline Inflation Rates** (October 2010)

## Corporate Bond Credit Spreads

**High-grade corporate bond credit spreads have fallen in most markets since the end of December 2009, while credit spreads for lower-rated corporates have generally fallen only at the short-end of their respective curves and, in some cases, have risen.**

Credit spreads on high-grade corporate bonds—rated AAA—fell between end-December 2009 and mid-November 2010 along the entire length of the corporate bond credit curves of the PRC and the Republic of Korea (**Figure 11a**). The Malaysian curve steepened, with credit spreads rising above end-December 2009 levels for all maturities, except at the very short-end of the curve.

The behavior of the Thai yield curve was more complex. Thai credit spreads fell along the entire length of the curve compared with end-December 2009 levels, but Thai credit spreads fell much more for maturities of 1–3 years than for maturities of less than 1 year or more than 3.5 years.

Trends for lower-rated corporate bonds (**Figure 11b**) were unique for each of the four markets in which data were available:

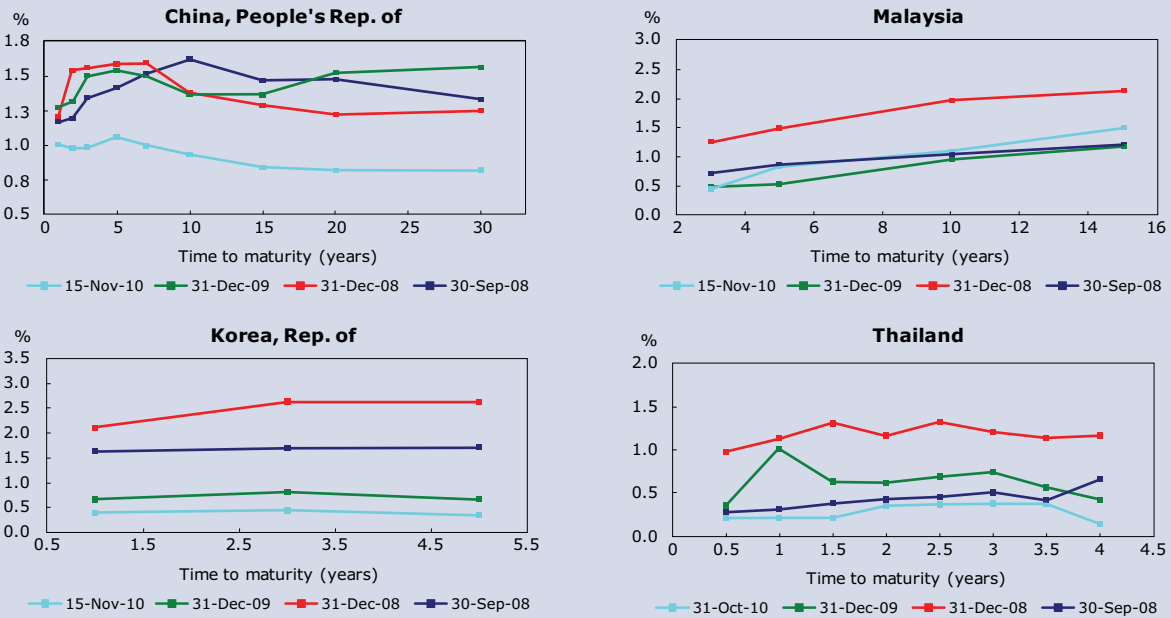
- (i) In the PRC, credit spreads with tenors of 15 years or more fell slightly, while credit spreads under 15 years fell significantly, especially for maturities under 5 years.
- (ii) In the Republic of Korea, credit spreads fell modestly between end-December 2009 and mid-November 2010. But instead of signaling a steepening of the curve, credit spreads simply fell below end-December 2009 levels along the entire length of the curve.
- (iii) In Malaysia, the credit curve steepened along its entire length relative to its position at end-December 2009.
- (iv) The trend for the lower-rated Thai credit curve was similar to that of the higher-rated curve, except that spreads on the lower-rated curve were roughly zero and therefore even lower than the 0.2%–0.3% spreads on the higher-rated curve. The short- and long-end of the lower-rated Thai credit curve also approached levels similar to those of end-September 2008, except for the very end of the curve, where the credit spreads rose above their end-December 2008 levels.

## G3 Currency Issuance

**G3 currency issuance in emerging East Asia reached USD77.8 billion in mid-November, which was significantly above the full-year 2009 level of USD63.2 billion.**

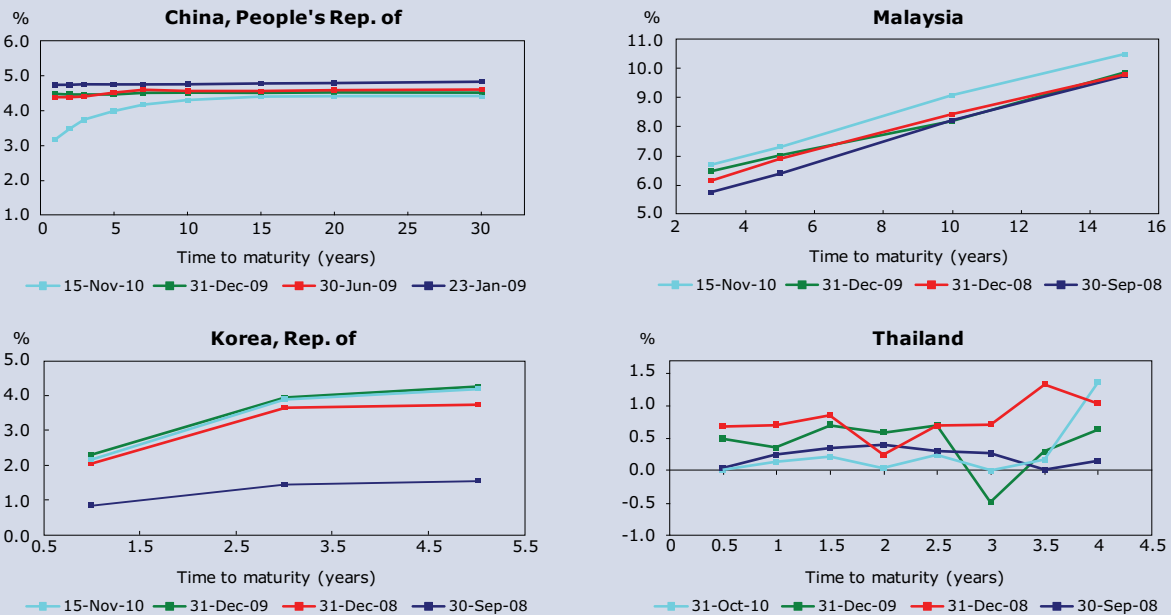
The new issuance of bonds denominated in G3 currencies in 2010 reached USD77.8 billion in mid-November. New issuance in G3 currencies was USD31.8 billion in the first half of 2010, with an additional USD45.9 billion issued between 1 July and 15 November (**Table 5**). This upsurge in G3 currency issuance reflected the return of investor appetite for the bonds of major Asian governments, corporations, and financial

**Figure 11a: Credit Spreads—LCY Corporates Rated AAA vs. Government Bonds**



Note:  
 1. Credit spreads 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 11b: 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).

**Table 5: G3 Currency Bond Issuance (1H10 and 1 July–15 November 2010)**

1H10			1 July–15 November 2010		
Issuer	USD million	Issue Date	Issuer	USD million	Issue Date
<b>China, People's Rep. of</b>	<b>4,770</b>		<b>China, People's Rep. of</b>	<b>5,900</b>	
Evergrande 13% 2015	1,350	27-Jan-10	China Overseas Finance 5.5% 2020	1,000	10-Nov-10
Agile Property 8.875% 2017	650	28-Apr-10	Sino-Ocean Land Capital 8.0% Perpetual	900	27-Jul-10
MCE Finance 10.25% 2017	600	17-May-10	Franshion Capital 6.8% Perpetual	600	12-Oct-10
Country Garden 11.25% 2017	550	22-Apr-10	China Resources Power 3.75% 2015	500	3-Aug-10
Citic Bank 6.875% 2020	500	24-Jun-10	Shimao Property 9.65% 2017	500	3-Aug-10
Kaisa Group 13.5% 2015	350	28-Apr-10	Country Garden 10.5% 2015	400	11-Aug-10
Others	770		Others	2,000	
<b>Hong Kong, China</b>	<b>5,405</b>		<b>Hong Kong, China</b>	<b>11,327</b>	
Bank of China (Hong Kong) 5.55% 2020	1,600	11-Feb-10	Hutch Whampoa 6.0% Perpetual	2,000	28-Oct-10
Bank of China (Hong Kong) 5.55% 2020	900	19-Apr-10	Sinochem 4.5% 2020	1,500	12-Nov-10
Li & Fung 5.25% 2020	750	13-May-10	PHBS 6.625% Perpetual	1,000	29-Sep-10
Fita International 7.0% 2020	750	10-Feb-10	Sino-Forest 6.25% 2017	600	21-Oct-10
CLP Power 4.75% 2020	500	19-Mar-10	Bank of East Asia 6.125% 2020	600	16-Jul-10
Noble Group 6.75% 2020	400	9-Feb-10	Hong Kong Land Finance 4.5% 2025	600	7-Oct-10
Others	505		Others	5,027	
<b>Indonesia</b>	<b>4,004</b>		<b>Indonesia</b>	<b>1,825</b>	
Indonesia Sovereign 5.875% 2020	2,000	19-Jan-10	Indonesia Sovereign (Samurai) 1.6% 2020	725	12-Nov-10
Star Energy 11.5% 2015	350	12-Feb-10	Indosat 7.375% 2020	650	29-Jul-10
Listrindo Capital 9.25% 2015	300	29-Jan-10	Berau Capital Resources 12.5% 2015	450	8-Jul-10
Others	1,354				
<b>Korea, Rep. of</b>	<b>10,833</b>		<b>Korea, Rep. of</b>	<b>15,630</b>	
Export-Import Bank of Korea 5.125% 2020	1,250	29-Jun-10	Export-Import Bank of Korea 4.0% 2021	1,000	20-Oct-10
Export-Import Bank of Korea 4.125% 2015	1,000	9-Mar-10	Polyvision 0.0% 2013	990	1-Oct-10
Korea Development Bank 4.375% 2015	750	10-Feb-10	Korea Development Bank 3.25% 2016	900	9-Sep-10
Shinhan Bank 4.375% 2015	700	15-Mar-10	Korea Finance Corp. 3.25% 2016	750	20-Sep-10
Hana Bank 4.5% 2015	500	30-Apr-10	Posco 4.25% 2020	700	28-Oct-10
Woori Bank 4.5% 2015	500	7-Apr-10	Korea Electric Power 3.0% 2015	700	5-Oct-10
Hynix Semiconductor 2.65% 2015	500	14-May-10	Korea National Oil Corp. 2.875% 2015	700	9-Nov-10
Hyundai Motors 4.5% 2015	500	15-Apr-10	Woori Bank 4.75% 2016	600	20-Jul-10
Others	5,133		Export-Import Bank of Korea 1.343% 2012	500	13-Sep-10
			Others	8,790	
<b>Malaysia</b>	<b>1,950</b>		<b>Malaysia</b>	<b>0</b>	
1Malaysia Sukuk 3.928% 2015	1,250	4-Jun-10			
Others	700		<b>Philippines</b>	<b>5,251</b>	
<b>Philippines</b>	<b>2,829</b>		Philippines Sovereign 4.0% 2021	2,242	6-Oct-10
Philippines Sovereign (Samurai) 2.32% 2020	1,070	2-Mar-10	Philippines Sovereign 6.375% 2034	950	6-Oct-10
Philippines Sovereign 6.5% 2020	650	13-Jan-10	Alliance Global 6.5% 2017	500	18-Aug-10
International Container Terminal 7.375% 2020	450	17-Mar-10	Others	1,559	
Others	658		<b>Singapore</b>	<b>3,936</b>	
<b>Singapore</b>	<b>845</b>		DBS Bank 2.375% 2015	1,000	14-Sep-10
CMT MTN 4.321% 2015	500	8-Apr-10	Bumi Investment 10.75% 2017	700	6-Oct-10
Others	345		STATS ChipPAC 7.5% 2015	600	12-Aug-10
			Others	1,636	
<b>Thailand</b>	<b>200</b>		<b>Thailand</b>	<b>2,050</b>	
Export-Import Bank 0.9% 2015	200	14-Jan-10	Bangkok Bank 4.8% 2020	800	18-Oct-10
			Others	1,250	
<b>Viet Nam</b>	<b>1,000</b>		<b>Viet Nam</b>	<b>0</b>	
Viet Nam Sovereign 6.75% 2020	1,000	29-Jan-10			
<b>Emerging East Asia Grand Total</b>	<b>31,835</b>		<b>Emerging East Asia Grand Total</b>	<b>45,919</b>	
<b>Memo Items:</b>			<b>Memo Items:</b>		
<b>India</b>	<b>3,579</b>		<b>India</b>	<b>4,610</b>	
Vedanta Resources 4.0% 2017	883	30-Mar-10	State Bank of India (London) 4.5% 2015	1,000	27-Jul-10
Bank of India (London) 4.75% 2015	500	31-Mar-10	Reliance Holdings (US) 4.5% 2020	500	19-Oct-10
IndianOil 4.75% 2015	500	22-Jan-10	ICICI Bank 5.0% 2016	500	15-Jul-10
Others	1,696		Others	2,610	
<b>Sri Lanka</b>	<b>378</b>		<b>Sri Lanka</b>	<b>1,195</b>	

Sources: Compilation from newspaper and wire reports.

institutions; a renewed search for yield; and low US interest rates.

The low level of US interest rates has allowed many banks and corporations in the Republic of Korea to issue bonds at lower coupons. As a result, the Republic of Korea accounted for the largest amount of new G3 currency issuance between the beginning of the year and mid-November at USD26.5 billion. The largest group of issuers in the Republic of Korea was the banks. In the first half of the year, the Export-Import Bank of Korea issued two bonds for a total of USD2.25 billion, while the Korea Development Bank (KDB) and Shinhan Bank issued bonds of USD750 million and USD700 million, respectively, with a further USD900 million issued by KDB in September. In September, Korea Finance Corp. issued USD750 million in bonds. The Export-Import Bank of Korea issued an additional USD500 million of bonds in September, and USD1.0 billion in October.

The next largest issuers of G3 currency bonds through mid-November were the PRC and Hong Kong, China. The PRC's total issuance

amounted to USD10.7 billion and included a number of prominent real estate developers. Issuance out of Hong Kong, China amounted to USD16.7 billion, including two issues from Bank of China (Hong Kong) totaling USD2.5 billion. And finally, the Philippine government issued two sovereign bonds in October (USD950 million and USD2.2 billion) under its dollar bond exchange program.

## Bond Market Returns

**Returns on LCY bonds for most markets have been buoyant in 2010, with Indonesia, the Philippines, Thailand, and Malaysia posting the largest gains.**

The Asian Bond Fund (ABF) Pan-Asian Bond Index has gained 11.2% to date in 2010, compared with 5.0% for all of 2009 (**Table 6**). The Indonesian bond market was the best performer, gaining 26.7%, followed by the Philippines (20.4%), Thailand (18.1%), and Malaysia (14.4%). The worst performing bond market in the ABF index was that of Hong Kong, China (3.7%), followed by the PRC (4.9%).

**Table 6: iBoxx Asia Bond Fund Index Family Returns**

Market	Modified Duration (years)	2009 Returns (%)		3Q10 Returns (%)		2010 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 Republic of	5.83	(0.64)	(0.69)	4.03	6.06	2.66	4.92
Hong Kong, China	3.89	(0.76)	(0.82)	3.74	3.67	3.71	3.69
Indonesia	5.77	20.22	35.61	19.36	24.62	21.46	26.66
Korea, Rep. of	3.74	1.94	9.73	8.04	10.20	7.88	11.37
Malaysia	4.82	0.48	1.64	5.11	15.49	4.84	14.41
Philippines	4.38	9.00	11.88	10.92	16.04	13.33	20.43
Singapore	5.80	0.48	3.06	5.18	11.30	5.15	12.66
Thailand	4.96	(3.47)	0.73	7.73	16.91	7.45	18.07
Pan-Asian Index	4.88	—	5.00	—	10.66	—	11.15
HSBC ALBI	8.20	—	6.13	—	11.22	—	12.07
US Govt 1-10 years	3.93	—	(1.38)	—	7.02	—	7.35

— = 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. 2010 returns are year-to-date as of 31 October 2010.
3. Annual return is computed for each year using natural logarithm of end-of-year index value/beginning of year index value.
4. Duration is as of 31 October 2010.

Source: *AsianBondsOnline* and Bloomberg LP.

These overall high returns, however, have been matched—broadly speaking—by the returns in Asia’s equity markets. The Morgan Stanley Capital International (MSCI) Far East ex-Japan Index has generated a return of 11.9% to date (**Table 7**). The largest returns in the MSCI index have come from Thailand, the Philippines, Indonesia, and Malaysia. These four markets were also the strongest performers in the ABF Index. Year-to-date returns in the equity markets of Hong Kong, China; Singapore; and the Republic of Korea have also been substantial, but still below the top four markets listed above. While the PRC’s returns in the MSCI index are positive, growth in 2010 has been in the single digits.

The appreciation of the region’s currencies in 2010 has helped to push up returns on LCY bonds (**Table 8**). As of mid-November, the Thai baht had gained 10.7% y-o-y against the US dollar, the Philippine peso 6.4%, the Malaysian ringgit 7.2%, and the Singaporean dollar 6.3%. The only currencies to decline against the US dollar have been the Vietnamese dong and the Hong Kong dollar, while the PRC yuan has only risen by 2.7% y-o-y.

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

Currency	2008	2009	3Q10		As of 15-Nov 2010	
	y-o-y	y-o-y	y-o-y	q-o-q	y-o-y	q-o-q
CNY	6.7	(0.02)	2.0	1.4	2.7	0.7
HKD	0.6	(0.04)	(0.1)	0.3	(0.03)	0.1
IDR	(18.7)	17.8	8.1	1.6	4.2	(0.8)
KRW	(29.7)	8.4	3.5	7.3	1.8	0.2
MYR	(4.5)	0.6	11.7	4.5	7.2	(1.8)
PHP	(13.9)	2.7	8.0	5.5	6.4	0.3
SGD	0.1	2.2	6.7	5.9	6.3	1.2
THB	(3.1)	3.9	9.8	6.7	10.7	1.4
VND	(8.8)	(5.5)	(8.8)	(2.1)	(8.7)	(0.1)
JPY	20.8	(2.6)	7.2	6.0	7.9	0.8

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

Notes:

1. Appreciation (depreciation) is equal to  $-\ln(\text{end-of-period rate}/\text{start-of-period rate})$ .

2. For 15 November 2010 q-o-q figures, appreciation (depreciation) is equal to  $-\ln(15 \text{ November 2010 rate}/\text{end-3Q10 rate})$ .

Source: Bloomberg LP.

**Table 7: MSCI Index Returns**

Market	2008 Returns (%)		2009 Returns (%)		2010 YTD Returns (%)	
	LCY terms	USD terms	LCY terms	USD terms	LCY terms	USD terms
China, People's Rep. of	(52.23)	(51.94)	58.89	58.80	5.57	5.59
Hong Kong, China	(53.16)	(52.88)	55.28	55.20	17.10	17.12
Indonesia	(50.76)	(57.57)	90.27	120.75	29.56	36.19
Korea, Republic of	(40.62)	(55.87)	56.63	69.42	8.96	12.76
Malaysia	(40.77)	(43.39)	46.25	47.78	18.35	30.23
Philippines	(46.77)	(53.79)	55.79	60.24	28.10	37.66
Singapore	(49.50)	(49.55)	63.02	67.29	6.13	15.12
Thailand	(48.72)	(50.34)	63.00	70.04	30.53	45.16
Far East ex-Japan Index	(48.14)	(51.96)	60.32	65.01	8.58	11.91
MSCI USA Index	—	(38.58)	—	24.20	—	6.38

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

Notes:

1. Market indices are from MSCI country indexes. 2010 returns are year-to-date as of 31 October 2010.

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.