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ASIA BOND MONITOR

NOVEMBER 2012

Asian Development Bank

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Printed in the Philippines.

ISSN 2219-1518 (Print), 2219-1526 (PDF)
ISBN 978-92-9092-908-6 (Print), 978-92-9092-909-3 (PDF)
Publication Stock No. RPS125215-3

Cataloging-In-Publication Data

Asian Development Bank.
Asia Bond Monitor—November 2012.
Mandaluyong City, Philippines: Asian Development Bank, 2012.

1. Regionalism. 2. Subregional cooperation. 3. Economic development. 4. Asia.
I. Asian Development Bank.

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Printed on recycled paper.

The *Asia Bond Monitor* (ABM) reviews recent developments in East Asian local currency bond markets along with outlook, risks, and policy challenges. It covers the 10 members of the Association of Southeast Asian Nations (ASEAN) plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.

The ABM is a part of the Asia Bond Market Initiative (ABMI), an ASEAN+3 initiative supported by the Asian Development Bank and funded by the Government of Japan.

Download the ABM at
http://www.asianbondsonline.adb.org/documents/abm_nov_2012.pdf

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The *Asia Bond Monitor* November 2012 was prepared by ADB's Office of Regional Economic Integration and does not necessarily reflect the views of ADB's Board of Governors or the countries they represent.

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Emerging East Asian Local Currency Bond Markets: A Regional Update

Emerging East Asian Local Currency Bond Markets: **A Regional Update**

Highlights

- The global economy that emerging East Asia faces remains weak, with growth in the United States (US) struggling to gain momentum and the eurozone economies slipping back into recession.[1] At the same time, the growth outlook for the region's economies has also worsened with the People's Republic of China's (PRC) growth expected to be at its lowest since the 2008/09 global financial crisis. The looming fiscal cliff in the US and the unresolved debt crisis in Europe continue to weigh on investor sentiment.

- Despite the uncertainties in global financial markets, the performance of local currency (LCY) bond markets has been robust. Total bonds outstanding in emerging East Asia's LCY bond market grew 3.5% quarter-on-quarter (q-o-q) and 11.0% year-on-year (y-o-y) to reach US$6.2 trillion in 3Q12, driven by a combination of strong growth in both the government and corporate bond sectors.

- The five most rapidly growing government bond markets in 3Q12 on a q-o-q basis were Malaysia, Singapore, the PRC, the Philippines, and Thailand. The q-o-q growth rates for these five markets were 4.8%, 4.0%, 3.9%, 3.6%, and 1.3%, respectively. The most rapidly growing corporate bond markets in 3Q12 on a q-o-q basis were Singapore, the PRC, Thailand, the Philippines, and the Republic of Korea.

- Issuance in emerging East Asia in 3Q12 totaled US$826 billion, a decrease of 3.8% on a q-o-q basis and 4.5% on a y-o-y basis. The decline in issuance in 3Q12 was largely due to the decline in central bank issuance of 16.7% q-o-q and 27.7% y-o-y. On the other hand, issuance of treasuries and other government bonds grew 6.0% on both a q-o-q and y-o-y basis in 3Q12. Issuance of corporate bonds grew 7.5% q-o-q and a very impressive 45.4% y-o-y in 3Q12.

- Most government bond yield curves in emerging East Asia have shifted downward since the end of 2Q12, but with different biases toward either flattening or steepening. Only the PRC yield curve shifted upward between end-June and end-October.

- Foreign holdings rose in Indonesia, Thailand, and Malaysia in 3Q12 over their respective levels at the end of 2Q12. On the other hand, the most recent data available for the Republic of Korea showed a slight decline in the share of foreign holdings from 11.1% at the end of 1Q12 to 10.0% at the end of 2Q12.

- Risks to the region's LCY bond markets are biased toward the downside. These risks include (i) the fiscal cliff that threatens the US recovery, (ii) the surge of capital inflows into the region, and (iii) higher inflation on supply-side shocks.

- Our analysis of interactions within Asian domestic financial markets shows the significance of both direct and indirect channels of shock and volatility transmission from mature markets to Asian local bond markets.

- The shocks emanating from mature government bond markets during the US and eurozone crises have had indirect spillovers; the effects were transmitted to domestic money markets, foreign exchange markets, and local bond markets. On the other hand, high-yield US and European Union corporate bond markets transmitted shock spillovers directly into Asian local bond markets. This validates investor perceptions of Asian debt as comprising high-yielding assets.

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

- Volatility spillovers were directly transmitted to Asian local bond markets during the US and eurozone crises. Their values were generally larger than the shock spillovers. Significant volatility spillovers have also been observed in Asian equity, currency, and money markets, underlining the threat of wider financial market contagion.

- The feedback and transmission of shock and volatility spillovers across Asian domestic financial markets underscores the importance of monitoring and coordinating policies not just within national jurisdictions, but also in the regional and global settings in order to maintain financial stability.

- The 2012 *AsianBondsOnline* Bond Market Liquidity Survey received 122 responses on government bonds and 92 responses on corporate bonds. This year's liquidity survey found that bid–ask spreads for both government and corporate bonds tightened in most markets in 2012, while average trading sizes also increased in most markets.

- Liquidity, as measured by quarterly turnover ratios, improved for most instruments in a number of markets. Some of the most significant improvements in turnover ratios were among central bank and treasury bonds in the PRC, central bank and government bonds in the Republic of Korea, and treasury bills in the Philippines. One of the most important features of the PRC bond market has been its large and vibrant repurchase (repo) market. The turnover ratios for repo transactions are typically higher than those for cash transactions.

- The 2012 survey identified greater investor diversity as the most important structural change needed to improve market liquidity. Foreign investors have continued to expand their share of bond holdings in most markets. Pension funds and insurance companies are rapidly increasing their shares of government bond holdings in both Thailand and the Philippines, while government agency and social security holdings of government bonds in the Republic of Korea are increasing steadily. Retail investors are also increasing their shares in some local bond markets.

Introduction: **Global and Regional Market Developments**

The global economy that emerging East Asia faces remains weak, with growth in the United States (US) struggling to gain momentum and the eurozone economies slipping back into recession.[2] At the same time, the outlook for the region's economies has also worsened as growth in the People's Republic of China's (PRC) is expected to fall to its slowest since the 2008/09 global financial crisis. The looming fiscal cliff in the US and the unresolved debt crisis in Europe are the key risks facing investors.

The eurozone debt crisis remains unresolved. The European Central Bank's (ECB) commitment to do what is needed to preserve the euro has boosted investor confidence in the currency. While the threat of a eurozone breakup has receded, Europe is still struggling with dismal economic conditions. There is growing discontent over the hardship brought about by austerity measures. Greece is struggling to make its debt payments even after restructuring; Spain is likely to seek further assistance as it finds it difficult to reduce its fiscal deficit. Any worsening of the eurozone debt crisis will likely cause an increase in investors' risk perception and prompt an outflow from the region's bond markets.

Export growth across the region was down sharply in most of 3Q12 due to weaker external demand. Slower growth in the PRC has also been a factor. The newly industrialized economies with close trading and financial ties with the PRC—such as Singapore; the Republic of Korea; and Hong Kong, China—have seen their growth moderate significantly as well. To address the slowdown, the PRC has rolled out new stimulus measures and eased its monetary policies. Several other economies have also cut their policy rates to boost spending.

Even with the uncertain economic outlook and signs of slower regional growth, investor perceptions of risk in the region's capital markets remain favorable, with bond yields falling, stock markets rising, and currencies appreciating **(Table A)**. Markets for credit default swap (CDS) spreads remain calm **(Figures A and B)**, and emerging bond market spreads have been narrowing, reflecting investor confidence **(Figure C)**. The announcement that the ECB is committed to preserving the euro has helped allay some fears of a eurozone break-up for the time being. This has resulted in sharply lower CDS spreads for select European bonds.

Yields on government bonds in mature markets remained broadly stable in 3Q12, with a slight downward bias **(Figure D)**. This reflected continued market demand for safe assets and a supply that is dwindling. Low inflation expectations have also contributed to lower yields. The commitment by the ECB to buy unlimited amounts of government bonds has helped drive down bond yields in Europe, particularly in Ireland and Portugal. The threat of a breakup in the eurozone has faded and market confidence in the euro has distinctly improved, as reflected by the strengthening of the euro.

Most emerging East Asian LCY bond yields have been declining since end-July. Concerns over weak growth in the first half of the year and continued low inflation have prompted the Republic of Korea, the Philippines, and Thailand to cut their policy rates. In addition, low interest rates in advanced economies and a new round of quantitative easing by the US Federal Reserve will help push more funds into the region in search of higher yields. Both Korean and Philippine sovereign bond ratings have recently been upgraded one notch. (Meanwhile, Viet Nam was recently downgraded over concerns about the health of its banking sector.) As a result, the spreads for emerging market bonds have tightened **(Figure E)**.

Foreign holdings in the region's LCY government bond markets have mostly risen **(Figure F)**. At end-September, foreign investors held nearly

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

Table A: Changes in Global Financial Conditions, 31 July–31 October 2012

	2-Year Government Bond (bps)	10-Year Government Bond (bps)	5-Year Credit Default Swap Spread (bps)	Equity Index (%)	FX Rate (%)
Major Advanced Economies					
United States	(2)	5	0	3.7	–
United Kingdom	(2)	(2)	(40)	3.8	2.7
Japan	(1)	(1)	(19)	(3.5)	(0.03)
Germany	(9)	(9)	(73)	13.2	2.3
Emerging East Asia					
China, People's Rep. of	63	24	(52)	(7.0)	(1.8)
Hong Kong, China	1	(29)	(28)	11.3	(0.1)
Indonesia	6	(44)	(63)	10.0	2.0
Korea, Rep. of	(52)	(66)	(55)	3.1	(4.8)
Malaysia	2	(5)	(50)	4.6	(4.1)
Philippines	(31)	(58)	(55)	3.4	(2.3)
Singapore	9	(27)	0	5.6	(3.6)
Thailand	(36)	(18)	(57)	10.8	(2.7)
Viet Nam	15	40	–	(8.0)	(0.3)
Select European Markets					
Greece	(109)	(635)	0	31.1	2.3
Ireland	(220)	(134)	(382)	3.2	2.3
Italy	(121)	(83)	(215)	8.9	2.3
Portugal	(392)	(264)	(356)	14.0	2.3
Spain	(122)	(67)	(231)	10.4	2.3

– = not available, ( ) = negative, bps = basis points, FX = foreign exchange.
Notes:
1. For emerging East Asia, positive value for FX rate means depreciation of local currency against US dollar.
2. For European markets, positive value for FX rate means appreciation of local currency against US dollar.
Source: Bloomberg LP, Institute of International Finance (IIF), and Thomson Reuters.

30% of Indonesian and Malaysian government bonds, and about 15% of Thai government bonds. Only the Republic of Korea experienced declining foreign participation, resulting in a drop of the share of foreign holdings to 10.0% at end-June from 11.1% at end-December 2011.

Total bonds outstanding in emerging East Asia's LCY bond market rose 3.5% quarter-on-quarter (q-o-q) and 11.0% year-on-year (y-o-y) to reach US$6.2 trillion at end-September. Corporate bonds outstanding grew 4.2% q-o-q in 3Q12, compared with a lower growth rate of 3.1% for government bonds. Given rapid corporate bond market growth over the last several years, the size of the region's corporate bond market reached US$2.2 trillion at the end of 3Q12, or slightly more than half of the government bond market's size of US$4.1 trillion.

At end-March, emerging East Asia's share of the global bond market had grown to 8.6% from 8.4% at end-December 2011 **(Table B)**. The PRC and the Republic of Korea continued to be the largest bond markets in the region apart from Japan, accounting for 5.1% and 1.9%, respectively, of the global total.

Risks to the region's LCY bond markets have tilted to the downside:

(i) **Fiscal cliff threatens US recovery.** The looming fiscal cliff threatens to considerably tighten the fiscal stance in the US at a time when the recovery is still fragile. A divided US Congress will have to find a way to craft a consensus to avert the forthcoming expiration of tax cuts and reductions in government spending. Without an agreement, the fiscal cliff scenario has the potential to push the US economy into a recession in 1Q13. The likely impact on bond yields is uncertain and depends on the outcome of the budget negotiations. An agreement that averts the

Figure A: Credit Default Swap Spreads[a, b] (senior 5-year)

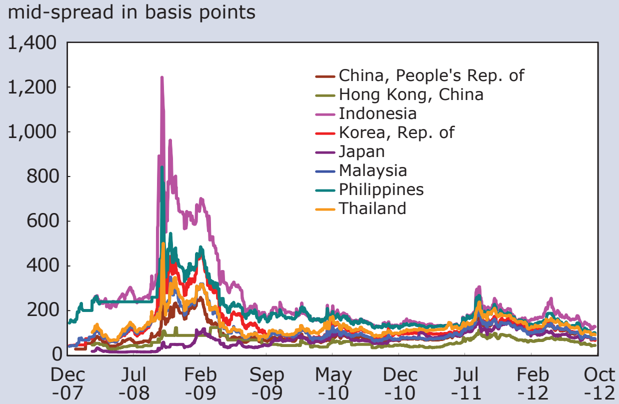


Figure B: Credit Default Swap Spreads for Select European Markets[a, b] (senior 5-year)

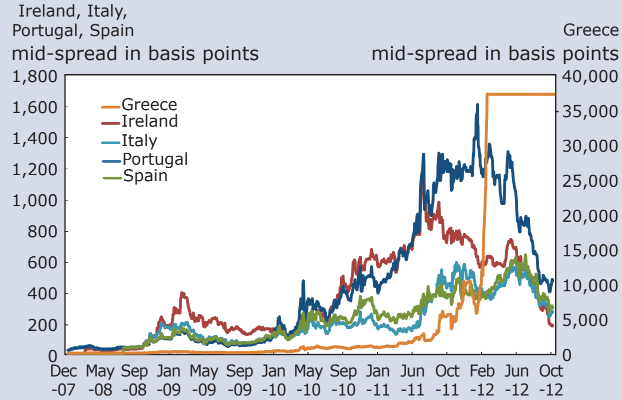


Figure C: US Equity Volatility and Emerging Market Sovereign Bond Spreads[b]

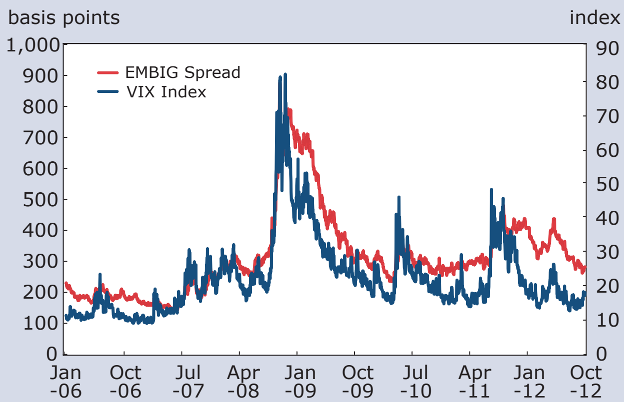


Figure D: 10-Year Government Bond Yields (% per annum)

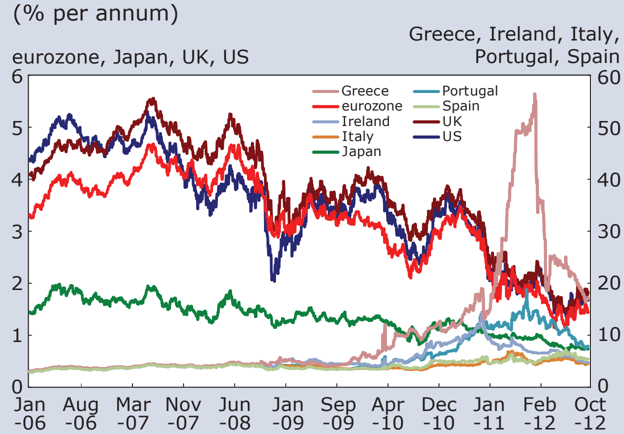


Figure E: JPMorgan EMBI Sovereign Stripped Spreads[a,b]

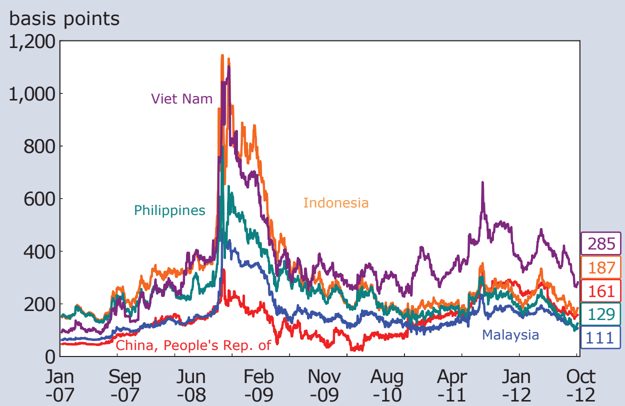
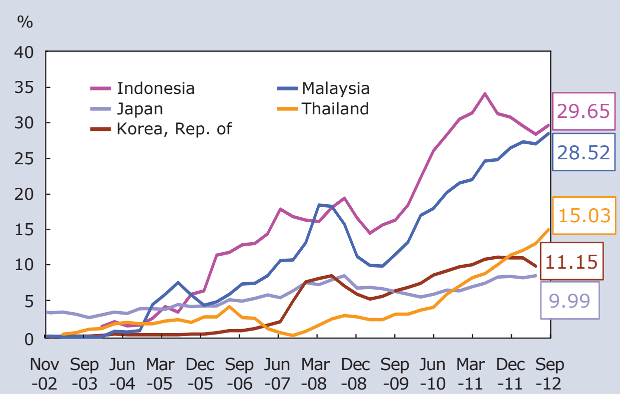


Figure F: Foreign Holdings of LCY Government Bonds in Select Asian Economies[c] (% of total)



EMBI = Emerging Markets Bond Index, EMBIG = Emerging Markets Bond Index Global, UK = United Kingdom, US = United States, VIX = Chicago Board Options Exchange Volatility Index.

Notes:

[a] In US$ and based on sovereign bonds.

[b] Data as of 31 October 2012.

[c] Data as of end-September 2012 except for the Republic of Korea and Japan as of end-June 2012.

Source: *AsianBondsOnline*, Bloomberg LP, and Thomson Reuters.

Table B: Bonds Outstanding in Major Markets (US$ billion)

Economy	March 2012		1996	
	LCY Bonds Outstanding	% of World Total	LCY Bonds Outstanding	% of World Total
United States	26,391	38.7	10,926	42.9
Japan	11,897	17.4	4,456	17.5
France	3,574	5.2	1,261	4.9
Germany	2,621	3.8	1,888	7.4
United Kingdom	1,823	2.7	678	2.7
Emerging East Asia	5,886	8.6	528	2.1
of which: PRC	3,448	5.1	62	0.2
Emerging East Asia excl. PRC	2,438	3.6	466	1.8
of which: Korea, Rep. of	1,290	1.9	283	1.1
of which: ASEAN-6	977	1.4	149	0.6
Indonesia	111	0.2	7	0.0
Malaysia	298	0.4	71	0.3
Philippines	87	0.1	28	0.1
Singapore	211	0.3	25	0.1
Thailand	250	0.4	18	0.1
Viet Nam	20	0.03	–	–
Memo Items:				
Australia	1,135	1.7	248	1.0
Brazil	1,568	2.3	299	1.2
PRC (excl. policy bank bonds)	2,359	3.5	–	–
India	621	0.9	81	0.3
Russian Federation	99	0.1	43	0.2
South Africa	218	0.3	82	0.3

– = not available, ASEAN = Association of Southeast Asian Nations, LCY = local currency, PRC = People's Republic of China.
Source: *AsianBondsOnline* and Bank for International Settlements.

fiscal cliff scenario without addressing the long-run sustainability of US deficits may not be welcomed by the market.

(ii) **Surge of capital inflows into the region.** The latest round of quantitative easing by the US Federal Reserve and the expansion of the asset purchase program by the Bank of Japan will lead to continued low interest rates in advanced economies. This has raised concerns that emerging East Asia could be subject to a surge in capital inflows, potentially causing exchange rates to rise and making exports less competitive. The excess global liquidity could also lead to higher credit growth that fuels asset price bubbles in the region.

(iii) **Higher inflation on supply-side shocks.** Inflationary conditions have been benign in the region, which has helped to underpin the decline in yields. However, the region faces the potential of upward inflationary pressures from high food prices as the summer drought in the US reduced its harvest of corn and soybeans. With food accounting for a relatively large share of the region's consumption basket, any spike in food prices could result in higher inflation.

Bond Market Developments in the Third Quarter of 2012

Size and Composition

Total bonds outstanding in emerging East Asia's LCY bond market grew 3.5% q-o-q and 11.0% y-o-y to reach US$6.2 trillion at the end of 3Q12, driven by of strong growth in both the government and corporate bond sectors.[3]

The quarter-on-quarter (q-o-q) growth rate for emerging East Asia's local currency (LCY) bond market was 3.5% in 3Q12, up from 1.9% in 2Q12. On a q-o-q basis, the five most rapidly growing markets in the region were Singapore, the People's Republic of China (PRC), Malaysia, the Philippines, and the Republic of Korea, which grew 6.1%, 4.2%, 4.1%, 3.7%, and 2.1%, respectively **(Table 1)**. These q-o-q growth rates were significantly higher than in 2Q12 in most of the region's individual bond markets **(Figure 1a)**.

The year-on-year (y-o-y) growth rate for emerging East Asia's LCY bond market rose to 11.0% in 3Q12 from 8.6% in 2Q12 **(Figure 1b)**, as growth for both the government and corporate bond sectors accelerated from their 2Q12 levels. The y-o-y growth rate for government bonds rose to 7.8% in 3Q12 from 5.5% in 2Q12, while the y-o-y growth rate for corporate bonds rose to 17.6% in 3Q12 from 15.2% in 2Q12.

The region's most rapidly growing bond markets on a y-o-y basis in 3Q12 were those of Viet Nam, Singapore, the Philippines, Malaysia, and Thailand, which grew 21.4%, 18.1%, 16.1%, 15.7%, and 14.4%, respectively. The growth of Viet Nam's bond market on a y-o-y basis was driven entirely by its treasury bond market in 3Q12, while the size of its corporate bond market shrank 21.4%. In the other four markets mentioned above, both the government and corporate bond sectors grew at double-digit rates on a y-o-y basis, but growth in Singapore, the Philippines, and Thailand was led by their respective corporate bond markets. Malaysia's y-o-y growth was more evenly balanced between its government and corporate bond markets: 16.1% for the government bond market and 15.3% for the corporate bond market.

Total government bonds outstanding grew 3.1% q-o-q in 3Q12, reflecting a dichotomy of very rapid growth in five markets and slower or negative growth in the region's remaining four markets.

The region's five most rapidly growing government bond markets in 3Q12 on a q-o-q basis were Malaysia, Singapore, the PRC, the Philippines, and Thailand. The q-o-q growth rates for these five markets were 4.8%, 4.0%, 3.9%, 3.6%, and 1.3%, respectively. On the other hand, the government bond markets of the Republic of Korea; Hong Kong, China; Indonesia; and Viet Nam grew at q-o-q rates of 0.4%, 0.1%, –0.1%, and –1.7%, respectively.

The slower growth for government bond markets—compared to corporate bond markets—has been a result of the sharp reduction in issuance by central banks and monetary authorities as they have retreated from the aggressive sterilization measures pursued in previous years. The stock of bills of The Bank of Korea (BOK) fell 3.4% q-o-q in 3Q12. The stock of Hong Kong Monetary Authority (HKMA) bills grew only 0.1% q-o-q in 3Q12. Bank Indonesia (BI) has reduced issuance of *Sertifikat* Bank Indonesia (SBI) over the last several years, resulting in a decline of the stock of SBI outstanding from levels well above US$30 billion in the first half of 2010 to only US$7 billion at the end of 3Q12. Furthermore, the stock of SBI fell 23.9% q-o-q and 53.3% y-o-y in 3Q12. SBI

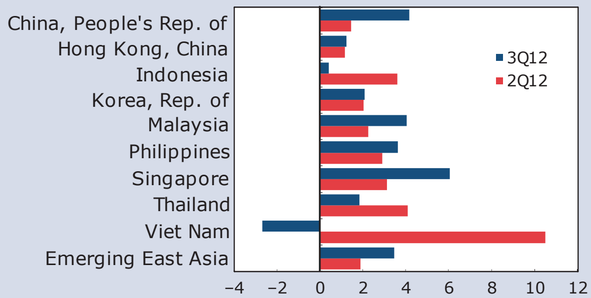
[3] Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Table 1: Size and Composition of LCY Bond Markets

	3Q11		2Q12		3Q12		Growth Rate (LCY-base %)				Growth Rate (US$-base %)			
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	3Q11		3Q12		3Q11		3Q12	
							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	3,247	100.0	3,469	100.0	3,654	100.0	0.5	3.5	4.2	10.8	1.8	8.6	5.3	12.5
Government	2,474	76.2	2,580	74.4	2,711	74.2	0.1	(0.7)	3.9	7.9	1.4	4.1	5.0	9.6
Corporate	773	23.8	889	25.6	943	25.8	1.8	20.0	5.0	20.2	3.1	25.9	6.1	22.0
Hong Kong, China														
Total	170	100.0	174	100.0	176	100.0	1.6	5.7	1.3	3.3	1.5	5.3	1.3	3.7
Government	90	52.8	93	53.5	93	52.8	1.9	3.8	0.1	3.4	1.8	3.5	0.1	3.8
Corporate	80	47.2	81	46.5	83	47.2	1.2	7.8	2.6	3.3	1.2	7.4	2.7	3.7
Indonesia														
Total	111	100.0	111	100.0	110	100.0	(2.9)	(1.8)	0.4	7.4	(6.2)	(1.5)	(1.2)	(0.6)
Government	96	86.3	94	84.2	92	83.8	(3.7)	(5.6)	(0.1)	4.2	(6.9)	(5.2)	(1.7)	(3.6)
Corporate	15	13.7	18	15.8	18	16.2	2.0	30.5	3.1	27.2	(1.4)	31.0	1.4	17.7
Korea, Rep. of														
Total	1,179	100.0	1,302	100.0	1,370	100.0	2.1	8.6	2.1	9.6	(7.4)	5.1	5.2	16.2
Government	501	42.5	525	40.3	543	39.6	1.2	4.4	0.4	2.2	(8.3)	1.1	3.5	8.4
Corporate	678	57.5	777	59.7	827	60.4	2.9	11.9	3.3	15.1	(6.8)	8.3	6.4	22.0
Malaysia														
Total	263	100.0	294	100.0	318	100.0	3.4	16.5	4.1	15.7	(2.1)	12.7	8.1	20.7
Government	158	60.1	176	59.8	192	60.3	4.1	19.8	4.8	16.1	(1.4)	16.0	8.9	21.0
Corporate	105	39.9	118	40.2	126	39.7	2.3	11.8	2.9	15.3	(3.1)	8.2	6.9	20.2
Philippines														
Total	75	100.0	87	100.0	91	100.0	0.3	3.1	3.7	16.1	(0.6)	3.3	4.7	21.8
Government	65	87.5	75	86.5	79	86.5	0.7	2.3	3.6	14.7	(0.2)	2.5	4.6	20.3
Corporate	9	12.5	12	13.5	12	13.5	(2.2)	8.9	3.9	26.1	(3.1)	9.1	4.9	32.3
Singapore														
Total	188	100.0	217	100.0	237	100.0	4.0	12.7	6.1	18.1	(2.3)	13.5	9.3	25.8
Government	116	61.9	130	59.9	139	58.7	5.8	18.9	4.0	12.1	(0.5)	19.7	7.2	19.4
Corporate	72	38.1	87	40.1	98	41.3	1.0	3.8	9.1	27.8	(5.1)	4.6	12.5	36.1
Thailand														
Total	229	100.0	254	100.0	265	100.0	4.8	8.7	1.9	14.4	3.3	5.8	4.3	15.7
Government	187	81.5	204	80.3	212	79.8	6.5	8.9	1.3	12.1	5.0	5.9	3.7	13.4
Corporate	43	18.5	50	19.7	54	20.2	(2.0)	8.1	4.2	24.4	(3.5)	5.2	6.7	25.9
Viet Nam														
Total	18	100.0	22	100.0	21	100.0	3.1	21.1	(2.7)	21.4	1.9	13.3	(2.6)	21.1
Government	16	88.3	20	91.6	20	92.5	3.3	20.2	(1.7)	27.0	2.1	12.5	(1.7)	26.7
Corporate	2	11.7	2	8.4	2	7.5	1.4	27.8	(12.7)	(21.4)	0.2	19.6	(12.6)	(21.6)
Emerging East Asia (EEA)														
Total	5,480	100.0	5,930	100.0	6,242	100.0	1.3	5.7	3.5	11.0	(0.8)	7.7	5.3	13.9
Government	3,703	67.6	3,897	65.7	4,080	65.4	0.9	1.8	3.1	7.8	(0.3)	4.4	4.7	10.2
Corporate	1,777	32.4	2,033	34.3	2,162	34.6	2.1	14.7	4.2	17.6	(1.9)	15.2	6.4	21.7
EEA Less PRC														
Total	2,233	100.0	2,461	100.0	2,588	100.0	2.4	9.0	2.6	11.3	(4.4)	6.4	5.2	15.9
Government	1,229	55.0	1,317	53.5	1,369	52.9	2.5	7.4	1.6	7.7	(3.5)	4.9	4.0	11.4
Corporate	1,004	45.0	1,144	46.5	1,219	47.1	2.3	11.0	3.6	15.7	(5.4)	8.1	6.5	21.5
Japan														
Total	12,626	100.0	12,465	100.0	12,955	100.0	0.8	3.9	1.5	3.8	5.3	12.6	3.9	2.6
Government	11,467	90.8	11,373	91.2	11,841	91.4	0.8	4.4	1.7	4.5	5.4	13.2	4.1	3.3
Corporate	1,158	9.2	1,092	8.8	1,114	8.6	0.5	(0.7)	(0.3)	(2.7)	5.1	7.6	2.0	(3.8)
Memo Item: CNH														
Total	40	100.0	55	100.0	53	100.0	37.4	600.1	(5.7)	31.2	39.2	634.3	(4.6)	33.2
Government	10	24.9	14	25.1	15	28.3	39.3	314.2	6.3	48.8	41.1	334.4	7.4	51.0
Corporate	30	75.1	41	74.9	38	71.7	36.8	808.4	(9.6)	25.4	38.5	852.7	(8.7)	27.3

LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. For Singapore, corporate bonds outstanding quarterly figures based on *AsianBondsOnline* estimates. For Japan, 3Q12 data carried over from August 2012.
2. Corporate bonds include issues by financial institutions.
3. CNH bonds are renminbi-denominated bonds issued in Hong Kong, China. Data include certificates of deposit and bonds issued by foreign companies.
4. Bloomberg LP end-of-period LCY–US$ rates are used.
5. For LCY base, emerging East Asia growth figures are based on end-September 2012 currency exchange rates and do not include currency effects.
6. Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Republic of Korea (EDAILY *BondWeb* and The Bank of Korea); 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).

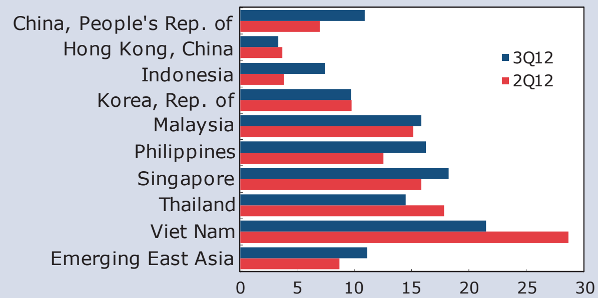
Figure 1a: Growth of LCY Bond Markets in 2Q12 and 3Q12 (q-o-q, %)



LCY = local currency, q-o-q = quarter-on-quarter.
Notes:
1. Calculated using data from national sources.
2. Growth rates are calculated from LCY base and do not include currency effects.
3. Emerging East Asia growth figure is based on end-September 2012 currency exchange rates and does not include currency effects.
4. For Singapore, corporate bonds outstanding quarterly figures based on *AsiaBondsOnline* estimates.

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

Figure 1b: Growth of LCY Bond Markets in 2Q12 and 3Q12 (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 LCY base and do not include currency effects.
3. Emerging East Asia growth figure is based on end-September 2012 currency exchange rates and does not include currency effects.
4. For Singapore, corporate bonds outstanding quarterly figures based on *AsiaBondsOnline* estimates.

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

issuance actually rose by 101% q-o-q in 3Q12, but from too small a base to make any difference to the downward trend in SBI outstanding. BI has implemented a 6-month holding period over concerns that the generous availability of short-dated SBI was contributing to speculation on the Indonesian currency. Indonesian issuance of LCY central government bonds grew only 0.2% q-o-q in 3Q12.

In Viet Nam, the stock of State Bank of Viet Nam (SBV) bills fell 62.0% q-o-q in 3Q12, even as the stock of Viet Nam government bills rose 104.7%—albeit from a small base of only US$1 million—and the stock of Viet Nam government bonds rose 14.0% q-o-q as Viet Nam's government has continued to pursue fiscal stimulus policies to offset the lingering impacts of the Global Financial Crisis (GFC) on Viet Nam's export sector.

Rapid growth in the government bond sectors of Malaysia and Singapore has been driven primarily by the growth of Bank Negara Malaysia (BNM) bills and Monetary Authority of Singapore (MAS) bills. BNM bills grew 12.0% q-o-q and 24.5% y-o-y in 3Q12, while Malaysian government bonds grew only 1.8% q-o-q and 12.8% y-o-y. Malaysian monetary policy still reflects concerns over large inflows of foreign capital into the country, which led to the share of foreign ownership of Malaysian government bonds rising to 28.5% by end-September.

MAS has aggressively increased its stock of MAS bills since they were first introduced in April 2011 for the purpose of managing liquidity in the Singaporean banking system. Outstanding MAS bills stood at SGD26.9 billion (US$21.9 billion) at end-September, representing a 60.1% y-o-y increase from September 2011. MAS bills grew 31.9% on a q-o-q basis in 3Q12, while growth rates for Singapore treasury bonds and bills were essentially flat in 3Q12.

The growth of Thai government bonds has also been driven primarily by bills issued by the Bank of Thailand (BOT) for sterilization purposes. BOT bills outstanding grew 12.7% q-o-q in 3Q12, while growth of other government and central bank securities was essentially flat for the quarter.

Philippine government bonds as a whole (including bonds issued by government-owned corporations) rose 3.6% q-o-q and 14.7% y-o-y in 3Q12.

Treasury bonds grew somewhat more rapidly at 3.8% q-o-q and 19.8% y-o-y. Growth of Philippine treasury bills was flat in 3Q12 on a q-o-q basis, but declined 22.7% y-o-y, reflecting the Philippines' Bureau of the Treasury's (BTr) concentration of new issuance at the longer-end of the curve.

At the end of 3Q12, the PRC government bond market was still the largest in the region at a size equivalent to US$2.7 trillion, representing a q-o-q increase of 3.9%. Bonds and bills outstanding of the People's Bank of China (PBOC) fell 7.9% q-o-q, resulting from the PBOC ceasing issuance of new bonds and bills in the beginning of the year. Treasury bonds and bills rose 5.5% q-o-q, while policy bank bonds rose 4.9%. The sharp decline in PBOC bonds and bills did not reduce the overall growth rate for government sector bonds, since PBOC bills and bonds only amounted to US$241 billion at end-September.

The LCY corporate bond market in emerging East Asia grew 4.2% q-o-q in 3Q12, a significantly faster pace than the 3.1% growth achieved in 2Q12.

The largest LCY corporate bond market in emerging East Asia in 3Q12 remained that of the PRC at US$943 billion, followed by the Republic of Korea at US$827 billion. The next largest corporate bond market was Malaysia's at US$126 billion. The corporate bond markets of Singapore and Hong Kong, China, broadly similar in size, reached US$98 billion and US$83 billion, respectively. Thailand followed at US$54 billion. The three remaining LCY corporate bond markets—Indonesia, the Philippines, and Viet Nam—were much smaller in size at US$18 billion, US$12 billion, and US$2 billion, respectively.

The most rapidly growing corporate bond markets on a q-o-q basis in 3Q12 were Singapore, the PRC, Thailand, the Philippines, and the Republic of Korea. The rapid growth of the Singapore corporate bond market at 9.1% q-o-q was driven by a number of factors including (i) frequent issuance by government-linked corporations such as the Housing and Development Board, (ii) issuance of subordinated debt by banks to strengthen their capital structure to Basel III standards, (iii) issuance of perpetual bonds by both financial and non-financial companies, and (iv) issuance by companies in the power and infrastructure sectors. This pattern of issuance reflects, in large part, the upgrading of infrastructure in Singapore.

The PRC corporate bond market only grew 2.6% q-o-q in 2Q12 before recovering in 3Q12 to grow at a more typical rate of 5.0%. Growth in 3Q12 was driven mainly by local corporate bonds, which expanded 11.8% q-o-q, and medium-term notes (MTNs), which expanded 9.9% q-o-q.

The Thai corporate bond market's growth of 4.2% q-o-q in 3Q12 was driven by the growth of subordinated debt from Thai banks, as well as that of companies in the infrastructure and real estate sectors.

The Philippine corporate bond market grew 3.9% q-o-q in 3Q12. A total of PHP27.4 billion (US$700 million) of LCY corporate bonds was sold in 3Q12 by 47 Philippine companies. Out of the 30 largest issuers, only five are privately held companies, the rest are publicly listed, including San Miguel Brewery (SMB), Banco de Oro Unibank, Ayala Corporation, Philippine National Bank, and the Manila Electric Company. The following are some notable characteristics of corporate bond issues in the Philippines in 3Q12:

(i) The ability of these companies to issue at relatively low coupons encourages them to issue in relatively large sizes.
(ii) Corporate bonds with maturities of 5 years have paid coupons ranging from 5.25% to 6.05% per annum.
(iii) Bonds with maturities of 7 years have been paying coupons ranging from 5.5% to 6.25% per annum.
(iv) Except for MTD Manila Expressways, which pays a coupon of 8.6615% for its 10-year bond, all other bonds with maturities of 10 years have coupons ranging from 5.75% to 6.95%. The bond of MTD Manila Expressways was issued through private placement and its liquidity may be limited.

(v) Ayala Corporation's 15-year bond pays a coupon of only 6.875% per annum.

These large, blue-chip companies are tapping the capital markets—either by issuing bonds or offering equities—to take advantage of the positive business environment and rapidly growing economy in the Philippines. Philippine banks are turning to small and medium-sized enterprises (SMEs) to expand their loan business, which diminishes the interest of Philippine SMEs in issuing bonds.

The Indonesian corporate bond market grew 3.1% q-o-q in 3Q12. In terms of yields for Indonesian corporate bonds, these can range between 7% and 10%:

(i) The Indonesian automotive leasing company Adira Dinamika Multi-Finance raised a total of IDR1.6 trillion (US$170 million) in September by issuing bonds ranging from maturities of 370 days with a yield of 6.5% to 5 years at 8.25%.
(ii) Property developer Bumi Serpong Damai raised a total of IDR1 trillion in 3Q12 by issuing 3-, 5-, and 7-year bonds with coupons of 8.0%, 9.25%, and 9.5%, respectively.
(iii) Indonesian plantation firm Sinar Mas Agro Resources and Technology issued 5-year bonds with a coupon of 9.0% and 7-year bonds with a coupon of 9.25%.

The 3.3% q-o-q growth rate of the corporate bond market of the Republic of Korea in 3Q12 was driven by the special public bonds sector (3.1% q-o-q and 15.1% y-o-y) and the private corporate sector (5.2% q-o-q and 23.5% y-o-y). Growth in the financial debentures sector, which comprises bonds of commercial banking subsidiaries of financial holding companies, was flat on both a q-o-q and y-o-y basis. Large LCY corporate bond issues for 3Q12 included

(i) Kookmin Bank's KRW500 billion (US$439 million)10-year bond offering a 3.4% coupon;
(ii) Hyundai Heavy Industry's KRW400 billion 10-year bond with a 3.35% coupon;
(iii) Lotte Shopping's 3-year bond with a 2.98% coupon; and
(iv) Korea Expressway's 50-year bond, the longest-dated LCY corporate bond from the Republic of Korea issued in 3Q12, worth KRW100 billion and carrying a 3.48% coupon.

The corporate bond market of the Republic of Korea also saw a number of high-yield corporate issues in 3Q12, including

(i) a 3-year asset-backed security of KRW68 billion issued by Gibo Green Hitech 1st Security Specialization Inc. at a coupon rate of 10%;
(ii) Dongbu Corporation's 1-year bond of KRW70 billion carrying an 8.9% coupon; and
(iii) Tongyang Inc.'s 1.5-year bond worth KRW130 billion offering a 7.4% coupon.

The CNH Bond Market in Hong Kong, China[4]

CNH bonds outstanding in 3Q12 fell 5.7% q-o-q to CNH331 billion (US$53 billion) from CNH351 billion in 2Q12. The amount of bonds outstanding declined due to a fall in issuance, which amounted to only CNH43 billion in 3Q12 versus CNH77 billion in 2Q12. On a year-to-date (YTD) basis, total issuance in the first 3 quarters of 2012 amounted to CNH185 billion versus CNH202 billion in the same period last year.

Concerns that the renminbi would no longer appreciate because of the slowing PRC economy have prompted some investors to move out of the PRC's currency. Renminbi deposits in Hong Kong, China fell to CNH552 billion in August from CNH563 billion in July. As a result, yields on CNH bonds have risen, making them less attractive for issuers, particularly those based in the PRC who can raise funds onshore.

Thus, CNH issuers are giving the CNH market more of a high-yield character. Some notable high-yield issuances in 3Q12 include Gemdale's 3-year

[4] CNH bonds are renminbi-denominated bonds issued in Hong Kong, China.

CNH1.2 billion bond that carried a coupon of 9.15% and Credit China Holdings' 2-year CNH200 million bond with a coupon of 11.0%.

Ratio of Bonds Outstanding to Gross Domestic Product

The ratio of LCY bonds outstanding to GDP in emerging East Asia rose to 54.3% in 3Q12 from 53.0% in 2Q12.

The ratio of LCY bonds outstanding to gross domestic product (GDP) in emerging East Asia rose to 54.3% in 3Q12 from 53.0% in 2Q12 **(Table 2)**. The ratio of government bonds to GDP rose to 35.5% in 3Q12 from 34.8% in 2Q12, and the ratio of corporate bonds to GDP rose to 18.8% from 18.2%. The largest increases in the ratio of government bonds to GDP in 3Q12 were in Malaysia (61.5% to 66.9%), Singapore (49.4% to 53.0%), and Thailand (60.0% to 62.2%). The ratio of government bonds to GDP remained unchanged in Hong Kong, China at 37.6% and fell in Indonesia (11.2% to 10.9%) and Viet Nam (15.4% to 14.7%).

The largest increase in the ratio of corporate bonds to GDP occurred in Singapore (33.1% to 37.8%), the Republic of Korea (70.7% to 75.2%), and Malaysia (41.2% to 44.1%). The ratio of corporate bonds to GDP remained unchanged in Indonesia at 2.1% and fell in Viet Nam from 1.4% to 1.2%.

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

	3Q11	2Q12	3Q12
China, People's Rep. of			
Total	46.0	44.7	45.5
Government	35.1	33.3	33.7
Corporate	11.0	11.5	11.7
Hong Kong, China			
Total	70.8	70.3	70.4
Government	37.4	37.6	37.6
Corporate	33.4	32.7	33.6
Indonesia			
Total	13.7	13.3	13.1
Government	11.8	11.2	10.9
Corporate	1.9	2.1	2.1
Korea, Rep. of			
Total	113.7	118.4	124.6
Government	48.3	47.7	49.4
Corporate	65.3	70.7	75.2
Malaysia			
Total	97.4	102.7	111.0
Government	58.6	61.5	66.9
Corporate	38.8	41.2	44.1
Philippines			
Total	34.3	36.3	38.0
Government	30.0	31.4	32.9
Corporate	4.3	4.9	5.1
Singapore			
Total	76.0	82.5	90.8
Government	47.0	49.4	53.0
Corporate	29.0	33.1	37.8
Thailand			
Total	67.0	74.7	78.5
Government	54.6	60.0	62.2
Corporate	12.4	14.7	15.7
Viet Nam			
Total	15.7	16.8	15.9
Government	13.9	15.4	14.7
Corporate	1.8	1.4	1.2
Emerging East Asia			
Total	53.0	53.0	54.3
Government	35.8	34.8	35.5
Corporate	17.2	18.2	18.8
Japan			
Total	216.9	207.1	215.3
Government	197.0	189.0	196.8
Corporate	19.9	18.1	18.5

GDP = gross domestic product, LCY = local currency.
Notes:
1. Data for GDP is from CEIC. 3Q12 GDP figures carried over from 2Q12 for Hong Kong, China; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand.
2. For Singapore, corporate bonds outstanding quarterly figures based on *AsianBondsOnline* estimates. For Japan, 3Q12 data carried over from August 2012.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); Republic of Korea (EDAILY *BondWeb* and The Bank of Korea); 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).

Issuance

Issuance in emerging East Asia in 3Q12 totaled US$826 billion, a decrease of 3.8% q-o-q and 4.5% y-o-y.

The overall decline in issuance in the region in 3Q12 was due entirely to the decline of central bank issuance by 16.7% q-o-q and 27.7% y-o-y **(Table 3)**. Issuance of treasuries and other government bonds grew 6.0% on both a q-o-q and y-o-y basis in 3Q12. Issuance of corporate bonds grew 7.5% q-o-q and a very impressive 45.4% y-o-y, which helps explain why the y-o-y growth rate for corporate bonds outstanding rose to 17.6% in 3Q12 from 15.2% in 2Q12.

Table 3: LCY-Denominated Bond Issuance (gross)

	LCY (billion)		US$ (billion)		Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
	3Q12	% share	3Q12	% share	3Q12 q-o-q	3Q12 y-o-y	3Q12 q-o-q	3Q12 y-o-y
China, People's Rep. of (PRC)								
Total	1,739	100.0	277	100.0	10.5	12.4	11.7	14.2
Government	1,203	69.2	191	69.2	9.2	(2.4)	10.4	(0.9)
Central Bank	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	1,203	69.2	191	69.2	9.2	12.6	10.4	14.3
Corporate	536	30.8	85	30.8	13.4	70.7	14.7	73.3
Hong Kong, China								
Total	1,312	100.0	169	100.0	(25.9)	(29.3)	(25.9)	(29.0)
Government	1,245	94.9	161	94.9	(26.8)	(30.5)	(26.7)	(30.2)
Central Bank	1,230	93.8	159	93.8	(27.0)	(30.7)	(27.0)	(30.4)
Treasury and Other Govt.	15	1.1	2	1.1	0.0	(9.4)	0.0	(9.0)
Corporate	67	5.1	9	5.1	(5.4)	4.2	(5.4)	4.6
Indonesia								
Total	79,985	100.0	8	100.0	(0.2)	27.1	(1.8)	17.6
Government	70,028	87.6	7	87.6	27.1	22.6	25.0	13.4
Central Bank	29,475	36.9	3	36.9	101.7	48.7	98.4	37.6
Treasury and Other Govt.	40,553	50.7	4	50.7	0.2	8.7	(1.5)	0.6
Corporate	9,957	12.4	1	12.4	(60.2)	71.1	(60.9)	58.3
Korea, Rep. of								
Total	160,111	100.0	144	100.0	(3.0)	5.9	0.0	12.2
Government	63,326	39.6	57	39.6	(5.1)	(14.0)	(2.2)	(8.9)
Central Bank	39,000	24.4	35	24.4	(8.2)	(17.1)	(5.4)	(12.2)
Treasury and Other Govt.	24,326	15.2	22	15.2	0.2	(8.6)	3.3	(3.1)
Corporate	96,785	60.4	87	60.4	(1.5)	24.8	1.6	32.3
Malaysia								
Total	180	100.0	59	100.0	38.1	20.3	43.4	25.5
Government	139	77.0	45	77.0	36.9	11.1	42.2	15.8
Central Bank	112	62.2	37	62.2	53.8	13.1	59.8	17.9
Treasury and Other Govt.	27	14.8	9	14.8	(6.4)	3.1	(2.8)	7.5
Corporate	41	23.0	14	23.0	42.2	67.1	47.7	74.2
Philippines								
Total	234	100.0	6	100.0	13.0	(47.8)	14.1	(45.3)
Government	206	88.3	5	88.3	55.2	(53.1)	56.7	(50.8)
Central Bank	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	206	88.3	5	88.3	55.2	(53.1)	56.7	(50.8)
Corporate	27	11.7	0.7	11.7	(62.9)	242.8	(62.6)	259.4
Singapore								
Total	103	100.0	84	100.0	(2.1)	7.8	1.0	14.8
Government	93	90.3	76	90.3	(6.6)	2.5	(3.7)	9.2
Central Bank	39	37.5	32	37.5	(4.0)	6.0	(1.0)	12.9
Treasury and Other Govt.	55	52.8	44	52.8	(8.4)	0.2	(5.6)	6.7
Corporate	10	9.7	8	9.7	78.5	104.6	84.0	117.9
Thailand								
Total	2,419	100.0	78	100.0	(8.1)	(19.9)	(6.0)	(18.9)
Government	2,080	86.0	67	86.0	(11.5)	(25.6)	(9.4)	(24.8)
Central Bank	1,689	69.8	55	69.8	(19.2)	(32.2)	(17.3)	(31.4)
Treasury and Other Govt.	392	16.2	13	16.2	50.8	27.1	54.4	28.6
Corporate	338	14.0	11	14.0	19.9	53.1	22.7	54.9

continued on next page

Table 3 *continued*

	LCY (billion)		US$ (billion)		Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
	3Q12	% share	3Q12	% share	3Q12		3Q12	
					q-o-q	y-o-y	q-o-q	y-o-y
Viet Nam								
Total	17,020	100.0	0.8	100.0	(81.3)	(40.4)	(81.3)	(40.6)
Government	16,170	95.0	0.8	95.0	(82.2)	(40.5)	(82.2)	(40.6)
Central Bank	0	0.0	0.0	0.0	–	–	–	–
Treasury and Other Govt.	16,170	95.0	0.8	95.0	(61.1)	(40.5)	(61.1)	(40.6)
Corporate	850	5.0	0.04	5.0	–	(38.8)	–	(39.0)
Emerging East Asia (EEA)								
Total	–	–	826	100.0	(3.8)	(4.5)	(2.3)	(2.2)
Government	–	–	611	73.9	(7.3)	(14.8)	(6.0)	(13.0)
Central Bank	–	–	320	38.7	(16.7)	(27.7)	(15.7)	(26.4)
Treasury and Other Govt.	–	–	291	35.2	6.0	6.0	7.7	8.9
Corporate	–	–	216	26.1	7.5	45.4	9.8	50.8
EEA Less PRC								
Total	–	–	550	100.0	(9.7)	(11.2)	(8.1)	(8.8)
Government	–	–	419	76.3	(13.2)	(19.5)	(11.9)	(17.6)
Central Bank	–	–	320	58.2	(16.7)	(23.2)	(15.7)	(21.8)
Treasury and Other Govt.	–	–	100	18.1	0.2	(4.8)	2.9	(0.3)
Corporate	–	–	130	23.7	4.0	32.5	6.8	39.0
Japan								
Total	51,024	100.0	654	100.0	0.7	1.4	3.1	0.3
Government	48,016	94.1	616	94.1	1.1	3.1	3.5	1.9
Central Bank	0.0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	48,016	94.1	616	94.1	1.1	3.1	3.5	1.9
Corporate	3,008	5.9	39	5.9	(4.9)	(19.8)	(2.6)	(20.7)

– = 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–US$ rates are used.
3. For LCY base, emerging East Asia growth figures based on end-September 2012 currency exchange rates and do not include currency effects.
Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia, Indonesia Debt Management Office, and Indonesia Stock Exchange); Republic of Korea (EDAILY *BondWeb* and The 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 most recent quarterly decline in central bank issuance is part of an overall trend that has been in place since 2Q10. Central bank issuance recovered briefly in 2Q12 before resuming its downward trend in 3Q12. In contrast, government bond issuance has risen significantly in the last 2 quarters to reach historically high levels. Corporate issuance in 3Q12 ranged around levels of issuance reached in 4Q11 and 1Q12 **(Figures 2a, 2b, 2c)**.

The PBOC ceased issuing bills and bonds in 2012, thereby making a direct contribution to the expansion of market liquidity. HKMA sharply reduced its issuance in 3Q12 by 27.0% q-o-q and 30.7% y-o-y. What is more interesting, however, is the result of large reductions of issuance in 3Q12 by BOK and BOT. For example, BOK reduced its quarterly issuance 8.2% q-o-q and BOT cut its issuance 19.2% q-o-q. However, the remaining amounts of central bank bonds and bills outstanding in both markets was still substantial. The stock of BOK bills declined 3.4% q-o-q, but BOK's stock of bonds was largely unchanged. BOT's stock of bonds fell 11.5% q-o-q, but its stock of bills still grew 12.7%. The consequence of these actions in both the Republic of Korea and Thailand was to reduce the growth of central bank sterilization activities, but not to eliminate it altogether. Indonesia has dramatically reduced its stock of SBI to US$7 billion in 3Q12

Figure 2a: Government (including SOE) and Central Bank Bond Issuance, 1Q09–3Q12

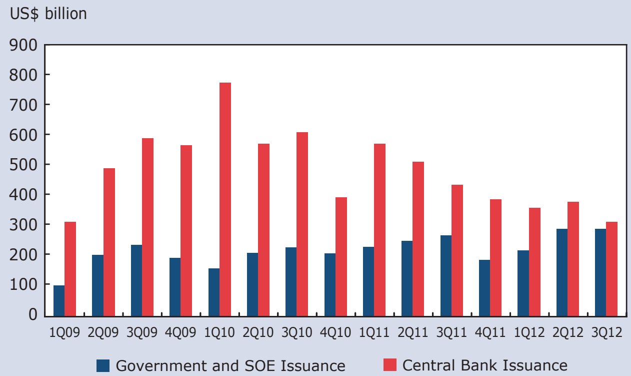


Figure 2b: Government (including SOE) and Corporate Bond Issuance, 1Q09–3Q12

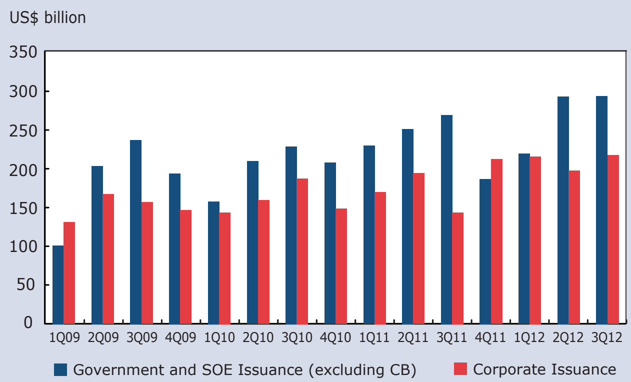
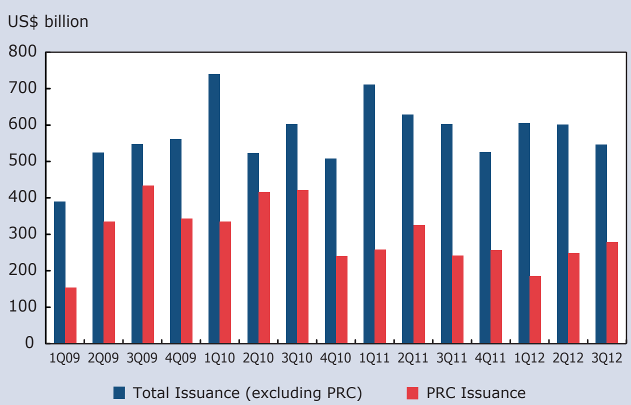


Figure 2c: Total LCY Bond Issuance, 1Q09–3Q12



CB = central bank, LCY = local currency, PRC = People's Republic of China, SOE = state-owned enterprise.
Note: In the PRC, government issuance (including SOE issuance) includes policy bank bonds, local government bonds, and savings bonds.
Source: *AsianBondsOnline*.

from a high point of US$38 billion in April 2010. However, BI issued US$3 billion of new SBI in 3Q12.

The one market where central bank issuance has not declined on a q-o-q and y-o-y basis is Malaysia. BNM's issuance grew 53.8% q-o-q and 13.1% y-o-y in 3Q12, resulting in growth of the stock of BNM bills at a rate of 12.0% q-o-q and 24.5% y-o-y.

The three markets where q-o-q growth in government bond issuance was most vigorous in 3Q12 were Thailand (50.8%), the Philippines (55.2%), and the PRC (9.2%). Thai issuance was driven by issuance from government-owned corporations rather than treasury bonds from the Ministry of Finance. Issuance by SOEs in 3Q12 amounted to US$4.7 billion out of total government sector issuance of US$13 billion. The most important issuer among the government-owned corporations was the Bank for Agriculture and Agricultural Cooperatives (BAAC), which issued bonds amounting to US$3.3 billion to finance support programs for Thai farmers. Philippine issuance reflects not only issuance of treasury bonds and bills, but also issuance by government-owned corporations such as the National Home Mortgage Finance Corporation (NHMFC). The growth of PRC issuance was more or less evenly divided between treasury bonds and policy bank bonds.

Issuance is typically more volatile from quarter-to-quarter for corporate bonds than for government bonds. Thus, q-o-q growth of corporate issuance was 7.5% in 3Q12. However, y-o-y growth in corporate issuance was 45.4%. The markets most responsible for the huge y-o-y growth of corporate bond issuance were the Philippines (242.8%), Singapore (104.6%), Indonesia (71.1%), the PRC (70.7%), and Malaysia (67.1%). Meanwhile, Indonesia and the Philippines had significant q-o-q contractions in issuance of 60.2% and 62.9%, respectively. Also, the PRC's corporate issuance growth of 13.4% q-o-q was quite modest compared with y-o-y growth of 70.7%.

Money Market Trends and Bills-to-Bonds Ratios

The movement of bills-to-bonds ratios in emerging East Asian markets was close to being evenly divided between those that rose and those that fell in 3Q12.

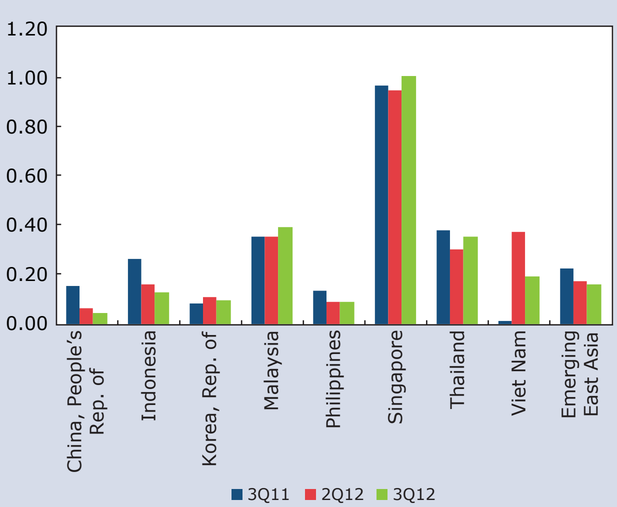
Total bills-to-bonds ratios fell in 3Q12 in four out of the eight emerging markets under review: the PRC, Indonesia, the Republic of Korea, and Viet Nam **(Figure 3a)**. More specifically, the stock of PBOC bills has fallen sharply from levels in 3Q11 **(Figure 3b)**. Total bonds, whether issued by governments or central banks, rose in all four cases, albeit by a very small amount—from US$81 billion to US$82 billion—in the case of Indonesia. The ratio of bills to bonds remained unchanged in the Philippines, reflecting in large part the fact that the central bank of the Philippines, Bangko Sentral ng Pilipinas (BSP), does not issue bills **(Table 4)**. The bills-to-bonds ratio also remained essentially unchanged in Hong Kong, China, which is not included in Figure 3a, due to the fact that its extraordinarily large ratio of bills to bonds puts it on an entirely different scale from other markets in the region.

The ratio of bills to bonds rose in Malaysia, Singapore, and Thailand, due to their rising stocks of central bank bills, even as their respective stocks of bonds—both government and central bank—also rose.

The region's stock of treasury bills was US$94 billion at the end of 3Q12. Of this amount, US$48 billion was in Singapore and US$28 billion was in the PRC, leaving only US$18 billion distributed among the rest of the region as follows: Indonesia (US$3 billion), the Republic of Korea (US$4 billion), Malaysia (US$1 billion), the Philippines (US$6 billion), Thailand (US$3 billion) and Viet Nam (US$0.8 billion). Around US$1 billion of Philippine treasury bills were issued in 3Q12 outside of the usual auction system for Philippine government securities.

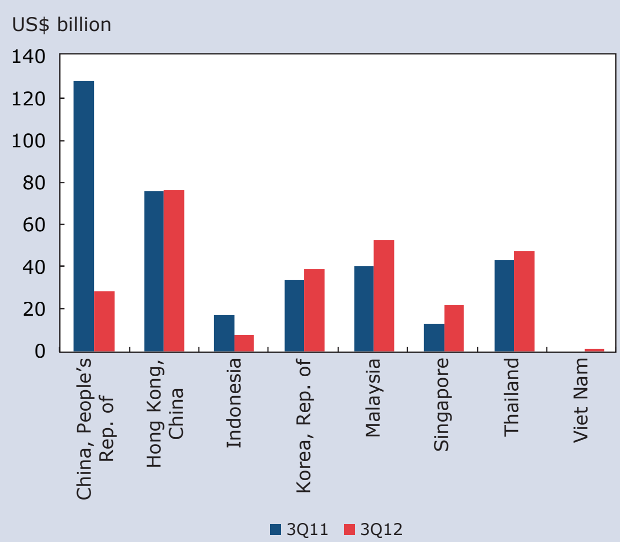
Finally, the stock of central bank bills for the region as a whole declined at a rate of 3.5% q-o-q and 23.5% y-o-y in 3Q12. Malaysia, Singapore, and Thailand recorded positive q-o-q growth rates

Figure 3a: 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*.

Figure 3b: Central Bank Bills Outstanding



Source: *AsianBondsOnline*.

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

	3Q11		2Q12		3Q12		Government Bills-to-Bonds Ratio			Growth Rate (LCY-base %) 3Q12		Growth Rate (US$-base %) 3Q12	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	3Q11	2Q12	3Q12	q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)													
Total	1,334	100.0	1,309	100.0	1,341	100.0				1.3	(1.0)	2.4	0.5
Total Bills	177	13.3	80	6.1	56	4.2	0.15	0.07	0.04	(30.9)	(68.9)	(30.2)	(68.4)
Treasury Bills	50	3.7	32	2.4	28	2.1	0.05	0.03	0.03	(13.5)	(44.8)	(12.6)	(43.9)
Central Bank Bills	127	9.5	48	3.7	28	2.1	0.63	0.23	0.13	(42.5)	(78.3)	(41.9)	(78.0)
Total Bonds	1,157	86.7	1,229	93.9	1,285	95.8				3.4	9.4	4.5	11.0
Treasury Bonds	954	71.5	1,018	77.8	1,072	79.9				4.1	10.7	5.2	12.4
Central Bank Bonds	203	15.2	211	16.1	213	15.9				0.0	3.1	1.1	4.7
Hong Kong, China													
Total	90	100.0	93	100.0	93	100.0				0.1	3.4	0.1	3.8
Total Bills	75	83.9	76	81.5	75.81	81.5	5.22	4.42	4.42	0.1	0.5	0.1	0.9
Treasury Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Central Bank Bills	75	83.9	76	81.5	76	81.5	8.41	8.51	8.52	0.1	0.5	0.1	0.9
Total Bonds	14	16.1	17	18.5	17.15	18.5				0.0	18.6	0.0	19.1
Treasury Bonds	5	6.1	8	8.9	8	8.9				0.0	50.6	0.0	51.2
Central Bank Bonds	9	10.0	9	9.6	9	9.6				0.0	(0.9)	0.0	(0.5)
Indonesia													
Total	96	100.0	94	100.0	92	100.0				(0.1)	4.2	(1.7)	(3.6)
Total Bills	20	20.7	13	13.8	10	11.3	0.26	0.16	0.13	(18.3)	(43.0)	(19.7)	(47.3)
Treasury Bills	3	2.8	3	3.3	3	3.3	0.04	0.04	0.04	(0.8)	21.9	(2.5)	12.8
Central Bank Bills	17	17.8	10	10.5	7	8.0	–	–	–	(23.9)	(53.3)	(25.1)	(56.7)
Total Bonds	76	79.3	81	86.2	82	88.7				2.9	16.5	1.2	7.8
Treasury Bonds	76	79.3	81	86.2	82	88.7				2.9	16.5	1.2	7.8
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Korea, Rep. of													
Total	449	100.0	471	100.0	497	100.0				2.3	4.5	5.4	10.8
Total Bills	34	7.5	46	9.8	43	8.6	0.08	0.11	0.09	(10.0)	19.4	(7.2)	26.6
Treasury Bills	0	0.0	7	1.5	4	0.8	0.00	0.02	0.01	(45.5)	–	(43.8)	–
Central Bank Bills	34	7.5	39	8.2	39	7.8	0.30	0.38	0.37	(3.4)	8.1	(0.5)	14.6
Total Bonds	415	92.5	425	90.2	454	91.4				3.6	3.3	6.8	9.5
Treasury Bonds	301	67.2	324	68.7	350	70.5				5.0	9.6	8.2	16.2
Central Bank Bonds	113	25.3	102	21.6	104	21.0				(0.6)	(13.4)	2.4	(8.2)
Malaysia													
Total	158	100.0	176	100.0	191	100.0				4.4	15.6	8.4	20.6
Total Bills	41	26.2	46	26.2	53	28.0	0.35	0.35	0.39	11.6	23.7	15.9	29.0
Treasury Bills	1	0.9	1	0.8	1	0.7	0.01	0.01	0.01	0.0	0.0	3.9	4.2
Central Bank Bills	40	25.3	45	25.4	52	27.3	–	–	–	12.0	24.5	16.3	29.8
Total Bonds	117	73.8	130	73.8	137	72.0				1.8	12.8	5.8	17.6
Treasury Bonds	117	73.8	130	73.8	137	72.0				1.8	12.8	5.8	17.6
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Philippines													
Total	63	100.0	72	100.0	76	100.0				3.5	14.7	4.5	20.3
Total Bills	8	12.0	6	8.4	6	8.1	0.14	0.09	0.09	0.0	(22.7)	1.0	(18.9)
Treasury Bills	8	12.0	6	8.4	6	8.1	0.14	0.09	0.09	0.0	(22.7)	1.0	(18.9)
Central Bank Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Total Bonds	55	88.0	66	91.6	69	91.9				3.8	19.8	4.8	25.7
Treasury Bonds	55	88.0	66	91.6	69	91.9				3.8	19.8	4.8	25.7
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–

continued on next page

Table 4 *continued*

	3Q11		2Q12		3Q12		Government Bills-to-Bonds Ratio			Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
										3Q12		3Q12	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	3Q11	2Q12	3Q12	q-o-q	y-o-y	q-o-q	y-o-y
Singapore													
Total	116	100.0	130	100.0	139	100.0				4.0	12.1	7.2	19.4
Total Bills	57	49.0	63	48.5	70	50.1	0.96	0.94	1.00	7.4	14.5	10.7	21.9
Treasury Bills	44	38.0	47	36.1	48	34.3	0.75	0.70	0.69	(1.0)	1.2	2.0	7.8
Central Bank Bills	13	11.0	16	12.4	22	15.7	–	–	–	31.9	60.1	35.9	70.5
Total Bonds	59	51.0	67	51.5	69	49.9				0.8	9.9	3.9	17.1
Treasury Bonds	59	51.0	67	51.5	69	49.9				0.8	9.9	3.9	17.1
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Thailand													
Total	171	100.0	189	100.0	192	100.0				(0.7)	10.8	1.6	12.1
Total Bills	47	27.4	44	23.2	50	26.2	0.38	0.30	0.35	11.9	5.8	14.6	7.0
Treasury Bills	4	2.4	3	1.7	3	1.7	0.05	0.03	0.04	2.1	(18.7)	4.6	(17.8)
Central Bank Bills	43	25.0	41	21.5	47	24.4	1.12	0.76	0.97	12.7	8.1	15.4	9.3
Total Bonds	124	72.6	145	76.8	142	73.8				(4.5)	12.7	(2.3)	14.0
Treasury Bonds	86	50.2	92	48.6	94	48.7				(0.5)	7.5	1.8	8.8
Central Bank Bonds	38	22.4	53	28.2	48	25.1				(11.5)	24.2	(9.4)	25.6
Viet Nam													
Total	7	100.0	12	100.0	12	100.0				(1.1)	63.0	(1.0)	62.6
Total Bills	0.1	1.4	3	27.2	2	16.0	0.01	0.37	0.19	(41.7)	1737.7	(41.6)	1732.8
Treasury Bills	0.1	1.4	0.4	3.3	0.8	6.9	0.01	0.05	0.08	104.7	686.7	104.9	684.6
Central Bank Bills	0	0.0	3	23.9	1	9.2	–	–	–	(62.0)	–	(62.0)	–
Total Bonds	7	98.6	8	72.8	10	84.0				14.0	38.8	14.1	38.5
Treasury Bonds	7	98.6	8	72.8	10	84.0				14.0	38.8	14.1	38.5
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Emerging East Asia (EEA)													
Total	2,484	100.0	2,546	100.0	2,632	100.0				1.7	3.5	3.4	6.0
Total Bills	459	18.5	377	14.8	366	13.9	0.23	0.17	0.16	(4.6)	(21.9)	(2.9)	(20.2)
Treasury Bills	110	4.4	100	3.9	94	3.6	0.07	0.06	0.05	(7.6)	(17.0)	(5.6)	(14.1)
Central Bank Bills	349	14.0	277	10.9	272	10.3	0.96	0.74	0.73	(3.5)	(23.5)	(1.9)	(22.2)
Total Bonds	2,025	81.5	2,169	85.2	2,266	86.1				2.7	9.2	4.5	11.9
Treasury Bonds	1,661	66.9	1,794	70.5	1,891	71.9				3.7	11.2	5.4	13.9
Central Bank Bonds	364	14.7	374	14.7	374	14.2				(1.8)	(0.1)	(0.1)	2.7
EEA Less PRC													
Total	1,150	100.0	1,237	100.0	1,291	100.0				2.0	8.6	4.4	12.3
Total Bills	282	24.5	297	24.0	310	24.0	0.32	0.32	0.32	2.4	7.3	4.5	10.1
Treasury Bills	60	5.2	68	5.5	66	5.1	0.08	0.09	0.08	(4.9)	5.2	(2.4)	10.7
Central Bank Bills	222	19.3	229	18.5	244	18.9	1.38	1.40	1.51	4.6	7.9	6.6	9.9
Total Bonds	868	75.5	940	76.0	981	76.0				1.9	9.0	4.4	13.0
Treasury Bonds	707	61.5	776	62.8	820	63.5				3.2	12.0	5.6	15.9
Central Bank Bonds	161	14.0	164	13.2	161	12.5				(4.1)	(4.1)	(1.5)	0.3
Japan													
Total	9,987	100.0	9,888	100.0	10,302	100.0				1.8	4.4	4.2	3.2
Total Bills	389	3.9	376	3.8	385	3.7	0.04	0.04	0.04	(0.0004)	(0.0017)	2.3	(1.2)
Treasury Bills	389	3.9	376	3.8	385	3.7	0.04	0.04	0.04	(0.0004)	(0.0017)	2.3	(1.2)
Central Bank Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Total Bonds	9,598	96.1	9,512	96.2	9,917	96.3				1.9	4.5	4.3	3.3
Treasury Bonds	9,598	96.1	9,512	96.2	9,917	96.3				1.9	4.5	4.3	3.3
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–

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

Notes:

1. Bloomberg LP end-of-period LCY–US$ rates are used.
2. For LCY-base, emerging East Asia growth figures are based on end-September 2012 currency exchange rates and do not include currency effects.
3. Total figures per market refer to bills and bonds issued by the central government and the central bank. It excludes bonds issued by policy banks and state-owned enterprises. Bills are defined as securities with original maturities of less than 1 year.

Source: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); 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).

for bills issued by central banks or monetary authorities in 3Q12—12.0%, 31.9%, and 12.7%, respectively. Signs of growth trends among treasury bills were even more sparse than for central bank bills. The only two markets to record any significant q-o-q growth for treasury bills in 3Q12 were Thailand at 2.1% and Viet Nam at 104.7%. (As mentioned above, Viet Nam's growth occurred from a small base, leaving Viet Nam's total treasury bills at a level of US$0.8 billion.) At the end of 3Q12, treasury bills for the region as a whole only constituted about one-quarter the amount of total bills.

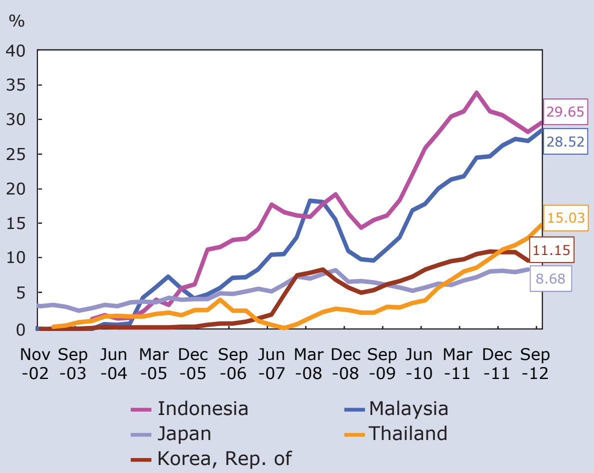
Foreign Holdings

Foreign holdings of government bonds rose in several markets in 3Q12.

The quarterly trends in foreign holdings of LCY government bonds differed among the individual markets of emerging East Asia **(Figure 4)**. In Indonesia, the share of foreign holdings to total LCY government bonds climbed to 29.7% by end-September from 28.4% at end-June. Foreign investor sentiment remained bullish on Indonesia given expectations for continued robust economic growth. Indonesia's GDP growth hovered above the 6% mark for the eighth consecutive quarter in 3Q12, expanding 6.2% y-o-y. At end-September, foreign holdings of Indonesian LCY government bonds with maturities of more than 5 years amounted to IDR168.8 trillion, or 70.1% of total foreign holdings, higher than end-June's figure of IDR150.9 trillion (67.3%) **(Figure 5)**.

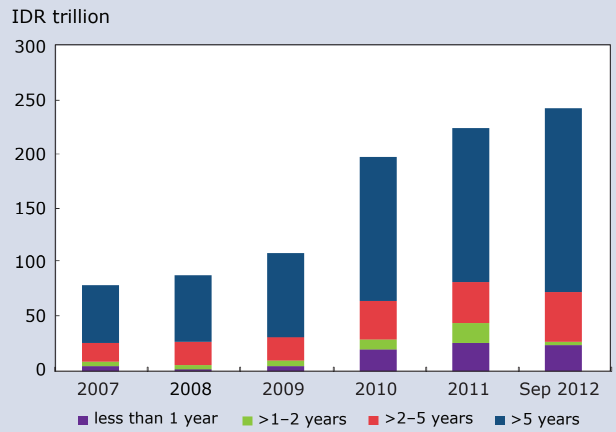
The share of foreign holdings in Thailand's LCY government bonds also increased in 3Q12, reaching 15.0% by end-September compared with 13.2% at end-June. The quarterly rise in foreign investment in Thailand's government bond market was supported by expectations of policy rate cuts amid softer growth momentum in the Thai economy. On 17 October, BOT's Monetary Policy Committee decided to lower the policy rate by 25 basis points (bps) to 2.75%. Also in October, BOT decided to revise downward its 2013 growth forecast to 4.6% from its earlier estimate of 5.0% made in July.

Figure 4: Foreign Holdings of LCY Government Bonds in Select Asian Economies (% of total)



LCY = local currency.
Note: Data as of end-September 2012 except for the Republic of Korea and Japan as of end-June 2012.
Source: *AsianBondsOnline*.

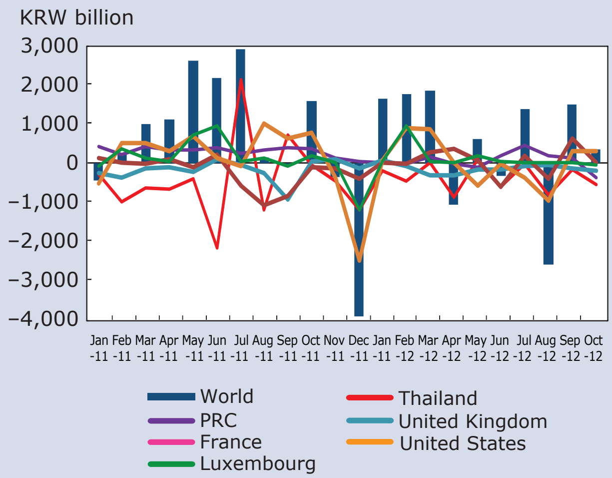
Figure 5: Foreign Holdings of Indonesian LCY Government Bonds by Maturity, 2007–September 2012



LCY = local currency.
Source: Indonesia Debt Management Office.

In the Republic of Korea, the share of foreign holdings fell to 10.0% at end-June from 11.1% at end-March amid heightened uncertainty due to the resurgence of the eurozone crisis. In more recent months, however, net foreign investment flows into the Republic of Korea's LCY bond market—defined to encompass both government and corporate bonds—have turned positive, leveling off at KRW361 billion in October after posting net foreign bond inflows of KRW1.5 billion in September and net bond outflows of KRW2.6 billion in August **(Figure 6)**. The rating upgrades for the Republic of Korea from Standard and Poor's (S&P) and Fitch Ratings in September and by Moody's Investor Service (Moody's) in August have helped attract more foreign capital into the country's domestic bond market. Meanwhile, the share of foreign holdings of LCY government bonds in Malaysia stood at 28.5% at end-September, higher than the end-June figure of 27.1%.

Figure 6: Net Foreign Investment by Country in LCY Bonds in the Republic of Korea, January 2011–October 2012



LCY = local currency, PRC = People's Republic of China.
Source: Financial Supervisory Service (FSS).

Government Bond Yield Curves

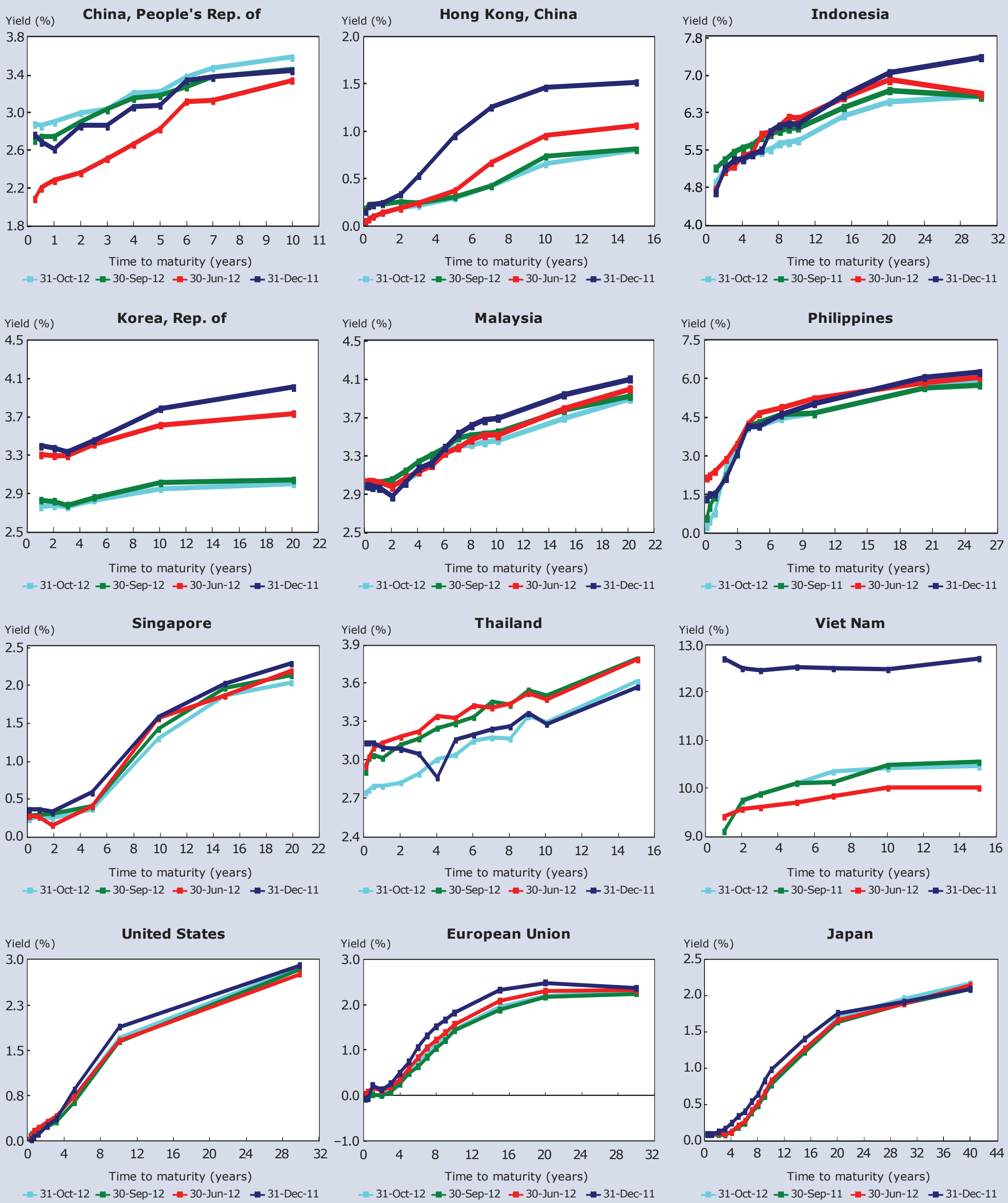
Most government bond yield curves have shifted downward since the end of 2Q12 on the back of moderating inflation and reduced central bank policy interest rates.

Most government bond yield curves have shifted downward since the end of 2Q12 on the back of moderating inflation and reductions in policy interest rates **(Figure 7)**. The strengthening of the region's currencies also has been a factor attracting foreign investment into the region's bond markets **(Table 5)**, while export performance has begun to recover in some markets. The export performance of the PRC improved in September and October, while export growth turned positive in October in the Republic of Korea for the first time in 4 months. Furthermore, ratios of government debt to GDP have generally remained below 50% across the region **(Figure 8)**, and even the country with the highest ratio of government debt to GDP in emerging East Asia, the Philippines (53.6%), was upgraded to one notch below investment grade by S&P in 3Q12 and, more recently, by Moody's in October **(Table 6)**, reflecting improved macroeconomic fundamentals. Inflation rates in the region have leveled off in most cases and even have started to move upward in some cases **(Figure 9)**. This trend could have a potential impact on the region's government bond yield curves in coming months.

The general trend of yield curves shifting downward demonstrated a wide range of variation across the region in 3Q12:

(i) The movement of the yield curves of Malaysia and the Philippines between end-June and end-September can be generally characterized as steepening, with yields falling more at the shorter-end than in the belly of the curve. However, in both markets yields have fallen more at the longer-end of the curve. Taking the whole length of the curve into account, "arching upward" might better describe the movement of the curve for these two markets. In both markets, inflation has been trending downward. This has allowed BSP to cut its policy rates recently, and some market observers believe that BNM will keep its rates unchanged at least until the end of the year,

Figure 7: Benchmark Yield Curves—LCY Currency Bonds



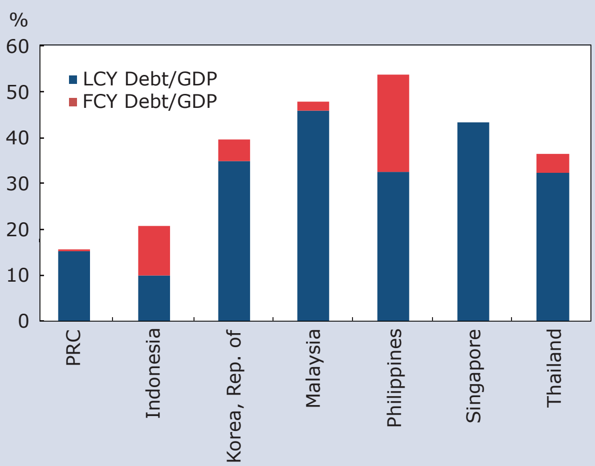
LCY = local currency.
Source: Based on data from Bloomberg LP.

Table 5: Appreciation (Depreciation) of Emerging East Asian Currencies (%)

Currency	2011	3Q12		As of 31 October 2012	
	y-o-y	y-o-y	q-o-q	y-o-y	q-o-q
CNY	4.8	1.5	1.1	1.9	0.8
HKD	0.07	0.4	0.04	0.2	0.06
IDR	(0.8)	(7.8)	(1.7)	(8.4)	(0.3)
KRW	(2.3)	5.8	3.0	1.8	1.9
MYR	(3.4)	4.2	3.8	0.6	0.4
PHP	(0.1)	4.8	1.0	3.6	1.4
SGD	(1.0)	6.3	3.0	2.8	0.6
THB	(4.8)	1.2	2.3	0.03	0.4
VND	(7.6)	(0.3)	0.1	0.8	0.2
JPY	5.3	(1.2)	2.3	(2.0)	(2.3)

q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Appreciation (depreciation) is equal to –LN(end-of-period rate/start-of-period rate).
2. For 31 October 2012 q-o-q figures, appreciation (depreciation) is equal to –LN(31 October 2012 rate/end-2Q12 rate).
Source: Bloomberg LP.

Figure 8: Ratios of LCY and FCY Government Debt to GDP, 2Q12



FCY = foreign currency, GDP = gross domestic product, LCY = local currency, PRC = People's Republic of China.
Note: Data as of 30 June 2012.
Source: *AsianBondsOnline*.

given the recent downward trend in inflation in Malaysia **(Figure 10)**.

(ii) The yield curve for Thailand steepened in 3Q12, with short-term yields falling as much as 5 bps–12 bps at the shorter-end of the curve and rising slightly at the longer-end. Yields then fell further between end-September and end-October, falling somewhat more at the shorter-end of the curve, following the reduction of BOT's policy rate by 25 bps on 17 October. BOT described its rate cut as an effort to improve domestic demand and cushion the economy from the effects of a fragile global economy. This move by BOT was supported by a slight decline in inflation in October.

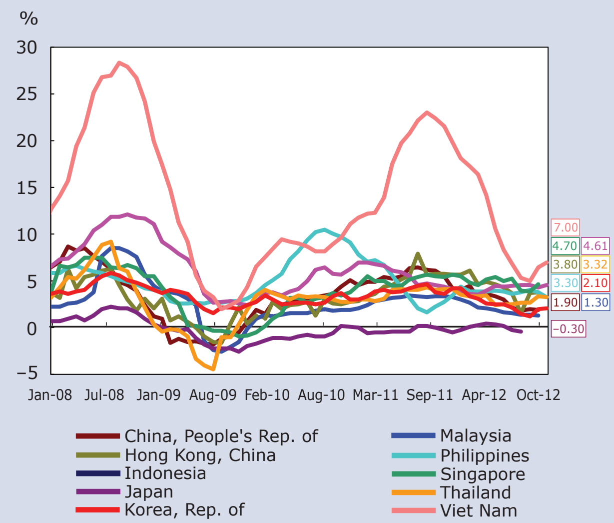
(iii) The yield curve for the Republic of Korea shifted downward in 3Q12. This downward shift was somewhat more pronounced at the

Table 6: Sovereign Credit Ratings

	S&P	Moody's	Fitch
China, People's Rep. of	AA–	Aa3	A+
Hong Kong, China	AAA	Aa1	AA+
Indonesia	BB+	Baa3	BBB–
Korea, Rep. of	A+	Aa3	AA–
Malaysia	A–	A3	A–
Philippines	BB+	Ba1	BB+
Singapore	AAA	Aaa	AAA
Thailand	BBB+	Baa1	BBB
Viet Nam	BB–	B2	B+

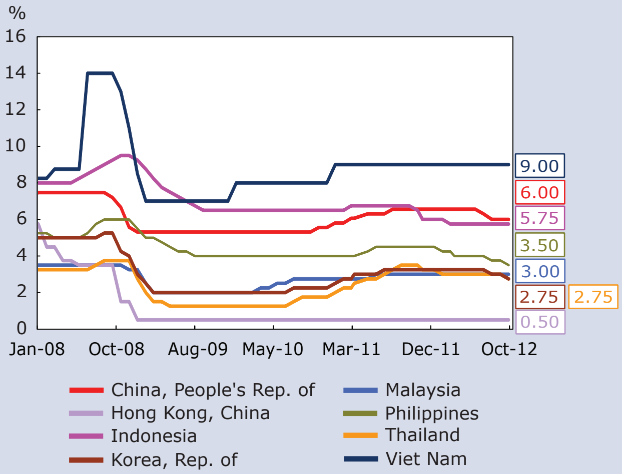
Source: Rating Agencies.

Figure 9: Headline Inflation Rates, January 2008–October 2012



Inflation rates for the People's Republic of China; Hong Kong, China; Japan; Malaysia; and Singapore as of September 2012.
Source: Bloomberg LP.

Figure 10: Policy Rates, January 2008–October 2012



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

longer-end of the curve, creating a flattening effect on the curve as a whole. The larger decline at the longer-end would seem to reflect weakening in the Korean economy as it suffers from a combination of falling export growth and weak domestic demand. On 11 October, BOK's Monetary Policy Committee reduced its base rate—the 7-day repurchase rate—by 25 bps to 2.75% and also lowered the interest rate on Aggregate Credit Ceiling Loans to 1.25% from 1.5%. Yields subsequently fell across all tenors.

(iv) The Viet Nam curve shifted sharply downward between end-December 2011 and end-June. But between end-June and end-October, Viet Nam yields rose modestly—with more movement at the longer-end than at the shorter-end, resulting in a normalization of Viet Nam's yield curve. SBV cut its key interest rates on 1 July for the fifth time this year. SBV has not executed any further reduction of its interest rates since then.

(v) The movement of the yield curves for Singapore and Hong Kong, China in 3Q12 could best be described as flattening. Inflation has been trending upward in both markets, resulting in the case of Hong Kong, China in a rise in short-term yields between end-June and end-September, and falling yields at the longer-end of the curve. A somewhat similar pattern emerged out of Singapore between end-June and end-September. However, between end-September and end-October, yields fell slightly more at the longer-end of the Singapore curve and at the shorter-end of the Hong Kong, China curve.

(vi) Indonesia is a more clear-cut case of yield curve flattening. In 3Q12, the LCY government bond yield curve flattened as yields rose from the shorter-end of the curve through the 5-year maturity and yields fell from the belly through the longer-end of the curve. This rise in short-term yields reflected the reluctance of BI to reduce policy rates while it remained concerned about inflationary pressures. Inflation eased in September to 4.3% y-o-y before rising again in October to 4.6%.

(vii) The fall in long-term yields, however, reflects the growing attractiveness of Indonesia as an investment destination for both domestic and foreign investors. The economy has remained buoyant, despite the reduced export performance of recent months, due to strong domestic consumption and investment. Positive investor sentiment resulted in a further reduction of yields along the entire curve by end-October.

(viii) The yield curve in the PRC shifted upward between end-June and end-October due to the lack of policy rate movement. Policy rates were last cut in the first week of July, when the PBOC reduced its 1-year deposit rate by 25 bps and its 1-year lending rate by 31 bps. Also, rates moved upward due to seasonal demand during the National Day Golden Week holidays in the first week of October.

Finally, the spread between the 2- and 10-year yields fell for most emerging East Asian markets between end-June and end-October, except in the cases of Thailand and Viet Nam. In the case of Thailand **(Figure 11)**, the widening

Box 1: Impact of the Global Financial Crisis: Spillovers across Asian Financial Markets

Introduction

The September 2012 issue of the *Asia Bond Monitor* analyzed the impact of the crises in the United States (US) and eurozone on emerging Asian local bond markets. Our results show that while the growth of individual bond markets in recent years has been impressive, the threat of financial contagion to Asian bond markets from shock and volatility spillovers originating in mature markets is real. Although Asian local bond market volatilities are more determined by their own shocks and volatilities, in some countries—such as the People's Republic of China (PRC), Indonesia, the Republic of Korea, and Thailand—the spillovers from the US and eurozone crises remain significant. During the Lehman crisis in 2008, shock spillovers were prominent, while volatility spillovers have had a more significant effect in Asia during the current eurozone crisis.

However, we are also aware that financial market interactions and spillovers during crisis periods are not limited to the direct spillovers. Substantial cross-asset market transmissions and interactions can occur during times of heightened market uncertainty and stress, adding to the overall instability of the financial system.

We have extended our analysis to investigate the channels through which the shocks and volatilities of source markets get transmitted to Asian local bond markets. The aim is to identify significant direct or indirect channels of shock and volatility propagation.

Methodology

A broader view of financial market interactions, spillovers, and contagion during the crisis periods (Lehman and eurozone debt crises) necessitates the use of multivariate GARCH (MV GARCH) analysis of a group of domestic financial markets partnered with an international source market. In line with the previous estimation technique, this exercise also employs the unrestricted version of the Baba–Engle–Kraft–Kroner (BEKK, $p = q = K = 1$) model to estimate the $5x5$ conditional variance–covariance matrix H_t.

For the impact from the Lehman collapse, the US Treasury (***UST BM***) and US high-yield corporate bond (***USC BM***) markets are used as the two main sources of shocks and spillovers. For the eurozone debt crisis, perturbations in German Bund (***Ger BM***), European Union (EU) composite government bond (***EUCG BM***), and the European corporate bond (***EUC BM***, mainly financial sector) markets are used to examine their fallout on selected Asian local debt markets.

The group of domestic markets considered are the local bond market (***BM***), domestic equity market (***EQM***), domestic currency market (***FXM***), and domestic money market (***MM***).

The time periods are defined as the (i) Lehman collapse period from September 2008 to March 2009, and (ii) peak of eurozone debt crisis from September 2011 to September 2012.

The emphasis is on shock and volatility spillovers, particularly in domestic bond markets. However, the results are rich enough to show shock and volatility persistence and spillovers within domestic markets and from source markets to domestic markets.

Results

Figure B1 shows the significant channels of shock and volatility spillovers from sources in mature markets and across Asian financial markets as implied by our MV GARCH estimates.[a]

Shock Spillovers

- In line with our earlier findings, there is a significant direct shock spillover from the US Treasury market into the government bond market in the PRC.

- Apart from the direct shock spillovers of US and EU government bond markets into Asian local bond markets, the multivariate GARCH estimates reveal significant transmission of shock spillovers from both the US and eurozone crisis periods into domestic money markets. During the Lehman crisis, there were significant spillovers into domestic money markets in the PRC, Indonesia, the Republic of Korea, the Philippines, and Thailand. During the eurozone crisis, in addition to the PRC, Indonesia, the Philippines, and Thailand, there was also a direct spillover into the Malaysia money market.

[a] See Tables B1 and B2 for the significant shock and volatility spillover coefficient values.

Figure B1: Observed Shock and Volatility Spillovers across Asian Financial Markets

Lehman Crisis Period	Eurozone Debt Crisis Period
The channels of **shock spillovers** are 1. UST → BMMM FXM ↔ MM FXM → BM 2. USC BM → BM USC BM → EQM EQM → BM	The channels of **shock spillovers** are 1. EUCG BM → MM BM ↔ MM ↔ FXM ↔ BM 2. Ger BM → BM Ger BM → MM 3. EUC BM → BM EUC BM → EQM
The channels of **volatility spillovers** are 1. UST BM → BM UST BM → EQ M BM ↔ EQM ↔ FXM ↔ BM 2. USC BM → BM	The channels of **volatility spillovers** are 1. EUCG BM → BM ↗ EQM EUCG BM → FXM ↘ MM ↗ MM 2. Ger BM → EQM → BM ↘ FXM 3. EUC BM → FXM BM ↔ EQM ↔ FXM ↔ BM

Note: → shows unidirectional spillover; ↔ shows two-way market feedback and/or spillover.

- The results highlight the liquidity crunch that occurs during the crisis periods. During the Lehman crisis, the US and eurozone interbank markets froze as fear engulfed market participants, creating stress in the funding and execution of capital market transactions. The liquidity crunch experienced by financial institutions in the mature markets evidently had ripple effects on Asian domestic money markets.

- The shocks delivered by US and EU government bond markets to Asian domestic money markets eventually found their way to Asian foreign exchange markets and local bond markets. There is significant spillover feedback between the domestic currency and money markets.[b] Since most Asian banks have substantial holdings of local government bonds, any instability in the currency and money markets translates into instability in local bond markets.

- On the other hand, the US and eurozone corporate bond markets have shock spillovers directly into Asian local bond markets. This validates investor perceptions that most Asian government bonds are in the same asset class as high-yielding US and EU corporate bonds. The US high-yield corporate debt market impacted Indonesia, the Republic of Korea, Malaysia, and the Philippines. The disturbances in the high-yield corporate market in the eurozone generated shock spillovers in the same four markets in addition to the PRC and Thailand.

- The US and EU corporate bond markets also have shock spillovers in Asian domestic equity markets, which further supports the high-yield classification.

[b] To further investigate claims of tightening in the US$ funding market during the height of the Global Financial Crisis, we have used the MV GARCH model to observe spillovers between US$ SIBOR and local money markets. Results show significant shock and volatility spillovers between the two funding markets, implying that instability is transmitted across onshore and offshore money markets.

- There are significant shock spillovers from the other domestic asset markets into the local bond market. During the Lehman crisis, equity markets showed significant shock spillovers in local bond markets, particularly when taken alongside the US corporate bond market (i.e., the high-yield market). The currency market also showed significant shock effects on the bond market, particularly when the US Treasury bond market is the source.

Volatility Spillovers

- The US and EU government bond markets have direct volatility spillovers into Asian local bond markets. Their values are generally larger than the shock spillovers. During the Lehman crisis, there was a direct volatility spillover from US Treasuries into the PRC, Indonesia, the Philippines, and Thailand. During the eurozone crisis, in addition to the PRC, Indonesia, the Republic of Korea, and Thailand, the volatility in the EU composite government bond market also spilled over into Malaysia.

- During the Lehman collapse crisis period, the US corporate bond market had significant volatility spillovers into all local bond markets included in this exercise. Moreover, there was a high degree of spillovers across domestic financial markets, suggesting heightened contagion in this crisis period.

- During the eurozone debt crisis period, the EU government bond market showed significant volatility spillovers not just into Asian local bond markets, but also into domestic equity, currency, and money markets, demonstrating the real and broader threat of financial market contagion from mature markets.

Implications

The spillover modelling exercise confirms the view that the region's local bond markets are vulnerable to the ongoing crisis in the eurozone as shocks and volatilities from the crisis affecting mature markets are transmitted into Asian domestic asset markets. The vulnerability of local bond markets is not only driven by direct linkages between the sources in mature markets and local bond markets in Asia, but more importantly through the cross-asset market spillovers within the domestic setting. The significant cross-market spillovers expose not only domestic bond markets, but also other local financial asset markets, to contagion threats as any direct spillover into one market may channel through and ultimately find its way into the other markets. The feedback and transmission of spillovers highlight the importance of coordination among domestic financial policymakers and regulators to address any market pressure and maintain financial stability.

The continued strong capital inflows that the region is experiencing further expose regional markets to contagion risks. The flow of funds from global capital markets presents opportunities for growth in the real sector when properly channelled into real investments; it also raises concerns over capital flight risks. Strengthening the domestic investor base and putting in place domestic safety nets are key policy measures needed to address any adverse impacts from capital flows reversals.

As the region moves toward greater financial integration, the results of the exercise underscore the importance of strengthening domestic and regional safety nets. Global market volatilities get transmitted to domestic asset markets and expose the region to contagion risks. From a risk-sharing viewpoint, financial integration may be beneficial as pressures in one market can be more easily diffused to other markets. On the other hand, it heightens contagion threats since a strain in one market can shared across the region. To better stave off pressures on the region's markets and minimize the spread of contagion, strong domestic and regional safety nets are needed.

Table B1: Shock Spillovers and Persistence (5% level of significance)

Lehman Collapse

Recipient Market	Country	BM	EQ	FX	MM	US Treasury
BM	PRC		0.0897			0.0759
	INO	0.1663		0.2687		
	KOR		0.0439	0.1166	0.0039	
	PHI	0.2708		1.5465		
	THA	0.4092	0.0083	3.4587		
EQ	PRC		0.3517	10.2232		0.0299
	INO	0.0767	0.2217			
	KOR		0.0302			
	PHI	0.0226	0.2207			0.0064
	THA	0.0094	0.1088	2.3164		
FX	PRC	0.0001		0.1703	0.0001	
	INO	0.0096	0.0492	0.0579		
	KOR			0.2046		
	THA	0.0009		0.1085	0.0040	0.0001
MM	PRC	0.8424	0.1672	60.1780		0.0578
	INO	0.0004	0.0027	0.0188	3.0717	0.0040
	KOR	0.1285	0.1667		0.7429	0.0144
	PHI	0.0725			0.0516	0.0446
	THA	0.0001	0.0028	0.4005	11.1316	0.0014

Recipient Market	Country	BM	EQ	FX	MM	US Corp.
BM	PRC	0.0192	0.0493	22.0932	0.0227	
	INO		0.1792	0.1334	0.2383	0.3183
	KOR		0.0719	0.0736		0.3066
	MAL	0.0274			0.2732	0.3196
	PHI	0.0534	0.2961		0.0093	0.0659
	THA	0.0822	0.0429	12.0191	0.3489	
EQ	PRC		0.0388	28.8173		0.5073
	INO		0.7445		0.5255	0.3084
	KOR	0.0539	0.0180	0.0612		0.2843
	MAL		0.0456		0.0086	0.0378
	PHI	0.1764	0.0852		0.0820	
	THA		0.1917	1.6150		
FX	PRC	0.0000		0.5707	0.0000	0.0013
	INO	0.0158	0.0284	0.2974		
	KOR	0.0087		0.1890		0.0270
	MAL		0.0034	0.0923	0.0039	0.0022
	PHI	0.0134			0.0022	
	THA	0.0005		0.0186	0.0028	
MM	PRC		0.4052		0.0236	
	INO				0.0986	
	KOR	0.0412	0.0533		0.8638	0.1765
	MAL	0.0580	0.1121	2.2800	2.2344	0.8813
	PHI	0.2445	0.5423	1.5327	0.1682	
	THA	0.0000		0.0005	4.5599	0.0012

EU Sovereign Debt Crisis

Recipient Market	Country	BM	EQ	FX	MM	EU composite government bond
BM	PRC	0.2187	0.0135		0.0004	0.0318
	INO	0.0675	0.0211	0.2591	0.0873	
	KOR		0.0203		0.0489	
	MAL	0.2043	0.0018			
	PHI	0.1304			0.0022	
	THA	0.0707	0.0120			
EQ	PRC					0.0084
	INO	0.0039	0.0079	0.0211		
	KOR		0.0923	0.2658		0.0023
	MAL		0.1490			
	PHI		0.1395	0.1984	0.0062	
	THA		0.0855	0.1687		
FX	PRC	0.0003	0.0003	0.0591		
	INO	0.0010	0.0018	0.1866	0.0015	0.0005
	KOR	0.0004	0.0026	0.0131	0.0025	
	MAL		0.0097	0.1029	0.0173	
	PHI	0.0006	0.0042	0.0250		0.0006
	THA		0.0011	0.0630		
MM	PRC			189.4008	0.0912	0.5252
	INO	0.2031	0.1316	0.0388	4.0678	0.0323
	KOR	0.0443			0.0706	
	MAL	0.0666	0.0641	0.1070	0.0323	0.0098
	PHI	0.0224	0.1325	1.3572	0.1286	0.0123
	THA	0.0031	0.0125	0.1149	5.0510	0.0001

Recipient Market	Country	BM	EQ	FX	MM	German Bunds
BM	PRC	0.2277		10.7284		0.0002
	INO	0.1676		0.0599	0.2775	
	KOR		0.0101			0.0007
	MAL	0.1847				0.0000
	PHI	0.0375				
	THA		0.0318		0.7992	0.0004
EQ	PRC			5.4637		0.0002
	INO	0.0208	0.0271	0.3054		
	KOR		0.0462	0.6158		
	MAL	0.1251	0.1081		0.1037	
	PHI	0.0125	0.1621		0.0031	
	THA	0.0095	0.0430			
FX	PRC		0.0003	0.0270	0.0000	
	INO		0.0147	0.0328	0.0045	
	KOR	0.0020		0.0189		
	MAL	0.0266	0.0511		0.0104	
	PHI		0.0070			
	THA	0.0031				
MM	PRC	1.5956	4.0717	113.1182	0.1254	
	INO	0.4800	0.0154	0.4742	1.3250	0.0002
	KOR	0.0431			0.3739	
	MAL			0.0950	0.2687	0.0004
	PHI	0.0263	0.2376	5.7405	0.1726	0.0007
	THA	0.0000	0.0000		1.7978	0.0000

Recipient Market	Country	BM	EQ	FX	MM	EU Corp.
BM	PRC	0.5181		1.6111		0.0315
	INO	0.2389		0.3717		0.0181
	KOR	0.0078	0.0325		0.4358	
	MAL	0.1769		0.0186		0.0018
	PHI	0.1091		1.8479	0.0106	0.0165
	THA		0.0371			0.0426
EQ	PRC		0.0404	10.4054	0.0005	0.0199
	INO	0.0928	0.5270	2.7579	0.1290	
	KOR	0.0095	0.1327	0.4387	0.0528	0.0164
	MAL		0.0256			0.0020
	PHI	0.0071	0.2860	0.1313		
	THA		0.0556	0.0692		0.0088
FX	PRC	0.0002			0.0000	
	INO	0.0018	0.0150		0.0174	
	KOR					0.0033
	MAL				0.0123	
	PHI			0.0645		
	THA				0.1341	
MM	PRC		2.2416		0.2051	2.9383
	INO	0.1021			0.3203	0.0074
	KOR	0.0481			0.1783	0.0034
	MAL			0.1572	0.0757	0.0300
	PHI	0.0818	0.0730	1.0690	0.0844	
	THA	0.0000	0.0000	0.0006	1.5821	0.0000

BM = local bond market, EQ = domestic equity market, EU = European Union, FX = domestic currency market, INO = Indonesia, KOR = Republic of Korea, MAL = Malaysia, MM = domestic money market, PHI = Philippines, PRC = People's Republic of China, THA = Thailand, US = United States.
Source: ADB's Office of Regional Economic Integration.

Table B2: Volatility Spillover and Persistence (5% level of significance)

Lehman Collapse

Recipient Market	Country	BM	EQ	FX	MM	US Treasury
BM	PRC	0.2049	0.0581		0.0251	0.0104
	INO	0.8642	0.2312			0.0301
	KOR	0.4739	0.4852	0.1425		
	PHI	0.3056			0.0114	0.0320
	THA	0.6111				0.0296
EQ	PRC	0.1263	0.0684	29.9823		0.0976
	INO		0.0485			0.0659
	KOR	0.6017	0.7370	0.6771		
	PHI	0.2771		5.1957	0.0430	0.0348
	THA		0.9007	4.6840		0.0073
FX	PRC			0.6400	0.0000	
	INO	0.0077	0.1030	0.6870		
	KOR	0.1698	0.1509	1.0927		
	PHI		0.0038		0.0076	
	THA	0.0009	0.0037			0.0023
MM	PRC	0.5049			0.3318	0.0275
	INO		0.0006		0.0634	
	KOR				0.4310	
	PHI	0.1295	1.5485		0.4055	
	THA	0.0001	0.0003	0.0018	0.0044	

Recipient Market	Country	BM	EQ	FX	MM	US Corp.
BM	PRC	0.4538	0.1795	5.3379		0.2189
	INO	0.3975		1.9775		1.0190
	KOR	0.6173			0.0083	0.1149
	MAL	0.5539	0.4939	1.1450	0.1253	0.2550
	PHI	0.2803		0.4188	0.0644	0.3909
	THA		0.1436	54.7333	0.0171	0.6379
EQ	PRC	0.4971	0.3819	32.5360	0.0806	
	KOR	0.1186	0.6367	0.0504	0.0012	0.3565
	MAL	0.1915	0.4009		0.0199	0.0794
	PHI			10.0616		
	THA	0.0540	0.6036		0.0576	0.2226
FX	PRC	0.0001	0.0000	0.2788	0.0000	0.0005
	INO	0.0235	0.0492	0.4500		0.1028
	KOR	0.0321	0.0041	0.9108	0.0005	
	MAL		0.0469	0.1057		0.0608
	PHI	0.0049	0.0345	0.4771		0.0373
	THA	0.0056	0.0012	0.0267	0.0006	0.0215
MM	PRC		0.0857		0.5498	0.6732
	INO				0.3648	
	KOR				0.4687	
	MAL					0.0073
	PHI	0.2699		2.7186	0.0977	3.8639
	THA		0.0000		0.0247	

EU Sovereign Debt Crisis

Recipient Market	Country	BM	EQ	FX	MM	EU composite government bond
BM	PRC		0.3137	16.7443		0.0240
	INO	0.0466	0.0241	4.0671		0.0016
	KOR		0.1019	0.2127	3.2675	0.0523
	MAL	0.7894	0.0035	0.0200	0.0053	0.0017
	PHI	0.8540	0.0606		0.0027	
	THA	0.5891	0.0052			0.0415
EQ	PRC	0.4638	0.1322	19.4184		
	INO	0.4103	0.4027		0.0359	0.0024
	KOR		0.8594	0.0300	0.1894	
	MAL		0.1086	0.7452		0.0594
	PHI		0.0432	6.5700	0.0140	0.0385
	THA		0.8932	0.0379		0.0137
FX	PRC	0.0015		0.1208		0.0011
	INO	0.0726	0.0893	0.1589		
	KOR	0.0071	0.0010	0.8832	0.0778	
	MAL	0.1054		0.5458		0.0012
	PHI		0.0844	0.2470		0.0093
	THA			0.8225		0.0030
MM	PRC			156.8631	0.3689	7.4547
	INO				0.0083	
	KOR	0.1265	0.0264	0.0573	0.0245	0.0020
	MAL	0.0165				0.0150
	PHI	0.0203			0.7158	0.0453
	THA		0.0001			

Recipient Market	Country	BM	EQ	FX	MM	German Bunds
BM	PRC	0.5360	0.0247	10.0487	0.0006	
	INO	0.7053	0.0054		0.3696	
	KOR	0.5149	0.1193	0.2993		0.0025
	MAL	0.8326				
	PHI	0.8898				
	THA	0.1615		7.4780		0.0025
EQ	PRC	0.0808	0.0587	57.0317	0.0020	0.0012
	INO		0.8929			
	KOR	0.2293	0.9890			0.0002
	MAL		0.2812	0.1585	0.2265	0.0009
	PHI		0.6959	0.7921	0.0049	
	THA		0.9166			
FX	PRC		0.0087		0.0000	
	INO			0.8636	0.0051	
	KOR	0.0283		0.9160	0.0095	0.0000
	MAL		0.0365	0.1146	0.0198	0.0003
	THA	0.0160	0.0145			
MM	PRC		3.7219	676.3852	0.4909	
	INO	0.0262	0.0028		0.0203	0.0000
	MAL	0.0775	0.3047	2.3164	0.1416	
	PHI			1.3549	0.6658	0.0003
	THA		0.0000	0.0000	0.2853	

Recipient Market	Country	BM	EQ	FX	MM	EU Corp.
BM	PRC	0.2880		7.6736		0.0329
	INO	0.1062	0.0978	0.6723	0.1326	
	KOR	0.2165		0.2669	3.4559	
	MAL	0.7847			0.0068	
	PHI	0.6798		0.3031	0.0073	0.0222
	THA	0.2057				
EQ	PRC			44.1673		
	INO	0.0254	0.2389		0.3135	0.2060
	KOR	0.2018	0.1156	3.3536	0.6469	
	MAL	0.0040	0.8867		0.0126	
	PHI		0.6070		0.0006	0.0133
	THA	0.0202	0.8968			
FX	PRC		0.0077			0.0014
	INO	0.0105	0.0090	0.4777	0.1033	
	KOR	0.0407	0.2263	0.0589	0.0324	
	MAL			0.4124	0.0982	0.0082
	PHI	0.0007	0.0035	0.6481		0.0204
	THA					0.0301
MM	PRC			379.4810	0.6553	
	INO	0.3289	0.0962		0.1054	
	KOR	0.0559				0.0210
	MAL	0.0452	0.2771	0.9354	0.1632	
	PHI	0.1018	0.0128		0.7993	
	THA				0.2954	

BM = local bond market, EQ = domestic equity market, EU = European Union, FX = domestic currency market, INO = Indonesia, KOR = Republic of Korea, MAL = Malaysia, MM = domestic money market, PHI = Philippines, PRC = People's Republic of China, THA = Thailand, US = United States.
Source: ADB's Office of Regional Economic Integration.

of the 2- versus 10-year spread has been driven mainly by the decline in yields on 2-year bonds between end-June and end-October. In Viet Nam, yields on 2-year bonds fell over this same period, while yields on 10-year bonds rose.

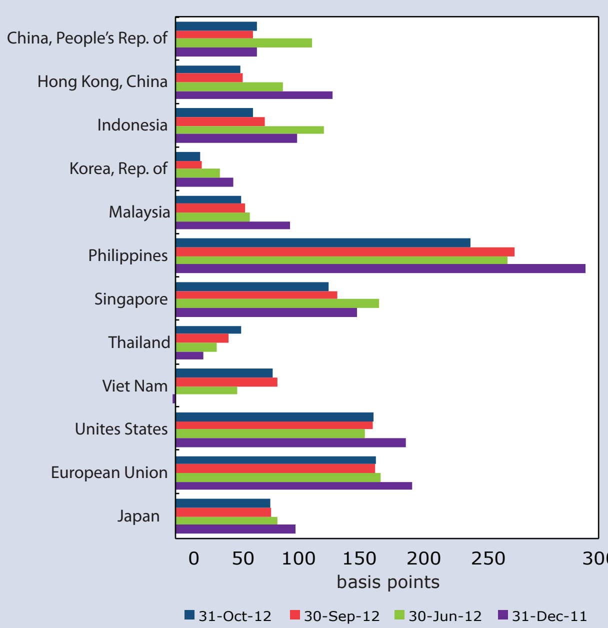
Corporate Bond Credit Spreads

There was little movement in corporate bond credit spreads between end-June and end-October.

The lack of movement for corporate bond credit spreads is especially true for the credit spreads of high-grade bonds in the PRC and the Republic of Korea, which traditionally have seen significant movement from one quarter to another. However, in the PRC credit spreads widened slightly for the 1- and 5-year maturities between end-June and end-October, while they tightened by miniscule amounts along the rest of the PRC corporate bond credit curve **(Figure 12a)**. Credit spreads for the Republic of Korea's high-grade corporate bonds tightened slightly across all maturities, as did credit spreads for Malaysian high-grade bonds. Credit spreads for Thai high-grade bonds widened in 3Q12 for the 1.5-, 2-, 3-, and 3.5-year maturities, while tightening for most other maturities.

The trend of non-movement was even more pronounced among the credit spreads of high-yield bonds. Movements in credit spreads were almost nonexistent for high-yield bonds from the PRC, Malaysia, and the Republic of Korea, except at the very short-end of the PRC curve, which showed a sharp reduction in credit spreads **(Figure 12b)**. Movements in credit spreads for Thai high-yield bonds were somewhat larger as credit spreads for bonds with maturities of 1, 3, and 4 years widened, while credit spreads for other maturities tightened.

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



Source: Based on data from Bloomberg LP.

G3 Currency Bond Issuance

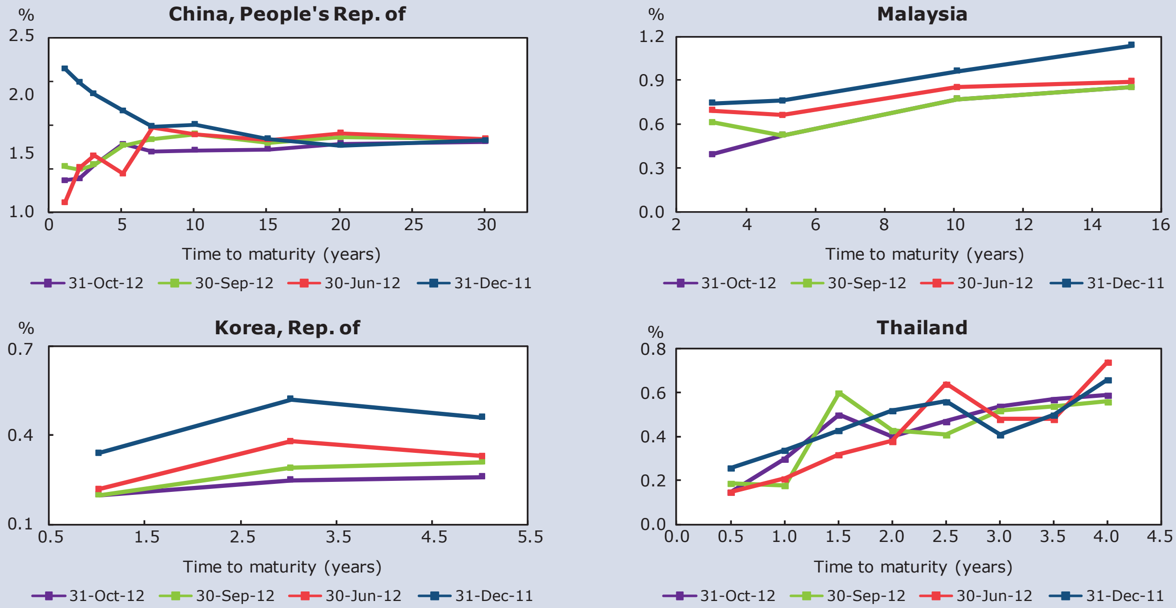
Emerging East Asia's G3 currency issuance breached the US$100 billion mark in 2012, reaching US$112 billion through October.

G3 currency bond issuance in emerging East Asia soared to US$112.1 billion through end-October, easily surpassing the full-year 2011 total of US$75 billion, on the back of historically low funding costs **(Table 7)**.

Most emerging East Asian economies recorded higher G3 currency bond issuance amounts in the first 10 months of the year than in all of 2011. The largest G3 currency issuance in the region in January–October came from the Republic of Korea, which recorded total issuance of US$27.9 billion. Among the top G3 currency bond issuers in the Republic of Korea were banks (Korea Eximbank and Korea Development Bank) and utility companies (Korea Gas Corporation, Korea National Oil Corporation, and Korea Hydro and Nuclear Power).

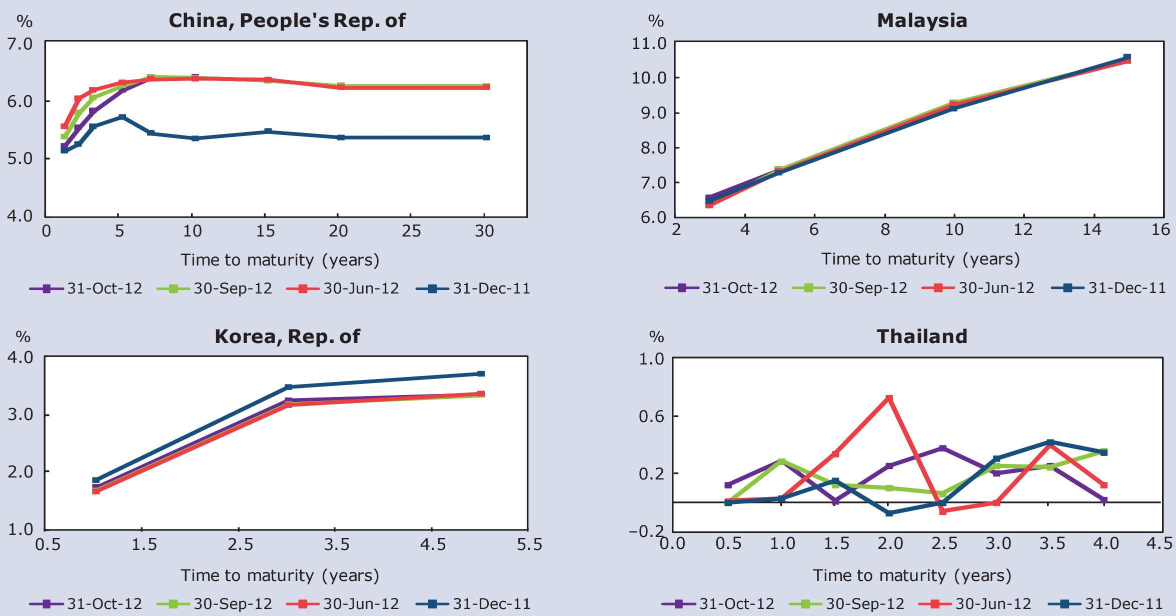
Hong Kong, China registered the second-largest G3 currency issuance in emerging East Asia in January–October, amounting to US$24.7 billion, which eclipsed its issuance of US$8.6 billion

Figure 12a: Credit Spreads—LCY Corporates Rated AAA vs. Government Bonds



LCY = local currency.
Note: Credit spreads are obtained by subtracting government yields from corporate indicative yields.
Source: People's Republic of China (*ChinaBond*); Republic of Korea (EDAILY *BondWeb*); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).

Figure 12b: Credit Spreads—Lower-Rated LCY Corporates vs. LCY Corporates Rated 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 (EDAILY *BondWeb*); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).

Table 7: G3 Currency Bond Issuance, 2011 and 1 January–31 October 2012

2011

Issuer	US$ (million)	Issue Date
China, People's Rep. of	**17,829**	
CNOOC Finance 4.25% 2021	1,500	26-Jan-11
Country Garden 11.125% 2018	900	23-Feb-11
China Resources Power 7.25% Perpetual	750	9-May-11
Citic Pacific 7.875% Perpetual	750	15-Apr-11
ENN Energy 6.0% 2021	750	13-May-11
Longfor Properties 9.5% 2016	750	7-Apr-11
Others	12,429	
Hong Kong, China	**8,565**	
Bank of China (Hong Kong) 3.75% 2016	750	8-Nov-11
China Resources Land 4.625% 2016	750	19-May-11
HSBC 1.0599% 2014	500	31-May-11
Newford Capital 0.0% 2016	500	12-May-11
The Hong Kong Mortgage Corp. 0.5293% 2013	450	15-Apr-11
Others	5,615	
Indonesia	**6,673**	
Indonesia (sovereign) 4.875% 2021	2,500	5-May-11
Pertamina 5.25% 2021	1,000	23-May-11
PLN 4.0% 2018	1,000	21-Nov-11
Others	2,173	
Korea, Rep. of	**32,035**	
Korea Development Bank 3.875% 2017	1,000	4-Nov-11
Korea Eximbank 4.375% 2021	1,000	15-Sep-11
Korea National Oil Corp. 4.0% 2016	1,000	27-Oct-11
Korea Development Bank 4.0% 2016	750	9-Mar-11
Korea Finance 4.625% 2021	750	16-Nov-11
Korea Eximbank (*samurai*) 0.93% 2013	741	8-Jul-11
Hyundai Capital 4.375% 2016	700	27-Jan-11
Korea Eximbank 3.75% 2016	700	20-Apr-11
Posco 5.25% 2021	700	14-Apr-11
Others	24,694	
Malaysia	**3,100**	
Wakala Global (*sukuk*) 2.991% 2016	1,200	6-Jul-11
Others	1,900	
Philippines	**3,450**	
Philippines (sovereign) 5.5% 2026	1,500	30-Mar-11
San Miguel Corp. 2.0% 2014	600	5-May-11
Energy Development Corp. 6.5% 2021	300	20-Jan-11
Others	1,050	
Singapore	**1,868**	
SingTel Group 4.5% 2021	600	8-Mar-11
Others	1,268	
Thailand	**1,370**	
PTTEP 5.692% 2021	700	5-Apr-11
Others	670	
Viet Nam	**90**	
Emerging East Asia Total	**74,981**	
Memo Items:		
India	**11,673**	
Novelis 8.75% 2020	1,400	13-Apr-11
Novelis 8.375% 2017	1,100	13-Apr-11
ICICI Bank 4.75% 2016	1,000	25-May-11
Others	8,173	
Sri Lanka	**1,512**	

1 January—31 October 2012

Issuer	US$ (million)	Issue Date
China, People's Rep. of	**21,715**	
CNOOC Finance 3.875% 2022	1,500	2-May-12
Sinopec 2.75% 2017	1,000	17-May-12
Sinopec 3.9% 2022	1,000	17-May-12
Sinopec 4.875% 2042	1,000	17-May-12
COSL Finance 3.25% 2022	1,000	6-Sep-12
Citic Pacific 6.8% 2023	750	17-Oct-12
Others	15,465	
Hong Kong, China	**24,673**	
Hutchison Whampoa 2.5% 2017	1,538	6-Jun-12
Hutchison Whampoa 4.625% 2022	1,500	13-Jan-12
Hutchison Whampoa 3.5% 2017	1,000	13-Jan-12
Hutchison Whampoa 6.0% Perpetual	1,000	7-May-12
Wharf Finance 4.625% 2017	900	8-Feb-12
Others	18,735	
Indonesia	**10,041**	
Indonesia (sovereign) 3.75% 2022	2,000	25-Apr-12
Indonesia (sovereign) 5.25% 2042	1,750	17-Jan-12
Pertamina 6.0% 2042	1,250	3-May-12
Others	5,041	
Korea, Rep. of	**27,901**	
Korea Eximbank 4.0% 2017	1,250	11-Jan-12
Korea Eximbank 5.0% 2022	1,000	11-Jan-12
Korea National Oil Corp. 3.125% 2017	1,000	3-Apr-12
Samsung Electronics 1.75% 2017	1,000	10-Apr-12
Korea Finance Corp. 2.25% 2017	800	7-Aug-12
Korea Development Bank 3% 2022	750	14-Sep-12
Korea Hydro and Nuclear Power 3% 2022	750	19-Sep-12
Korea Gas 6.25% 2042	750	20-Jan-12
Korea Development Bank 3.5% 2017	750	22-Feb-12
Others	19,851	
Malaysia	**6,785**	
1MDB Energy 5.99% 2022	1,750	21-May-12
Malayan Banking 3.25% 2022	800	20-Sep-12
SSG Resources 4.25% 2022	800	4-Oct-12
Others	3,435	
Philippines	**3,125**	
Philippines (sovereign) 5.0% 2037	1,500	13-Jan-12
Others	1,625	
Singapore	**12,392**	
OCBC Bank 3.15% 2023	1,000	11-Sep-12
Others	11,392	
Thailand	**4,900**	
PTT Global Chemical 4.25% 2022	1,000	19-Mar-12
Others	3,900	
Viet Nam	**550**	
Emerging East Asia Total	**112,081**	
Memo Items:		
India	**10,469**	
Reliance Holdings 5.4% 2022	1,500	14-Feb-12
State Bank of India 4.125% 2017	1,250	1-Aug-12
ICICI Bank 4.7% 2018	750	21-Aug-12
Others	6,969	
Sri Lanka	**2,434**	

Note: Not included in this table is the Philippines' sovereign Global Peso Bond, a PHP54.8 billion (US$1.2 billion) 25-year bond issued in January 2011.
Source: Bloomberg LP, newspaper and wire reports.

in 2011. One of the largest G3 currency bond issuers in Hong Kong, China was Hutchison Whampoa, which raised about US$7 billion through October. The PRC was third on the list in terms of G3 currency bond issuance with a total of US$21.7 billion, which was also larger than 2011's US$17.8 billion. Energy companies were among the top G3 currency bond issuers from the PRC. For example, Sinopec Group, a state-owned petroleum and petrochemical company, raised a total of US$3.5 billion in US$-denominated bonds in the first 10 months of the year.

Meanwhile, Singapore showed the most impressive growth in G3 currency bond issues in January–October compared with full-year 2011, posting total issuance of US$12.4 billion thus far in 2012 versus US$1.9 billion in all of the previous year. Financial institutions were the largest issuers of G3 currency bonds in Singapore, including OCBC Bank (US$2.2 billion), DBS Bank (US$2.1 billion), and Temasek Financial (US$1.7 billion in dual-tranche bonds).

In 2012, total G3 currency bond issuance from Indonesia also improved, leveling off at US$10.0 billion through October versus US$6.7 billion in 2011. This total was bolstered by the Government of Indonesia issuing a US$2.0 billion 10-year bond and a US$1.75 billion 30-year bond. Utility companies in Indonesia have likewise issued a number of US$-denominated bonds in 2012, led by Indonesian oil company, Pertamina, which sold dual-tranche bonds totaling US$2.5 billion in May.

Malaysia's total G3 currency bond issues in January–October reached US$6.8 billion, more than doubling its 2011 total of US$3.1 billion. 1MDB Energy remained the largest Malaysian G3 currency bond issuer based on its US$1.75 billion bond sold in May. More recently, Malayan Banking (Maybank) and SSG Resources both issued US$800 million worth of US$-denominated bonds in September and October, respectively.

G3 issuance in 2012 has more than tripled in Thailand compared with the previous year, reaching US$4.9 billion through October versus US$1.4 billion in full-year 2011. PTT was the largest Thai issuer of US$-denominated bonds, with the PTT Group issuing a total of US$1.1 billion in dual-tranche bonds in October. Its petrochemical unit, PTT Global Chemical, sold US$1.0 billion of 10-year bonds in March.

In the Philippines, total G3 issuance amounted to US$3.1 billion through October, led by a 25-year sovereign bond worth US$1.5 billion issued in January. In Viet Nam, G3 currency bond issues totaled US$550 million in January–October.

Market Returns

Market returns for emerging East Asia's LCY bonds show YTD gains in all markets.

The Pan-Asian Index rose 6.8% year-to-date (YTD) through 31 October, which is identical to the 6.8% return for 2011 as a whole **(Table 8)**. Most of these YTD gains were realized by the end of 3Q12, when the Pan-Asian Index's YTD return was 5.6%.

The best performing market on a US$ unhedged basis through 31 October was the Philippines with a return of 13.4%, while the best performing market on an LCY total return basis was Indonesia at 8.6%. The return for Singapore (9.8%) was also impressive on an unhedged basis, as was that for Malaysia (7.7%). Both markets, however, shared the same return of 3.6% on an LCY total return basis. The worst performing market by both measurements was the PRC, with returns of 2.9% on an unhedged basis and 1.9% on an LCY total return basis.

The region's equity markets have delivered returns that are much improved in 2012 over 2011 returns **(Table 9)**. Returns on the Far East ex-Japan Index were –16.8% in US$ terms and –15.6% in LCY terms in 2011. However, these returns improved in January–October this year, with YTD returns of 12.3% in US$ terms and 9.5% in LCY terms.

Table 8: iBoxx Asia Bond Fund Index Family Returns

Market	Modified Duration (years)	2011 Returns (%)		3Q12 Returns (%)		2012 YTD Returns	
		LCY Total Return Index	US$ Unhedged Total Return Index	LCY Total Return Index	US$ Unhedged Total Return Index	LCY Total Return Index	US$ Unhedged Total Return Index
China, People's Rep. of	6.73	5.4	9.9	2.1	2.3	1.9	2.9
Hong Kong, China	4.22	5.2	5.2	3.0	3.2	3.2	3.4
Indonesia	7.09	19.7	18.4	6.6	1.6	8.6	3.1
Korea, Rep. of	4.73	6.2	4.7	6.2	9.8	6.6	12.1
Malaysia	5.25	4.7	1.8	3.0	6.6	3.6	7.7
Philippines	6.94	14.8	14.7	6.9	11.8	7.2	13.4
Singapore	6.49	6.3	5.0	3.0	8.9	3.6	9.8
Thailand	5.04	4.9	0.3	1.8	4.1	3.2	5.9
Pan-Asian Index	5.63	–	6.8	–	5.6	–	6.8
HSBC ALBI	7.54	–	4.9	–	6.3	–	7.4
US Govt. 1–10 years	3.99	–	6.8	–	1.9	–	1.6

– = not applicable, ALBI = Asian Local Bond Index, LCY = local currency, US = United States, YTD = year-to-date.
Notes:
1. The Asian Bond Fund (ABF) indices contain only government debt and government-guaranteed debt obligations.
2. Market bond indices are from iBoxx Index Family. Returns for 2012 are year-to-date as of 31 October 2012.
3. Annual returns are computed for each year using a natural logarithm of end-of-year index value/beginning-of-year index value.
4. Duration as of 31 October 2012.
Source: *AsianBondsOnline* and Bloomberg LP.

Table 9: MSCI Index Returns

Market	2010 Returns (%)		2011 Returns (%)		2012 YTD Returns (%)	
	LCY terms	US$ terms	LCY terms	US$ terms	LCY terms	US$ terms
China, People's Rep. of	2.6	2.3	(20.4)	(20.3)	11.2	11.4
Hong Kong, China	20.0	19.7	(18.5)	(18.4)	19.7	19.9
Indonesia	25.8	31.2	4.7	4.0	10.5	4.3
Korea, Rep. of	22.1	25.3	(11.5)	(12.8)	5.4	11.3
Malaysia	19.3	32.5	(0.2)	(2.9)	5.7	10.0
Philippines	23.5	30.3	(3.1)	(3.2)	24.7	32.8
Singapore	8.1	18.4	(20.0)	(21.0)	14.1	21.2
Thailand	36.4	50.8	(1.7)	(5.6)	18.0	21.5
Far East ex-Japan Index	12.5	16.7	(15.6)	(16.8)	9.5	12.3
MSCI US	–	13.2	–	(0.1)	–	12.3

– = not applicable, LCY = local currency, MSCI = Morgan Stanley Capital International, US = United States, YTD = year-to-date.
Notes:
1. Market indices are from MSCI country indexes. 2012 returns are year-to-date as of 31 October 2012.
2. Far East ex-Japan includes the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.
Source: *AsianBondsOnline* and Bloomberg LP.

Policy and Regulatory Developments

People's Republic of China

Allowable Investments for QFIIs Expanded

On 28 July, the China Securities Regulatory Commission (CSRC) issued new rules allowing Qualified Foreign Institutional Investors (QFIIs) to invest in the interbank market. QFIIs were previously only allowed to trade in the exchange market. The new regulations also allow QFIIs to invest in private placement bonds issued by small and medium-sized enterprises (SMEs). Finally, the 20% stake limit in a listed company was raised to 30%.

CSRC Approves First Direct Offshore Bond Fund

On 16 October, the CSRC approved Huaxia Asset Management's bid to launch a bond fund investing in offshore bonds under the Qualified Domestic Institutional Investor (QDII) program. The fund will invest 80% of its assets in bonds, unlike existing QDII funds that invest mostly in equities. The fund will also invest in bonds directly, rather than indirectly, as is the case with other QDII bond funds.

Allowable Offshore Investments of Insurance Companies Expanded

On 23 October, the China Insurance Regulatory Commission (CIRC) began allowing insurance companies to invest offshore in countries other than Hong Kong, China. The list of allowable countries was expanded to 45 and the allowable investments were expanded from bonds and equity to also include real estate, currency products, and fixed-income products other than bonds.

Bank of Communications Prices First ABS under Pilot Program

On 2 November, Bank of Communications priced the first asset-back security (ABS) under the new ABS pilot scheme. The security comprises three tranches. The A1-rated tranche had a size of CNY850 million and was priced at 4.2%. The A2-rated tranche had a size of CNY1.6 billion with a floating rate of 140 basis points (bps) over the 1-year deposit rate. The B-rated tranche was sized at CNY310 million with a floating rate of 300 bps over the 1-year deposit rate. An unrated subordinated tranche worth CNY263.3 billion will also be privately placed. The collateral for the notes comprises 60 corporate loans from 34 borrowers.

Hong Kong, China

HKMA to Implement First Phase of Basel III

On 19 October, the Hong Kong Monetary Authority (HKMA) announced that the first phase of its implementation of Basel III requirements would take effect on 1 January 2013. The first phase consists mostly of changes to the capital adequacy ratio, splitting it into three distinct ratios: (i) common equity Tier 1 capital ratio, (ii) Tier 1 capital ratio, and (iii) total capital ratio.

Indonesia

BI to Impose Capital Requirements on Foreign Lenders

In August, Bank Indonesia (BI) announced plans to require foreign banks to comply with minimum paid-up capital requirements. Current regulations require domestic banks to meet a IDR3 trillion capitalization. Foreign banks that will be affected by this new regulation are those that were set up at a time when BI allowed foreign lenders to open branches without establishing a locally incorporated company.

BI to Require *Shari'a* Banks to Comply with LTV Rule

In August, BI announced plans to require *shari'a* banks to comply with the loan-to-value (LTV) rule currently applied to conventional banks. The LTV rule requires a minimum down payment amount for those seeking housing and automotive loans, effective 15 June. The minimum down payment requirement is 25% for two-wheeled vehicles and 30% for 4-wheeled vehicles. *Shari'a* banks were excluded from the regulation as Islamic rules do not require down payments.

Republic of Korea

FSS Introduces Tighter Rules on Commercial Paper

The Financial Supervisory Service (FSS) announced in October that it had begun requiring issuers of asset-backed commercial paper to disclose the structure, credit ratings, and collateral of these instruments, together with information on the issuers' financial soundness and credit ratings. The FSS also announced that a one-stop inquiry system for commercial paper would be established in October and that it would strengthen its supervision of brokerages selling asset-backed commercial paper.

FSC and FSS Revise Regulations on Bank Supervision

The Financial Services Commission (FSC) announced in September a joint effort with the FSS to revise regulations on bank supervision for domestic implementation of Basel III standards, which will take effect in 2013. The revisions will include subdividing the criteria for the minimum capital requirement, which is 8% of total capital, into three criterion: (i) 4.5% of common equity Tier 1 capital, (ii) 6% of Tier 1 capital, and (iii) 8% of total capital. The revisions will also include the introduction of a capital buffer of 2.5 percentage points in addition to the minimum capital requirement.

Malaysia

ASEAN Trading Link Launches with the Connection of Bursa Malaysia and Singapore Exchange

ASEAN Exchanges—a collaboration among the seven stock exchanges of the Association of Southeast Asian Nations (ASEAN) that seeks to promote growth in the region's capital markets—announced the rollout of the ASEAN Trading Link on 18 September with the connection of Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link allows connected brokers to execute trades directly to connected exchanges without having to be licensed with that exchange.

Bloomberg AIBIM Bursa Malaysia Corporate *Sukuk* Index Launches

Bloomberg announced in September the launch of an index developed in partnership with the Association of Islamic Banking Institutions Malaysia (AIBIM) and Bursa Malaysia. The Bloomberg AIBIM Bursa Malaysia Corporate *Sukuk* (Islamic bonds) Index will serve as a benchmark for investors in MYR-denominated *sukuk* in Malaysia. According to Bloomberg, the new index will track and measure the performance of the most liquid and credit worthy *sukuk* in Malaysia.

Philippines

BSP Requires Loss Absorbency Clause for Hybrid Instruments

Bangko Sentral ng Pilipinas (BSP) issued Circular 768 on 21 September, requiring instruments eligible as capital under Basel III rules to have loss absorbency features. The circular requires hybrid Tier 1 capital and lower Tier 2 capital to either be written off or converted into common equity upon the occurrence of a trigger event as determined by BSP. In addition, the circular states that "the issuance of any new shares as a result of the trigger event must occur prior to any public sector injection of capital so that the capital provided by the public sector is not diluted."

Singapore

ASEAN Trading Link Launches with the Connection of Bursa Malaysia and Singapore Exchange

ASEAN Exchanges—a collaboration among the seven stock exchanges of the Association of Southeast Asian Nations (ASEAN) that seeks to promote growth in the region's capital markets—announced the rollout of the ASEAN Trading Link on 18 September with the connection of Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link allows brokers to execute trades directly on connected exchanges without having to be licensed with that exchange.

Thailand

BOT Announces Capital Account Liberalization Master Plan

In October, the Bank of Thailand (BOT) proposed the Capital Account Liberalization Master Plan to encourage businesses and depositors to diversify their investments and enhance business efficiency, create an environment for more balanced capital flows, and promote financial market development to facilitate economic integration under the ASEAN Economic Community, which comes into effect in 2015. Specifically, the BOT announced plans to relax rules on outward portfolio investment to allow (i) listed companies to directly invest in derivatives and securities products outside Thailand, (ii) Thai residents to buy foreign currency (FCY) bonds issued in Thailand, and (iii) institutional investors to freely unwind foreign exchange hedging. Additionally, the BOT stated that it will conduct an initial relaxation of foreign exchange regulations by the end of the year and that it will allow Thai individuals to invest in securities outside Thailand through securities companies or private funds without BOT approval.

SET Connects to ASEAN Trading Link

The Stock Exchange of Thailand (SET) became the third stock exchange to connect to the ASEAN Trading Link in October, following Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link was launched in September to offer investors single entry-point access to ASEAN's participating stock exchanges. Brokers who are connected through the ASEAN Trading Link can execute trades directly on any of these three stock exchanges.

Viet Nam

Government Tasks the SBV to Strengthen the Banking Sector in 2013

On 8 October, the Government of Viet Nam released a resolution appointing the State Bank of Vietn Nam (SBV) to take necessary measures to tighten discipline in the banking sector and strengthen all weak banks in 2013. The SBV was also asked to design comprehensive solutions to deal with non-performing loans, increase foreign reserves, and strictly control the exchange rate. In the same resolution, the government re-emphasized that it will continue to pursue a flexible monetary policy to help businesses maintain access to capital while seeking to avoid a recurrence of high inflation. The government also announced it would continue to offer a 3-month extension of value added tax payments due in June 2012.

In addition, the Ministry of Planning and Investment has been instructed to speed up investment promotion and take more measures to mobilize and disburse official development assistance (ODA) and foreign direct investment (FDI) capital. The ministry will revamp its statistical methodology in accordance with international standards to improve socio-economic data collection.

AsianBondsOnline Annual Bond Market Liquidity Survey

Current Trends in the Emerging Asian LCY Bond Market

This year's *AsianBondsOnline* Bond Market Liquidity Survey was conducted in September and October in most markets in emerging Asia.[5] The 2012 survey assessed the current state of liquidity in emerging Asia's local currency (LCY) bond markets by looking at major indicators of liquidity—turnover ratios, bid–ask spreads, representative trading sizes—as well as how market participants view potential changes in policies and improvements to market infrastructure.

The survey found that the most important factors influencing market liquidity in the bond markets of emerging Asia were the continuation of accommodative monetary policies in the United States (US) and Europe, which have resulted in an accelerated inflows of foreign capital. Thus, the role of foreign investors, as well as foreign issuers, is now acknowledged as an important factor in the evolution of bond market liquidity in almost all emerging Asian markets. But foreign inflows have also brought increased volatility in local debt markets and coincided with a retreat from the tightening of the fiscal and monetary policies of 2011 during the first 3 quarters of 2012 in most emerging Asian markets. Perhaps, most importantly, these inflows signal an acknowledgement that credit quality in many of the bond markets of emerging Asia, both government and corporate, has improved. This conclusion is supported by a bevy of sovereign rating upgrades in the region and the improved balance sheets of companies.

Market liquidity has also been driven by the rapidly growing role of institutional investors: pension funds, insurance companies, private banking institutions, and asset management companies. While government bond trading desks at commercial banks are still the largest and most important participants in most markets, institutional investors are assuming an increasingly important role in the larger and more well-developed markets.

Issuance continued to be an important factor driving overall market liquidity in 2012, but its relative importance varied among different market segments. Issuance from central government institutions—treasuries and special purpose government entities—grew very rapidly during the first 3 quarters of 2012 as many governments in the region revived the fiscal stimulus programs they had phased out or reduced in 2011. Central bank issuance was also important, mainly because it was sharply reduced in many markets as central banks generally retreated from their sterilization efforts of recent years. The People's Bank of China (PBOC), for example, simply ceased issuing both bills and bonds in 2012. Quite a few, but not all, central banks in the region have ceased to withdraw liquidity from the market, leaving cash available for investment in other financial instruments, including corporate bonds, which have emerged as the most rapidly growing segment of the emerging Asian bond market in 2012.

The corporate bond market remains less liquid than the government bond sector, due to the fact that many corporate bonds fall into the hands of buy-and-hold investors within a few months of issuance. But there are important exceptions to this generalization in some markets, where issuance by government-owned corporations—or issuance by high-credit-quality private corporations—takes place in very large sizes and continues to trade because of market confidence in the company name and a significant pick-up in yield over a government bond of comparable maturity. Foreign investors have been active in the bond market of the Republic of Korea, for example, and have lately discovered the high-grade corporate bond market, especially bonds issued by government-

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

owned corporations, as an investment in addition to Korean Treasury Bonds (KTBs).

Recent Trends in Quarterly Turnover Ratios for LCY Bonds in Emerging East Asia

The liquidity of LCY government bonds as measured by quarterly turnover ratios has improved in most emerging East Asian markets in 2012 on a year-to-date (YTD) basis.[6]

- In the People's Republic of China (PRC), quarterly turnover ratios for all three types of government sector bonds rose in the first 3 quarters of 2012, although policy bank bond ratios turned down a bit in 3Q12 **(Figure 13a)**. The principal driver of improving turnover ratios for the PRC's government sector bonds has been the trading volumes of repurchase (repo) bond transactions rather than cash bond transactions. Repo bond turnover ratios for the PRC's central bank bonds, policy bank bonds, and treasury bonds—defined as the quarterly repo bond trading volume for a particular type of government sector bond divided by total bonds outstanding for the bond category in question—are compared with turnover ratios for the same category of cash bond transactions in **Figure 13b**.

- The repo bond turnover ratios are higher than those for cash bond transactions for all types of PRC government bonds. The highest repo bond turnover ratio at end-September was for central bank bonds at a level of 2.52, followed by the repo turnover ratios for treasury bonds at 1.87 and policy bank bonds at 1.78. The comparable cash bond turnover ratios at end-September for the PRC's central bank bonds, policy bank bonds, and treasury bonds were 1.53, 0.93, and 0.45, respectively. The much higher repo turnover ratios were driven by the PBOC's repo transactions.

- The Republic of Korea has seen its turnover ratios for central government bonds and central bank bonds rise steadily over the last year to reach levels of 1.24 for central government bonds and 1.18 for central bank bonds at end-September **(Figure 13c)**.

- Turnover ratios for Malaysian government bonds have fluctuated around a level of 0.5 over the last year, while the turnover ratios for Malaysia's central bank bills have fallen from levels as high as 3.0 at end-December 2009 to about 1.0 at end-September **(Figure 13d)**. The turnover ratio for Malaysian government bonds—comprising Malaysian Government Securities (MGSs) and Government Investment Issues (GIIs)—fell to a level slightly below 0.5 in 3Q12.

- Some of the weakness in the turnover ratio for Malaysian government bonds reflects the decline in the turnover ratio for MGS repo bond transactions in 2012, as the repo turnover ratio has trended downward since 2008 **(Figure 13e)**. The MGS cash turnover ratio has been more robust over the last year, reflecting, at least in part, the large foreign capital inflows into the Malaysian bond market.

- Singapore's turnover ratios have been mixed over the last year **(Figure 13f)**. The turnover ratio for Singapore treasury bills has trended upward in 2012, while the turnover ratio for Singapore Government Securities (SGSs) has trended downward.

- The turnover ratio for all Philippine government securities masks the disparate trading activities among specific types of treasury securities, particularly bills and bonds **(Figure 13g)**. Significant movements have occurred in the individual turnover ratios for bills and bonds over the last year. Based on the records of the Bureau of the Treasury's Registry of Scripless Securities (BTr-ROSS), turnover ratios prior to 2010 were within a range of 0.12 and 0.84 for bills and 0.22 and 0.55 for bonds. Between 1Q10 and 3Q12, the average turnover ratio

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

Figure 13a: Trends in Quarterly Turnover Ratios for Spot and Repo in the People's Republic of China

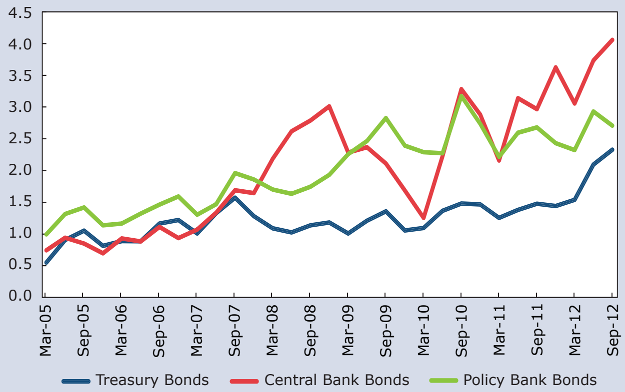


Figure 13b: Trends in Turnover Ratios for Spot and Repo in the People's Republic of China

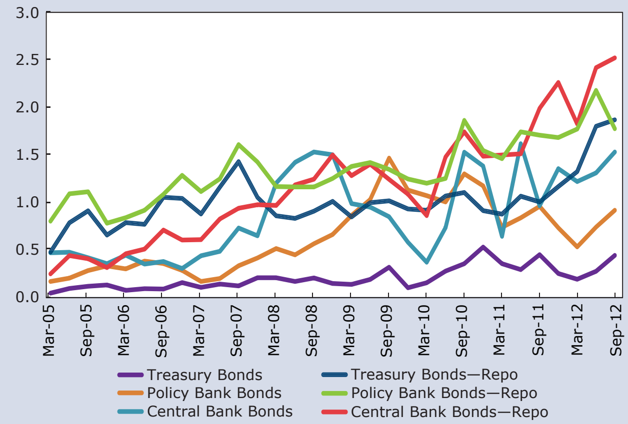


Figure 13c: Trends in Quarterly Turnover Ratios in the Republic of Korea

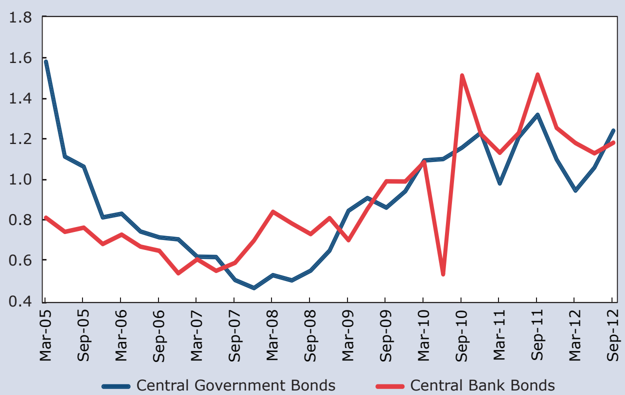


Figure 13d: Trends in Quarterly Turnover Ratios in Malaysia

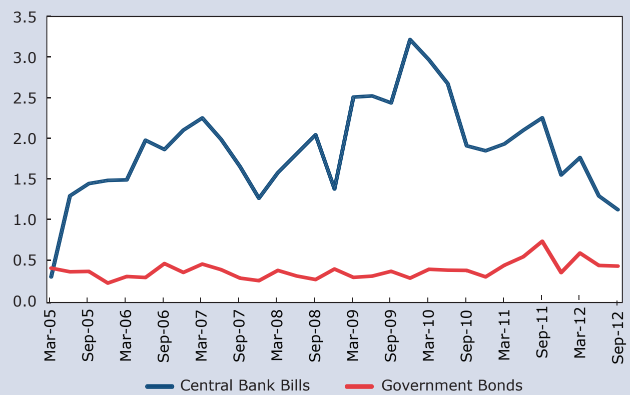


Figure 13e: Trends in Quarterly Turnover Ratios for Malaysian Government Securities

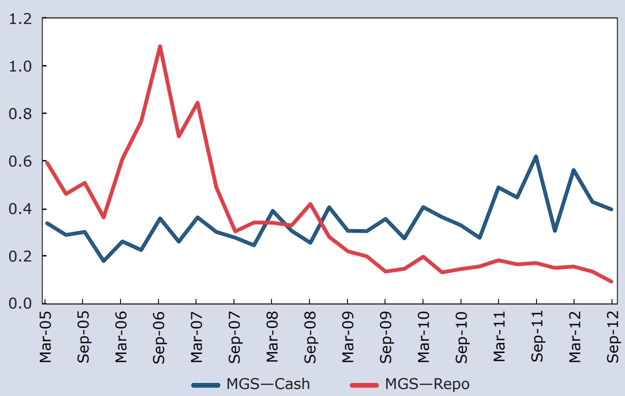
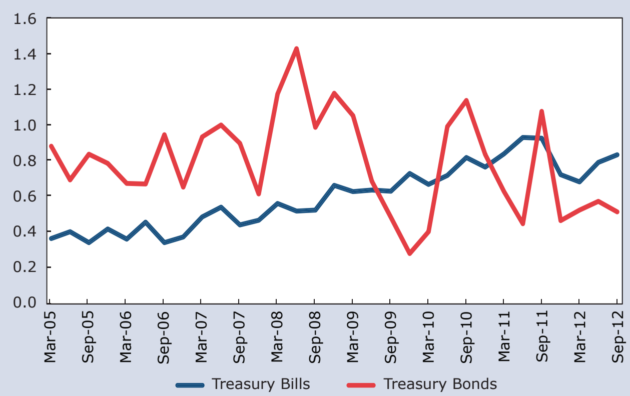


Figure 13f: Trends in Quarterly Turnover Ratios in Singapore



MGS = Malaysia Government Securities.
Notes:
1. For the Republic of Korea, central government bonds include treasury bonds and National Housing Bonds.
2. For Malaysia, government bonds include Malaysian Government Securities (MGSs) and Government Investment Issues (GIIs).
3. Turnover ratios are calculated as LCY trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.
Source: *AsianBondsOnline*.

Figure 13g: Trends in Quarterly Turnover Ratios in the Philippines

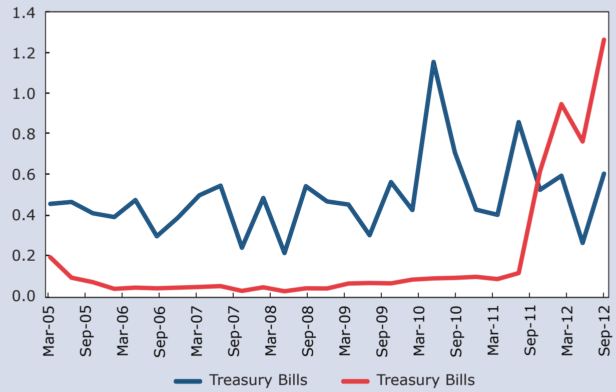


Figure 13h: Trends in Quarterly Turnover Ratios in Thailand

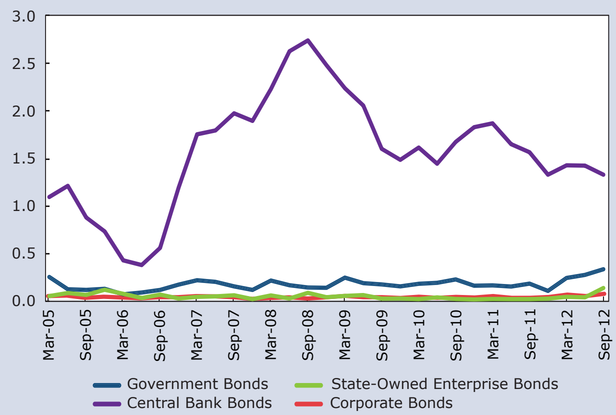
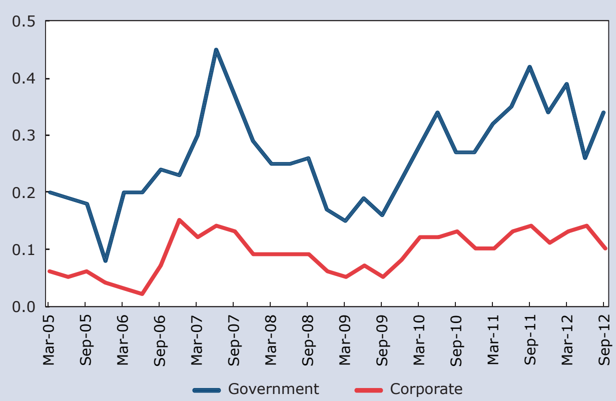


Figure 13i: Trends in Quarterly Turnover Ratios in Indonesia



Note:
1. For Thailand, September 2012 data based on *AsianBondsOnline* estimates.
2. Turnover ratios are calculated as LCY trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.

Source: *AsianBondsOnline*.

for bills catapulted from 0.29 to 5.42; for bonds, it improved slightly from 0.56 to 0.61. The turnover of treasury bills increased dramatically between 4Q11 and 3Q12, which coincided with the rapid strengthening of the Philippine peso and the heightened intervention of the Bangko Sentral ng Pilipinas (BSP) in the secondary market.

- The highest quarterly turnover ratios in Thailand are those of central bank bonds, which in both cases, have tended to fluctuate around 1.5 since 2010 **(Figure 13h)**. Turnover ratios for both government bonds and corporate bonds in Thailand are much lower. The turnover ratio for government bonds in recent years has fluctuated in a range just below 0.3, while the turnover ratio for Thai corporate bonds is negligible. This seems to reflect the fact that a very large amount of corporate bonds—almost 50% of the total—are held by retail investors, mostly on a buy-and-hold basis.

- The turnover ratio for Indonesian government bonds is relatively low, fluctuating in a range below 0.5 over the last several years **(Figure 13i)**. The turnover ratio for Indonesian corporate bonds is even lower, fluctuating around 0.1 in recent years.

The 2012 survey received 122 replies to the questionnaire on government bonds and 92 replies to the questionnaire on corporate bonds. The replies came from a total of 127 respondents, representing trading desk staff and managers, portfolio managers, bond market analysts and strategists, and bond pricing agency staff. Of the 127 respondents, 55 represented domestic firms and 72 represented international firms.

Respondents were asked to give quantitative and qualitative feedback on the measures of liquidity in emerging Asian LCY bond markets, as well as their views on the appropriate policies needed to improve market liquidity and efficiency. Market participants were asked to provide bid–ask spreads and typical transaction sizes for both "on-the-run" and "off-the-run" government bonds. In the case of corporate bonds, market participants were asked to provide bid–ask spreads at the time when a new bond is issued, as well as average transaction sizes. **Table 10** summarizes the survey results for the region's government bond markets.

Bid–Ask Spreads. The bid–ask spread is one of the other most commonly used measures of market liquidity since it directly measures the cost of executing a trade. Bid–ask spreads, however, are only valid for market-accepted transaction sizes and for a limited amount of time. The average reported on-the-run bid–ask spread for a government benchmark bond—typically, a treasury bond—in all 10 markets surveyed was 5.8 basis points (bps). The lowest on-the-run bid–ask spread was found in the Republic of Korea and India (0.6 bps each), followed by the Philippines (2.1 bps) and then the PRC and Malaysia (2.7 bps each). The widest bid–ask spread was in Viet Nam (30.5 bps). Bid–ask spreads in emerging East Asia have generally tightened from last year's levels, reflecting large inflows of capital into many of the region's bond markets in 2012 and the easing of monetary policy currently underway in a number of markets.

Liquidity can also be measured by the difference between on-the-run and off-the-run bid–ask spreads. The greatest differences between the two were in Viet Nam and the Philippines at 10.0 bps and 9.6 bps, respectively. The difference between Viet Nam's on-the-run and off-the-run bid–ask spreads can be explained by the fact that it is still a small market in which a large number of illiquid bonds are being issued.

The Philippines is a somewhat more complex story. The government has made dramatic progress in restructuring the market with buy-backs and re-openings of existing issues. The government has also dramatically extended the maturity profile of its markets to the point that the 20-year maturity is now the dominant and most liquid issue. More than 60% of the secondary bonds trading on the Philippine Dealing and Exchange Corp. (PDEx) are centered on the 20-year maturity (FXTN 20-17). Thus, the on-the-run bond is extremely liquid. This reflects increased foreign inflows of investable funds into the Philippines, recent reductions in policy rates, and a continuing trend of sovereign credit rating upgrades from international credit rating agencies. Most recently, Moody's Investor Service (Moody's) upgraded the Philippines to Ba1 from Ba2. Only the Republic of Korea and India have on-the-run bid–ask spreads that are lower than that of the Philippines. The Philippines' off-

Table 10: LCY Government Bond Market Quantitative Indicators

		PRC	HK	IN	ID	KR	MY	PH	SG	TH	VN	Regional
Typical Bid–Ask Spread On-the-Run (bps)	Average	2.7	6.4	0.6	6.6	0.6	2.7	2.1	3.1	3.2	30.5	5.8
	Count	19	7	5	21	11	11	16	9	13	5	117
	SD	1.3	2.5	0.5	2.0	0.2	1.2	2.3	0.8	1.5	9.4	8.9
Typical Bid–Ask Spread Off-the-Run (bps)	Average	4.5	8.1	2.7	11.6	1.0	4.6	11.7	3.6	5.9	40.5	9.4
	Count	16	6	5	13	11	10	16	7	13	5	102
	SD	2.7	4.1	1.2	5.4	0.3	2.2	8.6	1.9	2.0	12.0	11.5
Accepted LCY Bond Transaction Size On-the-Run (US$ million)	Average	23.2	7.3	1.7	1.8	6.5	10.0	3.0	7.9	4.7	2.4	6.9
	Count	20	6	5	17	11	12	16	9	13	5	114
	SD	22.0	3.2	1.7	1.2	4.6	6.4	2.8	6.4	8.4	1.2	6.4
Accepted LCY Bond Transaction Size Off-the-Run (US$ million)	Average	18.5	5.4	1.7	5.3	8.4	7.3	1.4	7.6	2.1	2.4	6.0
	Count	16	5	5	13	10	11	16	8	13	5	102
	SD	20.0	2.3	1.7	11.2	3.1	4.6	0.6	6.2	1.7	1.8	5.1

bps = basis points; HK = Hong Kong, China; ID = Indonesia; IN = India; KR = Republic of Korea; LCY = local currency; MY = Malaysia; PH = Philippines; PRC = People's Republic of China; SD = standard deviation; SG = Singapore; TH = Thailand; VN = Viet Nam.
Note: The bid–ask spreads for Indonesian treasury bonds presented above are expressed in terms of yields or basis points to make them comparable with bid–ask spreads in other Asian markets. Bid–ask spreads for government bonds are most often expressed in terms of "cents" in the Indonesian market. In our 2012 survey, the average treasury bond bid-ask spread was 38.8 cents.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Table 11: LCY Government Bond Bid–Ask Spreads—Historical Series

	2006	2007	2008	2009	2010	2011	2012
China, People's Rep. of	7.6	20.0	15.0	5.1	2.2	4.0	2.7
Hong Kong, China	3.0	8.0	4.0	4.3	5.1	4.7	6.4
India	–	–	–	–	–	1.0	0.6
Indonesia	16.9	42.0	24.5	26.6	31.7	32.9	38.8
Korea, Rep. of	1.4	4.5	1.7	1.1	1.1	0.7	0.6
Malaysia	2.3	1.5	12.2	2.3	2.6	3.3	2.7
Philippines	25.3	10.0	19.8	6.6	3.1	5.3	2.1
Singapore	2.7	3.4	20.0	2.9	3.0	3.8	3.1
Thailand	3.0	6.3	9.8	3.4	3.1	3.3	3.2
Viet Nam	–	20.6	75.0	25.6	13.2	33.5	30.5

– = data not available, LCY = local currency.
Note: Indonesian bid-ask spread is expressed in "cents."
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

the-run bid–ask spread of 11.7 bps, however, is exceeded only by that of Viet Nam.

Table 11 shows that liquidity in most government bond markets, as measured by average bid–ask spreads, has improved in 2012 after bid–ask spreads had dramatically risen in 2011 on the back of monetary policy tightening in most emerging East Asian markets. Bid–ask spreads in 2009 and 2010, however, were lower than in 2007 and 2008, driven downward by the monetary easing measures implemented in response to the "Lehman Shock" of 2008.

Average Transaction Size. Transaction size is a useful measure of market depth, given that it is an ex post measure of the quantity of bonds that are traded at the bid or ask price. In this year's survey, average on-the-run transaction sizes (US$ equivalent) for government bonds ranged from lows of US$1.7 million and US$1.8 million in India and Indonesia, respectively, to a high of US$23.2 million in the PRC. The next largest average on-the-run transaction sizes were US$10.0 million in Malaysia and US$7.9 million in Singapore.

Characteristics of Individual Government Bond Markets

The 2012 survey also collected data on bid–ask spreads and average sizes for the different types of bonds in larger individual markets, as well as information on developments in market infrastructure.

The PRC. Bid–ask spreads for the PRC's treasury bills and bonds tightened from 4.7 bps and 4.0 bps in the 2011 survey, respectively, to 2.4 bps and 2.7 bps in 2012 **(Table 12)**. PBOC bills and bonds also tightened by comparable amounts in this year's survey to levels of 2.2 bps and 3.1 bps, respectively. The bid–ask spread for policy bank bonds, however, remained at its 2011 level of 4.0 bps, suggesting that liquidity has remained largely unchanged in 2012, while liquidity for treasury and PBOC instruments has improved markedly since the middle of this year.

Average trading sizes have risen for most types of government bonds in 2012. The average trading size for treasury bills more than doubled to CNY209.8 million and the average trading size for treasury bonds rose from CNY97.5 million in 2011 to CNY146 million this year.

The PBOC has cut its policy interest rates twice this year. The first cut of PBOC's policy rates in 3 years took place on 8 June with a reduction of 25 bps for both rates. This was followed by cuts of 31 bps for the lending rate and 25 bps for the 1-year deposit rate on 8 July. Market participants are waiting to see if further interest rate reductions occur in coming months. The PBOC reduced its reserve

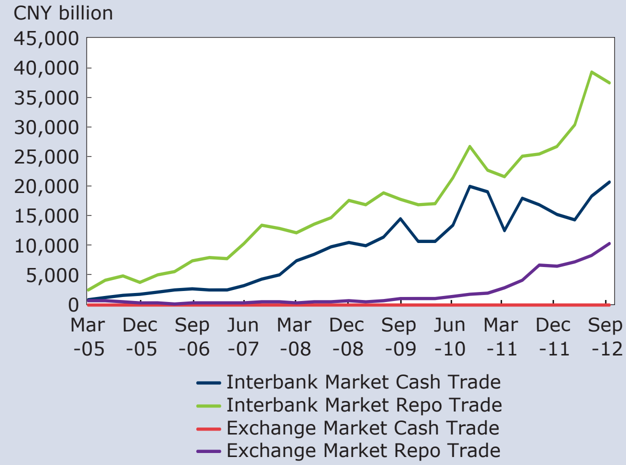
Table 12: LCY Government Bond Survey Results—People's Republic of China

	Treasury Bills	Treasury Bonds	Policy Bank Bonds	PBOC Bills	PBOC Bonds
On-the-Run					
Bid–Ask Spread (bps)	2.4	2.7	4.0	2.2	3.1
Average Trading Size (CNY million)	209.8	146.0	156.7	235.8	195.3
Off-the-Run					
Bid–Ask Spread (bps)	4.6	4.5	6.3	3.1	4.3
Average Trading Size (CNY million)	150.3	116.3	129.6	207.5	163.8

bps = basis points, LCY = local currency, PBOC = People's Bank of China.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

requirement ratio for banks in February and May. More recently, it has engaged in extensive reverse repo operations to add liquidity to the market. As mentioned earlier, a robust repo market has contributed to market liquidity. This is especially true for the exchange bond market, as can be seen in **Figure 14**, which compares trading volumes for repo transactions and cash bond transactions in both the larger interbank bond market and the smaller exchange market. The trading volumes plotted in Figure 14 include transactions for both government and corporate bonds. The interbank bond market, however, is limited to government bonds and AAA-rated corporate bonds, consisting mostly of the so-called "Golden AAA" bonds issued by the largest state-owned enterprises.

Figure 14: Repo and Cash Bond Trading Volumes in the PRC's Interbank and Exchange Bond Markets



repo = repurchase.
Source: Wind.

The exchange market can accept corporate bonds with a much larger range of credit quality as collateral for repo transactions. One reason for this is that the exchange itself is the counterparty for trading in the exchange market. Trading in the interbank market is primarily on an over-the-counter basis, where a market participant has to accept the credit risk of both his or her trading counterparty as well as the credit risk of the security being traded—essentially, two-way risk. The interbank market is clearly the larger market; its trading volume for repos is larger than that of the exchange market. The exchange market, nevertheless, plays an important role in allowing corporate bonds to be traded, thereby improving their liquidity.

The PRC also has an important market for interest rate swaps (IRSs). The total notional amount traded in the IRS market rose 17.4% quarter-on-quarter (q-o-q) and 1.4% year-on-year (y-o-y) in 3Q12 to CNY801 billion, on a total of 6,662 transactions. The most popular benchmark is the 7-day repo rate, accounting for 52.9% of the notional amount traded, followed by the overnight SHIBOR at 31.6%. These two benchmarks were the most actively traded in 3Q12 because the primary participants in the PRC's onshore IRS market are commercial banks with large funding exposures in the form of repo transactions. Therefore, banks make use of the repo rate as the base rate to hedge their funding. The PRC still lacks a bond futures market, although the government is expected to launch a pilot project for a futures market sometime over the next year.

Market participants are eager to see further development of the derivatives markets in the PRC. One example of this would be a more robust credit default swap (CDS) market. A renminbi CDS market has been in operation for over a year. This market is regulated by the National Association of Financial Market Institutional Investors (NAFMII), which is a trade body set up by the PBOC. The domestic CDS market is divided into two sections: (i) non-tradable bilateral contacts that are more akin to insurance policies and known as credit risk mitigation agreements (CRMAs), and (ii) tradable contracts known as credit risk mitigation warrants (CRMWs). Daily trading volume in the CRMW market is negligible because the regulating authority—the China Banking Regulatory Commission (CBRC)—has yet to decide on precise rules for reflecting the reduction of risk on a financial institution's balance sheet once it buys a particular CRMW contract.

Foreign investment in the PRC's bond market at present is limited to funds in the QFII and mini-Qualified Foreign Institutional Investor (QFII) programs, as well as through the cross-border trade settlement program. The allocated quotas for these two programs are relatively small and not necessarily fully invested because QFII funds had been limited to investment in the smaller and less liquid exchange market. They were excluded from investment in the much larger interbank bond market until July 2012.

Republic of Korea. KTBs and Monetary Stabilization Bonds (MSBs), which are issued by The Bank of Korea, have experienced significant improvement in their liquidity in 2012 due to a combination of monetary easing measures and inflows of foreign capital into the Republic of Korea's LCY bond market. As mentioned earlier, the quarterly turnover ratios for both central government and central bank bonds have risen to fluctuate in a range between 1.0 and 1.4 over the last 2 years. Average bid–ask spreads for on-the-run KTBs fell to 0.6 bps in 2012 from 0.7 bps in 2011, while off-the-run KTB bid–ask spreads fell only slightly to 1.0 bps from 1.1bps in 2011 **(Table 13)**. Bid–ask spreads for central bank on-the-run bonds remained unchanged at 0.8 bps, while bid–ask spreads for central bank bills rose slightly to 0.9 bps from 0.8 bps in 2011. Bid–ask spreads for exchange-traded KTBs, however, remained in a range just below 0.25 bps.

Table 13: LCY Government Bond Survey Results—Republic of Korea

	Treasury Bonds	Treasury Bills	Central Bank Bonds	Central Bank Bills
On-the-Run				
Bid–Ask Spread (bps)	0.6	0.8	0.8	0.9
Average Trading Size (KRW billion)	7.2	8.7	8.3	9.0
Off-the-Run				
Bid–Ask Spread (bps)	1.0	1.1	0.9	1.1
Average Trading Size (KRW billion)	9.4	8.0	8.3	8.4

bps = basis points, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Trading sizes for on-the-run and off-the-run KTBs averaged around KRW7.2 billion and KRW9.4 billion, respectively. Trading sizes for on-the-run central bank bonds and bills averaged KRW8.3 billion and KRW9.0 billion, respectively.

Growth of the KTB futures market also has been an important factor this year. In 3Q12, the number of traded KTB futures contracts rose to 9.5 million from 6.3 million in 2Q12, led by increased trading of the 3- and 10-year contracts. About 71% of total KTB futures contracts traded in 3Q12 were 3-year futures, while the rest were 10-year futures. The 10-year futures market has grown from an almost negligible level in 1Q11, reflecting a switch from physical delivery to cash settlement for the 10-year futures contract in late 2010. In addition, market participants reported that foreign investors are becoming more active in the 10-year sector and are contributing to its rapid growth.

India. The 2012 survey results show that the average on-the-run bid–ask spread was 0.6 bps for Government of India (GOI) bonds, less than those for treasury bills and special government bonds, which leveled off at 3.7 bps and 4.8 bps, respectively **(Table 14)**. The survey results also indicate that treasury bills had the highest average trading size at INR345 million, followed by special government bonds at INR108.5 million and GOI bonds at INR90 million.

GOI bonds are medium- to long-term debt securities issued by the Reserve Bank of India (RBI) on behalf of the federal government to finance its budgetary expenditures and infrastructure projects. Treasury bills are short-dated debt securities that are also auctioned by the RBI on behalf of the federal government. Special government bonds are issued to fertilizer and oil marketing companies to serve as a form of compensation for these companies in lieu of cash subsidies.

Market participants have mentioned that GOI securities and treasury bills are relatively liquid, and that there has been an improvement in liquidity in 2012. The average on-the-run bid–ask spreads for GOI bonds and treasury bills in the 2011 survey were 1.0 bps and 4.3 bps, respectively, both of which were higher than this year's results. The government has taken steps over the last year to widen the investor base for India's LCY bond market.

In June, the RBI decided to increase the foreign institutional investor (FII) limit for Indian government securities to US$20 million from US$15 million. Meanwhile, the FII limit for Indian corporate bonds stood at US$45 million. RBI also decided in June to widen the non-resident investor base for Indian government securities by allowing long-term investors—such as central banks, endowment funds, insurance funds, multilateral agencies, pension funds, and sovereign wealth funds—to invest up to US$20 million in Indian government securities.

Table 14: LCY Government Bond Survey Results—India

	Treasury Bills	Government of India Bonds	Special Government Bonds
On-the-Run			
Bid–Ask Spread (bps)	3.7	0.6	4.8
Average Trading Size (INR million)	345.0	90.0	108.5

bps = basis points, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Indonesia. The most liquid government bond market instrument in Indonesia is the fixed-rate treasury bond. Liquidity remains concentrated in the benchmark series: FR0060, FR0061, FR0059, and FR0058. Most of this year's survey respondents cited that liquidity in 2012 has been mostly in the longer-dated tenors of 10 years (FR0059) and 20 years (FR0058). There is less liquidity in treasury bills due to their small size, comprising only 3.3% of total government bonds outstanding. Bank Indonesia (BI) has only been issuing 9-month *Sertifikat* Bank Indonesia (SBI), with liquidity limited to the final 3 months of maturity due to a 6-month holding period requirement that has made SBI less attractive in the market.

The 2012 liquidity survey results for Indonesia showed an average on-the-run bid–ask spread of 6.6 bps for treasury bonds **(Table 15)**. Bid–ask spreads for treasury bills and SBI were wider than those for treasury bonds. The average off-the-run bid–ask spread for all government bond instruments was nearly double the average on-

Table 15: LCY Government Bond Survey Results—Indonesia

	Treasury Bills	Treasury Bonds	SBI
On-the-Run			
Bid–Ask Spread (bps)	38.3	6.6	42.9
Average Trading Size (IDR billion)	30.3	17.6	52.0
Off-the-Run			
Bid–Ask Spread (bps)	60.7	11.6	68.8
Average Trading Size (IDR billion)	52.9	51.2	71.3

bps = basis points, LCY = local currency, SBI = *Sertifikat* Bank Indonesia.
Note: The bid–ask spreads for Indonesian treasury bonds presented above are expressed in terms of yield or basis points to make them comparable with bid–ask spreads in other Asian markets. Bid–ask spread for government bonds are most often expressed in terms of "cents" in the Indonesian market. In the 2012 survey, the average treasury bond bid–ask spread was 38.8 cents. The Indonesian market quotes bid–ask spreads for treasury bills and SBI in terms of yield or basis points.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

the-run spread. The highest bid–ask spreads were the on-the-run and off-the-run spreads for SBI.

The on-the-run transaction sizes averaged IDR17.6 billion for treasury bonds and IDR52.0 billion for SBI. The same trend was observed for off-the-run transactions, where the average trading size for SBI remained the highest among all government instruments.

Liquidity, as measured by the turnover ratio, remains low at below 0.5 for Indonesia. Trading volumes declined significantly in 2Q12 due mainly to bearish global market conditions. Uncertainties related to the eurozone crisis have made investments in emerging market assets more risky. The Indonesian bond market is still largely influenced by external factors; nearly one-third of its government bonds are held by offshore investors. Other investor classes—such as insurance companies and pension funds—tend to buy and hold until maturity, while mutual fund funds' holdings of government bonds remain small. However, foreign investment flows into the Indonesian government bond market recovered in October and could help improve market liquidity in coming months.

The need to broaden the investor base for Indonesian government bonds was cited again in the 2012 survey as an important factor for improving liquidity. Another important factor cited was the need to broaden development of the repo market. In particular, market participants said that Indonesia needs a standardized rule that would be applicable to transactions with all counterparties. Also, it would be useful for Indonesia to establish a centralized institution to manage all repo transactions.

Malaysia. Malaysia has been one of the most rapidly- and consistently-growing bond markets in emerging East Asia over the last several years. This has been based on a combination of growth of 16.1% y-o-y in the government bond market and 12.6% y-o-y for central bank bills issued by Bank Negara Malaysia (BNM). The government has aggressively issued bonds to finance large budget deficits, while

Table 16: LCY Government Bond Survey Results—Malaysia

	MGSs	GIIs	BNM Bills	Treasury Bills
On-the-Run				
Bid–Ask Spread (bps)	2.7	2.9	3.1	2.9
Average Trading Size (MYR million)	30.7	15.8	61.4	19.3
Off-the-Run				
Bid–Ask Spread (bps)	4.6	7.7	3.6	2.5
Average Trading Size (MYR million)	22.3	9.0	40.0	21.0

BNM = Bank Negara Malaysia, bps = basis points, GIIs = Government Investment Issues, LCY = local currency, MGSs = Malaysian Government Securities.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

BNM has issued bills to sterilize the large inflows of foreign capital into the country. This has been easy for the government to finance, in large part, due to the rapidly rising level of foreign capital in the Malaysian bond market and the steady increase in the turnover ratio for the government cash bond market, even as demand for repo transactions has declined over the last several years.

Bid–ask spreads for the benchmark MGS bonds fell to 2.7 bps in this year's survey from 3.3 bps in 2011 **(Table 16)**. The fall in GIIs was roughly the same—from 3.4 bps in 2011 to 2.9 bps this year. Bid–ask spreads for BNM bills fell to 3.1 bps from 3.9 bps in 2011. The largest decline in bid–ask spreads among government securities, however, was for treasury bills, which fell from 5.3 bps in 2011 to 2.9 bps this year.

At the same time, the average trading size for Malaysian government bonds rose dramatically from MYR11.7 million in 2011 to MYR30.7 million in 2012. The average trading size for BNM bills rose from MYR31.9 million in 2011 to MYR61.4 million in 2012. The average trading size for GIIs, however, rose by a much smaller amount—from MYR13.0 million in 2011 to MYR15.8 million in 2012.

Philippines. The average bid–ask spread for Philippine treasury bonds narrowed dramatically in 2012 compared with 2011 **(Table 17)**. The liquidity

Table 17: LCY Government Bond Survey Results—Philippines

	Treasury Bonds	Treasury Bills
On-the-Run (large-issued)		
Bid–Ask Spread (bps)	2.1	8.0
Average Trading Size (PHP million)	126.6	58.7
Off-the-Run		
Bid–Ask Spread (bps)	11.7	12.5
Average Trading Size (PHP million)	56.9	40.3

bps = basis points, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Table 18: LCY Government Bond Survey Results—Singapore

	SGS Bonds	SGS Bills	MAS Bills
On-the-Run			
Bid–Ask Spread (bps)	3.1	3.4	3.0
Average Trading Size (SGD million)	9.7	16.6	17.5
Off-the-Run			
Bid–Ask Spread (bps)	3.6	3.4	3.0
Average Trading Size (SGD million)	9.4	16.3	13.3

bps = basis points, LCY = local currency, MAS = Monetary Authority of Singapore, SGS = Singapore Government Securities.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

survey in 2012 coincided with upbeat market sentiment on the back of monetary easing, while last year's survey was clouded by the negative overhang from the spillover of the eurozone crisis. The bid–ask spread for on-the-run treasury bills narrowed to 8.0 bps in 2012 from 14.5 bps in 2011. Similarly, the average bid–ask spread for on-the-run (large-issue) bonds tightened to 2.1 bps from 5.3 bps. The average trading size for treasury bills rose to PHP58.7 million in 2012 from PHP43.0 million in 2011. Meanwhile, the average trading size of treasury bonds fell to PHP126.6 million in 2012 from PHP161.9 million in 2011.

Bid–ask spreads for off-the run government securities improved and the Philippine peso continued to appreciate versus the US dollar in 2012. The average bid–ask spread for off-the-run treasury bills contracted to 12.5 bps this year compared with 27.7 bps last year. Off-the-run treasury bonds' bid–ask spread also tightened to 11.7 bps in 2012 from 19.4 bps in 2011. Higher average trading sizes were observed for off-the-run government securities in 2012 than in 2011. Average trading sizes of treasury bills and bonds rose to PHP40.3 million and PHP56.9 million, respectively, in 2012 from PHP39.9 million and PHP45.2 million in 2011.

Singapore. Bid–ask spreads for the major types of government bonds in Singapore were broadly the same in 2012 as 2011: 3.1 bps for SGS bonds, 3.4 bps for SGS bills, and 3.0 bps for Monetary Authority of Singapore (MAS) bills **(Table 18)**. Average trading sizes for SGS bills and MAS bills in 2012 were broadly similar at SGD16.6 million and SGD17.5 million, respectively. The average trading size for SGS bonds was substantially smaller (SGD9.7 million). Singapore has an operating repo market for government bonds. However, at present it is limited to interbank transactions and is not typically used as a funding vehicle by market participants.

Thailand. Short-term debt instruments in Thailand in 2012 appear to be relatively more liquid than long-term debt securities based on survey results **(Table 19)**. Bank of Thailand (BOT) bills posted the lowest average on-the-run bid–ask spread among all types of government debt instruments at 2.4 bps, followed by treasury bills at 3.0, BOT bonds at 3.1, and government bonds at 3.2 bps. Meanwhile, the average trading size was highest for treasury bills at THB298.3 million, followed by BOT bills at THB291.7 million. For BOT bonds and government bonds, the average trading sizes amounted to THB151.3 million and THB143.5 million, respectively.

A similar trend can be gleaned from the 2012 survey results for off-the-run government debt securities. BOT bills recorded the lowest average off-the-run bid–ask spread at 3.8 bps, followed by treasury bills at 4.2 bps, BOT bonds at 5.8 bps, and government bonds at 5.9 bps. The average trading size for off-the-run government debt instruments was largest for treasury bills at THB123.2 million,

Table 19: LCY Government Bond Survey Results—Thailand

	Government Bonds	Treasury Bills	BOT Bonds	BOT Bills
On-the-Run				
Bid–Ask Spread (bps)	3.2	3.0	3.1	2.4
Average Trading Size (THB million)	143.5	298.3	151.3	291.7
Off-the-Run				
Bid–Ask Spread (bps)	5.9	4.2	5.8	3.8
Average Trading Size (THB million)	63.5	123.2	65.5	105.0

BOT = Bank of Thailand, bps = basis points, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

followed by BOT bills at THB105 million, BOT bonds at THB65.5 million, and government bonds at THB63.5 million.

There appears to have been a slight improvement in liquidity in the government bond market in 2012 as the average bid–ask spread for government bonds fell to 3.2 bps from 3.3 bps in 2011. Meanwhile, the government bond turnover ratio in Thailand rose to 0.80 in 3Q12 from 0.64 in 4Q11.

Qualitative Indicators for Government Bond Markets

The 2012 *AsianBondsOnline* Bond Market Liquidity Survey asked participants in the region's LCY government and corporate bond markets for their views on market structure and ways to improve liquidity. The "spider charts" included in this section capture market participants' perceptions of the importance of the following structural and policy issues in strengthening and deepening LCY bond markets:

(i) greater diversity of investors and traders,
(ii) easing restrictions on market access,
(iii) easing foreign exchange regulations and restrictions,
(iv) availability of funding for market participants,
(v) tax treatment,
(vi) settlement custody,
(vii) more efficient hedging instruments, and
(viii) transparency.

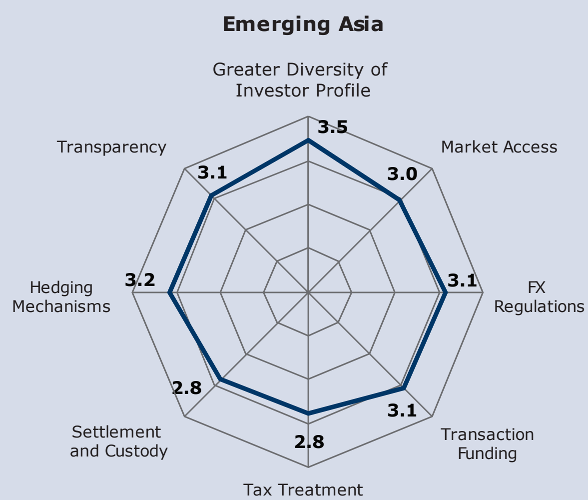
Market participants were asked to characterize each of the above issues by degree of importance:

(i) not important,
(ii) somewhat important,
(iii) important, or
(iv) very important.

Numerical values were assigned—ranging from 1 for not important to 4 for very important—in order to construct the following spider charts.

Figure 15 summarizes the results as they relate to the region's LCY government bond market as a whole. The most important structural issue for market participants was investor diversity, which had a score of 3.5, followed by hedging mechanisms, with a score of 3.2, and foreign exchange regulations, transaction funding, and transparency (3.1 each). Market access received a score of 3.0, while lower scores of 2.8, indicating

Figure 15: Regional Averages—LCY Government Bond Market Structural Issues



FX = foreign exchange, LCY = local currency.
Note: Emerging Asia comprises the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

a somewhat lesser immediate policy priority, were assigned to tax treatment and settlement and custody.

Greater Diversity of Investors and Traders. The investor profile is rapidly changing in many markets. The April 2012 issue of the *Asia Bond Monitor* discussed the growing role of contractual savings institutions in emerging East Asia. More recent data indicate that banks still hold around 65% of treasury bonds in the PRC and that their share of total treasury bonds outstanding is rising. Banks' shares of treasury bonds in the region's other markets, however, are much lower and falling. In the Republic of Korea, for example, banks' share of government bonds has fallen to 19% in 2012, while other types of financial institutions held 29% of the total and insurance companies and pension funds held 34%. In Malaysia, financial institutions as a group held 44% of government bonds, but social security institutions and insurance companies combined held a sizeable 28% of the total, and foreigners held 27% as of end-June. **Figure 16** provides a view of the growth of government bond holdings in recent years by different types of investors for most of the major markets in the region.

Greater diversity of investors and traders was assigned an average importance rating of 3.7 in Indonesia and the Philippines, and an average importance rating of between 3.5 and 3.6 in the PRC, Singapore, Thailand, and Viet Nam **(Figure 17)**.

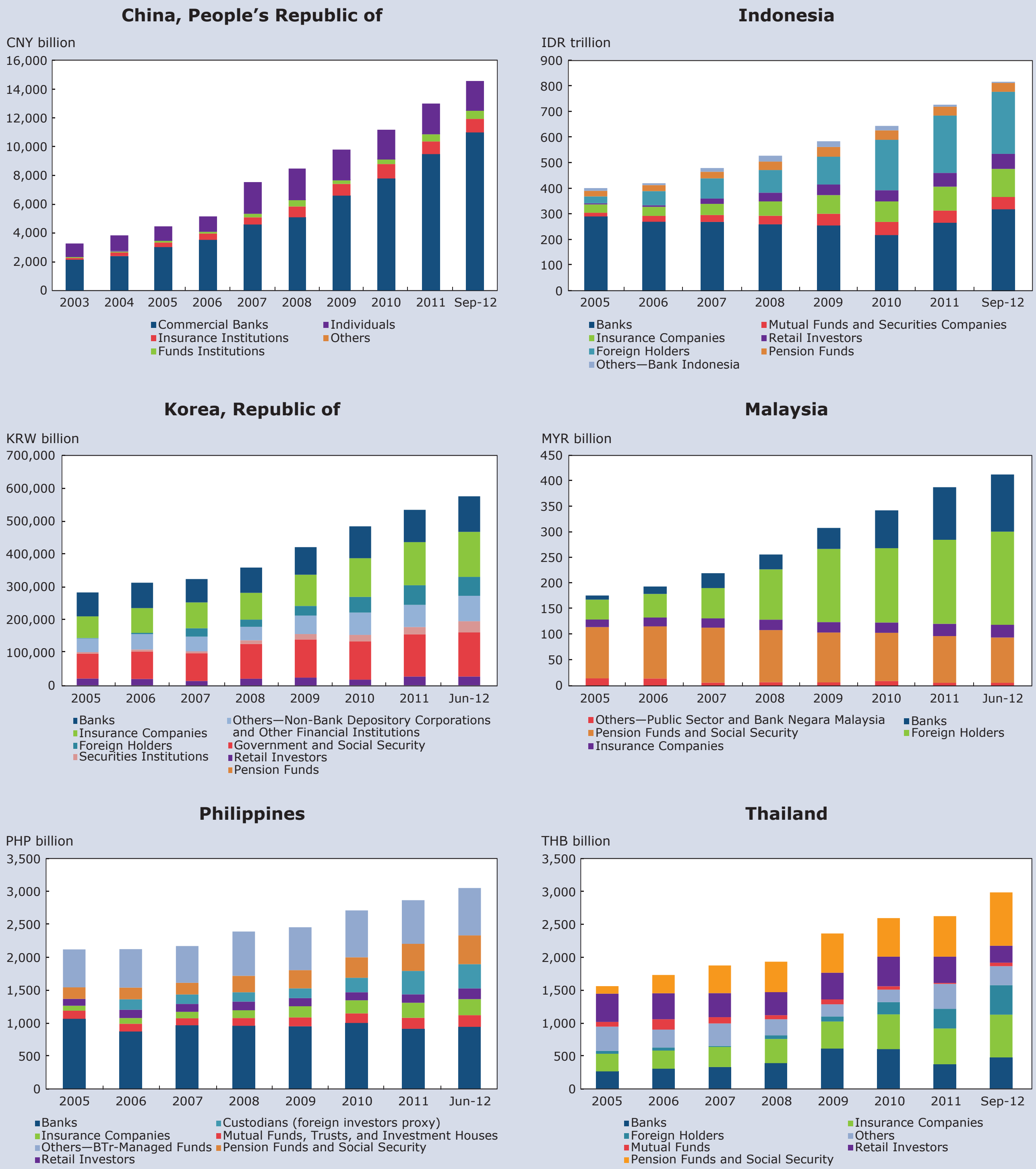
Hedging Mechanisms. In terms of importance in improving liquidity, hedging mechanisms received their highest rankings in Indonesia (3.6), the PRC (3.5), Singapore (3.4), and India (3.3). A number of hedging mechanisms are currently available in several emerging Asian markets. For example, the PRC and Malaysia have working repo markets. In Hong Kong, China, interest rate and cross-currency swaps are available and relatively liquid as are 3-year Exchange Fund Note (EFN) futures. In the Republic of Korea, 3- and 10-year KTB futures contracts are being offered and the liquidity of the relatively new 10-year KTB futures has improved rapidly over the last year. **Table 20** compares the availability of different types of hedging instruments in the region.

Foreign Exchange Regulations. Participants in several major markets—Singapore, the Philippines, Malaysia, and Viet Nam—rated the importance of foreign exchange regulations in a range of 3.5–3.6. Participants from the PRC; Hong Kong, China; India; and Indonesia rated foreign exchange regulations at somewhat lower average levels, ranging from 2.5 in India to 2.9 in the PRC and Indonesia. The importance of foreign exchange regulations in the Republic of Korea and Thailand was rated by participants in these markets in the middle range for the region as a whole—3.0 for the Republic of Korea and 3.1 for Thailand. **Table 21** compares current foreign exchange regulations in the region.

Thailand has progressively liberalized its foreign exchange regulations in recent years. BOT announced a Capital Account Liberalization Master Plan in mid-October to encourage companies and depositors to diversify their investments and enhance business efficiency. More importantly, BOT aims to create an environment that supports more balanced capital flows and facilitates more financial market development en route to further economic integration under the ASEAN Economic Community (AEC) by 2015.

Transparency. Transparency was deemed an important issue by most government bond market participants in the region, garnering a score of 3.1 for the region as a whole. Specifically, participants rated transparency as being very important in the Philippines (3.7), Viet Nam (3.5), and Singapore (3.3), as well as in Thailand, Malaysia, and India, where the average rating of market participants in each country was 3.1. The PRC's transparency score was 3.0, while that of both the Republic of Korea and Hong Kong, China was 2.8. The lowest transparency score of any market in this year's survey was from Indonesia at 2.7.

Figure 16: Investor Holdings



BTr = Bureau of the Treasury.
Source: *AsianBondsOnline*.

Figure 17: Structural Issues for Individual LCY Government Bond Markets

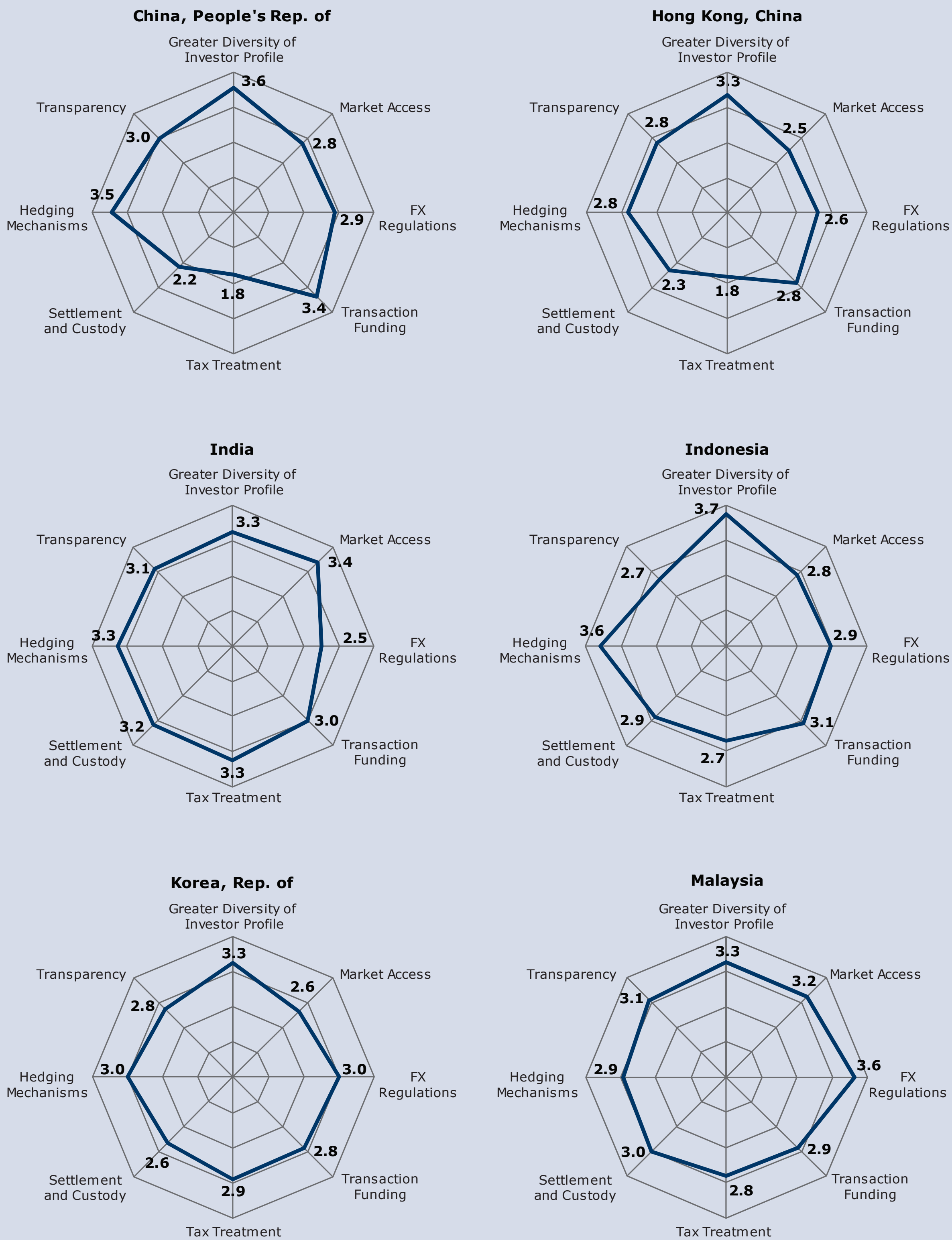


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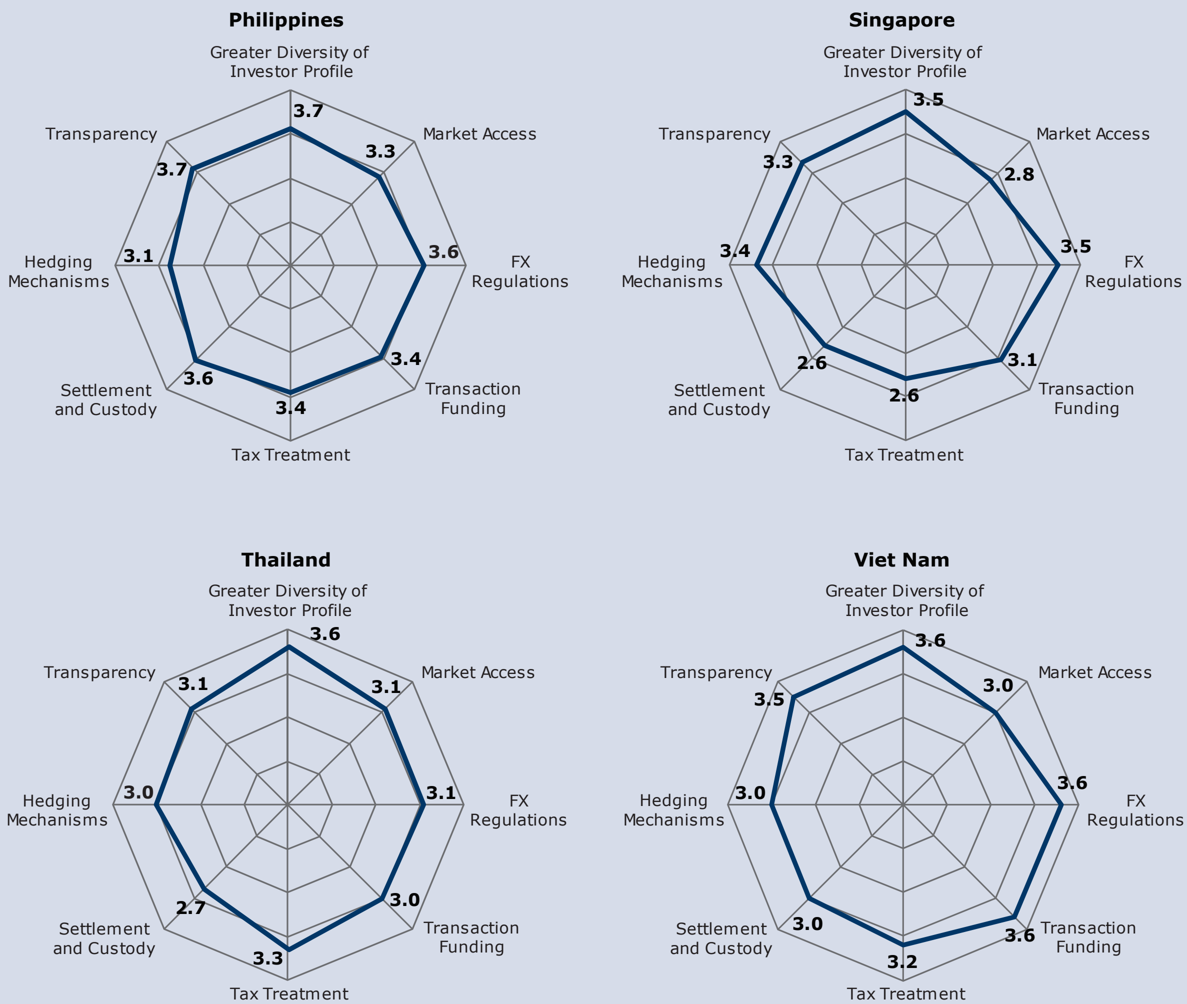
Figure 17 *continued*



FX = foreign exchange, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Transaction Funding. Transaction funding was identified as an important issue this year in Viet Nam (3.6), the Philippines and the PRC (3.4), Singapore (3.1), Indonesia (3.1), India (3.0), and Thailand (3.0). Transaction funding was rated as a somewhat important issue in Malaysia (2.9); the Republic of Korea (2.8); and Hong Kong, China (2.8). This would seem to reflect the large capital inflows into the Republic of Korea and Malaysia over the last year, while the Hong Kong, China money market is normally very liquid. Transaction funding in the PRC is an important issue because of the large role played by the repo market as a major funding vehicle. As we pointed out earlier, the turnover ratio for repo bond transactions is significantly higher than for cash transactions in the PRC.

Other Indicators. The other structural and regulatory indicators for government bond markets in this survey—market access, tax treatment, and settlement and custody—were rated by market participants as less important issues than the five indicators detailed above.

Table 20: Hedging Instruments in Emerging East Asia

	Instruments				
	Futures, Forwards, and Options	Interest Rate Swaps	Repurchase Agreements	Credit Default Swaps	Cross Currency Swaps
Brunei Darussalam	N/A	N/A	N/A	N/A	N/A
Cambodia	N/A	N/A	N/A	N/A	N/A
China, People's Rep. of	Bond Forwards Only; N/A for Futures and Options	Available	Available	Available	Available
Hong Kong, China	Available	Available	Available	Available	Available
Indonesia	N/A	Available	Available	N/A	Available
Japan	Available	Available	Available	Available	Available
Korea, Republic of	Available	Available	Available	Available	Available
Lao PDR	N/A	N/A	N/A	N/A	N/A
Malaysia	Available	Available	Available	Available	Available
Myanmar	N/A	N/A	N/A	N/A	N/A
Philippines	Bond Forwards Only; N/A for Futures and Options	Available	Available	N/A	Available
Singapore	Available	Available	Available	Available	Available
Thailand	Available	Available	Available	Available	Available
Viet Nam	N/A	Available	Available	N/A	N/A

N/A = not available or not applicable.
Source: *AsianBondsOnline*.

Market access received an average rating of 3.0 for the region as a whole, while settlement and custody, and tax treatment, were both rated 2.8. **Table 22** compares current regulations on the tax treatment for interest income among the various markets in the region.

Corporate Bond Markets

Corporate bond markets are generally less liquid than government bond markets. Corporate bonds often are issued in smaller sizes and trade for only 1–2 months after issue before finding their way to buy-and-hold investors. Corporate bonds also may have structural features that make them less liquid as is the case with perpetual bonds or *sukuk* (Islamic bonds), for example. **Figure 18** graphs quarterly turnover ratios for corporate bonds in the region. (Trading volume data for corporate bonds is not available for Singapore and the Philippines.)

Corporate bond market participants were asked to respond to questions similar to ones put to government bond market participants. **Table 23** compiles responses from corporate bond market participants with regard to average issue sizes, bid–ask spreads, and average trading sizes.

Average Issue Size. The largest average issue sizes were in the PRC (US$415.8 million), Malaysia (US$285.9 million), and Singapore (US$158.5 million). The smallest average sizes were in India (US$48.1 million) and Hong Kong, China (US$46.7 million).

Bid–Ask Spreads. Bid–ask spreads for corporate bonds are typically much wider than those for government bonds, reflecting lower levels of liquidity. In many cases, corporate bond liquidity is limited to the months (or month) following issuance.

The highest bid–ask spreads this year came from Viet Nam and the Philippines at 138.3 bps and 34.5 bps, respectively. Bid–ask spreads for Hong Kong, China and Indonesia were 21.3 bps and 18.7 bps, respectively. The lowest bid–ask spreads

Table 21: Foreign Currency and Currency-Related Restrictions

Jurisdiction	Foreign Exchange Rate Floating	Restrictions on Remittances 1. Own Currency 2. Investment Principles 3. Coupons and Dividends	Currencies Eligible for Continuous Linked Settlement Bank Settlement
China, People's Republic of	Government controlled floating rate, referring to a currency basket	1. Restricted	–
		2. Restricted for certain period of time after investment	
		3. Restricted for certain period of time after investment	
Hong Kong, China	Link to US dollar (Currency Board System)	1. No restriction	Yes
		2. No restriction	
		3. No restriction	
Indonesia	Floating	1. Restricted. (Rupiahs foreign-exchange trades must be done by Indonesian domestic banks, rupiah remittance between foreign banks is prohibited)	–
		2. No Reporting required for repatriation of benefits.	
		3. Reporting required	
		(*) Real-demand principle applies to inbound foreign exchange or buy Indonesian rupiah only.	
Japan	Floating	1. No restriction	Yes
		2. No restriction (ex post facto report required)	
		3. No restriction (ex post facto report required)	
Korea, Republic of	Floating	1. Restricted	Yes
		2. No restriction	
		3. No restriction	
Malaysia	Managed float against a basket of currencies, following the de-pegging of the ringgit	1. Restricted (All remittance out of the country must be made in foreign currency). Real-demand principle applies to inbound foreign exchange only.	–
		2. No restriction for non-resident investors to repatriate in foreign currency.	
		3. No restriction for non-resident investors to repatriate in foreign currency.	
Philippines	Floating	1. Restricted. Registration with Bangko Sentral ng Pilipinas (BSP) for issuance of Bangko Sentral Registration Document (BSRD) on per transaction basis is required to qualify for automatic conversion of peso sale/interest into foreign exchange for outward repatriation.	–
		2. Registration with BSP for issuance of BSRD on per transaction basis is required to qualify for automatic conversion of peso sale/interest into foreign exchange for outward repatriation.	
		3. Interest automatically qualifies for outward repatriation if principal investment has BSRD.	
Singapore	Floating against basket of currencies	1. No restrictions (investor can hold Singapore dollar in, e.g., Tokyo)	Yes
		2. No restriction	
		3. No restriction	
Thailand	Managed floating	1. Restricted	–
		2. Reporting required	
		3. Reporting required	
Viet Nam	Controlled floating	1. Restricted	–
		2. Restricted for certain period of time after investment	
		3. No restriction	
		(Viet Nam issue is based on availability of foreign currency.)	

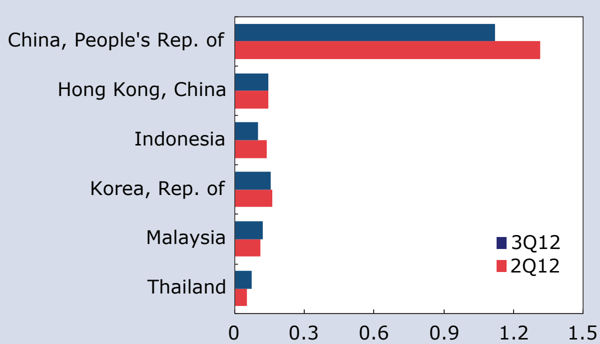
Source: ASEAN+3 Bond Market Guide.

Table 22: Tax Treatments in Emerging East Asian Markets

Market	Withholding Tax on Interest Income	
	Government	Corporate
China, People's Rep. of	Exempt from tax.	Non-resident investors are subject to 10% withholding tax, which may be reduced due to tax treaties.
Hong Kong, China	Exempt from tax.	Individuals are exempt from tax. Corporations are subject to 17.5% profits tax.
Indonesia	Residents and permanent establishments are subject to 15% tax. Non-residents are subject to 20% tax, which is subject to reductions based on treaty. For mutual funds registered with Bapepam LK, the tax rate is 5% for 2011 to 2013, and 15% thereafter.	Residents and permanent establishments are subject to 15% tax. Non-residents are subject to 20% tax, which is subject to reductions based on treaty. For mutual funds registered with Bapepam LK, the tax rate is 5% for 2011 to 2013, and 15% thereafter.
Korea, Republic of	Non-residents are subject to 15.4% withholding tax.[a]	Non-residents are subject to 15.4% withholding tax.[a]
Malaysia	Exempt from tax.	Exempt from tax.
Philippines	Subject to 20% tax withheld at source. Interest income from long-term deposit or investment (with holding period of more than 5 years) is exempt from tax. Foreign corporations are subject to 30% tax on the gross amount of income derived within the Philippines. Non-resident individuals not engaged in trade or business are subject to 25% tax on the gross amount of income derived in the Philippines.	Standard rate of withholding tax on income payments from corporate bonds is 30%.
Singapore	Exempt from tax.	Individual investors are tax exempt. Resident and non-resident institutional investors are exempt from withholding tax, subject to qualifying conditions.
Thailand	Subject to 15% tax for domestic individual resident investors and foreign investors, subject to 1.0% tax for domestic institutional investors.	Subject to 15% tax for domestic individual resident investors and foreign investors, subject to 1% tax for domestic institutional investors.
Viet Nam	Subject to 10% withholding tax.	Subject to 10% withholding tax.

[a] 1.4% local tax is added to 14% national income tax.
Source: *AsianBondsOnline*.

Figure 18: LCY Corporate Bond Turnover Ratios



LCY = local currency.
Note: Turnover ratios are calculated as LCY trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.
Source: *AsianBondsOnline*.

were reported in the Republic of Korea (1.9 bps) and India (6.1 bps). Bid–ask spreads in the PRC, Thailand, and Malaysia constituted a middle range of 10.4 bps, 10.3 bps, and 9.4 bps, respectively.

Average Trading Size. The largest average trading sizes were found in the Republic of Korea (US$9.0 million) and the PRC (US$7.1 million). The smallest trading sizes were from the Philippines (US$0.5 million) and Indonesia (US$0.6 million), with Singapore and Thailand coming in at US$1.1 million each. The average trading sizes for the remaining markets fell in a range between US$2.0 million for India to US$3.0 million for Viet Nam.

Table 23: LCY Corporate Bond Market Quantitative Indicators

		PRC	HK	IN	ID	KR	MY	PH	SG	TH	VN	Regional
Typical Issue Size of Corporate Bonds (US$ million)	Average	415.8	46.7	48.1	103.6	94.3	285.9	146.0	158.5	98.2	73.0	147.0
Typical Bid–Ask Spread for New Corporate Issues (bps)	Average	10.4	21.3	6.1	18.7	1.9	9.4	34.5	15.9	10.3	138.3	26.7
	Count	15	4	4	11	7	5	14	5	11	3	79
	SD	4.3	19.8	3.8	10.4	0.6	4.6	14.6	10.3	8.7	141.1	40.3
Typical Transaction Size of LCY Corporate Bonds (US$ million)	Average	7.1	2.9	2.0	0.6	9.0	2.4	0.5	1.1	1.1	3.0	3.0
	Count	17	4	4	11	8	5	15	5	11	3	83
	SD	5.0	2.6	1.9	0.3	-	1.4	0.4	0.3	0.8	1.1	2.9

bps = basis points; HK = Hong Kong, China; ID = Indonesia; IN = India; KR = Republic of Korea; LCY = local currency; MY = Malaysia; PH = Philippines; PRC = People's Republic of China; SD = standard deviation; SG = Singapore; TH = Thailand; VN = Viet Nam.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Inter-Market Comparisons

The PRC. The 2012 survey identified commercial paper, medium-term notes (MTNs), and state-owned enterprise (SOE) bonds as the most liquid types of corporate bonds in the PRC. This can be seen in both the bid–ask spreads presented in **Table 24** and the corporate bond turnover ratios in **Figure 19**. Commercial paper was the most liquid type of corporate paper with a bid–ask spread of 5.5 bps, followed by SOE bonds and MTNs at 6.6 bps and 6.7 bps, respectively. Most of the liquidity in the SOE bond market can be attributed to the largest SOEs, mainly in energy and infrastructure, known as the Golden AAAs, which issue in large sizes and are seen as possessing quasi-government credit quality and implicit sovereign support due to a combination of their government ownership and important roles in the PRC economy. Thus, the Golden AAAs are considered to be safe credit that offer a somewhat higher yield than a straight government security such as a treasury bond. Examples of these issuers include the State Grid Corporation of China, China National Petroleum, and Petro China. The tight spread for MTNs is also being driven by demand from institutional investors such as insurance companies and investment funds, which appreciate the combination of higher yields and good liquidity. Commercial bank bonds are largely issued in the form of subordinated debt with longer-dated maturities of 10 years or more. Thus, they tend to be a buy-and-hold security with much less liquidity.

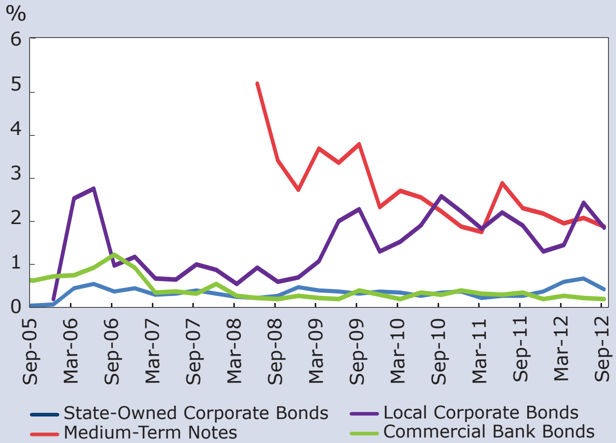
Republic of Korea. The survey results show that special pubic bonds and financial debentures are the most liquid types of corporate bonds in the Republic of Korea. Special public bonds are bonds issued by certain public corporations such as Korea Land and Housing Corp.; Korea Rail Network Authority, and Korea Water Resources Corp. They are typically issued in larger sizes (average issue size of KRW142.9 billion in 2012), giving them greater liquidity, and offer a coupon slightly higher than a government bond of comparable

Table 24: LCY Corporate Bond Survey Results—People's Republic of China

	SOE Bonds	Local Corporate Bonds	MTNs	Commercial Bank Bonds	Commercial Paper
Average Issue Size (CNY million)	6,015.6	2,613.3	3,391.7	12,982.1	3,146.7
Bid–Ask Spread (bps)	6.6	10.4	6.7	14.0	5.5
Average Trading Size (CNY million)	57.8	44.7	56.3	68.5	56.8

bps = basis points, LCY = local currency, MTNs = medium-term notes, SOE = state-owned enterprise.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Figure 19: Trends in the PRC's LCY Corporate Bond Turnover Ratios, September 2005–September 2012



LCY = local currency, PRC = People's Republic of China.
Source: *ChinaBond*.

tenor. Korea Finance Corp. and Korea Land & Housing Corp. are two of the more actively traded special public bonds. In the 2012 survey, the average bid–ask spread for special public bonds was 1.4 bps, compared with 1.7 bps for financial debentures and 2.8 bps for private corporate bonds **(Table 25)**.

Financial debentures are bonds issued by the banking subsidiaries of the Republic of Korea's various bank holding companies. Their average issue size (KRW78.6 billion) is much smaller than that for special public bonds, and in 2012 their average bid–ask spread was slightly higher than that for special public bonds. The average issue size for private corporate bonds in the 2012 survey was KRW83.3 billion, broadly the same as for

Table 25: LCY Corporate Bond Survey Results—Republic of Korea

	Special Public Bonds	Financial Debentures	Private Corporate Bonds
Average Issue Size (KRW billion)	142.9	78.6	83.3
Bid–Ask Spread (bps)	1.4	1.7	2.8
Average Trading Size (KRW billion)	10.0	10.0	10.0

bps = basis points, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

financial debentures. Turnover ratios for corporate bonds are low, ranging from 0.3 for financial debentures to 0.1 for private corporate bonds at end-September. The turnover ratio for special public bonds, however, has been rising gradually over the last year, slightly exceeding 0.2 at end-September. As mentioned previously, this is partly due to the rising interest of foreign investors in special public bonds.

Malaysia. Malaysia's corporate turnover ratio improved slightly to 0.12 in 3Q12 from 0.11 in 2Q12. Average bid–ask spreads for Malaysian corporate bonds widened slightly to 9.4 bps from 8.2 bps in 2011. The average transaction size, however, rose slightly to US$2.4 million from US$2.1 million in 2011. The typical issue size rose more dramatically to US$285.9 million from US$176.6 million in 2011.

Much of this increase in trading and issuance has reflected a surge in the issuance and trading of Islamic medium-term notes (IMTNs) this year. In absolute terms, trading of IMTNs increased to MYR68 billion during the first 9 months of the year versus a total trading volume of MYR38 billion for the whole of 2011.The more actively traded bonds include those of Project Lebuhraya Utara Selatan (PLUS) Bhd., which issued MYR30.5 billion worth of IMTNs, the world's largest *sukuk* issuance to date. Other actively traded bonds were those of Johor Corp., which issued MYR3.0 billion worth of IMTNs in June, Serawak Energy (MYR2.5 billion of IMTNs in January), Tanjung Bin Energy (MYR3.3 billion of IMTNs in March), Pembinaan BLT-Aman (MYR2.2 billion of IMTNs in April and July), and Hong Leong Bank (MYR1.5 billion of corporate bonds in June).

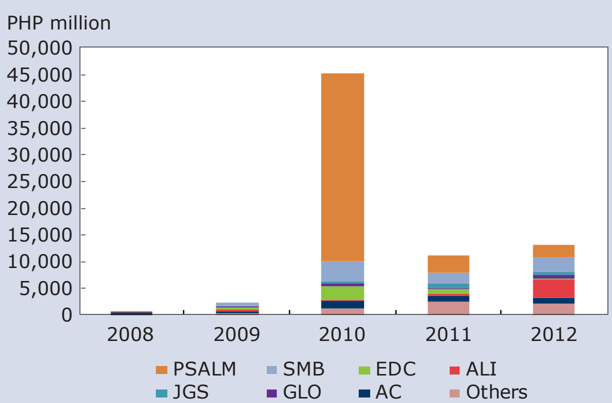
The Philippines. The Philippines' corporate bond market has been one of the most rapidly growing corporate bond markets in emerging East Asia over the last year. In 3Q12, it grew 26.1% y-o-y and 3.9% q-o-q. The average bid–ask spread for Philippine corporate bonds fell to 34.5 bps in 2012 from 52.9 bps in 2011, while the average trading size rose slightly to US$0.5 million from US$0.4 million in 2011. Average issue size for

Philippine corporate bonds also rose slightly to US$146 million in 2012 from US$144.3 million in 2011.

Trading volume data is not available for the Philippine corporate bond market as a whole. However, PDEx maintains a database on the secondary trading of corporate bonds listed on its platform **(Figure 20)**. At the end of 3Q12, there were 17 Philippine companies that had their bonds listed with the exchange, including bonds issued by the National Home Mortgage Finance Corporation, known as *Bahay* Bonds 2, and bonds issued by the Power Sector Assets and Liabilities Management Corporation (PSALM). *AsianBondsOnline* classifies the issuances of these two companies under government securities, since they are government-owned and -controlled corporations.

The secondary trading volume of corporate bonds is negligible compared to that of government securities, accounting for less than 1% of total bonds (government and corporate) traded in 2012. Nevertheless, the volume of secondary trading of corporate bonds grew to PHP13 billion in the first 9 months of 2012, up 44.1% compared with the same period in 2011.

Figure 20: PDEx Trading Volume Trends—Corporate Bonds



AC = Ayala Corporation; ALI = Ayala Land, Inc.; EDC = Energy Development Corporation; GLO = Globe Telecom; JGS = JG Summit Holdings, Inc.; PDEx = Philippine Dealing and Exchange Corporation; PSALM = Power Sector Assets and Liabilities Management Corp.; SMB = San Miguel Brewery, Inc.
Note: PDEx reports one-side of the trade.
Source: Philippine Dealing and Exchange Corporation (PDEx).

Trading volume in 2010 was centered on PSALM bonds, comprising almost 78% of total trades that year. In 2011 and 2012, the trading volume of PSALM bonds declined to levels more comparable with those of the leading private sector issuers. The three companies with the highest traded volumes in 2012 were (i) Ayala Land Inc. (PHP3.3 billion), (ii) San Miguel Brewery (PHP2.8 billion), and (iii) PSALM (PHP2.2 billion).

Singapore. Singapore's average bid–ask spread for corporate bonds narrowed to 15.9 bps in 2012 from 19.0 bps in 2011. Meanwhile, the average trading size fell to US$1.1 million in 2012 from US$1.4 million in 2011. The narrowing of the spread reflected improved liquidity in the LCY corporate bond market, as issuance during the first 3 quarters of 2012 surged 78.5% compared with the same period last year.

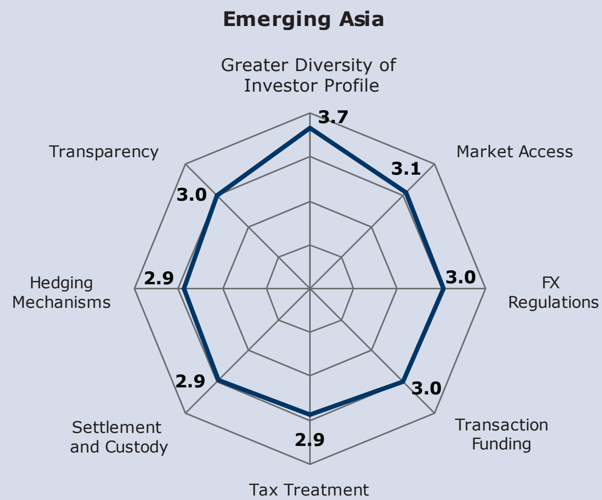
During the first half of 2012, Genting Singapore issued SGD1.8 billion worth of perpetual bonds. Oversea-Chinese Banking Corporate issued SGD1.0 billion of perpetual notes in 3Q12. Two other banks also made large issuances in 3Q12: (i) United Overseas Bank Ltd., with SGD1.2 billion worth of 10-year notes; and (ii) DBS Bank Ltd., with SGD1.0 billion worth of 10.5-year notes. Also in 3Q12, Mapletree Treasury Services issued SGD600 million worth of perpetual bonds, while NTUC Income Insurance sold 15-year bonds worth SGD600 million. Meanwhile, the Housing and Development Board, a government-linked company, raised a total of SGD3.6 billion in the first 3 quarters of 2012, up slightly from the SGD3.4 billion it issued in the first 3 quarters of 2011. Aside from the big issues of perpetual bonds mentioned above, several companies also issued perpetual bonds in small amounts in 2012, including (i) Mapletree Logistics (SGD350 million), (ii) Singapore Post (SGD350 million), (iii) Ascendas Pte (SGD300 million), and (iv) Olam International (SGD275 million).

Thailand. The average bid–ask spread for Thai corporate bonds in the 2012 survey was 10.3 bps, approximately the same as the 9.9 bps in last year's survey. Furthermore, the average trading size of

US$1.1 million was approximately the same as in 2011. This reflects the fact that the Thai corporate bond market consistently has an extremely low quarterly turnover ratio since about half of Thai corporate bonds are held by retail investors, who invest predominantly on a buy-and-hold basis.

The bid–ask spread for Thai corporate bonds is nevertheless relatively low compared with many other markets in the region, suggesting that investors find them to be attractive investments despite their low liquidity. The attractiveness of Thai corporate bonds is driven primarily by the fact that bonds issued by Thai blue chips combine relatively high credit quality with reasonably good returns, given the excess liquidity that has invaded many of Asia's financial markets. Recent examples of attractively priced Thai corporate bonds include subordinated bonds issued by Siam Commercial Bank and Thanachart Bank at coupon rates of 4.65% and 4.70%, respectively, while agri-business conglomerate Charoen Pokphand sold a 20-year bond with a 5.3% coupon and Hemaraj Land and Development sold a 9-year bond with a coupon of 5.65%.

Figure 21: Regional Averages—LCY Corporate Bond Market Structural Issues



FX = foreign exchange, LCY = local currency.
Note: Emerging Asia comprises the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Qualitative Indicators for Corporate Bond Markets

Figure 21 summarizes market participants' feedback on the structural and regulatory issues of corporate bond markets in the region. The results for the region as a whole are broadly comparable to those from the government bond market survey, albeit with a few small differences.

- The most important structural issue for the emerging East Asian LCY corporate bond market was greater diversity of investor profile, with a rating of 3.7 compared with 3.5 for the government bond market.
- Market access was rated at 3.1 for the corporate bond market as a whole compared with 3.0 for the government bond market.
- Hedging mechanisms were rated less important in the corporate bond market at 2.9 compared with 3.2 in the government bond market. The lower score reflects the fact that corporate bond markets are typically less liquid than government bond markets; corporate bonds frequently disappear altogether from the markets a few months, or even a few weeks, after issue.
- Transparency received a nearly identical rating in the government (3.1) and corporate bond markets (3.0). Corporate investors rely largely upon the information they receive in the prospectus for a given bond issue, which may contain information that is not otherwise available. One problem in Asia is that prospectuses are sometimes issued only in the language of the country where the issuer is domiciled, making it more difficult for foreign investors to assess the credit worthiness of the issuer.
- Foreign exchange regulations and transaction funding both received ratings of 3.0 for the corporate bond market, compared with 3.1

for both categories in the government bond market. Foreign exchange regulations are a somewhat lower priority for corporate bond investors, who typically have a wider range of concerns than government bond investors. The lower corporate bond market score for transaction funding reflects the lower level of liquidity in the corporate bond market.

- Tax treatment and settlement and custody, however, are rated slightly higher in the corporate bond market at 2.9 in both categories, compared with 2.8 in the government bond market. Taxes paid on government bonds are waived for certain types of investors in government bonds in a number of jurisdictions, but corporate bonds are rarely tax-exempt.

- Settlement and custody is a slightly more important issue in the corporate bond market (2.9) than in the government bond market (2.8). Governments enforce a fair amount of uniformity for settlement and custody procedures for government bonds. Settlements and custody procedures for corporate bonds, however, are less standardized. In some markets, they may even vary according to different settlement and custody procedures that have been set up by a particular bond's underwriters.

Responses on structural issues differed considerably among individual markets. In five markets—the Republic of Korea, the Philippines, Singapore, Thailand, and Viet Nam—the charts broadly resemble the spider chart for the region as a whole, with scores above 3 or just slightly below 3 for most structural issues **(Figure 22)**. Some of the other markets have strikingly unique features.

- The PRC's score for foreign exchange regulations, tax treatment, settlement and custody, and transparency are all well below 3. Settlement and custody works well, and local market participants find the current level of bond market transparency quite acceptable.

- Hong Kong, China scores well below 3 in most categories of its spider chart, except for investor diversity and transparency, reflecting the fact that it is one of the most open capital markets in Asia.

- Participants in the Malaysian market rated transaction funding, tax treatment, settlement and custody, and hedging mechanisms at levels suggesting that they are only somewhat important to the operation of Malaysia's corporate bond market.

- These ratings for Malaysia's corporate bond market are consistent with our observation that corporate bond investors are heavily focused on the performance of the company they are investing in.

Figure 22: Structural Issues for Individual LCY Corporate Bond Markets

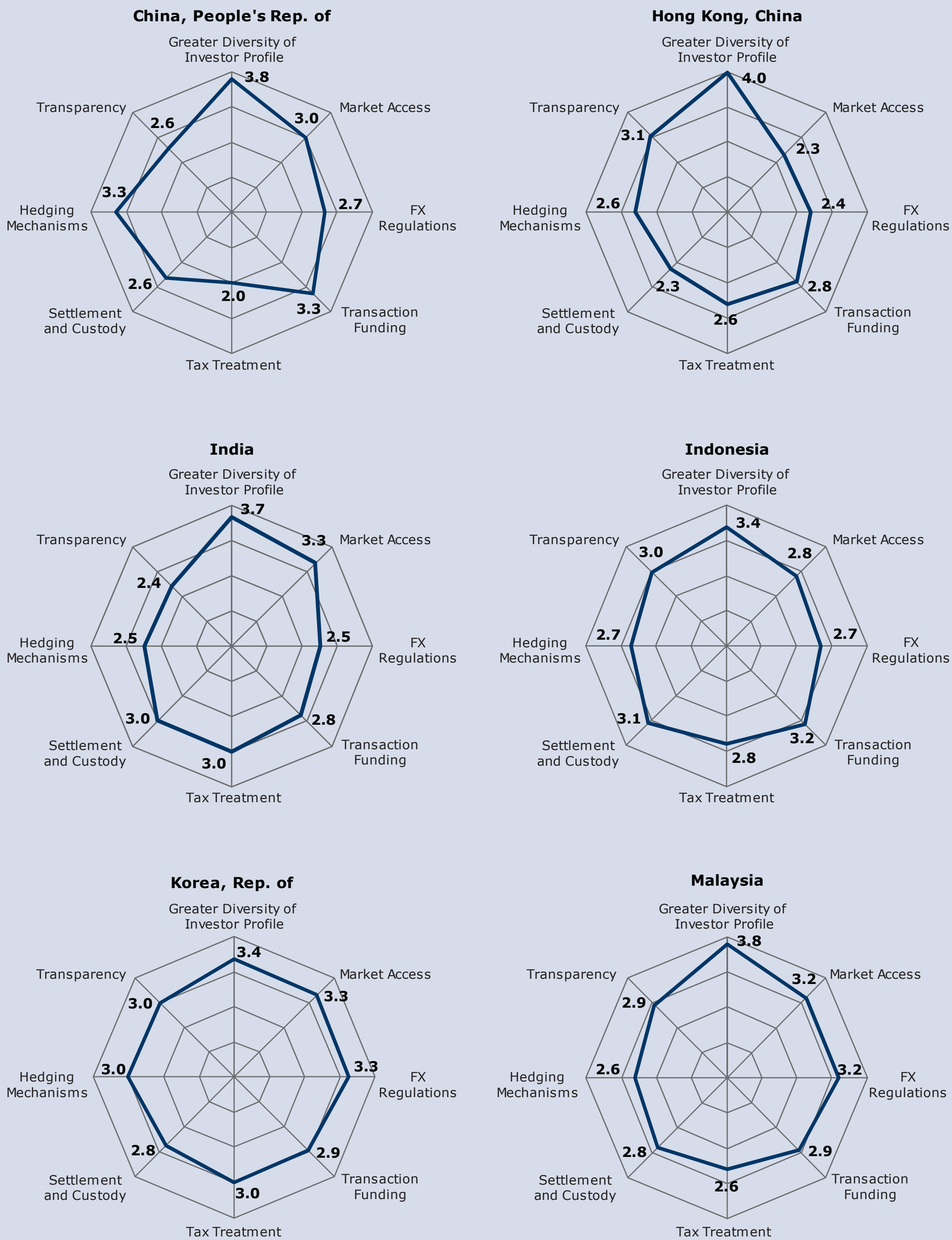


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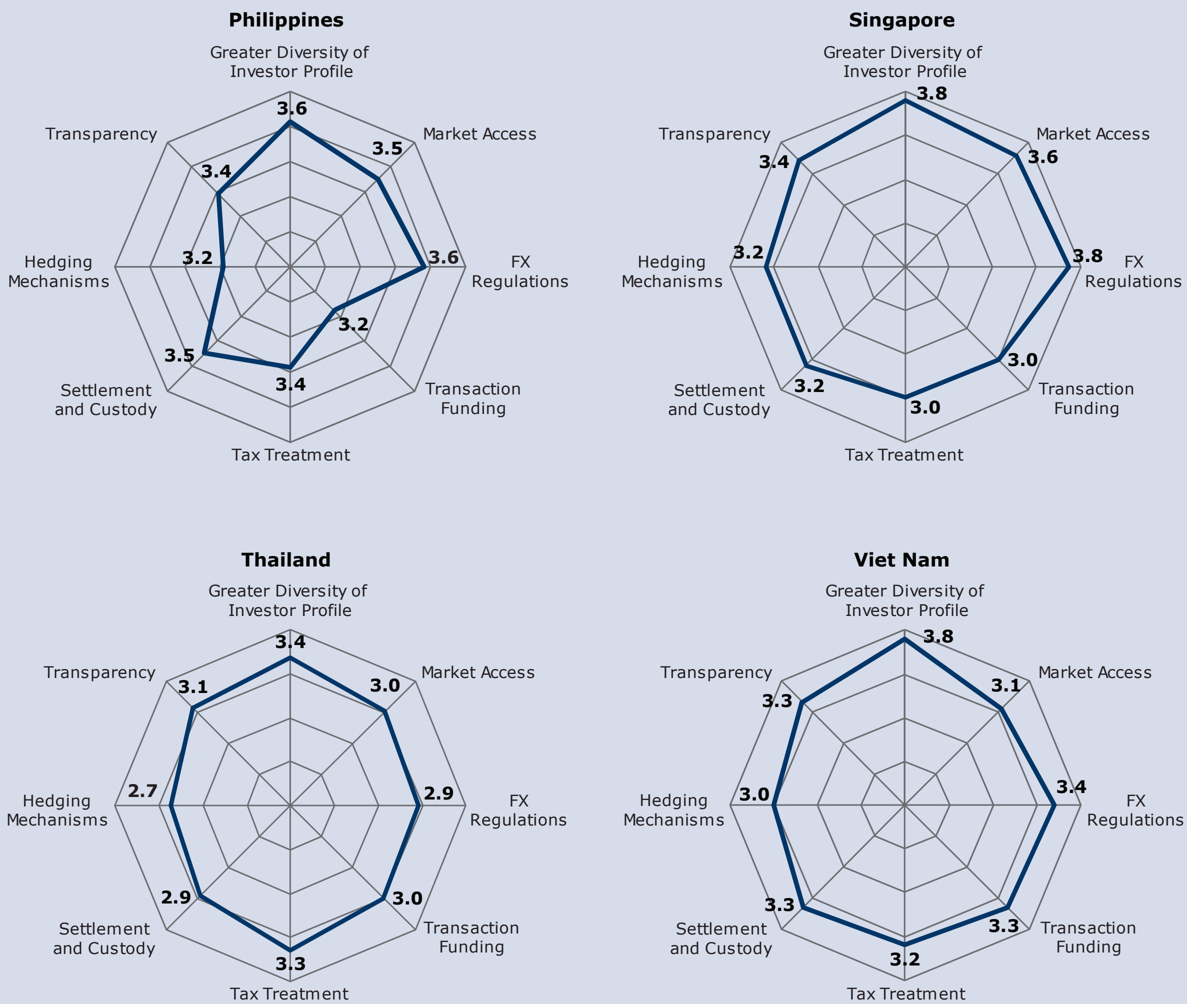
Figure 22 *continued*



FX = foreign exchange, LCY = local currency.
Source: *AsianBondsOnline* 2012 LCY Bond Market Liquidity Survey.

Market Summaries

People's Republic of China—Update

Yield Movements

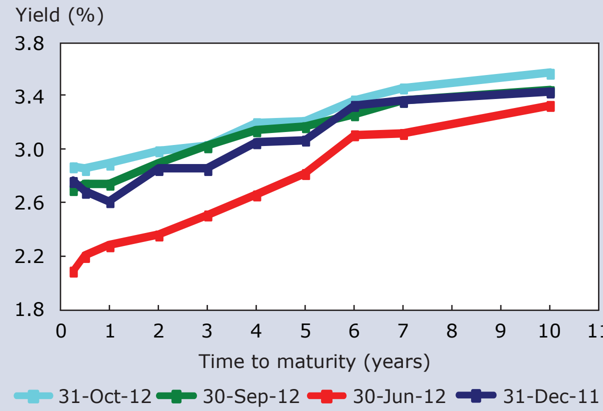
The government bond yield curve in the People's Republic of China (PRC) shifted upward from end-June to end-September, particularly at the shorter-end. Yields rose between 46 basis points (bps) and 61 bps for tenors of 1-year or less in 3Q12. Meanwhile, yields rose 15 bps–53 bps between the 2- and the 6-year tenors, and 11 bps–24 bps between the 7- and 10-year tenors **(Figure 1)**.

As a result of the rise in interest rates, particularly at the shorter-end of the curve, the yield curve flattened in 3Q12. From end-September to end-October, yields rose again, with the yields rising 11 bps to 17 bps for tenors of 1-year or less. The 7-year tenor rose 10 bps while the 10-year tenor rose 13 bps. By 31 October, the yield spread between 2- and 10-year maturities had narrowed further to 58 bps, a level similar to that at end-December 2011.

The rise in yields in September was primarily due to the cautious monetary policy of the People's Bank of China (PBOC), which ceased issuing new bills and notes in 2012, while also using reverse repurchase agreements to increase liquidity. In the last week of October, the PBOC injected CNY395 billion into the money supply through reverse repurchase agreements.

Seasonal factors also contributed to the rise in yields in September as banks' need for liquidity increased during the PRC's Golden Week. In addition, economic data suggested a bottoming out of the PRC's economic growth, putting further upward pressure on yields in October. While inflation has remained low, it is no longer falling and seems to have stabilized. The consumer price inflation rate was at 2.0%, 1.9%, and 1.7% year-on-year (y-o-y) for the months of August, September, and October, respectively.

Figure 1: The People's Republic of China's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Gross domestic product (GDP) growth slowed further as the economy expanded 7.4% y-o-y in 3Q12 from 7.6% in 2Q12. Exports posted a strong rebound in September, growing 9.9% y-o-y from 2.7% in August. Manufacturing activity has also picked up, as indicated by the manufacturing purchasing managers' index (PMI), which rose to 50.2 in October from 49.8 in September. Industrial production also grew 9.6% y-o-y in October from 9.2% in August.

In spite of a few positive signs, the external and domestic environments remain challenging. Foreign direct investment (FDI) has been declining on a y-o-y basis since June. FDI in January–September was at US$83.4 billion, or 3.8% less than in the same period last year.

On 7 September, the government announced a CNY1.0 trillion package to fund 60 infrastructure projects. Local governments have also begun planning their own stimulus packages. Tianjin announced that it would spend CNY1.5 trillion on 10 industries, including petrochemicals,

Table 1: Size and Composition of the LCY Bond Market in the People's Republic of China

	Amount (billion)								Growth Rates (%)						
	Jun-12		Jul-12		Aug-12		Sep-12		Jun-12		Jul-12	Aug-12	Sep-12		
	CNY	US$	CNY	US$	CNY	US$	CNY	US$	y-o-y	q-o-q	m-o-m	m-o-m	y-o-y	q-o-q	m-o-m
Total	22,042	3,469	22,337	3,511	22,737	3,581	22,963	3,654	6.9	1.5	1.3	1.8	10.8	4.2	1.0
Government	16,396	2,580	16,682	2,622	16,981	2,675	17,036	2,711	3.9	1.1	1.7	1.8	7.9	3.9	0.3
Treasury Bonds	7,500	1,180	7,630	1,199	7,811	1,230	7,915	1,259	8.0	1.1	1.7	2.4	8.8	5.5	1.3
Central Bank Bonds	1,644	259	1,631	256	1,619	255	1,514	241	(41.0)	(14.7)	(0.8)	(0.7)	(28.5)	(7.9)	(6.5)
Policy Bank Bonds	7,251	1,141	7,421	1,166	7,551	1,189	7,606	1,210	20.0	5.6	2.3	1.8	18.9	4.9	0.7
Corporate	5,646	889	5,655	889	5,756	907	5,927	943	16.5	2.5	0.2	1.8	20.2	5.0	3.0
Policy Bank Bonds															
China Development Bank	4,921	775	5,031	791	5,131	808	5,142	818	14.9	5.2	2.2	2.0	15.4	4.5	0.2
Export–Import Bank of China	930	146	960	151	990	156	1,008	160	36.0	3.1	3.2	3.1	29.2	8.4	1.8
Agricultural Devt. Bank of China	1,400	220	1,429	225	1,430	225	1,457	232	30.0	8.4	2.1	0.1	25.4	4.1	1.9

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Treasury bonds include savings bonds and local government bonds.
3. Bloomberg LP end-of-period LCY–US$ rate is used.
4. Growth rates are calculated from LCY base and do not include currency effects.
Source: *ChinaBond* and Bloomberg LP.

port equipment, and aerospace. Chongqing announced that it would spend CNY1.5 trillion over a period of 3 years in industries such as electronics, information technology (IT), and automobiles. Other local governments have announced plans for stimulus packages, including Nanjing, Guangzhou, and Changsha. For example, Changsha said that it plans to spend up to CNY829 billion on construction projects such as airports and subway lines.

Size and Composition

The amount of outstanding local currency (LCY) bonds in the PRC market reached CNY23 trillion (US$3.7 trillion) at end-September, representing a y-o-y increase of 10.8% and a quarter-on-quarter (q-o-q) rise of 4.2% **(Table 1)**.

LCY government bonds outstanding grew 7.9% y-o-y and 3.9% q-o-q in 3Q12, while corporate bonds rose 20.2% y-o-y and 5.0% q-o-q. Central bank bonds continued to act as a drag on government bond growth, falling 28.5% y-o-y and 7.9% q-o-q as a result of fewer sterilization activities and additional monetary easing by the PBOC. In contrast, treasury bonds grew 8.8% y-o-y and 5.5% q-o-q, and policy bank bonds grew 18.9% y-o-y and 4.9% q-o-q.

Corporate Bonds. Corporate bonds outstanding grew 20.2% y-o-y in 3Q12. Growth was driven mainly by an increase in outstanding commercial bank bonds, local corporate bonds, and medium-term notes (MTNs). Commercial bank bonds grew 46.5% y-o-y in 3Q12, due largely to a carryover from the issuance of subordinated notes in 2Q12 as banks sought to bolster their capital bases in advance of the PRC's implementation of Basel III capital adequacy requirements.

Local corporate bonds grew 51.7% y-o-y and MTNs expanded 32.3% in 3Q12, while state-owned corporate bonds rose 13.1% **(Table 2)**. Asset-backed securities continued to decline as well, falling 16.5% in 3Q12 due to an ongoing lack of issuance.

Table 2: Corporate Bonds Outstanding in Key Sectors

	Amount (CNY billion)						Growth Rates (%)					
							q-o-q					y-o-y
	2Q11	3Q11	4Q11	1Q12	2Q12	3Q12	3Q11	4Q11	1Q12	2Q12	3Q12	3Q12
Commercial Bank Bonds	759	755	924	1,028	1,100	1,106	(0.5)	22.4	11.2	7.0	0.6	46.5
State-Owned Corporate Bonds	877	876	894	953	992	991	(0.1)	2.1	6.6	4.1	(0.1)	13.1
Local Corporate Bonds	714	727	782	876	987	1,103	1.8	7.5	12.0	12.6	11.8	51.7
Asset- and Mortgage-Backed Securities	10	10	10	9	8	8	(2.3)	(3.5)	(9.6)	(4.3)	–	(16.5)
Medium-Term Notes	1,621	1,769	1,974	2,030	2,129	2,340	9.1	11.6	2.8	4.9	9.9	32.3

– = not available, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Source: *ChinaBond.*

On a q-o-q basis, local corporate bonds and MTNs showed the strongest growth: local corporate bonds grew 11.8% and MTNs grew 9.9%. Commercial bank bonds grew only 0.6% q-o-q as banks conducted most of their capital-raising efforts in 2Q12.

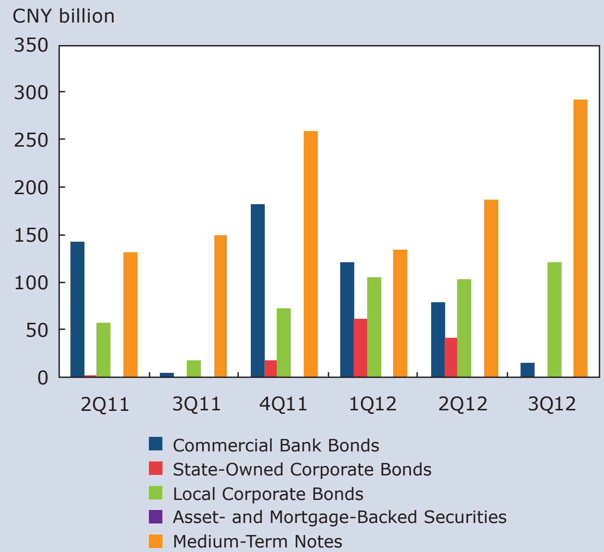
Overall issuance of corporate bonds was down in 3Q12 from 2Q12 levels **(Figure 2)**, with the exception of local corporate bonds and MTNs.

The lack of asset-backed securities stems from the PRC's decision to temporarily halt new issuance in 2008. However, a recently expanded pilot program is underway. Commercial bank bond issuance was strong in 1Q12 and 2Q12, but still lower than its peak level in prior quarters, as banks sought to bolster their capital bases in preparation for the PRC's implementation of Basel III.

A relatively small number of issuers dominate the PRC's corporate bond market **(Table 3)**. At end-September, the top 30 corporate bond issuers accounted for CNY3.5 trillion worth of corporate bonds outstanding, or about 60% of the total market. Among the top 30 corporate issuers, the 10 largest accounted for CNY2.4 trillion worth of bonds outstanding.

State-owned companies (defined as majority-owned by the government) dominate the corporate bond market in the PRC. Among the top 30 corporate issuers at end-September, 23 were state-owned, with a total of CNY3.1 trillion worth of bonds outstanding.

Figure 2: Corporate Bond Issuance in Key Sectors, 2Q11–3Q12



Source: *ChinaBond.*

Investor Profile

Treasury Bonds. Banks remained the largest category of investors in the PRC's treasury bond market, holding a slightly larger share of these bonds at end-September 2012 (68%) than at end-September 2011 (65%) **(Figure 3a)**. The shares held by special members fell to 22% from 24% during the same period. Special members comprise the PBOC, Ministry of Finance, policy banks, China Government Securities Depository Trust and Clearing Co., and China Securities Depository and Clearing Corporation.

Table 3: Top 30 Issuers of LCY Corporate Bonds in the People's Republic of China (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (CNY billion)	LCY Bonds (US$ billion)				
1. Ministry of Railways	697.0	110.9	Yes	No	No	Transportation
2. State Grid Corporation of China	326.5	52.0	Yes	No	No	Public Utilities
3. China National Petroleum	310.0	49.3	Yes	No	No	Energy
4. Industrial and Commercial Bank of China	230.0	36.6	Yes	No	Yes	Banking
5. Bank of China	196.9	31.3	Yes	No	Yes	Banking
6. China Construction Bank	160.0	25.5	Yes	No	Yes	Banking
7. China Petroleum & Chemical	158.2	25.2	Yes	No	Yes	Energy
8. Central Huijin Investment	109.0	17.3	Yes	No	No	Diversified Financial
9. Agricultural Bank of China	100.0	15.9	Yes	No	Yes	Banking
10. Shenhua Group	92.0	14.6	Yes	No	No	Energy
11. China Minsheng Bank	82.3	13.1	No	Yes	Yes	Banking
12. Bank of Communications	76.0	12.1	No	Yes	Yes	Banking
13. China Guodian	74.9	11.9	Yes	No	No	Public Utilities
14. Industrial Bank	72.1	11.5	No	Yes	Yes	Banking
15. Petrochina	67.5	10.7	Yes	No	Yes	Energy
16. Shanghai Pudong Development Bank	67.2	10.7	No	Yes	Yes	Banking
17. China Three Gorges Project	65.5	10.4	Yes	No	No	Public Utilities
18. China Power Investment	60.3	9.6	Yes	No	No	Public Utilities
19. China Life	58.0	9.2	Yes	No	Yes	Insurance
20. State-Owned Capital Operation and Management Center of Beijing	55.0	8.8	Yes	No	No	Diversified Financial
21. Citic Group	53.5	8.5	Yes	No	No	Diversified Financial
22. China United Network Communications	53.0	8.4	Yes	No	Yes	Telecommunications
23. China Everbright Bank	52.7	8.4	No	Yes	Yes	Banking
24. China Huaneng Group	52.2	8.3	Yes	No	No	Public Utilities
25. China Merchants Bank	50.0	8.0	No	Yes	Yes	Banking
26. Huaneng Power International	49.0	7.8	Yes	No	Yes	Public Utilities
27. Metallurgical Corporation of China	45.6	7.3	Yes	No	Yes	Capital Goods
28. China Southern Power Grid	44.0	7.0	Yes	No	No	Public Utilities
29. China Citic Bank	42.5	6.8	No	Yes	Yes	Banking
30. Shougang Group	42.0	6.7	Yes	No	No	Raw Materials
Total Top 30 LCY Corporate Issuers	**3,542.9**	**563.7**				
Total LCY Corporate Bonds	**5,927.2**	**943.1**				
Top 30 as % of Total LCY Corporate Bonds	**59.8%**	**59.8%**				

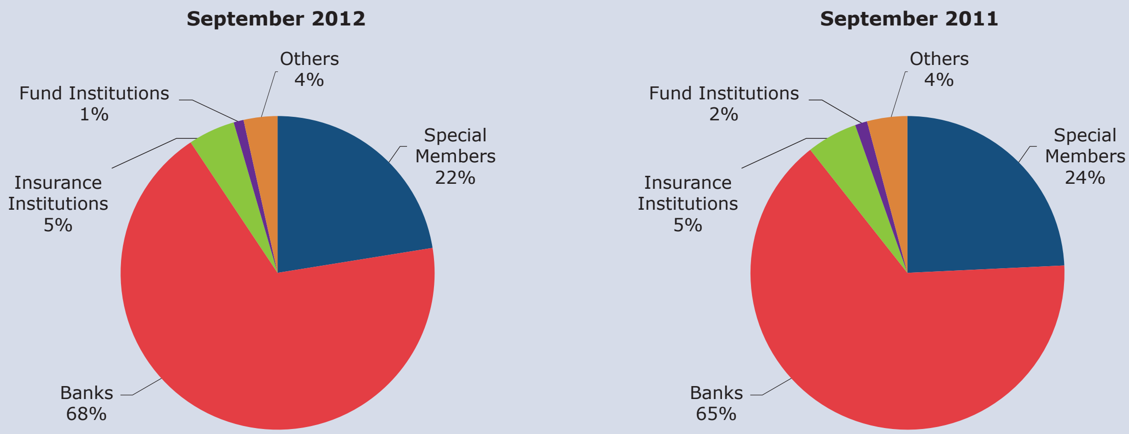
LCY = local currency.
Source: Bloomberg LP and Wind.

Banks are a much more significant holder of policy bank bonds **(Figure 3b)**. At end-September, banks held 85% of outstanding policy bank bonds, up slightly from 84% at end-September 2011. Insurance institutions' holdings fell slightly to 8% at end-September from 10% a year earlier.

Corporate Bonds. Banks remained the largest holder of corporate bonds at end-September, albeit with a comparatively smaller share than bank holdings of treasury bonds and policy bank bonds. Banks' share of corporate bonds fell slightly to 45% at end-September from 50% at end-September 2011 **(Figure 4)**. The shares held by insurance and fund institutions at end-September were 21% and 25%, respectively, from 21% and 20% a year earlier.

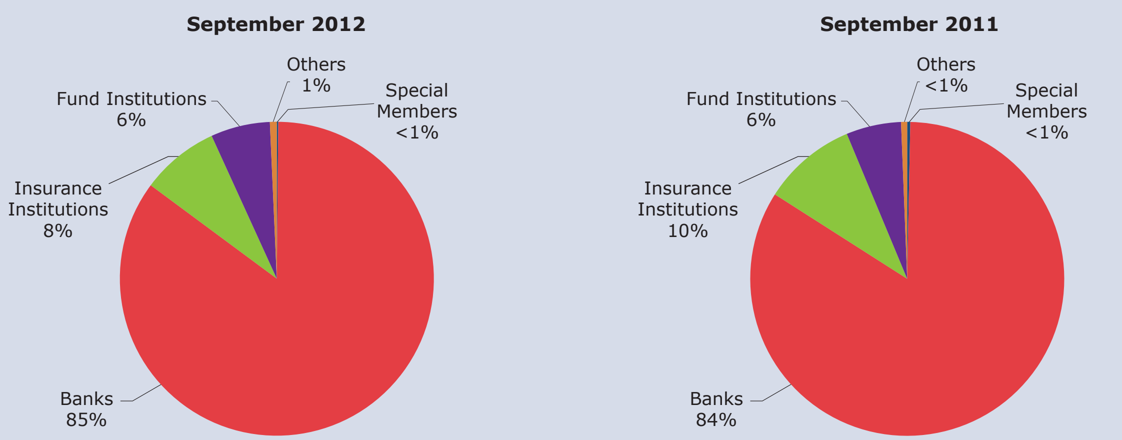
Figure 5 presents the investor profile across different bond categories. Banks were the largest holder of treasury bonds and policy bank bonds at end-September, with a more than 80% share of outstanding policy bank bonds. Meanwhile, insurance institutions were the largest holder of commercial bank bonds.

Figure 3a: LCY Treasury Bonds Investor Profile



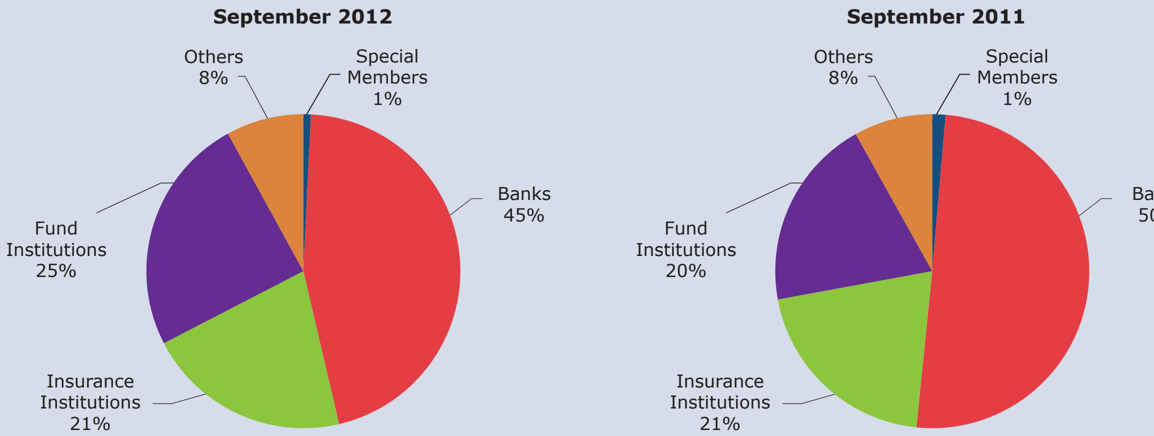
LCY = local currency.
Source: *ChinaBond*.

Figure 3b: LCY Policy Bank Bonds Investor Profile



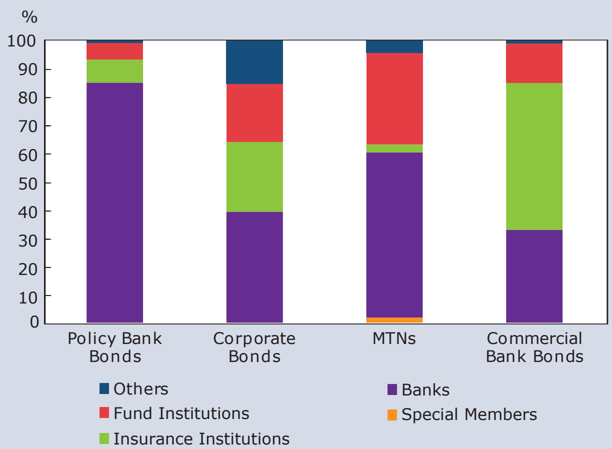
LCY = local currency.
Source: *ChinaBond*.

Figure 4: LCY Corporate Bonds Investor Profile



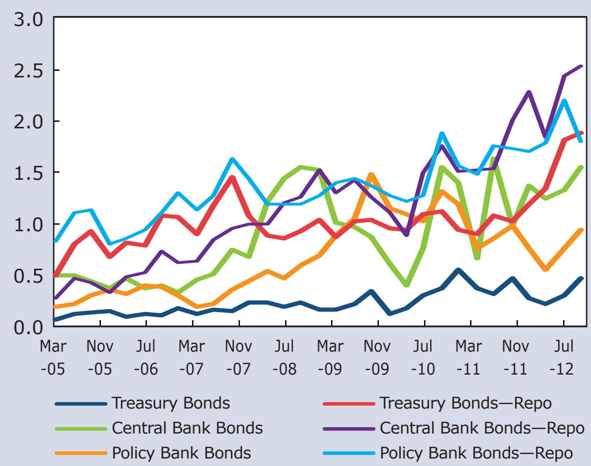
LCY = local currency.
Source: *ChinaBond*.

Figure 5: Investor Profile across Bond Categories
(as of end-September 2011)



bps = basis points, MTNs = medium-term notes.
Source: *ChinaBond*.

Figure 6: Turnover Ratios for Government Bonds



Repo = repurchase.
Source: *ChinaBond*.

Liquidity

Figure 6 presents the turnover ratio for government bonds, including both spot trading as well as repo trading volumes. As can be seen, the repo market is the more active of the two, with volumes much larger than spot trading.

Interest Rate Swaps

The total notional amount traded in the interest rate swap (IRS) market rose 1.4% y-o-y and 17.4% q-o-q in 3Q12 to CNY801 billion on 6,662 transactions **(Table 4)**. The most popular benchmark was the 7-day repurchase (repo) rate, accounting for 53% of the notional amount

Table 4: Notional Values of the PRC's Interest Rate Swap Market (as of 3Q12)

Interest Rate Swap Benchmarks	Notional Amount (CNY billion)	% of Total Notional Amount	Number of Transactions	Growth Rate (%)	
	3Q12			q-o-q	y-o-y
7-Day Repo Rate	424.1	52.9	4,699	22.0	4.4
Overnight SHIBOR	253.5	31.6	629	8.5	(9.0)
3-Month SHIBOR	78.7	9.8	791	4.2	(3.6)
1-Year Term Deposit Rate	26.8	3.3	237	27.7	16.1
6-Month Lending Rate	0.07	0.0	4	(65.2)	787.5
1-Year Lending Rate	13.4	1.7	257	458.1	14,955.1
3-Year Lending Rate	3.2	0.4	22	639.4	–
5-Year Lending Rate	0.9	0.1	21	38.7	–
Above 5-Year Lending Rate	0.3	0.0	2	55.6)	–
Total	**801.0**	**100.0**	**6,662**	**17.4**	**1.4**

– = not applicable, PRC = People's Republic of China, q-o-q = quarter-on-quarter, Repo = repurchase, SHIBOR = Shanghai Interbank Offered Rate, y-o-y = year on year.
Source: *AsianBondsOnline* and *ChinaMoney*.

traded, followed by the overnight SHIBOR at 32%. These two benchmarks were the most actively traded in 3Q12 because the primary participants in the PRC's onshore IRS market are commercial banks with high levels of funding exposure in the form of repo transactions. Therefore, banks make extensive use of the repo rate as the base rate to hedge their funding.

Policy, Institutional, and Regulatory Developments

Allowable Investments for QFIIs Expanded

On 28 July, the China Securities Regulatory Commission (CSRC) issued new rules allowing Qualified Foreign Institutional Investors (QFIIs) to invest in the interbank market. QFIIs were previously only allowed to trade in the exchange market. The new regulations also allow QFIIs to invest in private placement bonds issued by small and medium-sized enterprises (SMEs). Finally, the 20% stake limit in a listed company was raised to 30%.

Home Price Controls to Continue

On 29 August, an official from the National Development and Reform Council (NDRC) said that it would take measures to prevent rising home prices. These measures include restricting speculation and increasing the housing supply, particularly small and medium-sized homes.

CSRC Approves First Direct Offshore Bond Fund

On 16 October, the CSRC approved Huaxia Asset Management's bid to launch a bond fund investing in offshore bonds under the Qualified Domestic Institutional Investor (QDII) program. The fund will invest 80% of its assets in bonds, unlike existing QDII funds that invest mostly in equities. The fund will also invest in bonds directly, rather than indirectly, as is the case with other QDII bond funds.

Allowable Offshore Investments of Insurance Companies Expanded

On 23 October, the China Insurance Regulatory Commission (CIRC) began allowing insurance companies to invest offshore in countries other than Hong Kong, China. The list of allowable countries was expanded to 45 and the allowable investments were expanded from bonds and equity to also include real estate, currency products, and fixed-income products other than bonds.

Bank of Communications Prices First ABS under Pilot Program

On 2 November, Bank of Communications priced the first asset-back security (ABS) under the new ABS pilot scheme. The security comprises three tranches. The A1-rated tranche had a size of CNY850 million and was priced at 4.2%. The A2-rated tranche had a size of CNY1.6 billion with a floating rate of 140 bps over the 1-year deposit rate. The B-rated tranche was sized at CNY310 million with a floating rate of 300 bps over the 1-year deposit rate. An unrated subordinated tranche worth CNY263.3 billion will also be privately placed. The collateral for the notes comprises 60 corporate loans from 34 borrowers.

Hong Kong, China—Update

Yield Movements

The yield curve for Hong Kong, China's Exchange Fund Bills and Notes (EFBNs) flattened between end-June and end-October. **(Figure 1)**. The yield curve flattened as yields on longer tenors moved downward while yields on the shorter-end were roughly unchanged. Yields for 6- to 12-month maturities were unchanged, while yields for 1-month to 3-year maturities fell by 2 basis points (bps) or more. In contrast, yields fell between 8 bps and 29 bps for the longer-dated tenors. The 10-year tenor fell 29 bps while the 15-year tenor fell 26 bps.

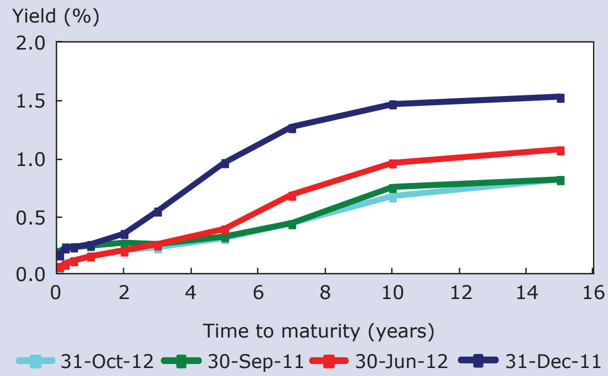
Due to the fall in yields for longer-term tenors, the spread between the 2- and 10-year rates fell to 46 bps at end-October from 76 bps at end-June.

The fall in longer-tenor yields was due to increased demand for high-quality Exchange Fund Bills and Notes due to increased risk aversion on renewed concerns over the global slowdown.

The performance of Hong Kong, China's economy improved in September. Export growth recovered to expand 15.2% year-on-year (y-o-y), from marginal growth of only 0.6% in August, as demand from Asia and the United States (US) improved. However, the government's outlook for 2012 suggests that economic growth remains weak. The annual gross domestic product (GDP) growth rate for 2012 is forecast at 1%–2%.

The government also remains concerned over rising property prices as a driver of inflation, which rebounded to 3.7% y-o-y in August from 1.6% in July, increasing slightly again to 3.8% in September. Inflation is rising mostly due to increases in property prices and other housing-related costs.

Figure 1: Hong Kong, China's Benchmark Yield Curve—EFBNs



EFBN = Exchange Fund Bills and Notes.
Source: Bloomberg LP.

Size and Composition

The size of Hong Kong, China's local currency (LCY) bond market grew 3.3% y-o-y to HKD1.4 trillion (US$176 billion) as of end-September **(Table 1)**. On a quarter-on-quarter (q-o-q) basis, LCY bonds outstanding rose 1.3% in 3Q12.

Total LCY government bonds outstanding rose 3.4% y-o-y and 0.1% q-o-q to reach HKD721 billion as of end-September. Government bonds include Exchange Fund Bills (EFBs), Exchange Fund Notes (EFNs), and bonds issued under the Institutional Bond Issuance Programme (HKSAR Bonds).

Most of the growth in government bonds in 3Q12 can be attributed to growth in HKSAR Bonds, which expanded 50.6% y-o-y to HKD64 billion. On the other hand, the stock of EFNs declined slightly by 0.9% y-o-y to HKD69 billion, while EFBs grew only slightly by 0.5% y-o-y to HKD588 billion.

In September, HKD3.5 billion worth of 2-year HKSAR Bonds were issued.

Table 1: Size and Composition of the LCY Bond Market in Hong Kong, China

	Amount (billion)								**Growth Rate** (%)						
	Jun-12		**Jul-12**		**Aug-12**		**Sep-12**		**Jun-12**		**Jul-12**	**Aug-12**	**Sep-12**		
	HKD	**US$**	**HKD**	**US$**	**HKD**	**US$**	**HKD**	**US$**	**y-o-y**	**q-o-q**	**m-o-m**	**m-o-m**	**y-o-y**	**q-o-q**	**m-o-m**
Total	1,347	174	1,353	174	1,358	175	1,364	176	3.7	1.2	0.4	0.4	3.3	1.3	0.4
Government	720	93	721	93	721	93	721	93	5.3	2.1	0.01	0.0	3.4	0.1	0.02
Exchange Fund Bills	587	76	588	76	588	76	588	76	0.4	0.1	0.01	0.0	0.5	0.1	0.03
Exchange Fund Notes	69	9	69	9	69	9	69	9	(0.9)	(0.4)	0.00	0.0	(0.9)	0.0	0.00
HKSAR Bonds	64	8	64	8	64	8	64	8	113.3	29.3	0.00	0.0	50.6	0.0	0.00
Corporate	627	81	632	82	638	82	643	83	1.9	0.1	0.9	0.9	3.3	2.6	0.9

HKSAR = Hong Kong Special Administrative Region, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–US$ rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
Source: Hong Kong Monetary Authority and Bloomberg LP.

The amount of LCY corporate bonds outstanding rose slightly to HKD643 billion at end-September, reflecting growth of 3.3% y-o-y and 2.6% q-o-q. The top 28 non-bank corporate issuers in Hong Kong, China accounted for almost 17% of total corporate bonds outstanding as of end-September **(Table 2)**. Hong Kong, China's top corporate issuer of LCY bonds remained the state-owned Hong Kong Mortgage Corporation (HKMC) with outstanding bonds valued at HKD17.7 billion. CLP Power Hong Kong Financing Ltd. was the next largest issuer at HKD11.3 billion. Sun Hung Kai Properties (Capital Market) Ltd. was the third largest issuer with outstanding bonds of HKD10.9 billion.

Financial firms dominated the list of the top 25 non-bank corporate issuers at end-September, accounting for nine out of the 28 issuers. Six state-owned companies were included on the list, while 18 were privately owned. Among the companies in Table 2, eight were listed on the Hong Kong Exchange.

Policy, Institutional, and Regulatory Developments

HKMA Implements Prudential Loan Property Measures

On 14 September, the Hong Kong Monetary Authority (HKMA) released new regulations regarding property lending in order to limit property price risks. For borrowers with multiple properties under mortgage, the loan-to-value ratios and debt servicing ratios were adjusted. Also, the maximum mortgage loan tenor was reduced to 30 years.

HKMA to Implement First Phase of Basel III

On 19 October, HKMA announced that the first phase of its implementation of Basel III requirements would take effect on 1 January 2013. The first phase consists mostly of changes to the capital adequacy ratio, splitting it into three distinct ratios: (i) common equity Tier 1 capital ratio, (ii) Tier 1 capital ratio, and (iii) total capital ratio.

Table 2: Top 28 Non-Bank Corporate Issuers in Hong Kong, China (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (HKD billion)	LCY Bonds (US$ billion)				
1. The Hong Kong Mortgage Corporate Ltd.	17.70	2.28	Yes	No	No	Finance
2. CLP Power Hong Kong Financing Ltd.	11.33	1.46	No	Yes	No	Electric
3. Sun Hung Kai Properties (Capital Market) Ltd.	10.86	1.40	No	Yes	No	Real Estate
4. Kowloon-Canton Railway Corporation	6.30	0.81	Yes	No	No	Transportation
5. MTR Corporation (C.I.) Ltd.	6.20	0.80	Yes	No	Yes	Transportation
6. HKCG (Finance) Limited	5.60	0.72	No	Yes	No	Gas
7. The Link Finance (Cayman) 2009 Ltd.	5.29	0.68	No	Yes	No	Finance
8. Swire Pacific MTN Financing Ltd.	4.98	0.64	No	No	Yes	Diversified
9. Hongkong Electric Finance Ltd.	4.81	0.62	No	Yes	No	Electric
10. Wheelock Finance Ltd.	3.75	0.48	No	Yes	No	Diversified
11. Cheung Kong Bond Finance Ltd.	3.45	0.44	No	Yes	Yes	Finance
12. Airport Authority Hong Kong	2.85	0.37	Yes	No	No	Trannsportation
13. Wharf Finance Ltd.	2.50	0.32	No	Yes	No	Diversified
14. Urban Renewal Authority	2.50	0.32	Yes	No	No	Property Development
15. Hysan (MTN) Ltd.	2.43	0.31	No	Yes	No	Finance
16. Cheung Kong Finance (MTN) Ltd.	2.21	0.28	No	Yes	No	Finance
17. Yue Xiu Enterprises (Holdings) Ltd.	2.00	0.26	No	Yes	No	Diversified
18. Henderson Land MTN Ltd.	1.83	0.24	No	Yes	Yes	Finance
19. Cathay Pacific MTN Financing Ltd.	1.18	0.15	No	No	Yes	Airlines
20. Wharf Finance (No.1) Ltd.	1.14	0.15	No	Yes	No	Diversified
21. Dragon Drays Ltd.	1.00	0.13	No	Yes	No	Diversified
22. Swire Properties MTN Finanicing Ltd.	0.80	0.10	No	No	Yes	Diversified
23. Nan Fung Treasury Ltd.	0.80	0.10	No	Yes	No	Real Estate
24. Wharf Finance (BVI) Ltd.	0.45	0.06	No	Yes	No	Diversified
25. HLP Finance Ltd.	0.41	0.05	No	No	Yes	Real Estate
26. Bauhinia MBS Ltd.	0.26	0.03	Yes	No	No	Finance
27. Cheung Kong Infrastructure Finance (BVI) Ltd.	0.26	0.03	No	Yes	Yes	Finance
28. The Hongkong Land Notes Company Ltd.	0.20	0.03	No	Yes	No	Finance
Total Top 28 Non-Bank LCY Corporate Issuers	**103.09**	**13.29**				
Total LCY Corporate Bonds	**643.21**	**82.95**				
Top 28 as % of Total LCY Corporate Bonds	**16.0%**	**16.0%**				

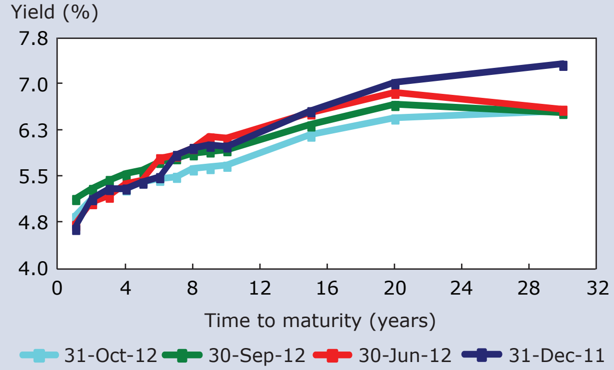
LCY = local currency.
Note: Based on Central Money Markets Unit data on tradeable non-bank debt securities issued and outstanding as of 2 July 2012.
Source: Hong Kong Monetary Authority.

Indonesia—Update

Yield Movements

Between end-June and end-September, the local currency (LCY) government bond yield curve for Indonesia flattened, as yields rose from the short-end of the curve through the 5-year maturity, while yields fell from the belly through the long-end of the curve **(Figure 1)**. Yields rose the most at the shortest-end of the curve (1-year maturity), climbing 43 basis points (bps) on inflation concerns. Yields from the 10-year maturity through the long-end of the curve fell between 4 bps and 23 bps.

Figure 1: Indonesia's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Between end-September and end-October, however, yields fell across all tenors on positive sentiment after Standard and Poor's (S&P) stated that modest improvements in the country's political and policy dynamics might result in a ratings upgrade. In addition, foreign fund inflows into the Indonesian bond market resumed following the announcement of stimulus measures by the United States (US) Federal Reserve Bank. Indonesia's bond market continues to attract foreign investor interest as its bond yields are among the highest in the region. The yield spread between the 2- and 10-year maturities narrowed to 55 bps at end-October from 64 bps at end-September and 105 bps at end-June.

Consumer price inflation slowed to 4.3% year-on-year (y-o-y) in September from 4.6% in August. However, inflation inched up again in October, rising 4.6% y-o-y on higher prices for food, beverages, and tobacco products. The inflation rate, however, remained within Bank Indonesia's (BI) target range of 3.5% to 5.5% for the year. On a month-on-month (m-o-m) basis, inflation accelerated to 0.16% in October from 0.01% in September. Inflation for the rest of the year is expected to remain tame and end near the midpoint of BI's target range.

On 8 November, BI's Board of Governors decided to hold its benchmark interest rate steady at a record-low level of 5.75% to support economic growth. The BI rate has been kept at this level since a 25 bps cut in February. According to BI, the policy rate at its current level remains consistent with an inflation forecast that expects price increases to remain low and contained. BI also noted that external balances have started to improve, with a declining current account deficit and the overall balance of payments turning into a surplus. The Indonesian rupiah also moved according to market condition as depreciation pressures abated.

In 3Q12, Indonesia recorded a US$0.8 billion balance of payments surplus, a turnaround from a US$2.8 billion deficit in 2Q12. The current account deficit eased to US$5.3 billion in 3Q12 compared with US$7.7 billion in 2Q12 due largely to an improving trade balance. The capital and financial account surplus rose to US$6.0 billion in 3Q12, amid robust inflows of foreign direct investment and a reduction in offshore deposits held by residents. Also, portfolio investments contributed to the surplus due to foreign buying of stocks and local currency (LCY) government bonds. BI expects these trends to continue into 4Q12.

Table 1: Size and Composition of the LCY Bond Market in Indonesia

	Amount (billion)								**Growth Rate** (%)						
	Jun-12		**Jul-12**		**Aug-12**		**Sep-12**		**Jun-12**		**Jul-12**	**Aug-12**	**Sep-12**		
	IDR	**US$**	**IDR**	**US$**	**IDR**	**US$**	**IDR**	**US$**	**y-o-y**	**q-o-q**	**m-o-m**	**m-o-m**	**y-o-y**	**q-o-q**	**m-o-m**
Total	1,050,246	111	1,053,322	111	1,058,174	111	1,054,800	110	3.8	3.6	0.3	0.5	7.4	0.4	(0.3)
Government	884,029	94	884,500	93	886,902	93	883,479	92	0.5	3.0	0.1	0.3	4.2	(0.1)	(0.4)
Central Govt. Bonds	791,180	84	799,660	84	803,053	84	812,796	85	14.5	4.0	1.1	0.4	16.7	2.7	1.2
Central Bank Bills	92,849	10	84,840	9	83,849	9	70,683	7	(50.9)	(5.3)	(8.6)	(1.2)	(53.3)	(23.9)	(15.7)
Corporate	166,217	18	168,822	18	171,272	18	171,321	18	25.9	7.4	1.6	1.5	27.2	3.1	0.0

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–US$ rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. The total stock of non-tradable bonds as of end-September stood at IDR277.2 trillion
Source: Bank Indonesia, Indonesia Debt Management Office, Indonesia Stock Exchange, and Bloomberg LP.

Buoyed by strong domestic consumption and investment, economic growth in Indonesia expanded 6.2% y-o-y in 3Q12 after posting annual growth of 6.4% in 2Q12. Domestic consumption climbed 5.7% y-o-y and investment grew 10.0% in 3Q12. According to BI, economic growth is expected to accelerate and will continue to be supported by private consumption and investment. Export performance is also expected to improve as the economies of some of Indonesia's main trading partners strengthen, although uncertainty remains in the global economy. BI is forecasting economic growth of 6.3% in 2012 and between 6.3% and 6.7% in 2013.

Size and Composition

The amount of LCY bonds outstanding in Indonesia grew marginally to IDR1.05 quadrillion (US$110 billion) in 3Q12, expanding 0.4% quarter-on-quarter (q-o-q) **(Table 1)**. On a y-o-y basis, the bond market saw modest 7.4% growth. The corporate sector continued to drive growth in Indonesia's bond market.

At end-September, outstanding LCY government bonds were almost unchanged at IDR883.5 trillion, down 0.1% on a q-o-q basis. On a y-o-y basis, however, growth in government bonds climbed 4.2%. Growth in the government bond market was driven by central government bonds, comprising treasury bills and treasury bonds issued by the Ministry of Finance. The stock of central bank bills, known as *Sertifikat* Bank Indonesia (SBI), continued to decline steeply in 3Q12. Government bonds accounted for 83.8% of total LCY bonds in Indonesia at the end of 3Q12.

Central Government Bonds. The stock of central government bonds grew a modest 2.7% q-o-q to IDR812.8 trillion in 3Q12 **(Table 2)**. On a y-o-y basis, central government bonds rose 16.7%.

As of end-September, fixed-rate bonds accounted for 70.3% of total LCY central government bonds and variable rate bonds accounted for 15.6%.

Table 2: Government Bonds Outstanding by Type of Bond (as of end-September 2012)

Government Bonds	Amount Outstanding (IDR billion)	% Share	Growth Rates (%)	
			y-o-y	q-o-q
Treasury Bills (SPN)	28,220	3.5	22.7	0.1
Fixed-Rate Bonds	571,434	70.3	22.6	5.7
Variable-Rate Bonds	127,123	15.6	(5.9)	(2.0)
Zero-Coupon Bonds	2,512	0.3	0.0	0.0
Retail Bonds	21,476	2.6	(32.1)	(27.9)
Islamic Treasury Bills	905	0.1	–	(23.6)
Sukuk	17,137	2.1	4.7	0.0
Retail *Sukuk*	28,989	3.6	38.5	0.0
Project Based *Sukuk*	15,000	1.8	–	16.3
Total	**812,796**	**100.0**	**16.7**	**2.7**

Source: Indonesia Stock Exchange.

Table 3: Corporate Bonds Outstanding by Type of Bond (as of end-September 2012)

Corporate Bonds	Amount Outstanding (IDR billion)	% Share	Growth Rates (%)	
			y-o-y	q-o-q
Conventional Bonds	141,781	82.8	30.5	3.2
Subordinated Bonds	22,611	13.2	12.3	0.0
Convertible Bonds	150	0.1	–	–
Zero-Coupon Bonds	500	0.3	–	–
Sukuk Ijarah	4,390	2.6	(12.8)	(2.0)
Sukuk Mudharabah	775	0.5	(7.6)	0.0
Sukuk Mudharabah Subordinated	1,114	0.7	–	–
Total	**171,321**	**100.0**	**27.2**	**3.1**

Notes:
1. *Sukuk Ijarah* refers to Islamic bonds backed by a lease agreement.
2. *Sukuk Mudharabah* refers to Islamic bonds backed by a profit-sharing scheme from a business venture or partnership.

Source: Indonesia Stock Exchange.

Conventional treasury bills and retail bonds accounted for 3.5% and 2.6%, respectively. The share of *sukuk* (Islamic bonds) was equivalent to 7.6% of the total. Among the different types of Islamic instruments, retail *sukuk* accounted for 3.6% of total central government bonds at the end of 3Q12, while project-based *sukuk* and Islamic treasury bills accounted for 1.8% and 0.1%, respectively.

In 3Q12, new issuance of treasury bills and bonds was flat on a q-o-q basis at IDR40.6 trillion. Issuance of treasury instruments, however, rose 8.7% in 3Q12 compared with a year earlier. Issuance during the quarter consisted of fixed-rate bonds, treasury bills, Islamic treasury bills, and project-based *sukuk*. Of the 11 scheduled auctions during the quarter, two *sukuk* auctions failed as investors sought higher yields.

As of 25 September, the government raised a total of IDR212.1 trillion in bond sales (including international bond issuance), representing 78.4% of gross issuance (IDR270.4 trillion) as stated in the 2012 revised state budget. In the same period, total redemptions and buybacks reached IDR75.4 trillion. The government will continue to prioritize issuance of IDR-denominated government securities, as part of its financing strategy. In addition, the government plans to issue global *sukuk* in 4Q12 to help finance the budget deficit.

Central Bank Bills. The stock of central bank bills continued to fall, dropping 23.9% q-o-q and 53.3% y-o-y to IDR70.7 trillion at end-September. However, issuance of SBI and *shari'a*-compliant SBI climbed during the quarter, rising 101.7% q-o-q and 48.7% y-o-y, although this was coming from a low base. SBI are issued by BI as one of its monetary operation tools to help manage liquidity.

Corporate Bonds. The size of Indonesia's LCY corporate bond market rose to IDR171.3 trillion in 3Q12, expanding 3.1% q-o-q and 27.2% y-o-y. Corporate bonds, however, only comprise a small share of Indonesia's LCY bond market, accounting for just 16.2% of total LCY bonds. Relatively high yields on corporate bonds issued in recent months, ranging from 6.5% to 10.5%, have made the Indonesian corporate bond market an important part of Asia's nascent high-yield bond sector.

Conventional corporate bonds accounted for 82.8% of total corporate bonds outstanding in 3Q12, while subordinated bonds represented 13.2% **(Table 3)**. *Sukuk* issues by corporate entities remained small, accounting for a share of only 3.7% at end-September.

The amount of total bonds outstanding from the top 31 corporate bond issuers in Indonesia stood at IDR133.5 trillion at end-September **(Table 4)**,

Table 4: Top 31 Issuers of LCY Corporate Bonds in Indonesia (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (IDR billion)	LCY Bonds (US$ billion)				
1. PLN	14,208	1.48	Yes	No	No	Energy
2. Adira Dinamika Multifinance	9,659	1.01	No	Yes	Yes	Finance
3. Indosat	9,350	0.97	No	Yes	Yes	Telecommunications
4. Federal International Finance	7,379	0.77	No	Yes	No	Finance
5. Bank Tabungan Negara	7,150	0.75	Yes	No	Yes	Banking
6. Astra Sedaya Finance	7,105	0.74	No	Yes	No	Finance
7. Indonesia Eximbank	7,034	0.73	Yes	No	No	Banking
8. Bank Pan Indonesia	5,500	0.57	No	Yes	Yes	Banking
9. Jasa Marga	5,000	0.52	Yes	No	Yes	Toll Roads, Airports, and Harbors
10. Bank Tabungan Pensiunan Nasional	4,900	0.51	No	Yes	Yes	Banking
11. Perum Pegadaian	4,664	0.49	Yes	No	No	Finance
12. Bank CIMB Niaga	4,480	0.47	No	Yes	Yes	Banking
13. Bank Internasional Indonesia	4,000	0.42	No	Yes	Yes	Banking
14. Indofood Sukses Makmur	3,610	0.38	No	Yes	Yes	Food and Beverages
15. Bank Mandiri	3,500	0.36	Yes	No	Yes	Banking
16. Antam	3,000	0.31	Yes	No	Yes	Petroleum and Natural Gas
17. Telekomunikasi Indonesia	3,000	0.31	Yes	No	Yes	Telecommunications
18. Bank Danamon Indonesia	2,800	0.29	No	Yes	No	Banking
19. BCA Finance	2,530	0.26	No	Yes	No	Finance
20. Medco-Energi Internasional	2,487	0.26	No	Yes	Yes	Petroleum and Natural Gas
21. Bank Permata	2,450	0.26	No	Yes	Yes	Banking
22. Agung Podomoro Land	2,400	0.25	No	Yes	Yes	Property and Real Estate
23. Bank Jabar Banten	2,400	0.25	No	Yes	Yes	Banking
24. Sarana Multigriya Finansial	2,312	0.24	Yes	No	No	Finance
25. Indomobil Finance Indonesia	2,225	0.23	No	Yes	No	Finance
26. Bank Rakyat Indonesia	2,000	0.21	Yes	No	Yes	Banking
27. Surya Artha Nusantara Finance	1,995	0.21	No	Yes	No	Finance
28. Toyota Astra Financial Services	1,905	0.20	No	Yes	No	Finance
29. Bank Bukopin	1,500	0.16	No	Yes	Yes	Banking
30. Bank DKI	1,500	0.16	No	Yes	No	Banking
31. Japfa	1,500	0.16	No	Yes	Yes	Animal Feed
Total Top 31 LCY Corporate Issuers	**133,541**	**13.92**				
Total LCY Corporate Bonds	**171,321**	**17.86**				
Top 31 as % of Total LCY Corporate Bonds	**77.9%**	**77.9%**				

LCY = local currency.
Source: Indonesia Stock Exchange.

accounting for nearly 80% of total corporate bonds outstanding. State-power firm PLN remained the largest issuer of LCY corporate bonds in Indonesia with bonds outstanding valued at IDR14.2 trillion. Automotive leasing company Adira Dinamika Multifinance climbed to the second spot with total bonds of IDR9.7 trillion. Telecommunications firm Indosat dropped to the third spot with bonds outstanding of IDR9.4 trillion at end-September.

The list of the top 31 LCY corporate bond issuers was dominated at end-September by firms from the banking and financial sector. Other bond issuers were from energy, telecommunications, toll roads, food and beverages, petroleum and natural gas, and property and real estate. About a third of the companies on the list were state-owned firms with total bonds valued at IDR51.9 trillion.

In 3Q12, corporate bond issuance totaled IDR10.0 trillion, a significant 60.2% q-o-q decline but a 71.1% increase over a year earlier. Corporate issuance during the quarter comprised 24 bond series issued by 10 corporate entities. The new corporate bond issues in 3Q12 were all conventional bonds except for one *sukuk* issue. Most of these new bond issues had a maturity of 3–5 years. **Table 5** lists a number of notable corporate bonds issued in 3Q12.

Automotive leasing company Adira Dinamika Multi Finance raised a total of IDR1.6 trillion through a triple bond sale in September. The proceeds from the bonds will be used to repay maturing debts and finance the firm's business operations. The bond issue was the third part of the company's IDR6 trillion continuous bond issuance program. The bond sale comprised the following issues:

- 370-day bonds worth IDR376 billion, coupon of 6.50%;
- 3-year bonds worth IDR578 billion, coupon of 7.75%; and
- 5-year bonds worth IDR673 billion, coupon of 8.75%.

Mid-sized lender Bank Tabungan Pensiunan Nasional sold a total of IDR1.25 trillion worth of bonds in a dual-tranche bond sale in August. The proceeds from the bond sale will be used to boost its lending business. The bond issue consisted of the following series:

- 3-year bonds worth IDR525 billion, coupon of 7.75%; and
- 5-year bonds worth IDR725 billion, coupon of 8.25%.

Media firm Global Mediacom raised a total of IDR1.25 trillion of bonds from a two-tranche bond sale in July. The proceeds from the bond sale will be used to fund the company's capital expenditure and working capital, and to develop media-related business. The bond issue consisted of the following series:

- 3-year bonds worth IDR250 billion, coupon of 9.75%; and
- 5-year bonds worth IDR1 trillion, coupon of 10.5%.

Property developer Agung Podomoro Land issued IDR1.2 trillion of 5-year bonds in August. The bonds carry a coupon of 9.38%. Proceeds from the bond sale will be used to finance its property development projects.

Property developer Bumi Serpong Damai raised a total of IDR1 trillion from a triple-tranche bond sale. About 70% of the bond sale proceeds will be used to support the development and expansion of the company's BSD City project, and the remaining 30% will be used for working capital.

Table 5: Notable LCY Corporate Issuance in 3Q12

Corporate Issuers	Amount Issued (IDR billion)
Adira Dinamika Multi Finance	1,627
Bank Tabungan Pensiunan Nasional	1,250
Global Mediacom	1,250
Agung Podomoro Land	1,200
Bumi Serpong Damai	1,000
SMART	1,000
Tunas Baru Lampung	1,000
Others	1,630
Total	**9,957**

Source: Indonesia Stock Exchange.

The bonds were rated IdA+ by Pefindo. The bond sale comprised the following issues:

- 3-year bonds worth IDR85 billion, coupon of 8.0%;
- 5-year bonds worth IDR479 billion, coupon of 9.25%; and
- 7-year bonds worth IDR436 billion, coupon of 9.5%.

Sinar Mas Agro Resources and Technology (SMART), an Indonesian plantation firm, raised a total of IDR1 trillion from a dual-tranche bond sale. About 60% of the bond sale proceeds will be used by the company to expand the capacity of its refineries, and the remaining 40% for working capital. The bonds were rated idAA- by Pefindo. The bonds consisted of the following series:

- 5-year bonds worth IDR900 billion, coupon of 9.0%; and
- 7-year bonds worth IDR100 billion, coupon of 9.25%.

Palm oil company Tunas Baru Lampung sold IDR1 trillion of 5-year bonds. The bonds carry a coupon of 10.5%. Proceeds from the bond sale will be used to finance a new refined sugar plant and other investment projects.

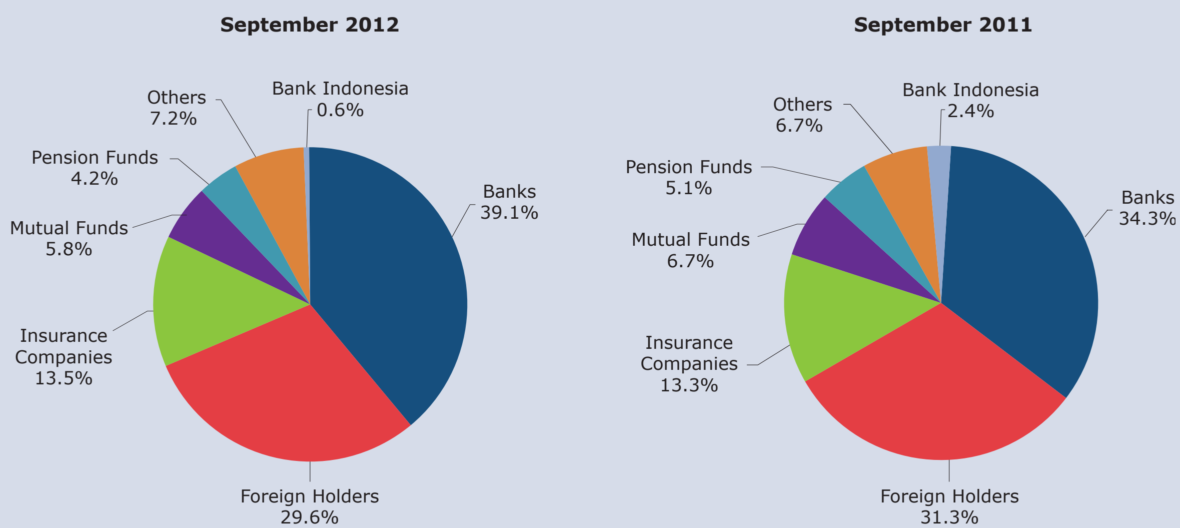
Investor Profile

Central Government Bonds. Banking institutions were the largest holder of central government bonds in Indonesia at the end of 3Q12 **(Figure 2)**. The share of banking institutions climbed to 39.1% in 3Q12 compared with 34.3% in the same period a year earlier. Banking institutions include state recap banks, private recap banks, non-recap banks, regional banks, and *shari'a* banks. Among the banking institutions, state banks hold the largest chunk of central government bonds with a share of 45% of banks' total bond holdings.

Foreign investors were the second largest holder of Indonesian LCY central government bonds at end-September. The share of foreign investors tapered off to 29.6% at end-September from 31.3% a year earlier. However, this reflected an improvement as the share of foreign investors had been steadily declining since the start of the year. The share of foreign investors was 32.1% in January before dropping to 29.5% in March and 28.4% in June **(Figure 3)**. Foreign investors include non-resident private banks, fund and asset management firms, securities firms, insurance companies, and pension funds.

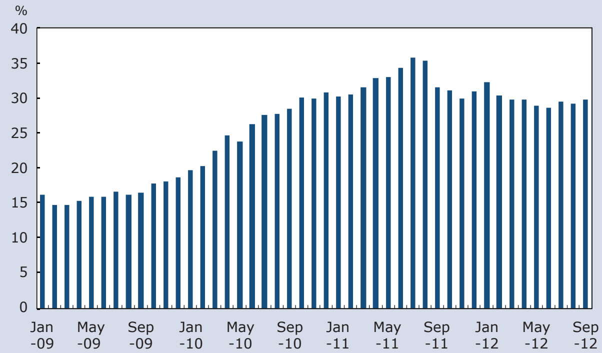
As of end-September, 70.1% of LCY bonds held by foreign investors were in long-dated tenors

Figure 2: LCY Government Bonds Investor Profile



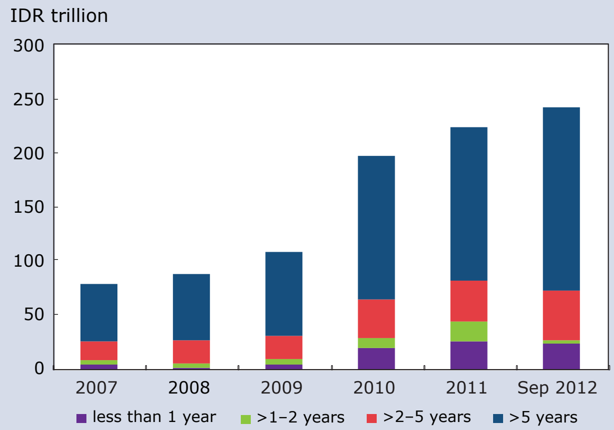
LCY = local currency.
Source: Indonesia Debt Management Office.

Figure 3: Monthly Foreign Investor Share of LCY Government Bonds, January 2009–September 2012



LCY = local currency
Source: Indonesia Debt Management Office.

Figure 4: Foreign Holdings of Indonesian LCY Government Bonds by Maturity, 2007–September 2012



LCY = local currency.
Source: Indonesia Debt Management Office.

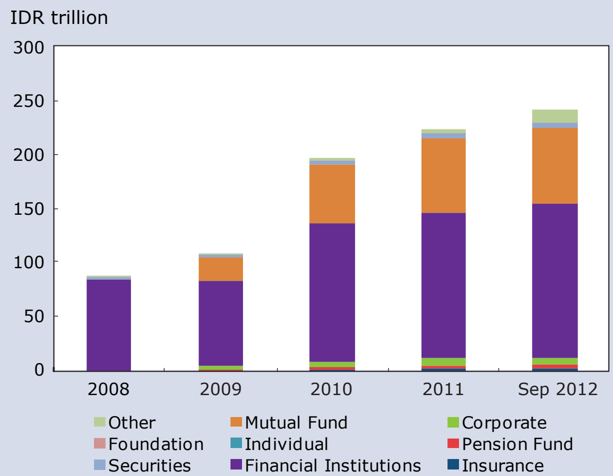
(maturities of 5-years or more) **(Figure 4)**. This was an increase from the 63.2% share of the total recorded at end-2011. Offshore investor holdings of short-dated tenors (bonds with maturities of less than 1 year) dropped to 9.8% at end-September, while bonds with maturities of more than 1 year to 2 years declined to 1.5%.

By type of foreign investor, offshore financial institutions owned more than half of bonds (58.6%) held by foreign investors at end-September **(Figure 5)**. This was followed by mutual funds with an ownership share equivalent to 28.5% of the total bonds held by non-residents. Insurance companies, pension funds, corporate investors, and securities companies hold shares of 2.8% or less.

Meanwhile, the share of insurance companies was steady at 13.5% in 3Q12 compared with the same period a year ago. On the other hand, the share of pension funds fell to 4.2% in 3Q12 from 5.1% in 3Q11. Mutual fund holdings of LCY central government bonds also dropped to 5.8% at end-September.

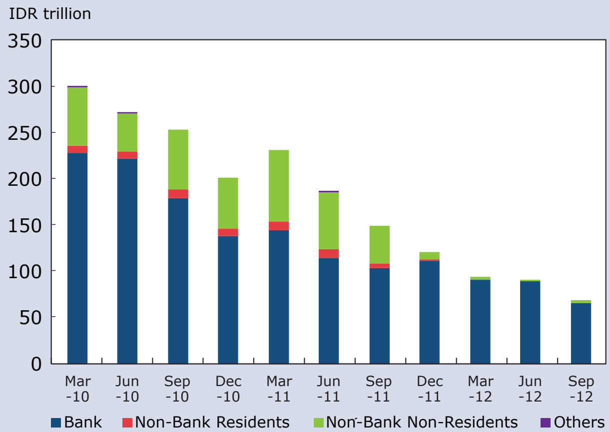
Central Bank Bills. At end-September, banking institutions held a dominant share of central bank bills, although their ownership share fell to 96.7% from 99.0% in 2Q12 **(Figure 6)**. The total amount of SBI held by banks reached IDR65.9 trillion at end-September. Market analysts believe that some banks liquidated SBI holdings to boost their funds and diversify their portfolio holdings into other investment instruments. Offshore investors held the remaining 3.3%, an improvement of about 1 percentage point since end-June following a steady decline in foreign investors' share that began after the central bank implemented a 6-month holding period for SBI last year.

Figure 5: Foreign Holdings of LCY Government Bonds by Type of Investors, 2008–September 2012



LCY = local currency.
Source: Bank Indonesia.

Figure 6: LCY Central Bank Bills Investor Profile, March 2010–September 2012



LCY = local currency.
Source: Bank Indonesia.

Table 6: Selected Sovereign Ratings and Outlook for Indonesia

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	Baa3	BB+	BBB–	BBB–
Outlook	Stable	Positive	Positive	Stable

FCY = foreign currency, LT = long-term.
Source: Rating agencies.

Rating Changes

On 18 October, Ratings and Investment (R&I) raised Indonesia's sovereign credit rating to BBB- from BB+ **(Table 6)**. The outlook on the rating was stable. R&I cited Indonesia's economic resilience amid the downturn in the global economy, conservative fiscal management, low debt burden, and stable financial system as the reasons for the ratings action.

Policy, Institutional, and Regulatory Developments

BI to Impose Capital Requirements on Foreign Lenders

In August, BI announced plans to require foreign banks to comply with minimum paid-up capital requirements. Current regulations require domestic banks to meet a IDR3 trillion capitalization. Foreign banks that will be affected by this new regulation are those that were set up at a time when BI allowed foreign lenders to open branches without establishing a locally incorporated company.

BI to Require *Shari'a* Banks to Comply with LTV Rule

In August, BI announced plans to require *shari'a* banks to comply with the loan-to-value (LTV) rule currently applied to conventional banks. The LTV rule requires a minimum down payment amount for those seeking housing and automotive loans, effective 15 June. The minimum down payment requirement is 25% for two-wheeled vehicles and 30% for 4-wheeled vehicles. *Shari'a* banks were excluded from the regulation as Islamic rules do not require down payments.

Government Raises IDR12.7 Trillion from Sale of Retail Bonds

In September, the Indonesian government raised a total of IDR12.7 trillion from the sale of its ninth series of retail bonds. Due to huge demand, the government decided to increase its target by IDR1 trillion a day prior to the close of the offer period. The retail bonds carry a coupon of 6.25% and a maturity of 3 years.

Government Sells JPY60 Billion of 10-Year Samurai Bonds

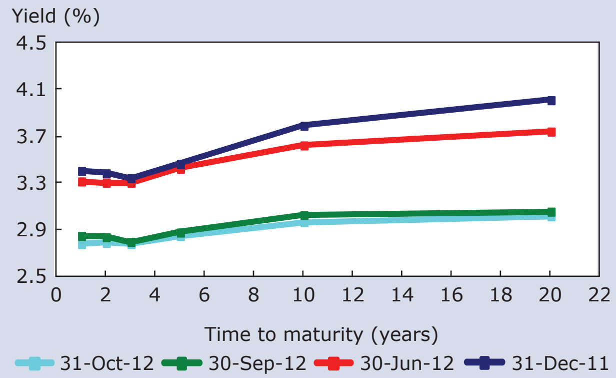
On 6 November, the Indonesian government priced JPY60 billion of 10-year *samurai* bonds with a coupon of 1.13%. The bonds were offered via a private placement and launched through the Japan Bank for International Cooperation's (JBIC) Guarantee and Acquisition Toward Tokyo Market Enhancement (GATE) program. According to the Directorate General of Debt Management, the deal was well received, with strong demand coming from central and regional banking accounts, and life and non-life insurers.

Republic of Korea—Update

Yield Movements

Government bond yields in the Republic of Korea fell for all tenors between end-June and end-September **(Figure 1)**. The drop in yields in 3Q12 ranged from 47 basis points (bps) for the 1- and 2-year tenors to 69 bps for the 20-year tenor. Yields fell further for all tenors between end-September and end-October. The decline in yields since end-June has been attributed to expectations of policy rate cuts amid a sluggish global economy. Meanwhile, the yield spread between the 2- and 10-year tenors narrowed 13 bps between end-June and end-September, and decreased slightly by 1 bp between end-September and end-October.

Figure 1: The Republic of Korea's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

The Bank of Korea's Monetary Policy Committee decided on 9 November to keep the base rate—the 7-day repurchase rate—steady at 2.75%. In its previous meeting in October, the committee decided to reduce the policy rate by 25 bps from 3.00% to 2.75%, and to lower the interest rate on Aggregate Credit Ceiling Loans to 1.25% from 1.50%. Consumer price inflation inched up to 2.1% year-on-year (y-o-y) in October from 2.0% in September.

Real gross domestic product (GDP) growth of the Republic of Korea eased to 1.6% y-o-y in 3Q12 from 2.3% in 2Q12, based on advance estimates of The Bank of Korea. The Bank of Korea in October revised downward its 2012 GDP growth forecast for the Republic of Korea to 2.4% from an earlier estimate of 3.0% made in July. It also lowered its forecast for 2013 to 3.2% from 3.8%.

Size and Composition

Total local currency (LCY) bonds outstanding in the Republic of Korea expanded 9.6% y-o-y and 2.1% quarter-on-quarter (q-o-q) to reach KRW1,523 trillion (US$1.4 trillion) at end-September **(Table 1)**. The outstanding amount of LCY government bonds amounted to KRW603.6 trillion, up 2.2% y-o-y and 0.4% q-o-q. The central government's bonds outstanding rose 5.8% y-o-y and 1.3% q-o-q to reach KRW413.8 trillion. Meanwhile, central bank bonds were valued at KRW162.5 trillion, down 4.1% y-o-y and 1.3% q-o-q, while industrial finance debentures also slipped 8.4% y-o-y and 3.3% q-o-q to level off at KRW27.3 trillion.

Issuance of LCY government bonds in 3Q12 totaled KRW63.3 trillion, which was down 5.1% from the previous quarter. The quarterly drop was induced by an 8.2% fall in central bank bond issuance, which stood at KRW39.0 trillion in 3Q12, compared with KRW42.5 trillion in the previous quarter. Meanwhile, issuance of central government bonds inched up 0.4% q-o-q to KRW22.7 trillion, while issuance of industrial finance debentures slipped 2.0% q-o-q to KRW1.6 trillion in 2Q12.

Total LCY corporate bonds outstanding grew 15.1% y-o-y and 3.3% q-o-q to reach KRW919.3 trillion at end-September. This growth was bolstered by increases of 23.5% y-o-y and 5.2% q-o-q for private corporate bonds outstanding, which rose to a level of

Table 1: Size and Composition of the LCY Bond Market in the Republic of Korea

	Amount (billion)								Growth Rate (%)						
	Jun-12		Jul-12		Aug-12		Sep-12		Jun-12		Jul-12	Aug-12	Sep-12		
	KRW	US$	KRW	US$	KRW	US$	KRW	US$	y-o-y	q-o-q	m-o-m	m-o-m	y-o-y	q-o-q	m-o-m
Total	1,491,463	1,302	1,501,447	1,328	1,514,137	1,334	1,522,869	1,370	9.7	2.1	0.7	0.8	9.6	2.1	0.6
Government	601,162	525	605,189	535	604,655	533	603,590	543	3.0	(0.05)	0.7	(0.1)	2.2	0.4	(0.2)
Central Bank Bonds	164,580	144	166,240	147	162,000	143	162,460	146	(1.5)	(2.0)	1.0	(2.6)	(4.1)	(1.3)	0.3
Central Government Bonds	408,361	357	411,271	364	415,533	366	413,848	372	5.5	1.1	0.7	1.0	5.8	1.3	(0.4)
Industrial Finance Debentures	28,221	25	27,678	24	27,122	24	27,283	25	(4.4)	(5.0)	(1.9)	(2.0)	(8.4)	(3.3)	0.6
Corporate	890,301	777	896,258	793	909,482	802	919,279	827	14.7	3.6	0.7	1.5	15.1	3.3	1.1

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–US$ rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
Source: EDAILY *BondWeb* and The Bank of Korea.

KRW409.9 trillion. Also, the outstanding size of special public bonds climbed 16.7% y-o-y and 3.1% q-o-q to KRW305.3 trillion. In contrast, the outstanding size of financial debentures, excluding Korea Development Bank (KDB) Bonds, marginally fell 0.5% y-o-y and 0.2% q-o-q to level off at KRW204.1 trillion at end-September.

The top 30 LCY corporate bond issuers at end-September had combined outstanding bonds of KRW568.0 trillion, accounting for 62% of total LCY corporate bonds outstanding **(Table 2)**. Korea Land & Housing Corp. remained the largest issuer of corporate bonds with a total outstanding amount of KRW57.0 trillion.

Issuance of LCY corporate bonds in 3Q12 amounted to KRW96.8 trillion, which was 1.5% lower than in the previous quarter. The quarterly decline stemmed from a 9.7% q-o-q fall in issuance of private corporate bonds, outweighing the 12.7% and 4.2% q-o-q increases in issuance of special public bonds and financial debentures, respectively.

The largest LCY corporate bond issues in 3Q12 included Kookmin Bank's KRW500 billion 10-year bond offering a 3.4% coupon, Hyundai Heavy Industries' KRW400 billion 5-year bond carrying a 3.35% coupon, and Lotte Shopping's 3-year bond with a 2.98% coupon. The longest-dated LCY corporate bond issued during the quarter was Korea Expressway's 50-year bond worth KRW100 billion carrying a 3.48% coupon. Meanwhile, among the high-yield corporate bond issues made in 3Q12 were a 3-year asset-backed security (ABS) worth KRW6.8 billion issued by Gibo Green Hitech 1st Securitization Specialty Inc. at a coupon rate of 10.0%, Dongbu Corporation's 1-year bond worth KRW70 billion carrying an 8.9% coupon, and Tongyang Inc.'s 1.5-year bond worth KRW130 billion offering a 7.4% coupon.

Liquidity

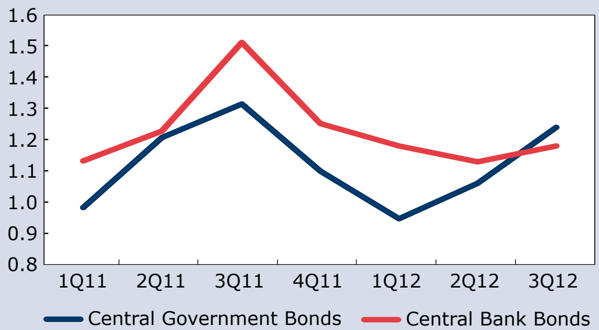
Liquidity in LCY government bonds improved in 3Q12, as the turnover ratio for government bonds increased to 1.16, compared with 1.02 in 2Q12

Table 2: Top 30 Issuers of LCY Corporate Bonds in the Republic of Korea (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed on		Type of Industry
	LCY Bonds (KRW billion)	LCY Bonds (US$ billion)			KOSPI	KOSDAQ	
1. Korea Land & Housing Corp.	56,983	51.3	Yes	No	No	No	Real Estate
2. Korea Housing Finance Corp.	41,209	37.1	Yes	No	No	No	Financial
3. Korea Deposit Insurance Corp.	39,740	35.8	Yes	No	No	No	Insurance
4. Korea Finance Corp.	37,130	33.4	Yes	No	No	No	Financial
5. Korea Electric Power Corp.	29,550	26.6	Yes	No	Yes	No	Utility
6. KDB Daewoo Securities	29,436	26.5	Yes	No	Yes	No	Securities
7. Industrial Bank of Korea	27,866	25.1	Yes	No	Yes	No	Bank
8. Woori Investment and Securities	23,599	21.2	Yes	No	Yes	No	Securities
9. Korea Investment and Securities	21,635	19.5	No	Yes	No	No	Securities
10. Korea Expressway Corp.	19,740	17.8	Yes	No	No	No	Infrastructure
11. Shinhan Bank	19,098	17.2	No	Yes	No	No	Bank
12. Kookmin Bank	18,828	16.9	No	Yes	No	No	Bank
13. Mirae Asset Securities	18,142	16.3	No	Yes	Yes	No	Securities
14. Tong Yang Securities	16,797	15.1	No	Yes	Yes	No	Securities
15. Woori Bank	15,992	14.4	Yes	No	No	No	Bank
16. Small & Medium Business Corp.	15,168	13.6	Yes	No	No	No	Financial
17. Korea Rail Network Authority	13,760	12.4	Yes	No	No	No	Infrastructure
18. Korea Gas Corp.	12,845	11.6	Yes	No	Yes	No	Utility
19. Hana Bank	12,464	11.2	No	Yes	No	No	Bank
20. Hyundai Securities	11,146	10.0	No	Yes	Yes	No	Securities
21. Hana Daetoo Securities	10,964	9.9	No	Yes	No	No	Securities
22. Korea Water Resources	9,387	8.4	Yes	No	Yes	No	Utility
23. Standard Chartered First Bank Korea	9,040	8.1	No	Yes	No	No	Bank
24. Shinhan Investment Corp.	8,990	8.1	No	Yes	No	No	Securities
25. Shinhan Card	8,648	7.8	No	Yes	No	No	Financial
26. Korea Eximbank	8,370	7.5	Yes	No	No	No	Bank
27. Hyundai Capital Services	8,235	7.4	No	Yes	No	No	Securities
28. Korea Railroad Corp.	7,860	7.1	Yes	No	No	No	Infrastructure
29. Shinhan Financial Group	7,690	6.9	No	Yes	Yes	No	Financial
30. Samsung Securities	7,675	6.9	No	Yes	Yes	No	Securities
Total Top 30 LCY Corporate Issuers	**567,989**	**511.1**					
Total LCY Corporate Bonds	**919,279**	**827.2**					
Top 30 as % of Total LCY Corporate Bonds	**61.8%**	**61.8%**					

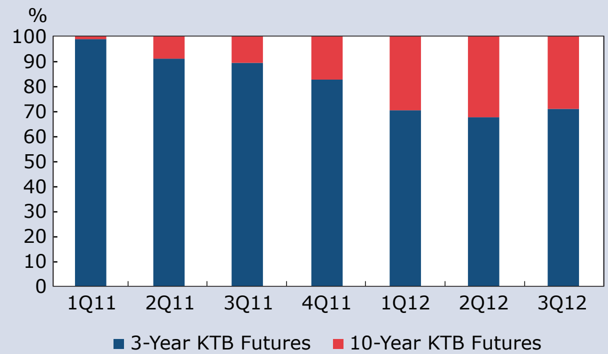
KOSPI = Korea Composite Stock Price Index, KOSDAQ = Korean Securities Dealers Automated Quotations, LCY = local currency.
Source: *AsianBondsOnline*, Bloomberg LP, and EDAILY *BondWeb*.

Figure 2: Turnover Ratio for Central Government and Central Bank Bonds, 1Q11-3Q12



Note: Central government bonds include treasury bonds and National Housing Bonds.
Source: The Bank of Korea and EDAILY *BondWeb*.

Figure 3: Trading Volume of KTB Futures Contracts, 1Q11–3Q12 (%)



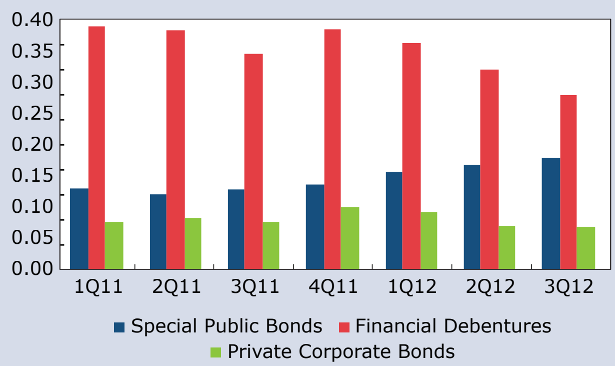
KTB = Korea Treasury Bond.
Source: Korea Exchange.

and 0.96 in 1Q12. Between 2Q12 and 3Q12, the turnover ratio for central government bonds, mostly Korea Treasury Bonds (KTBs), rose from 1.06 to 1.24, while also climbing for Monetary Stabilization Bonds (MSBs) from 1.13 to 1.18 **(Figure 2)**.

Trading activity in the KTB futures market strengthened in 3Q12, as the number of KTB futures contracts traded rose to 9.5 million for the quarter from 6.3 million in 2Q12. About 71% of the total KTB futures contracts traded in 3Q12 were 3-year, while the rest were 10-year **(Figure 3)**.

For LCY corporate bonds, the turnover ratio fell marginally to 0.15 in 3Q12 from 0.16 in 2Q12, induced by lower trading activity for financial debentures. Between 2Q12 and 3Q12, the turnover ratio for financial debentures fell to 0.28 from 0.32, inched up for special public bonds from 0.17 to 0.18, and remained unchanged for private corporate bonds at 0.07 **(Figure 4)**.

Figure 4: Turnover Ratios for Special Public Bonds, Financial Debentures, and Private Corporate Bonds, 1Q11–3Q12



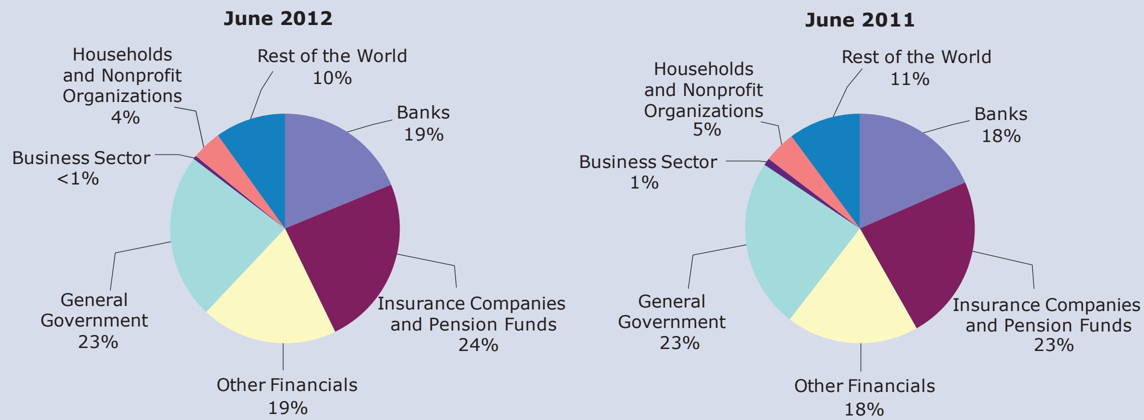
Source: EDAILY *BondWeb*.

Investor Profile

Insurance companies and pension funds remained the largest investor group in LCY government bonds in 2Q12, holding 24% of total government bonds at end-June **(Figure 5)**. They were followed by the general government—consisting of the central government, local government, and social security funds—which held 23% of the total. Banks and other financial companies each held 19%, while foreign investors owned 10%. Compared with end-June 2011, the shares of insurance companies and pension funds, banks, and other financial companies rose by 1 percentage point each. In contrast, the shares of households and nonprofit organizations, non-financial corporates, and foreign investors fell by 1 percentage point each.

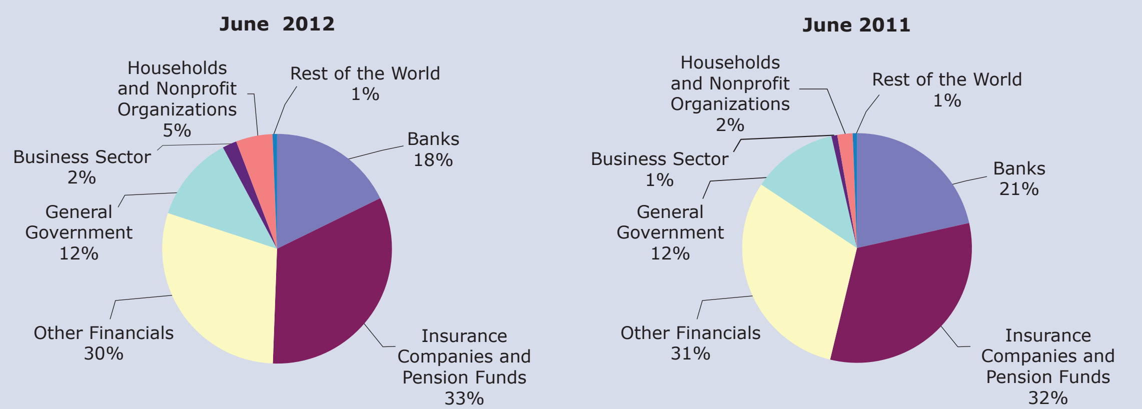
Insurance companies and pension funds were also the largest investor group in LCY corporate bonds, holding 33% of the total as of end-June **(Figure 6)**. Financial companies other than banks were the second-largest corporate bondholders with a share of 30%, followed by banks (18%), the

Figure 5: LCY Government Bonds Investor Profile



LCY = local currency.
Source: *AsianBondsOnline* and The Bank of Korea.

Figure 6: LCY Corporate Bonds Investor Profile



LCY = local currency.
Source: *AsianBondsOnline* and The Bank of Korea.

general government (12%), households and nonprofit organizations (5%), non-financial companies (2%), and foreign investors (1%). Between end-June 2011 and end-June 2012, the share of households and nonprofit organizations rose 3 percentage points, while insurance companies and pension funds, and non-financial corporates, both recorded a 1 percentage point increase in their respective shares. In contrast, the shares of banks and other financial companies fell 3 percentage points and 1 percentage point, respectively.

Rating Changes

Standard and Poor's (S&P) announced in September that it had upgraded the Republic of Korea's foreign currency (FCY) long-term rating to A+ from A, the LCY long-term rating to AA– from A+, and the LCY short-term rating to A-1+ from A-1 **(Table 3)**. Also in September, Fitch Ratings upgraded the country's long-term FCY issuer default rating to AA– from A+, and the short-term FCY issuer default rating to F1+ from F1, with a stable outlook for both. According to Fitch, the ratings upgrade reflects the

Table 3: Selected Sovereign Ratings and Outlook for the Republic of Korea

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	Aa3	A+	AA–	A+
Outlook	Stable	Stable	Stable	Stable

FCY = foreign currency, LT = long term.
Source: Rating agencies.

country's strong macroeconomic policy framework, sustained fiscal discipline, and continued economic and financial stability. Meanwhile, Moody's Investor Service (Moody's) upgraded the FCY and LCY long-term ratings of the Republic of Korea to Aa3 from A1 in August.

Policy, Institutional, and Regulatory Developments

FSS Introduces Tighter Rules on Commercial Paper

The Financial Supervisory Service (FSS) announced in October that it had begun requiring issuers of asset-backed commercial paper to disclose the structure, credit ratings, and collateral of these instruments, together with information on the issuers' financial soundness and credit ratings. The FSS also announced that a one-stop inquiry system for commercial paper would be established in October and that it would strengthen its supervision of brokerages selling asset-backed commercial paper.

FSC Announces Measures to Strengthen Investor Protection in ELS/DLS Market

The Financial Services Commission (FSC) reported in September that a monitoring system for the issuance and operations of equity-linked securities (ELS) and derivatives-linked securities (DLS) would be established. To enhance investor protection, the FSC would discourage securities houses from issuing excessive short-term ELS and DLS.

FSC and FSS Revise Regulations on Bank Supervision

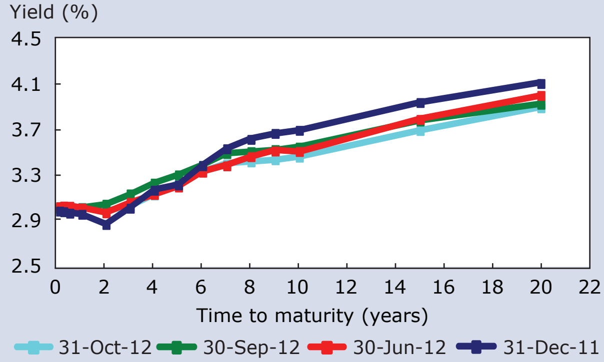
The FSC announced in September a joint effort with the FSS to revise regulations on bank supervision for domestic implementation of Basel III standards, which will take effect in 2013. The revisions will include subdividing the criteria for the minimum capital requirement, which is 8% of total capital, into three criterion: (i) 4.5% of common equity Tier 1 capital, (ii) 6% of Tier 1 capital, and (iii) 8% of total capital. The revisions will also include the introduction of a capital buffer of 2.5 percentage points in addition to the minimum capital requirement.

Malaysia—Update

Yield Movements

Between end-June and end-September, the yield curve for Malaysian local currency (LCY) government bonds steepened, with yields falling at the very short- and very long-end of the curve but rising elsewhere else along the curve **(Figure 1)**. As inflation continued to ease, yields at the very short-end fell between 1 basis point (bp) and 2 bps, while yields rose in the belly of the curve, but fell at the very-long end of the curve. Between end-September and end-October, yields at the very short-end of the curve rose slightly, while yields at the belly to the very-long end fell between 3 bps and 11 bps. The yield spread between the 2- and 10-year maturities narrowed to 47 bps at end-October from 50 bps at end-September and 53 bps at end-June.

Figure 1: Malaysia's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Bank Negara Malaysia (BNM) decided to keep its overnight policy rate steady at 3.0% after its Monetary Policy Committee meeting on 6 September. BNM has kept its rate at this level since May last year. BNM expects headline inflation to remain moderate for the rest of 2012 and into 2013.

Malaysia's consumer price inflation eased further to 1.3% year-on-year (y-o-y) in September from 1.4% in August and July. During the first 9 months of the year, consumer price inflation averaged 1.8% y-o-y.

In 3Q12, Malaysia's real gross domestic product (GDP) grew 5.2% y-o-y, slightly lower than the revised 5.6% growth in the previous quarter. Domestic demand buoyed Malaysia's economy as weakness in the global economy persisted. Aggregate domestic demand growth eased to 7.3% y-o-y in 3Q12 from a revised 9.2% in 2Q12, due to lower growth in private and public consumption. Private consumption growth eased slightly to 8.5% y-o-y in 3Q12 from 8.8% in 2Q12, while public consumption growth slowed to 2.2% y-o-y in 3Q12 from 10.5% in the previous quarter. Capital spending continued to post double-digit growth at 22.7% y-o-y, with the private and public sectors registering growth of 22.9% and 22.4% y-o-y, respectively.

On the supply side, growth in the construction sector slowed to 18.3% y-o-y in 3Q12 from 22.2% in 2Q12. Manufacturing sector growth eased to 3.3% y-o-y in 3Q12 from 5.6% in the previous quarter. The mining sector shrank 1.2% y-o-y in 3Q12, after posting 2.3% growth in the previous quarter. Meanwhile, the services and agriculture sectors expanded as the former grew 7.0% y-o-y in 3Q12 from 6.6% in 2Q12, while the latter posted 0.5% growth in 3Q12 after a 4.7% decline in 2Q12.

Size and Composition

Malaysia's total LCY bonds outstanding rose 15.7% y-o-y to MYR972.2 billion (US$318 billion) at end-September, with both government and corporate bonds posting strong growth **(Table 1)**. Total LCY government bonds rose 16.1% and total LCY corporate bonds increased 15.3% in 3Q12. On a quarter-on-quarter (q-o-q) basis, total LCY bonds outstanding grew 4.1% in 3Q12.

Table 1: Size and Composition of the LCY Bond Market in Malaysia

	Amount (billion)								Growth Rate (%)						
	Jun-12		Jul-12		Aug-12		Sep-12		Jun-12		Jul-12	Aug-12	Sep-12		
	MYR	US$	MYR	US$	MYR	US$	MYR	US$	y-o-y	q-o-q	m-o-m	m-o-m	y-o-y	q-o-q	m-o-m
Total	934	305	952	304	952	305	972	318	15.0	12.1	1.9	(0.0)	15.7	4.1	2.2
Government	559	183	576	184	570	183	586	192	15.3	12.1	3.0	(1.1)	16.1	4.8	2.9
Central Government Bonds and Bills	417	136	426	136	420	135	424	139	10.9	6.4	2.3	(1.5)	12.6	1.8	1.1
Central Bank Bills	142	46	147	47	147	47	159	52	31.0	33.1	3.4	0.1	24.5	12.0	8.2
Sukuk Permuhan Kerajaan	0	0	3	1	3	1	3	1	-	-	-	-	-	-	-
Corporate	375	123	376	120	382	122	386	126	14.6	12.1	0.2	1.6	15.3	2.9	1.1

m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–US$ rate is used.
3. Growth rates are calculated from LCY base and do not include currency effects.
Source: Bank Negara Malaysia Fully Automated System for Issuing/Tendering (FAST) and Bloomberg LP.

Total LCY government bonds stood at MYR586.1 billion at end-September, rising 16.1% y-o-y as central government bonds and bills and central bank bills posted robust growth in 3Q12. On a q-o-q basis, total LCY government bonds outstanding rose 4.8% in 3Q12. Central government bills and bonds rose 12.6% y-o-y and 1.8% q-o-q to MYR424.5 billion at end-September. Meanwhile, outstanding central bank bills grew 24.5% y-o-y and 12.0% q-o-q in 3Q12.

Total LCY government bond issuance rose 13.1% y-o-y to MYR141.3 billion in 3Q12, mainly due to the increased issuance of central bank bills, which rose 13.1%. Meanwhile, issuance of government bonds—Malaysian Government Securities (MGSs) and Government Investment Issues (GIIs)—rose 3.1% y-o-y in 3Q12.

Outstanding LCY corporate bonds rose 15.3% y-o-y to MYR386.1 billion at end-September, slightly higher than the 14.6% growth posted in the previous quarter. On a q-o-q basis, total LCY corporate bonds outstanding rose 2.9% in 3Q12. The surge in issuance of corporate bonds that began in 1Q12 was sustained in 3Q12, with issuance rising 67.1% y-o-y in June–September.

Table 2: Notable Corporate Issuances in 3Q12

Corporate Issuer	Instrument	Amount (MYR billion)
Celcom Transmission	IMTNs	5.00
Tanjung Bin Power	IMTNs	4.20
Khazanah Nasional	IBONDS	2.50
DanaInfra Nasional	IMTNs	2.40
Prasarana	IBONDS	2.00
HLA Holdings	MTNs	2.00
Malacoff Corp	IBONDS	1.80
Kuala Lumpur Kepong	IMTNs	1.00
Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)	IMTNs	1.00
Magnum Corp	MTNs	1.00
AMMB Holdings	MTNs	1.00

BONDS = conventional corporate bonds, IBONDS = Islamic bonds, IMTNs = Islamic medium-term notes, MTNs = medium-term notes.
Source: Bank Negara Malaysia.

Among the largest corporate LCY issues during 3Q12 were the *sukuk* (Islamic bond) issuances of Celcom Transmission and Tanjung Bin Power worth MYR5.0 billion and MYR4.2 billion, respectively **(Table 2)**. Several state-owned companies also issued *sukuk* in 3Q12. DanaInfra Nasional, a company wholly owned by the Ministry of Finance, issued MYR2.4 billion worth of Islamic medium-term notes (MTNs) in July. In August, government investment holding arm Khazanah Nasional raised MYR2.5 billion from the sale of zero-coupon *sukuk* with 10- and 20-year maturities, while state-owned Syarikat Prasarana Negara Berhad (Prasarana) sold MYR2 billion worth of 10- and 15-year *sukuk*. Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN), Malaysia's National Higher Education Corporation, issued MYR1 billion worth of 10-year *sukuk*.

Other notable issuances in 3Q12 included MTNs from HLA Holdings (MYR2.8 billion), AMBB Holdings (MYR1 billion), and gaming firm Magnum Corporation (MYR1 billion). In September, power generation company Malakoff Corporation raised MYR1.8 billion from the sale of 30-year Islamic MTNs, while rubber and oil palm producer Kuala Lumpur Kepong issued MYR1 billion worth of 10-year *sukuk*.

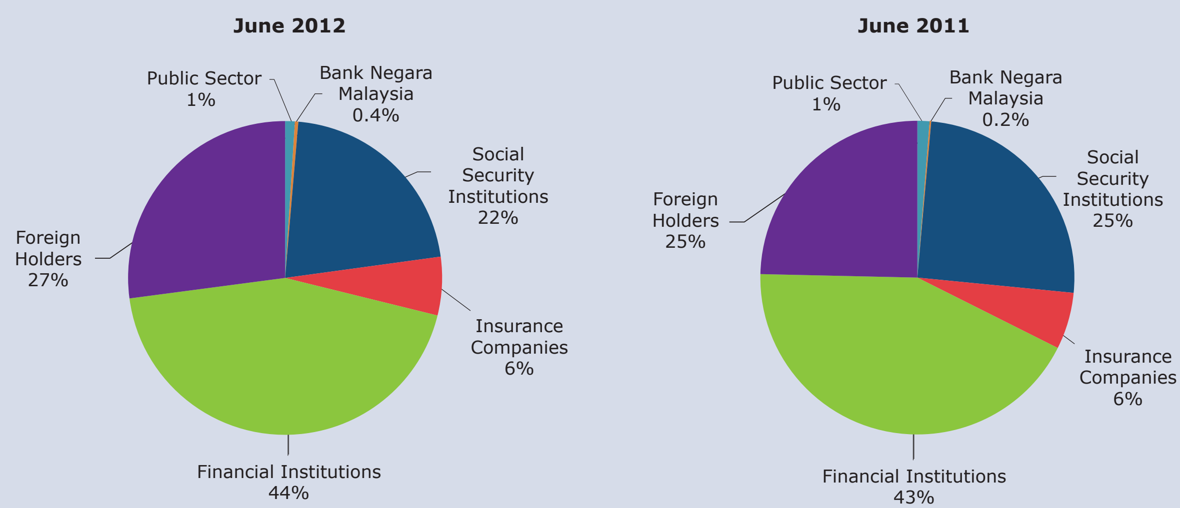
As of end-September, the top 30 issuers in Malaysia accounted for 56.3% of total LCY corporate bonds outstanding **(Table 3)**. Project Lebuhraya remained the largest issuer of LCY corporate bonds with MYR30.6 billion outstanding, followed by national mortgage corporation Cagamas Bhd. and the government's investment holding arm Khazanah Nasional with outstanding amounts of MYR19.9 billion and MYR15.7 billion, respectively.

Investor Profile

At end-June, financial institutions were still the largest holders of MGSs and GIIs, with 44.1% of total outstanding government bonds, followed by foreign investors and social security institutions, which held 27.1% and 21.5%, respectively. The holdings of insurance companies accounted for 6.0% of the total **(Figure 2)**.

Despite the depreciation of the Malaysian ringgit against the United States (US) dollar in the

Figure 2: Malaysian LCY Government Bonds Investor Profile



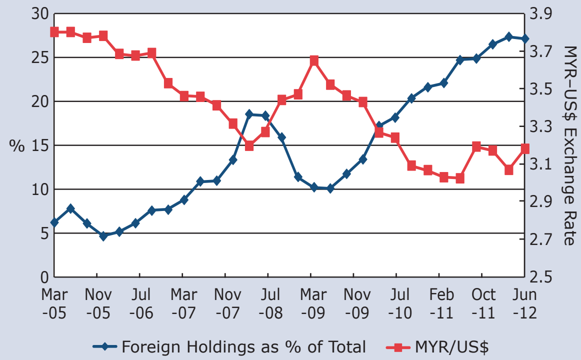
LCY = local currency.
Source: Bank Negara Malaysia.

Table 3: Top 30 Issuers of LCY Corporate Bonds in Malaysia (as of end-June 2012)

Issuers	Outstanding Amount (MYR billion)					State-Owned	Privately-Owned	Listed Company	Type of Industry
	BONDS	IBONDS	MTNs	IMTNs	TOTAL				
1. Project Lebuhraya				30.60	30.60	No	Yes	Yes	Transport, Storage, and Comm.
2. Cagamas			9.57	10.38	19.94	Yes	No	No	Finance
3. Khazanah		15.70			15.70	Yes	No	No	Quasi-Govt. and Other
4. Pengurusan Air Bhd.				11.28	11.28	Yes	No	No	Energy, Gas, and Water
5. Maybank	9.70	1.50			11.20	No	Yes	Yes	Finance
6. Binariang GSM		3.02		7.22	10.24	No	Yes	No	Transport, Storage, and Comm.
7. Prasarana	1.91	4.00		4.00	9.91	Yes	No	No	Finance
8. Malakoff Corp.		1.80		5.60	7.40	No	Yes	No	Finance
9. CIMB Bank	7.00				7.00	No	Yes	No	Finance
10. Public Bank	1.20		4.87		6.07	No	Yes	Yes	Finance
11. Senai Desaru Expressway Bhd.				5.58	5.58	No	Yes	No	Construction
12. Sarawak Energy				5.50	5.50	Yes	No	Yes	Energy, Gas, and Water
13. KL International Airport	1.60	3.76			5.36	Yes	No	No	Transport, Storage, and Comm.
14. Celcom Transmission				5.00	5.00	No	Yes	No	Transport, Storage, and Comm.
15. 1Malaysia Development Bhd.				5.00	5.00	Yes	No	No	Finance
16. Hong Leong Bank	3.70		1.16		4.86	No	Yes	Yes	Finance
17. Manjung Island Energy Bhd.				4.85	4.85	No	Yes	No	Energy, Gas, and Water
18. AM Bank	0.49		4.28		4.77	No	Yes	Yes	Finance
19. RHB Bank	0.60		4.00		4.60	No	Yes	No	Finance
20. Aman Sukuk Bhd.				4.42	4.42	Yes	No	No	Construction
21. Jimah Energy Ventures				4.32	4.32	No	Yes	No	Energy, Gas, and Water
22. Putrajaya Holdings		0.39		3.88	4.27	No	Yes	No	Finance
23. Bank Pembangunan Malaysia	0.90		2.40	0.90	4.20	Yes	No	No	Finance
24. Tanjung Bin Power				4.20	4.20	No	Yes	No	Energy, Gas, and Water
25. Rantau Abang Capital Bhd.				3.80	3.80	No	Yes	No	Quasi-Govt. and Other
26. Danga Capital				3.60	3.60	Yes	No	No	Finance
27. Perbadanan Tabung Pendidikan Tinggi Nasional				3.50	3.50	No	Yes	No	Quasi-Govt. and Other
28. Cekap Mentari	3.50				3.50	No	Yes	Yes	Finance
29. YTL Power International			3.32		3.32	No	Yes	Yes	Energy, Gas, and Water
30. Tanjung Bin Energy				3.29	3.29	No	Yes	No	Energy, Gas, and Water
Total Top 30 LCY Corporate Issuers	**30.60**	**30.17**	**29.60**	**126.90**	**217.26**				
Total LCY Corporate Bonds	**60.57**	**63.18**	**61.79**	**180.65**	**386.09**				
Top 30 as % of Total LCY Corporate Bonds	**50.5%**	**47.7%**	**47.9%**	**70.2%**	**56.3%**				

BONDS = conventional corporate bonds, IBONDS = Islamic bonds, IMTNs = Islamic medium-term notes, LCY = local currency, MTNs = medium-term notes.
Source: Bank Negara Malaysia Fully Automated System for Issuing/Tendering (FAST).

Figure 3: Foreign Holdings of LCY Government Bonds vs. the MYR–US$ Exchange Rate



LCY = local currency.
Source: Bank Negara Malaysia.

second half of 2011 and in 2Q12, the share of foreign holdings among total LCY government bonds continued to rise from 21.5% at end-2010 to 26.5% at end-2011 (**Figure 3**). The share of foreign holdings increased further to 27.3% at end-March and slightly dropped to 27.1% at end-June.

Policy, Institutional, and Regulatory Developments

ASEAN Trading Link Launches with the Connection of Bursa Malaysia and Singapore Exchange

ASEAN Exchanges—a collaboration among the seven stock exchanges of the Association of Southeast Asian Nations (ASEAN) that seeks to promote growth in the region's capital markets—announced the rollout of the ASEAN Trading Link on 18 September with the connection of Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link allows brokers to execute trades directly to connected exchanges without having to be licensed with that exchange.

Bloomberg AIBIM Bursa Malaysia Corporate *Sukuk* Index Launches

Bloomberg announced in September the launch of an index developed in partnership with the Association of Islamic Banking Institutions Malaysia (AIBIM) and Bursa Malaysia. The Bloomberg AIBIM Bursa Malaysia Corporate *Sukuk* Index will serve as a benchmark for investors in MYR-denominated *sukuk* in Malaysia. According to Bloomberg, the new index will track and measure the performance of the most liquid and credit worthy *sukuk* in Malaysia.

Philippines—Update

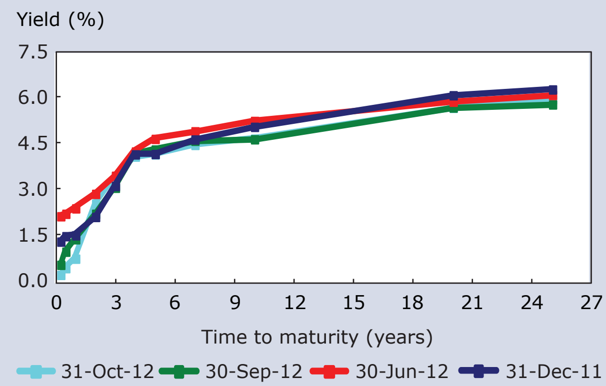
Yield Movements

Between end-December and end-October, the Philippine local currency (LCY) government bond yield curve arched slightly upward as yields on both ends fell, while those in the 2- to 3-year range rose **(Figure 1)**. Yields for tenors of 1 year and below plunged between 75 basis points (bps) and 108 bps as foreign investors sought these bills on the back of the strong peso. Government bonds with maturities of 4 years and above fell between 1 bp and 40 bps during the same period. Meanwhile, yields for tenors between 2 years and 3 years climbed 31 bps–43 bps.

Between end-June and end-October, the yield curve generally shifted downward with a steepening bias as the decline at the short-end outpaced that of the long-end. Movement in the yield curve reflected the monetary easing policies implemented by Bangko Sentral ng Pilipinas (BSP) and the country's credit upgrade from Standard and Poor's (S&P) in July and Moody's Investors Service (Moody's) in October. Government securities with maturities of 1 year and below dropped the most, with declines ranging between 163 bps and 190 bps. The yield spread between the 2- and 10-year tenors narrowed 31 bps between end-June and end-October—from 241 bps to 210 bps.

Inflation in the Philippines has been favorable in 2012, enabling the pursuit of expansionary fiscal and monetary policy goals. Consumer price inflation began slowing after peaking in August at 3.8% year-on-year (y-o-y); September and October inflation came in at 3.6% and 3.1%, respectively. Year-to-date headline inflation stood at 3.2% at end-October, while core inflation, which excludes selected food and energy items, was slightly higher at 3.8%. Both figures fell at the low-end of the government's 3%–5% annual target inflation range. Slower inflation in October was brought about by falling prices of food and oil imports, and an appreciating peso.

Figure 1: Philippines' Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

During the first half of 2012, the growth of the Philippine economy surpassed many analysts' forecasts as gross domestic product (GDP) grew 6.1% y-o-y. Growth trends in the second half of the year point to a slight easing due to disruptions caused by weather disturbances and a slowdown in exports and remittances, the combined effects of which may result in curtailed household consumption.

Merchandise exports recovered to grow 22.8% y-o-y in September from a 9.0% fall in August, bringing cumulative 9-month export growth to 7.2% y-o-y on US$40.1 billion in exports. Electronics products were a drag on export performance, dropping 7.24% y-o-y in January–September. Meanwhile, cumulative January–August personal remittances from overseas Filipinos grew 5.6% y-o-y, reaching US$15.3 billion. Total remittances for the month of August grew 7.9% y-o-y. Cash remittances expanded 7.6% y-o-y in August and 5.5% y-o-y in January–August. In June, BSP began recording personal remittances in line with the International Monetary Fund's (IMF) balance of payment calculation methodology.

BSP has noted an increase in the level of liquidity in the financial system as the Philippine currency

Table 1: Size and Composition of the LCY Bond Market in the Philippines

	Amount (billion)								Growth Rate (%)						
	Jun-12		Jul-12		Aug-12		Sep-12		Jun-12		Jul-12	Aug-12	Sep-12		
	PHP	US$	PHP	US$	PHP	US$	PHP	US$	y-o-y	q-o-q	m-o-m	m-o-m	y-o-y	q-o-q	m-o-m
Total	3,667	87	3,745	90	3,752	89	3,801	91	12.4	2.9	2.1	0.2	16.1	3.7	1.3
Government	3,172	75	3,239	78	3,237	77	3,286	79	11.5	1.7	2.1	(0.1)	14.7	3.6	1.5
Treasury Bills	255	6	259	6	257	6	262	6	(33.1)	(4.7)	1.4	(0.6)	(20.6)	2.7	1.8
Treasury Bonds	2,793	66	2,856	68	2,855	68	2,900	69	19.0	2.5	2.3	0.04	19.8	3.8	1.6
Others	124	3	124	3	124	3	124	3	6.4	(2.4)	0.0	0.3	8.6	0.3	0.0
Corporate	495	12	506	12	515	12	514	12	18.7	11.5	2.2	1.9	26.1	3.9	(0.2)

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY–US$ rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. "Others" includes bonds issued by government agencies, instrumentalities, and corporations with which repayment was guaranteed by the National Government. These include issues of Power Sector Assets and Liabilities Management (PSALM), National Food Authority, and others.
5. Peso Global Bonds (PHP-denominated bonds but payable in US$) and multi-currency Retail Treasury Bonds are not included. As of 30 September 2012, the Government of the Philippines and Petron Corporation had PHP98.9 billion and PHP20.0 billion of Peso Global Bonds outstanding, respectively. The government also had PHP20.8 billion of multi-currency Retail Treasury Bonds outstanding.
Source: Philippine Bureau of the Treasury and Bloomberg LP.

strengthens. To help insulate the country from "risks associated with weaker external demand by encouraging investment and consumption," BSP has stated that further monetary easing may be necessary. In its meeting on 25 October, BSP reduced the policy rates by another 25 bps each, bringing the overnight borrowing (reverse repurchase) and lending (repurchase) rates to 3.5% and 5.5%, respectively. BSP reported that it would continue easing monetary policy as needed to ward off the destabilizing effects of an overly strong peso.

Size and Composition

The Philippine LCY bond market grew at a robust rate of 16.1% y-o-y as of end-September, led by both treasury and corporate bond expansion **(Table 1)**. Improving macroeconomic fundamentals combined with transparency in political governance has improved business sentiment and encouraged investment. Total LCY bonds outstanding reached PHP3.8 trillion (US$91 billion) at end-September, up 3.7% from end-June's level of almost PHP3.7 trillion. Government securities still accounted for the majority of bonds outstanding, totaling PHP3.3 trillion, while corporate bonds summed to PHP514 billion.

Government Bond Market Development. Outstanding fixed-income instruments issued by the Philippine government and government-controlled companies rose 14.7% y-o-y and 3.6% quarter-on-quarter (q-o-q) to close at PHP3.3 trillion at end-September. Treasury bonds advanced at the most rapid pace—19.8% y-o-y and 3.8% q-o-q—to stand at PHP2.9 trillion at end-September. Meanwhile, only treasury bills registered a decline in 3Q12, contracting 20.6% y-o-y to PHP262 billion. However, September's balance of outstanding treasury bills was up 2.7% on a q-o-q basis. Total outstanding bonds of government agencies was almost unchanged at PHP124 billion in 3Q12, although this was 8.6% higher than in the same period last year.

In terms of issuance in 3Q12, PHP143 billion worth of treasury bills were sold compared with PHP63 billion of treasury bonds. Notable issues included the PHP30 billion worth of 182-day treasury bills sold in September and the PHP25 billion of 362-day treasury bills sold in August. Among treasury bonds, PHP9 billion worth of 5-year, PHP18 billion of 7-year, PHP18 billion of 10-year, PHP9 billion of 20-year, and PHP9 billion of 25-year bonds were sold during the quarter.

The National Home Mortgage Finance Corporation (NHMFC), the government's secondary mortgage institution, sold a total of PHP420 million of residential mortgage-backed securities known as Bahay Bonds II **(Table 2)**. NHMFC opted to list PHP300 million of the bonds with the Philippine Dealing and Exchange Corporation (PDEx), marking the first time that mortgage-backed securities were listed on the country's exchange.

The government has programmed LCY borrowing of PHP90 billion through its regular auction schedule in 4Q12. Half of the borrowing will consist of treasury bills with 91-, 182-, and 364-day tenors, and the other half will consist of treasury bonds with maturities of 5, 7, and 10 years.

In October, the government reached another milestone by completing a 25-year Retail Treasury Bond (RTB) offering worth PHP188 billion. The RTBs, which carry a coupon of 6.125% payable quarterly, are primarily intended to encourage participation by individual investors and promote savings. The 25-year RTBs have the longest maturity of any RTB issue.

Corporate Bond Market Development. As of end-September, total outstanding LCY corporate bonds stood at PHP514 billion (US$12.3 billion), equivalent to a growth rate of 26.1% y-o-y. Comparing 3Q12 with 2Q12, the size of the corporate bond market expanded modestly at 3.9% q-o-q. A total of PHP27.4 billion of LCY corporate bonds were sold in 3Q12. Major issuers for the quarter included (i) SM Investments Corporation (SMIC), (ii) First Metro Investment Corporation (FMIC), and (iii) Security Bank Corporation (SBC).

In October, BDO issued PHP5 billion of fixed-rate certificates of deposit (CDs). The CDs carry a coupon of 5.25% payable quarterly.

Only 47 companies are actively tapping the capital markets in the Philippines. Not surprisingly, the top 30 issuers accounted for 93.2% of the total amount of LCY corporate bonds outstanding (PHP514 billion) at end-September **(Table 3)**. Out of the top 30 bond issuers, only 5 companies were privately-held corporations and the rest were publicly listed with the Philippine Stock Exchange (PSE). San Miguel Brewery (SMB) remained the largest corporate borrower in the country with PHP45.2 billion of outstanding debt. Banco de Oro Unibank (BDO)

Table 2: Selected Issuance in 3Q12

	Issue Date	Amount		Coupon Rate (%)	Bond Type
		PHP (billion)	US$ (billion)		
July-September 2012					
SM Investments Corporation	16-Jul-12	15.00	0.36		Senior Unsecured
PHP6.34 billion 6.0% due 2019					
PHP8.66 billion 6.9442% due 2022					
First Metro Investment Corporation	10-Aug-12	7.00	0.17		Senior Secured
PHP4 billion 5.5% due 2017					
PHP3 billion 5.75% due 2019					
Security Bank Corporation	15-Aug-12	5.00	0.12	5.5	Certificate of Deposit
Bahay Bonds II Special Purpose Trust	17-Aug-12	0.42	0.01		Mortgage-Backed
PHP300 million 4.8% due 2017					
PHP120 million 6.00% due 2022					

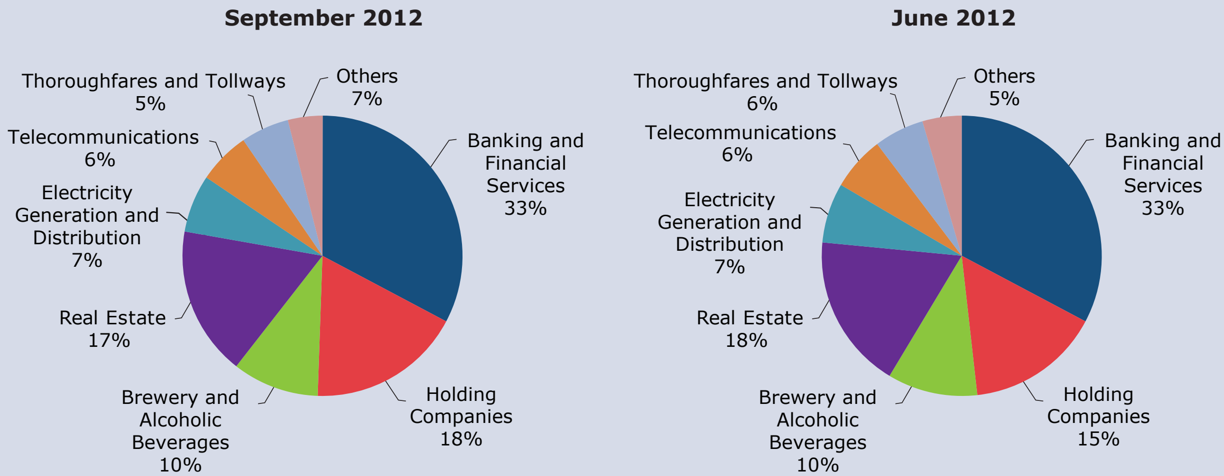
Note: *AsianBondsOnline* classifies Bahay Bonds II Special Purpose Trust as part of government bonds.
Source: Bloomberg LP.

Table 3: Top 30 Issuers of LCY Corporate Bonds in the Philippines (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (PHP billion)	LCY Bonds (US$ billion)				
1. San Miguel Brewery Inc.	45.21	1.08	No	Yes	Yes	Brewery
2. BDO Unibank Inc.	38.00	0.91	No	Yes	Yes	Banking
3. SM Investments Corporation	36.09	0.86	No	Yes	Yes	Diversified Operations
4. Ayala Corporation	36.00	0.86	No	Yes	Yes	Diversified Operations
5. Ayala Land Inc.	30.51	0.73	No	Yes	Yes	Real Estate
6. Philippine National Bank	21.85	0.52	No	Yes	Yes	Banking
7. Rizal Commercial Banking Corporation	21.00	0.50	No	Yes	Yes	Banking
8. Manila Electric Company	19.38	0.46	No	Yes	Yes	Electricity Distribution
9. Metropolitan Bank & Trust Co.	18.50	0.44	No	Yes	Yes	Banking
10. Philippine Long Distance Telephone Co.	17.50	0.42	No	Yes	Yes	Telecommunications
11. SM Development Corporation	16.31	0.39	No	Yes	Yes	Real Estate
12. Filinvest Land, Inc	15.00	0.36	No	Yes	Yes	Real Estate
13. Petron Corporation	13.60	0.33	No	Yes	Yes	Oil Refining and Marketing
14. JG Summit Holdings, Inc.	13.31	0.32	No	Yes	Yes	Diversified Operations
15. Security Bank Corporation	13.00	0.31	No	Yes	Yes	Banking
16. Energy Development Corporation	12.00	0.29	No	Yes	Yes	Electricity Generation
17. First Metro Investment Corporation	12.00	0.29	No	Yes	Yes	Investment Banking
18. Robinsons Land Corporation	12.00	0.29	No	Yes	Yes	Real Estate
19. MTD Manila Expressway Corporation	11.50	0.28	No	Yes	No	Transport Services
20. South Luzon Tollway Corporation	11.00	0.26	No	Yes	No	Transport Services
21. Globe Telecom Inc.	10.92	0.26	No	Yes	Yes	Telecommunications
22. United Coconut Planters Bank	9.52	0.23	No	Yes	Yes	Banking
23. Allied Banking Corporation	8.00	0.19	No	Yes	Yes	Banking
24. Megaworld Corporation	6.38	0.15	No	Yes	Yes	Real Estate
25. Manila North Tollways Corporation	6.15	0.15	No	Yes	No	Public Thoroughfares
26. Bank of the Philippine Islands	5.00	0.12	No	Yes	Yes	Banking
27. China Banking Corporation	5.00	0.12	No	Yes	Yes	Banking
28. SM Prime Holdings Inc.	5.00	0.12	No	Yes	Yes	Real Estate Management Services
29. Tanduay Distilleries Inc.	5.00	0.12	No	Yes	No	Alcoholic Beverages
30. Philippine Phosphate Fertilizer Corporation	4.50	0.11	No	Yes	No	Agricultural Chemicals
Total Top 30 LCY Corporate Issuers	**479.23**	**11.48**				
Total LCY Corporate Bonds	**514.43**	**12.32**				
Top 30 as % of Total LCY Corporate Bonds	**93.2%**	**93.2%**				

LCY = local currency.
Note: Petron Corporation has PHP20 billion of peso global bonds outstanding that are not included in this statistics.
Source: Bloomberg LP.

Figure 2: LCY Corporate Bond Issuers by Industry



LCY = local currency.
Source: Bloomberg LP.

followed SMB as the next largest borrower with PHP38.0 billion. SMIC was in the third spot with PHP36.1 billion of outstanding bonds.

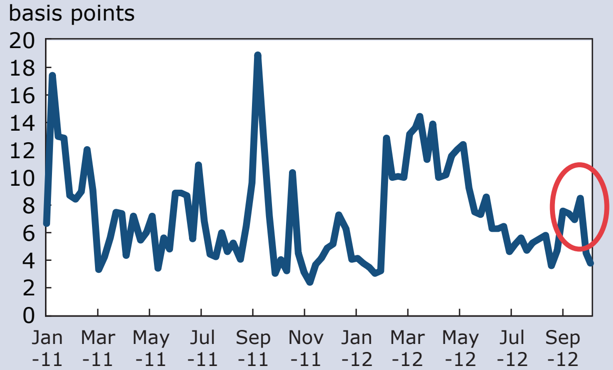
The diversity of LCY corporate bond issuers in 3Q12 was comparable with that in 2Q12 **(Figure 2)**. Banks and financial services, including investment houses, remained the leading issuers of debt in 3Q12 with 33% of the total as BSP moved toward more stringent liquidity and capital requirements. The share of holding companies rose to 18% in 3Q12 from 15% in 2Q12. Real estate companies, meanwhile, accounted for 17% of total LCY corporate bonds outstanding in 3Q12, slightly lower than the 18% share recorded in the previous quarter. The share of breweries and alcoholic beverage companies was 10% of the total, similar to their share at end-June. Firms from industries as diverse as (i) electricity generation and distribution, (ii) telecommunications, and (iii) thoroughfares and tollways continued to hold shares of total corporate bonds outstanding in the single-digit levels.

Benchmark Government Securities Bid–Ask Spreads. Liquidity in the secondary trading market for government securities is an indication of market sentiment and investor confidence. Bid–ask spreads and trading volume trends are common indicators of liquidity in the secondary market. *AsianBondsOnline* monitored the most traded treasury bonds with the most frequent bid–ask (two-way) quotes from 7 January 2011 to 25 October 2012. The data used to capture the bid–ask spreads for these securities were obtained from the Bloomberg pages of money brokers operating in the Philippines.

Bid–ask spreads for benchmark government securities continued to tighten in 2012, reflecting a trend discussed in previous editions of the Asia Bond Monitor **(Figure 3)**. Year-to-date through 25 October, bid–ask spreads averaged 7.7 bps. The average bid–ask spread stood at 7.6 bps in 1Q12 before increasing to 10.4 bps in 2Q12 on the back of rising risk aversion resulting from the possibility of a Greek exit from the eurozone and an economic slowdown in the People's Republic of China (PRC). From 1 July to 25 October, bid–ask spreads narrowed to 5.7 bps on renewed risk appetite resulting from the Philippines' credit upgrades from S&P and Moody's, and continuous monetary easing policies from BSP in response to the rapid appreciation of the Philippine peso.

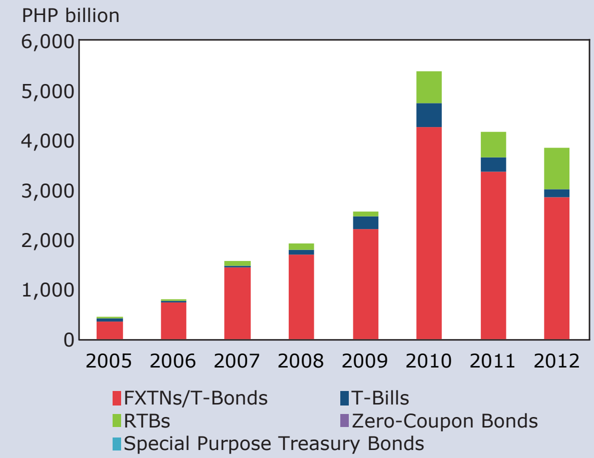
From 1 July to 25 October, the series with the tightest bid–ask spreads were FXTN 20-17 and RTB 20-1, with an average of 1.3 bps and 2.7 bps,

Figure 3: Weekly Average Bid–Ask Spreads of the Philippines' Most Active Government Securities, 7 January 2011–25 October 2012



Note: The following were included among the monitored government securities: (i) FXTN 7-51, (ii) FXTN 7-53, (iii) RTB 10-2, (iv) FXTN 10-53, (v) RTB 10-3, (vi) FXTN 10-54, (vii) FXTN 10-55, (viii) RTB15-1, (ix) RTB15-2, (x) FXTN 20-17, (xi) RTB 20-1, and (xii) FXTN 25-8.
Source: *AsianBondsOnline*.

Figure 4: PDEx Trade Volume Trends—Government Securities, 2005–October 2012



FXTNs = fixed-rate treasury notes, RTBs = Retail Treasury Bonds.
Note: PDEx reports one side of the trade only.
Source: Philippine Dealing and Exchange Corporation (PDEx).

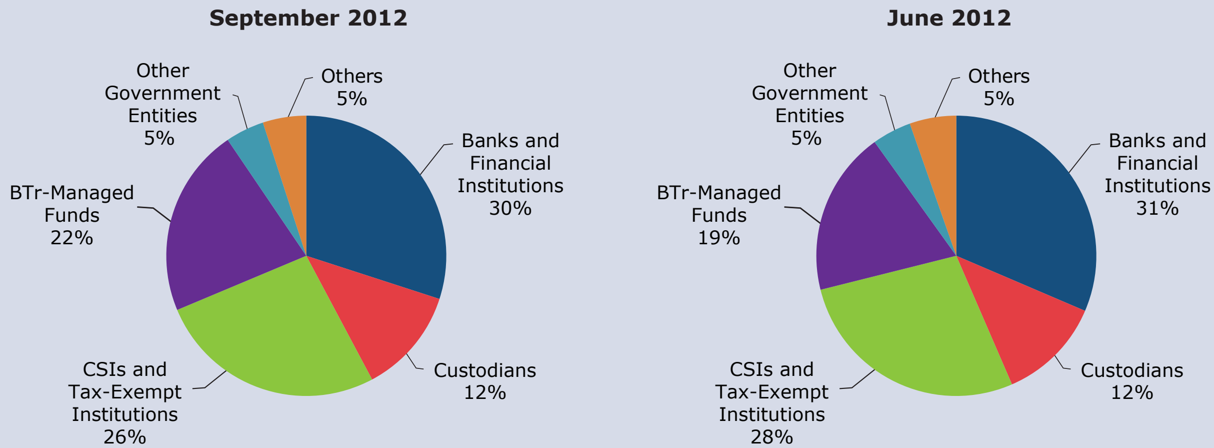
respectively. The other series considered the most liquid were (i) FXTN 7-51 with a bid–ask spread of 5.0 bps, (ii) FXTN 10-54 with 5.4 bps, (iii) FXTN 10-55 with 6.0 bps, and (iv) FXTN 10-53 and RTB 10-3 with 6.2 bps each. FXTN 25-08 and RTB 10-2 had bid–ask spreads of 7.2 bps and 7.7 bps, respectively. On-the-run 15-year RTBs enjoyed bid–ask spreads of 7.8 bps and 8.5 bps, respectively. Two-way quotes for FXTN 7-53 became less frequent and widened to 11.7 bps during the period. Meanwhile, two-way quotes for FXTN 5-67 (1.23 years), FXTN 7-48 (3.23 years), and FXTN 10-42 (3.83 years) were dropped from the analysis since it has been observed that they have lost their liquidity. Interestingly, these government securities have remaining maturities of less than 5 years.

PDEx Trade Volume Trends—Government Securities. As the sole fixed-income exchange in the country, PDEx captures the secondary trading of listed fixed-income issues. The volume of secondary trading of government securities has surged tremendously between 2005 and end-October 2012 **(Figure 4)**. From annual trading of PHP437.7 billion in full-year 2005, trade volume increased to PHP3.83 trillion in the first 10 months of 2012. The largest annual volume was recorded in 2010, when secondary trading reached PHP5.35 trillion. Between January 2005 and October 2012, treasury bonds accounted for almost 82% of all trades in the secondary market as investors sought greater capital gains and interest income from these securities.

Investor Profile

The largest grouping of investors of government securities in 3Q12 comprised banks and financial institutions with 30.0% of the total **(Figure 5)**. This was slightly down from their share of 31.5% in 2Q12. Contractual savings institutions—the Social Security System (SSS), the Government Service Insurance System (GSIS), Pag-ibig, and life insurance companies—and tax-exempt institutions—trusts and other tax-exempt entities—accounted for 26.4% in 3Q12, down from 27.6% in 2Q12. Meanwhile, the share of funds being managed by the Bureau of the Treasury (BTr), which includes the Bond Sinking Fund, rose to 21.9% at end-September from 19.0% at end-June. The participation of custodians remained steady in 3Q12 at around 12% of the total. Other government entities and other investor, which include individuals and private corporations, were almost unchanged between end-June and end-September at around 5%.

Figure 5: LCY Government Bonds Investor Profile



BTr = Bureau of Treasury, CSIs = contractual savings institutions, LCY = local currency.
Note: For the purpose of this investor profile only, LCY government bonds are defined as domestic bonds, which include multi-currency (US$ and EUR) retail tresury bonds totaling to almost PHP21 billion as of end-September 2012.
Source: Philippine Bureau of the Treasury.

Rating Changes

The Philippines received an upgrade from Moody's on 29 October, leaving its credit rating one notch away from investment grade **(Table 4)**. Moody's raised the foreign currency (FCY) and LCY long-term bond ratings of the Government of the Philippines to Ba1 from Ba2. The ratings outlook was stable for both. Moody's rationale for the upgrade took into account the Philippines' (i) improved economic performance and strong fiscal position in the face of deteriorating global demand, (ii) enhanced prospects for growth over the medium-term, and (iii) sound financial system that poses limited contingent risks and provides a stable source of government financing. Moody's also upgraded the issue ratings for the BSP-rated liabilities to Ba1 from Ba2, with a stable outlook.

Table 4: Selected Sovereign Ratings and Outlooks for the Philippines

	Moody's	S&P	Fitch
Sovereign FCY LT Rating	Ba1	BB+	BB+
Outlook	Stable	Stable	Stable

FCY = foreign currency, LT = long-term.
Source: Rating agencies.

Policy, Institutional, and Regulatory Developments

BSP Requires Loss Absorbency Clause for Hybrid Instruments

BSP issued Circular 768 on 21 September, requiring instruments eligible as capital under Basel III rules to have loss absorbency features. The circular requires hybrid Tier 1 capital and lower Tier 2 capital to either be written off or converted into common equity upon the occurrence of a trigger event as determined by BSP. In addition, the circular states that "the issuance of any new shares as a result of the trigger event must occur prior to any public sector injection of capital so that the capital provided by the public sector is not diluted."

Philippines Sells PHP30.8 Billion (US$750 Million) of Global Peso Notes, Offers Bond Buy-Back

The Philippines sold PHP30.8 billion (US$750 million) of 10-year global peso notes priced at 3.9% during the second week of November. The foreign exchange rate at pricing was PHP41.07 to US$1. The proceeds will be used to partially fund the repurchase of the 15 most expensive US$- and euro-denominated government bonds. The government has offered to repurchase US$1.5 billion of such foreign bonds, with the offer set to expire on 15 November. Should the repurchase require additional US dollars, the government will source the needed funding from the reserves of the BSP. The global peso notes are registered with the US Securities and Exchange Commission (SEC) as they are PHP-denominated but settled in US dollars. The issuance and tender offer are part of the government's external liability management efforts to minimize the foreign exchange risk inherent in the Philippines' outstanding debt portfolio.

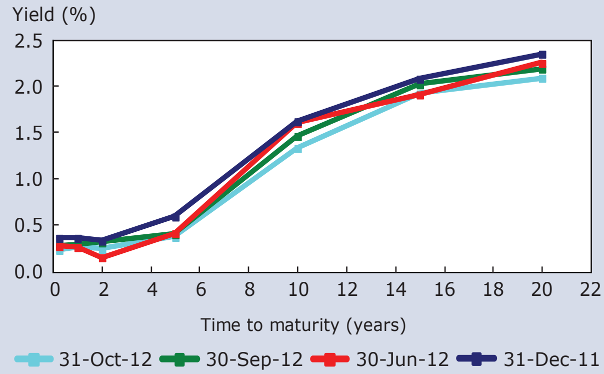
With the sale, the Philippines has completed three global peso notes offerings. The two previous issues were a PHP44.1 billion (US$1.0 billion) 10-year bond offering in September 2010 and a PHP54.8 billion (US$1.25 billion) 25-year bond offering in January 2011. *AsianBondsOnline* does not include global peso notes in its statistics of LCY and FCY government bonds.

Singapore—Update

Yield Movements

Between end-June and end-September, the yield curve for local currency (LCY) government bonds in Singapore rose slightly at the shorter-end, while falling between the belly of the curve and the longer-end, with the exception of the 15-year maturity. Yields fell across all maturities between end-September and end-October **(Figure 1)**. Despite the uptick in the inflation rate in 3Q12, yields between the 2-month and 5-year maturities fell between 3 basis points (bps) and 7 bps between end-September and end-October. Meanwhile, the yield for the 10-year benchmark posted a larger decline at 13 bps, while the 15- and 20-year maturities each fell by 10 bps. The yield spread between the 2- and 10-year maturities narrowed further to 109 bps at end-October from 115 bps at end-September and 145 bps at end-June.

Figure 1: Singapore's Benchmark Yield Curve–LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Inflation in September accelerated to 4.7% year-on-year (y-o-y) in September from 3.9% in August and 4.0% in July, mainly due to higher transportation and housing costs. The increase in Certificate of Entitlement (COE) premiums drove the increase in the index for transportation in September.

Based on advance estimates by the Ministry of Trade and Industry, Singapore's economy posted modest 1.3% y-o-y growth in 3Q12, down from revised growth of 2.3% in the previous quarter. Growth in the manufacturing sector slipped to 0.7% y-o-y in 3Q12 from 4.6% in 2Q12, while construction sector growth eased to 8.5% in 3Q12 from 10.1% in 2Q12. Meanwhile, growth in the services sector slightly improved to 1.1% y-o-y in 3Q12 from 0.9% in the previous quarter. On a seasonally adjusted quarter-on-quarter (q-o-q) annualized basis, however, Singapore's gross domestic product (GDP) fell 1.5% in 3Q12, after posting revised 0.2% growth in 2Q12. The q-o-q decline was mainly due to a 3.9% drop in manufacturing that reflected the decline in output in the electronics cluster. Growth for the rest of the year is expected to be weighed down by subdued global economic conditions, with the externally oriented sector continuing to be affected by the slowdown in demand from advanced economies. The GDP growth projection is still within the 1.5%–2.5% forecast for the year.

In October, the Monetary Authority of Singapore (MAS) decided to maintain a modest and gradual appreciation of the Singapore dollar nominal effective exchange rate (S$NEER) policy band. MAS also decided to keep the slope and width of the S$NEER policy band unchanged.

Size and Composition

The total amount of outstanding LCY bonds in Singapore increased 18.1% y-o-y to reach SGD290.8 billion (US$236.9 billion) at end-September, mainly due to a surge in LCY corporate bond issuance **(Table 1)**. Outstanding LCY corporate bonds accelerated 27.8% y-o-y to SGD120.0 billion at end-September, after posting 18.3% y-o-y growth at end-June. On a q-o-q basis, outstanding LCY corporate bonds rose 9.1% in 3Q12.

Table 1. Size and Composition of the LCY Bond Market in Singapore

	Amount (billion)								Growth Rate (%)						
	Jun-12		Jul-12		Aug-12		Sep-12		Jun-12		Jul-12	Aug-12	Sep-12		
	SGD	US$	SGD	US$	SGD	US$	SGD	US$	y-o-y	q-o-q	m-o-m	m-o-m	y-o-y	q-o-q	m-o-m
Total	274	217	274	220	282	226	291	237	15.8	3.2	0.1	2.6	18.1	6.1	3.3
Government	164	130	161	129	164	132	171	139	14.1	1.5	(1.8)	1.8	12.1	4.0	4.1
Central Govt. Bonds and Bills	144	114	141	114	142	114	144	117	3.8	–	(1.7)	0.8	6.2	0.1	1.1
Central Bank Bills	20	16	20	16	22	17	27	22	277.8	13.3	(2.5)	9.0	60.1	31.9	24.0
Corporate	110	87	113	91	117	94	120	98	18.3	5.8	3.0	3.8	27.8	9.1	2.1

– = not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Government bonds are calculated using data from national sources. Corporate bonds are based on *AsianBondsOnline* estimates.
2. Government bonds and bills do not include the special issue of Singapore Government Securities held by the Singapore Central Provident Fund (CPF).
3. Bloomberg LP end-of-period LCY–US$ rate is used.
4. Growth rates are calculated from LCY base and do not include currency effects.
Source: Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP.

Issuance of LCY corporate bonds in 3Q12 reached SGD10.1 billion, more than twice the SGD4.9 billion of issuance in 3Q11. Among the notable bond issues in 3Q12 were the SGD1.2 billion 10-year notes issued by United Oversea Bank Ltd., SGD1.0 billion 10.5-year notes issued by DBS Bank Ltd., and Oversea-Chinese Banking Corporation's SGD1.0 billion perpetual notes **(Table 2)**. Mapletree Treasury Services issued SGD600 million of perpetual bonds, while Ezra Holdings and Ezion Holdings issued smaller perpetual bonds worth SGD150 million and SGD125 million, respectively. Finally, the Housing and Development Board raised SGD950 million from the sale of 5- and 10-year bonds, and NTUC Income Insurance issued SGD600 million worth of 15-year bonds.

Outstanding LCY government bonds increased 12.1% y-o-y at end-September, slightly lower than the 14.1% growth posted at end-June. Meanwhile, outstanding MAS bills rose 60.1% y-o-y to SGD22 billion. On the other hand, outstanding Singapore Government Securities (SGS) bills and bonds rose 6.2% y-o-y, but were roughly flat on a q-o-q basis at SGD143.9 billion.

Issuance of SGS bonds dropped 5.3% y-o-y but went unchanged q-o-q in 3Q12. During the first 9 months of the year, SGS bonds issuance was down 10.8% compared with the same period last year. On the other hand, issuance of SGS bills rose 0.6% y-o-y but fell 8.9% q-o-q, while issuance of MAS bills rose 6.0% y-o-y but dropped 4.0% q-o-q in 3Q12.

Table 2: Notable Corporate Issuances in 3Q12

Corporate Issuers	Amount Issued (SGD million)	Tenor (years)	Coupon (%)
United Overseas Bank Ltd.	1,200.00	10	3.15
DBS Bank Ltd.	1,000.00	10.5	3.10
Oversea-China Banking Corp.	1,000.00	Perpetual	4.00
Mapletree Treasury Services	600.00	Perpetual	5.13
NTUC Income Insurance	600.00	15	3.65
Housing and Development Board	500.00	10	2.09
		5	1.11

Source: Bloomberg LP.

The top 30 corporate issuers in Singapore accounted for 50.1% of total corporate bonds outstanding at end-September and were found mainly in the financial and consumer sectors **(Table 3)**. The Housing and Development Board remained the biggest issuer with SGD11.6 billion of outstanding bonds at the end of 2Q12, while DBS Bank Singapore and Capitaland followed with outstanding amounts of SGD5.0 billion and SGD4.9 billion, respectively.

Policy, Institutional, and Regulatory Developments

ASEAN Trading Link Launches with the Connection of Bursa Malaysia and Singapore Exchange

ASEAN Exchanges—a collaboration among the seven stock exchanges of the Association of Southeast Asian Nations (ASEAN) that seeks to promote growth in the region's capital markets—announced the rollout of the ASEAN Trading Link on 18 September with the connection of Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link allows brokers to execute trades directly on connected exchanges without having to be licensed with that exchange.

MAS Sets Up Contingent Liquidity Facility

MAS announced in its annual report released in July 2011 that it entered into an agreement with the Singapore Deposit Insurance Corporation Limited (SDIC) through which MAS could offer a contingent liquidity facility of up to SGD20 billion in the event of a banking crisis. The agreement was signed in February; as of 31 March, no request had been made on the facility.

Table 3: Top 30 Issuers of LCY Corporate Bonds in Singapore (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (SGD billion)	LCY Bonds (US$ billion)				
1. Housing and Development Board	11.6	9.4	Yes	No	No	Financial
2. DBS Bank Singapore	5.0	4.1	No	Yes	yes	Financial
3. CapitaLand	4.9	4.1	No	Yes	Yes	Financial
4. United Overseas Bank	4.5	4.0	No	Yes	Yes	Financial
5. Temasek Financial I	3.6	2.9	No	Yes	No	Financial
6. Oversea-Chinese Bank	2.9	2.4	No	Yes	Yes	Financial
7. SP Powerassets Ltd.	2.5	2.0	No	Yes	No	Utilities
8. Public Utilities Board	2.1	1.7	Yes	No	No	Utilities
9. Land Transport Authority	2.1	1.7	Yes	No	No	Industrial
10. GLL IHT PTE	1.5	1.2	No	Yes	No	Financial
11. Keppel Corp	1.5	1.2	No	Yes	Yes	Industrial
12. Olam International	1.5	1.2	No	Yes	Yes	Consumer
13. Keppel Land	1.4	1.1	No	Yes	Yes	Financial
14. Mapletree Treasury	1.3	1.1	No	Yes	No	Diversified
15. Temasek Financial III	1.3	1.1	No	Yes	No	Financial
16. CapitaMalls Asia Treasury	1.1	0.9	No	Yes	No	Financial
17. Overseas Union Enterprise	1.1	0.9	No	Yes	Yes	Consumer
18. City Developments	1.1	0.9	No	Yes	Yes	Consumer
19. PSA Corporation	1.0	0.8	No	Yes	No	Consumer
20. Neptune Orient Lines	1.0	0.8	No	Yes	Yes	Industrial
21. F&N Treasury	1.0	0.8	No	Yes	No	Financial
22. Hyflux	1.0	0.8	No	Yes	Yes	Industrial
23. Singapore Post	0.9	0.7	Yes	No	No	Industrial
24. Singtel Group Treasury	0.9	0.7	No	Yes	No	Communications
25. Capitamall Trust	0.8	0.7	No	Yes	Yes	Financial
26. Singapore Airlines	0.8	0.7	No	Yes	No	Transportation
27. Global Logistic Properities	0.8	0.6	No	Yes	yes	Industrial
28. CapitaLand Treasury	0.7	0.6	No	Yes	No	Financial
29. Joynote Ltd.	0.7	0.6	No	Yes	No	Financial
30. Sembcorp Financial Services	0.7	0.6	No	Yes	No	Industrial
Total Top 30 LCY Corporate Issuers	**61.1**	**49.8**				
Total LCY Corporate Bonds	**120.0**	**97.8**				
Top 30 as % of Total LCY Corporate Bonds	**50.9%**	**50.9%**				

LCY = local currency.
Source: Bloomberg LP.

Thailand—Update

Yield Movements

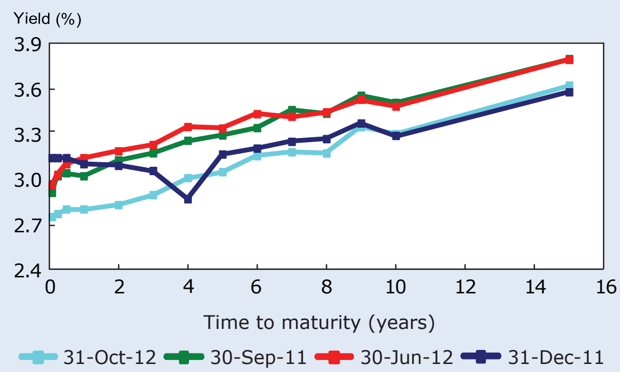
Thailand's government bond yields fell for most tenors between end-June and end-September, and dropped further for all tenors between end-September and end-October **(Figure 1)**. The decrease in yields between end-September and end-October ranged from 18 basis points (bps) for the 15-year tenor to 30 bps for the 2-year tenor. Expectations of policy rate cuts were the cause of declining yields. Meanwhile, yield spreads between the 2- and 10-year tenors widened 9 bps between end-June and end-September, and climbed an additional 9 bps between end-September and end-October.

The Bank of Thailand's (BOT) Monetary Policy Committee decided on 17 October to reduce the policy rate—the 1-day repurchase rate—by 25 bps to 2.75%. The BOT stated that the committee's decision to cut the policy rate was in line with monetary easing to help improve domestic demand and cushion the economy from the negative effects of a fragile global economy.

Consumer price inflation in Thailand eased to 3.3% year-on-year (y-o-y) in October from 3.4% in September. The price index for food and beverages rose 3.4% in October following a 3.7% increase in the prior month. Meanwhile, the price index for non-food items climbed 3.3% in October after a 3.2% hike in September.

Thailand's real gross domestic product (GDP) growth accelerated to 4.2% y-o-y in 2Q12 from mild 0.4% growth in 1Q12. Exports of goods and services rebounded in 2Q12, posting 0.9% y-o-y growth for the quarter compared with a contraction of 3.2% in the previous quarter. Comparing y-o-y growth rates in 1Q12 and 2Q12, private consumption rose from 2.9% to 5.3%, government spending rebounded from –0.2% to 5.6%, and domestic investment increased from 5.2% to 10.2%.

Figure 1: Thailand's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Size and Composition

The outstanding amount of local currency (LCY) bonds in Thailand grew 14.4% y-o-y and 1.9% quarter-on-quarter (q-o-q) to reach THB8.2 trillion (US$265 billion) at end-September **(Table 1)**. Total government bonds amounted to THB6.5 trillion, which was up 12.1% from a year ago and 1.3% from the previous quarter. The combined size of outstanding government bonds and treasury bills rose 6.3% y-o-y, but declined 0.4% q-o-q, to THB3.0 trillion. Similarly, the central bank's bonds outstanding increased 15.7% y-o-y, but contracted 1.0% q-o-q, to level off at THB2.9 trillion. Meanwhile, state-owned enterprise (SOE) bonds climbed 26.7% y-o-y and 26.0% q-o-q to THB607 billion.

The largest government bond issues in 3Q12 were BOT's 1-year bond worth THB115 billion and 3-year bond worth THB85 billion. Provincial Waterworks Authority (PWA)—an SOE—sold the longest-dated government bonds of the quarter, issuing 15-year bonds in three tranches totaling THB850 million. One tranche of PWA's 15-year bonds was valued at THB350 million and offered the highest coupon rate across all

Table 1: Size and Composition of the LCY Bond Market in Thailand

	Amount (billion)								**Growth Rate** (%)						
	Jun-12		**Jul-12**		**Aug-12**		**Sep-12**		**Jun-12**		**Jul-12**	**Aug-12**	**Sep-12**		
	THB	**US$**	**THB**	**US$**	**THB**	**US$**	**THB**	**US$**	**y-o-y**	**q-o-q**	**m-o-m**	**m-o-m**	**y-o-y**	**q-o-q**	**m-o-m**
Total	8,027	254	8,149	259	8,187	262	8,176	265	17.7	4.1	1.5	0.5	14.4	1.9	(0.1)
Government	6,444	204	6,560	208	6,559	210	6,527	212	17.9	4.8	1.8	(0.03)	12.1	1.3	(0.5)
Government Bonds and Treasury Bills	3,000	95	3,043	97	3,107	99	2,987	97	17.3	8.0	1.4	2.1	6.3	(0.4)	(3.8)
Central Bank Bonds	2,963	94	2,973	94	2,855	91	2,933	95	22.1	1.7	0.3	(4.0)	15.7	(1.0)	2.7
State-Owned Enterprise and Other Bonds	481	15	545	17	597	19	607	20	(0.2)	4.5	13.1	9.6	26.7	26.0	1.7
Corporate	1,583	50	1,588	50	1,629	52	1,649	54	16.9	1.6	0.3	2.6	24.4	4.2	1.3

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY–US$ rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
Source: Bank of Thailand (BOT) and Bloomberg LP.

government bond issues in 3Q12 at 4.18%. The largest SOE issuer for the quarter was Bank for Agriculture and Agricultural Cooperatives (BAAC), which issued a total of THB102.5 billion worth of bonds.

LCY corporate bonds outstanding amounted to THB1.6 trillion at end-September, up 24.4% y-o-y and 4.2% q-o-q. On a month-on-month (m-o-m) basis, the outstanding size of the corporate bond market rose 1.3%. As of end-September, the top 30 corporate bond issuers had combined bonds outstanding of THB1.0 trillion, accounting for 61% of total corporate bonds outstanding **(Table 2)**. PTT and Siam Cement remained the two largest corporate issuers of LCY bonds.

The largest corporate bond issues in 3Q12 included Siam Commercial Bank's THB20 billion 12-year subordinated debt offering a 4.65% coupon, PTT's 7-year bond worth THB10 billion with a 4.1% coupon, and Thanachart Bank's THB8.5 billion 10-year subordinated debt carrying a 4.7% coupon. Meanwhile, Charoen Phokphand sold the longest-dated tenor among all corporate bonds issued in the quarter, a 20-year bond worth THB5 billion and carrying a 5.3% coupon. Additionally, Hemaraj Land and Development sold the corporate bond with the quarter's highest coupon rate, a 9-year bond worth THB2 billion and with a coupon rate set at 5.65%.

Investor Profile

Contractual savings funds remained the largest holder of LCY government bonds in Thailand at end-September, accounting for 27% of the total, followed by insurance companies with a 22% share **(Figure 2)**. Compared with end-September 2011, the respective shares of contractual savings funds, foreign investors, insurance companies, and non-financial market mutual funds all increased, while shares fell for most other types of bondholders.

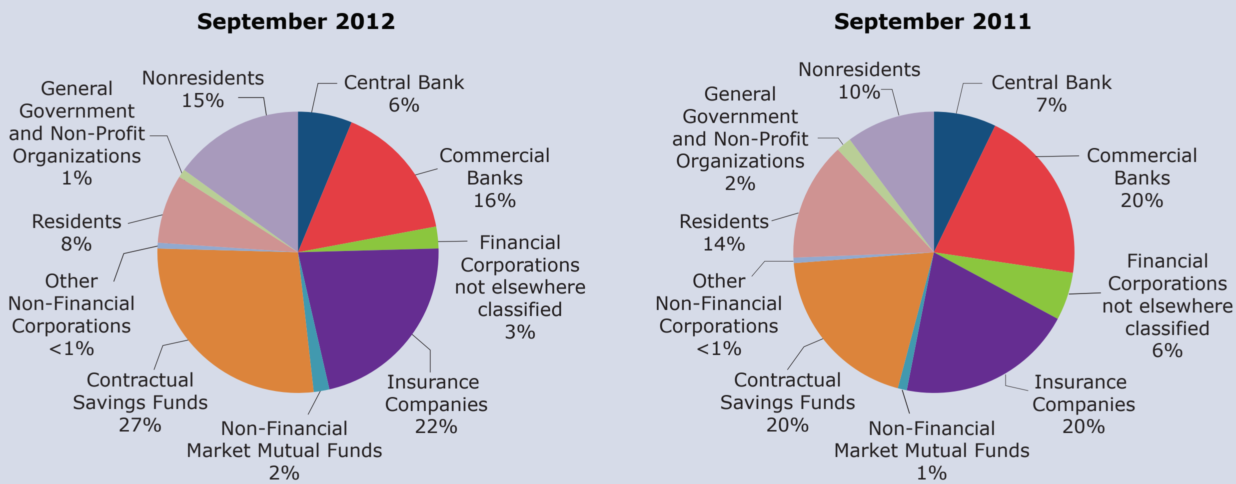
Individual retail investors remained the largest investor group in LCY corporate bonds in 2Q12, the latest period for which data is available,

Table 2: Top 30 Issuers of LCY Corporate Bonds in Thailand (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (THB billion)	LCY Bonds (US$ billion)				
1. PTT	187.0	6.1	Yes	No	Yes	Energy
2. Siam Cement	115.0	3.7	Yes	No	Yes	Diversified
3. Charoen Pokphand Foods	61.0	2.0	No	Yes	Yes	Consumer
4. Siam Commercial Bank	60.0	1.9	No	Yes	Yes	Financial
5. Kasikorn Bank	47.1	1.5	No	Yes	Yes	Financial
6. Thanachart Bank	38.6	1.3	No	Yes	no	Financial
7. Bank of Ayudhya	37.8	1.2	No	Yes	Yes	Financial
8. PTT Global Chemical	35.4	1.1	Yes	No	Yes	Basic Materials
9. Thai Airways International	32.2	1.0	Yes	No	Yes	Consumer
10. PTT Exploration and Production Company	29.2	0.9	Yes	No	Yes	Energy
11. Ayudhya Capital Auto Lease	28.3	0.9	No	Yes	No	Financial
12. Thai Oil	27.8	0.9	Yes	No	Yes	Energy
13. TMB Bank	27.7	0.9	No	Yes	Yes	Financial
14. Banpu	25.3	0.8	No	Yes	Yes	Energy
15. Krung Thai Card	23.7	0.8	Yes	No	Yes	Financial
16. Glow Energy	20.6	0.7	No	Yes	Yes	Utilities
17. Toyota Leasing Thailand	19.9	0.6	No	Yes	No	Consumer
18. IRPC	19.6	0.6	Yes	No	Yes	Energy
19. Quality Houses	18.3	0.6	No	Yes	Yes	Consumer
20. Indorama Ventures	16.9	0.5	No	Yes	Yes	Basic Materials
21. True Corporation	16.1	0.5	No	Yes	Yes	Communications
22. Kiatnakin Bank	15.3	0.5	No	Yes	Yes	Financial
23. Land & Houses	15.0	0.5	No	Yes	Yes	Consumer
24. Minor International	14.9	0.5	No	Yes	Yes	Consumer
25. Bangkok Expressway	14.2	0.5	No	Yes	Yes	Consumer
26. Tisco Bank	12.8	0.4	No	Yes	No	Financial
27. Pruksa Real Estate	12.5	0.4	No	Yes	Yes	Industrial
28. Italian-Thai Development	12.0	0.4	No	Yes	Yes	Industrial
29. Thanachart Capital	12.0	0.4	No	Yes	Yes	Financial
30. Central Pattana	11.7	0.4	No	Yes	Yes	Industrial
Total Top 30 LCY Corporate Issuers	**1,007.7**	**32.7**				
Total LCY Corporate Bonds	**1,649.5**	**53.5**				
Top 30 as % of Total LCY Corporate Bonds	**61.1%**	**61.1%**				

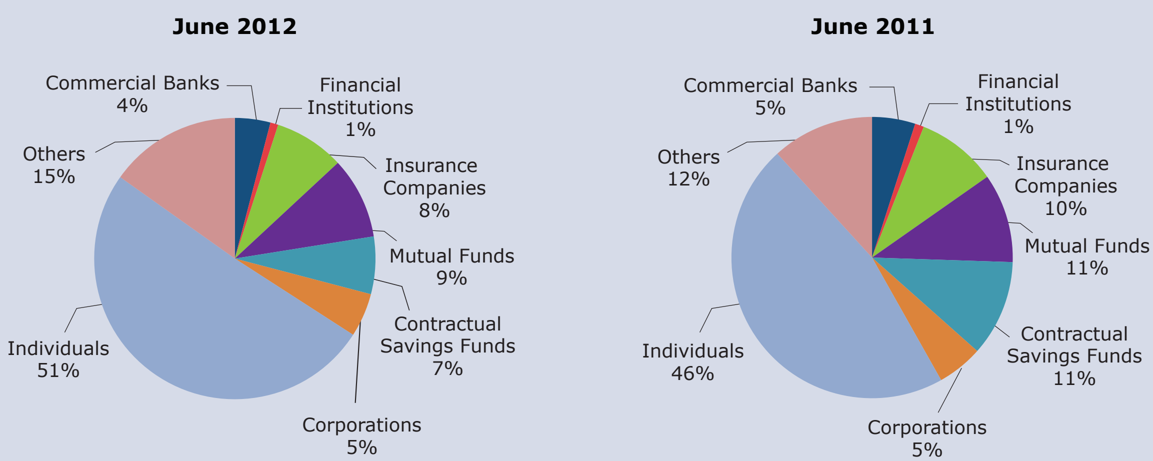
LCY = local currency.
Source: Bloomberg LP.

Figure 2: LCY Government Bonds Investor Profile



LCY = local currency.
Note: Government bonds exclude central bank bonds and state-owned enterprise bonds.
Source: *AsianBondsOnline* and Bank of Thailand.

Figure 3: LCY Corporate Bonds Investor Profile



LCY = local currency.
Source: ThaiBMA.

holding 51% of the total at end-June **(Figure 3)**. They were followed by other investors—such as the government, cooperatives, and foundations—with a combined 15% share, then mutual funds (9%), insurance companies (8%), contractual savings funds (7%), non-financial corporations (5%), commercial banks (4%), and other financial institutions (1%). Compared with end-June 2011, the share of individual retail investors rose 5 percentage points, while the share of the combined group of government, cooperatives, and foundations rose by 3 percentage points. In contrast, the respective shares of contractual savings funds, mutual funds, insurance companies, and commercial banks fell compared with end-June 2011.

Rating Changes

Rating and Investment Information, Inc. (R&I) upgraded Thailand's foreign currency (FCY) issuer rating in October to BBB+ from BBB, and its LCY issuer rating to A– from BBB+, while affirming the country's FCY short-term debt rating at a-2 **(Table 3)**. R&I stated that Thailand's external balance is stable and that the economy is returning to a normal growth path following its recovery from massive flooding in late 2011.

Table 3: Selected Sovereign Ratings and Outlook for Thailand

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	Baa1	BBB+	BBB	BBB+
Outlook	Stable	Stable	Stable	Stable

FCY = foreign currency, LT = long-term.
Source: Rating agencies.

Policy, Institutional, and Regulatory Developments

BOT Announces Capital Account Liberalization Master Plan

In October, the BOT proposed the Capital Account Liberalization Master Plan to encourage businesses and depositors to diversify their investments and enhance business efficiency, create an environment for more balanced capital flows, and promote financial market development to facilitate economic integration under the Association of Southeast Asian Nations (ASEAN) Economic Community, which comes into effect in 2015. Specifically, the BOT announced plans to relax rules on outward portfolio investment to allow (i) listed companies to directly invest in derivatives and securities products outside Thailand, (ii) Thai residents to buy foreign currency (FCY) bonds issued in Thailand, and (iii) institutional investors to freely unwind foreign exchange hedging. Additionally, the BOT stated that it will conduct an initial relaxation of foreign exchange regulations by the end of the year and that it will allow Thai individuals to invest in securities outside Thailand through securities companies or private funds without BOT approval.

MOF Restricts Foreign Entities from Issuing LCY Bonds in Thailand between September 2012 and May 2013

The Ministry of Finance (MOF) announced in September that it would not permit foreign entities to issue THB-denominated bonds or debentures in Thailand from 1 September 2012 to 31 May 2013. Normally, foreign entities planning to issue an LCY bond or debenture in Thailand can submit a letter of intent to MOF during three months in a year: March, July, and November.

SET Connects to ASEAN Trading Link

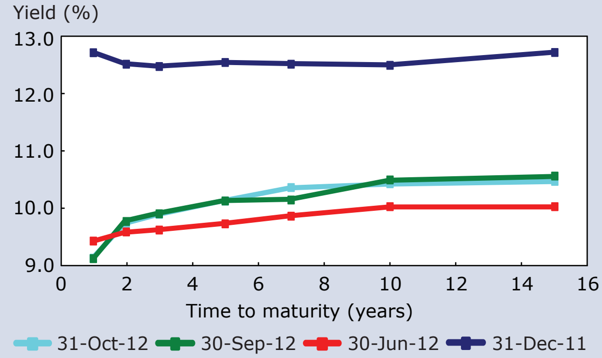
The Stock Exchange of Thailand (SET) became the third stock exchange to connect to the ASEAN Trading Link in October, following Bursa Malaysia and Singapore Exchange. The ASEAN Trading Link was launched in September to offer investors single entry-point access to ASEAN's participating stock exchanges. Brokers who are connected through the ASEAN Trading Link can execute trades directly on any of these three stock exchanges.

Viet Nam—Update

Yield Movements

Between end-June and end-October, yields on Viet Nam's 1-year government bonds fell 30 basis points (bps) to 9.13% **(Figure 1)**. Yields rose between 15 bps and 50 bps over the same period for maturities between 2 years and 15 years. As a result, the spread between 2- and 10-year government bonds widened to 69 bps at end-October from 44 bps at end-June and from –2 bps at end-December 2011, as the yield curve assumed a more normal upwardly-sloping curvature.

Figure 1: Viet Nam's Benchmark Yield Curve—LCY Government Bonds



LCY = local currency.
Source: Bloomberg LP.

Viet Nam's economic expansion slowed to 4.7% year-on-year (y-o-y) in the first 9 months of 2012 from 5.8% in the same period last year. On a quarter-on-quarter (q-o-q) basis, the economy's expansion accelerated to an estimated 5.4% y-o-y in 3Q12 from 4.7% in 2Q12. The slowing year-to-date expansion in 2012 was due to the government's tightening of lending standards in the early months of the year in an effort to control inflation. Meanwhile, bad debts have limited the ability of Vietnamese banks to provide credit to the private sector. Loans outstanding as of 20 September increased only 2.4% from the end of 2011, compared with credit growth of 10.9% and 27.7% in 2011 and 2010, respectively. The State Bank of Viet Nam (SBV) has lowered its 2012 credit growth rate target to 8%–10% from an estimate of 15%–17% made earlier this year. The lackluster credit growth in 2012 has occurred in spite of continuous monetary easing by the SBV since March.

Meanwhile, consumer price inflation in Viet Nam accelerated in October to 7.0% y-o-y from 6.5% in September. October was the second month in which inflation had risen, following a steady decline in inflation over the previous 12 months, in response to measures taken since September 2011 to quell inflationary pressures. In October, Viet Nam posted total exports of US$9.9 billion, up 4.4% from September. Total imports were estimated to have reached US$10.4 billion in October, up 11.7% from a month earlier. This resulted in a trade gap of US$500 million for the month of October. In the first 10 months of the year, Viet Nam experienced a total trade deficit of US$357 million.

Viet Nam's industrial production index (IPI) in October increased 5.8% from the previous month and surged 5.7% from a year earlier. On a year-to-date basis, the IPI has risen 4.5% in the first 10 months of this year. The IPI of the mining and quarrying sector rose 3.9% y-o-y and the manufacturing sector rose 3.8%.

Size and Composition

As of end-September, Viet Nam's total local currency (LCY) bonds outstanding stood at VND443.7 trillion (US$21.2 billion), an increase of 21.4% y-o-y that was driven mainly by the 48.0% growth of treasury bonds and the resumption of SBV bill issuance beginning in March. However, significant growth in these areas was partially offset by contractions of 3.3% and 21.4% y-o-y, respectively, in state-owned enterprise (SOE) and corporate bonds outstanding **(Table 1)**.

Table 1: Size and Composition of the LCY Bond Market in Viet Nam

	Amount (billion)								**Growth Rate** (%)						
	Jun-12		**Jul-12**		**Aug-12**		**Sep-12**		**Jun-12**		**Jul-12**	**Aug-12**	**Sep-12**		
	VND	**US$**	**VND**	**US$**	**VND**	**US$**	**VND**	**US$**	**y-o-y**	**q-o-q**	**m-o-m**	**m-o-m**	**y-o-y**	**q-o-q**	**m-o-m**
Total	455,892	22	440,181	21	448,111	22	443,731	21	28.5	10.5	(3.4)	1.8	21.4	(2.7)	(1.0)
Government	417,525	20	401,814	19	412,514	20	410,237	20	33.5	12.6	(3.8)	2.7	27.0	(1.7)	(0.6)
Treasury Bonds	185,403	9	191,583	9	211,433	10	218,743	10	42.0	11.7	3.3	10.4	48.0	18.0	3.5
Central Bank Bonds	58,078	3	39,787	2	31,787	2	22,070	1	–	–	(31.5)	(20.1)	–	(62.0)	(30.6)
State-Owned Enterprise Bonds	174,044	8	170,444	8	169,294	8	169,424	8	(4.4)	(0.2)	(2.1)	(0.7)	(3.3)	(2.7)	0.1
Corporate	38,367	2	38,367	2	35,597	2	33,494	2	(8.7)	(7.9)	–	(7.2)	(21.4)	(12.7)	(5.9)

– = not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:
1. Bloomberg LP end-of-period LCY–US$ rates are used.
2. Growth rates are calculated from LCY base and do not include currency effects.

Source: Bloomberg LP.

Total LCY government bonds outstanding rose 27.0% y-o-y to VND410.2 trillion as of end-September. Of this total, treasury bonds grew 48.0% y-o-y to VND218.7 trillion and SBV bills stood at VND22.1 trillion after resumption of their issuance in March. On the other hand, SOE bonds contracted 3.3% y-o-y to VND169.4 trillion and total LCY corporate bonds outstanding contracted 21.4% to VND33.5 trillion.

Treasury bond issuance remained active in 3Q12, with total new issuance amounting to VND15.3 trillion, due to Viet Nam's need to fund its rising fiscal deficit. Meanwhile, new issuance of SOE bonds amounted to VND900 billion. Given the tough market conditions, Vietnamese banks have had less risk appetite for corporate bonds. Thus, Viet Nam's LCY corporate bond market was mostly inactive in 3Q12, with only one new issuance by HAGL—a real estate company—amounting to VND850 billion.

As of 30 September, the Viet Nam Technological and Commercial Joint Stock Bank (Techcombank) remained the largest corporate issuer with outstanding bonds of VND5.1 trillion **(Table 2)**. HAGL became the second largest issuer in Viet Nam's LCY corporate bond market in 3Q12 with its VND850 billion issuance in August, the only corporate bond issuance to date in 2012. HAGL was previously the sixth largest corporate bond issuer at end-June. Total LCY bonds outstanding among the 15 largest issuers comprised 92.7% of all LCY corporate bonds outstanding.

Rating Changes

On 28 September, Moody's Investors Service (Moody's) downgraded Viet Nam's foreign currency and LCY government bond ratings to B2 from B1, with a stable outlook for both **(Table 3)**. The downgrade was driven by increasing banking system vulnerabilities due to overhang from a prolonged credit boom and the subsequent tightening in lending policy.

Table 2: Top 15 Issuers of LCY Corporate Bonds in Viet Nam (as of end-September 2012)

Issuers	Outstanding Amount		State-Owned	Privately-Owned	Listed Company	Type of Industry
	LCY Bonds (VND billion)	LCY Bonds (US$ billion)				
1. Techcombank	5,100	0.24	No	Yes	No	Finance
2. HAGL	4,110	0.20	No	Yes	Yes	Real Estate
3. Vietin Bank	4,095	0.20	No	Yes	Yes	Finance
4. Vincom	4,000	0.19	No	Yes	Yes	Real Estate
5. Vinpearl	3,500	0.17	No	Yes	Yes	Resorts/Theme Parks
6. Asia Commercial Joint Stock Bank	3,000	0.14	No	Yes	Yes	Finance
7. Agribank Securities	2,000	0.10	No	Yes	Yes	Finance
8. Viet Nam Maritime Commercial Bank	1,000	0.05	No	Yes	No	Finance
9. Minh Phu Seafood	900	0.04	No	Yes	Yes	Fisheries
10. Hoa Phat Group	800	0.04	No	Yes	Yes	Industrial
11. Phu Hoang Anh	600	0.03	No	Yes	No	Real Estate
12. An Binh Bank	600	0.03	No	Yes	No	Finance
13. Kinh Bac City Development	500	0.02	No	Yes	Yes	Real Estate
14. HCMC General Import Export	450	0.02	No	Yes	No	Import/Export
15. Viet Nam Steel	400	0.02	No	Yes	No	Steel Producer
Total Top 15 LCY Corporate Issuers	**31,055**	**1.49**				
Total LCY Corporate Bonds	**33,494**	**1.60**				
Top 15 as % of Total LCY Corporate Bonds	**92.7%**	**92.7%**				

LCY = local currency.
Source: Bloomberg LP.

Table 3: Selected Sovereign Ratings and Outlook for Viet Nam

	Moody's	S&P	Fitch
Sovereign FCY LT Ratings	B2	BB–	B+
Outlook	Stable	Stable	Stable

FCY = foreign currency, LT = long-term.
Source: Rating agencies.

Policy, Institutional, and Regulatory Developments

Government Tasks the SBV to Strengthen the Banking Sector in 2013

On 8 October, the Government of Viet Nam released a resolution appointing the SBV to take necessary measures to tighten discipline in the banking sector and strengthen all weak banks in 2013. The SBV was also asked to design comprehensive solutions to deal with non-performing loans, increase foreign reserves, and strictly control the exchange rate. In the same resolution, the government re-emphasized that it will continue to pursue a flexible monetary policy to help businesses maintain access to capital while seeking to avoid a recurrence of high inflation. The government also announced it would continue to offer a 3-month extension of value added tax payments origanally due in June 2012.

In addition, the Ministry of Planning and Investment has been instructed to speed up investment promotion and take more measures to mobilize and disburse official development assistance (ODA) and foreign direct investment (FDI) capital. The ministry will revamp its statistical methodology in accordance with international standards to improve socio-economic data collection.

Asia Bond Monitor
November 2012

This publication reviews recent developments in East Asian local currency bond markets along with the outlook, risks, and policy options. It covers the 10 members of the Association of Southeast Asian Nations plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.

It was prepared by the Asian Development Bank's Office of Regional Economic Integration, headed by Iwan J. Azis. The production of the Asia Bond Monitor was led by Sabyasachi Mitra, Thiam Hee Ng, and John Stuermer with support from the AsianBondsOnline team (www.asianbondsonline.adb.org).

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than $2 a day, with 828 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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6 ADB Avenue, Mandaluyong City
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Printed in the Philippines