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Highlights

Bond Market Outlook

Emerging East Asia has witnessed an outflow of funds since the 22 May remarks of United States (US) Federal Reserve Chairman Ben Bernanke that US monetary policy could soon be tightened.[1] A slower growth outlook for the region has also contributed to capital flowing out, with the withdrawal of funds leading to rising bond yields and depreciating currencies.

The turmoil in global financial markets has made it harder and more expensive for companies to issue foreign currency (FCY) bonds. However, the issuance of local currency (LCY) bonds has been less affected.

The capital outflows highlight the need to promote more stable sources of funding. Promoting greater intra-Asian holdings of financial assets can help shield the region's financial markets from global financial volatility.

Bond markets in the region are more resilient now than during the 1997/98 Asian financial crisis as the growing use of LCY bonds has reduced currency mismatches.

Yet, risks to the region's bond markets are intensifying. Specifically, (i) the region's interest rates could rise further when the Federal Reserve starts to tighten policy; (ii) weakening growth momentum in the region could accelerate the pace of capital outflows; and (iii) continued outflows could result in vulnerable economies raising interest rates to prop up their currencies, thereby further dampening growth.

LCY Bond Market Growth in Emerging East Asia

The quarter-on-quarter (q-o-q) growth rate for emerging East Asia's local LCY bond market in 2Q13 was 1.7%, down from 2.9% growth in 1Q13, as the region's LCY bond market reached US$6.8 trillion in size. The slight decline in the quarterly growth rate reflected not only a drop in the growth rate for government bonds to 1.1% in 2Q13 from 1.9% in the previous quarter, but an even larger drop in the corporate sector's growth rate to 2.9% from 4.7%.

The region's most rapidly growing markets on a q-o-q basis were Hong Kong, China (4.4%); Thailand (3.0%); Indonesia and the Republic of Korea (2.2% each); and Singapore (2.1%). The growth of Hong Kong, China's market was driven by Exchange Fund Bills (EFBs), while in the Thai bond market growth was driven primarily by a 4.3% expansion in treasury bonds. The most rapidly growing corporate bond markets in 2Q13 continued to be Indonesia and the People's Republic of China (PRC), which expanded 4.5% and 4.2%, respectively.

LCY bond issuance in 2Q13 totaled US$827 billion, a 4.0% increase over 1Q13 that was driven by a 26.8% rise in issuance by central governments and agencies. Issuance by corporates experienced a sharp 20.1% decline, largely due to a dramatic 48.8% dip in corporate issuance in the PRC. The PRC's remaining issuance in 2Q13 was still sufficient to generate a 4.2% q-o-q increase in corporate bonds outstanding.

During periods of interest rate volatility, bond markets can become a source of risk. A rise in interest rates would result in losses for bond holders, with the losses being most severe in markets where there is a large gap between total holdings of both government and corporate bonds, and total corporate bonds outstanding. The larger this gap is, the greater the impact of a reduction to the mark-to-market value of total bond holdings. Hence, monetary policy should also take into account the implications of interest rate changes on corporate balance sheets.

[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.

LCY Bond Market Structural Developments

The maturity profiles of the region's government bond markets generally lengthened in 2Q13, while the region's corporate bond markets remained much more short-dated. On a year-on-year (y-o-y) basis, Indonesia, the Republic of Korea, and Thailand each saw an increase in the proportion of government bonds with maturities of more than 10 years. The PRC, Singapore, and Viet Nam, on the other hand, experienced reductions in the share of bonds with maturities of more than 10 years.

Foreign holdings of government bonds continued to rise in nominal terms in 2012 and the early months of 2013 in most economies, although the share of foreign holdings has begun to stabilize in some markets. In Indonesia, foreign holdings of government bonds continued to rise in nominal terms in 2Q13, but the share of foreign holdings fell slightly to 31.9% of the total at end-June. The share of foreign holdings of Malaysian government bonds continued to increase in 2013, reaching 31.2% at end-March, while the share of foreign holdings of Thai bonds increased to 17.9% at end-June.

Yield Curve Movements

Most government bond yield curves in emerging East Asia have shifted upward since the Federal Reserve suggested on 22 May that the US might exit from its highly accommodative monetary policy sooner than expected. Between end-March and end-July, most yield curves steepened, with very short-dated maturities changing little while yields from the belly to the longer-end of the curve rose substantially. Yields in Viet Nam fell for some shorter-dated maturities, but remained more or less unchanged at the longer-end of the curve. Yields on the Philippine curve tightened for most maturities greater than 2 years between end-May and end-July.

The yield curves for Indonesia and the PRC shifted upward between end-March and end-July. The sharp upward movement of Indonesia's entire yield curve reflected concerns about a widening current account deficit, rising inflation levels, and a weakening currency. Bank Indonesia raised its policy rate by 25 bps in June to 6.0%, 50 bps in July to 6.5%, and 50 bps in August to 7.0%. Yields at the shorter-end of the PRC's curve shifted sharply upward between end-May and end-July, reflecting the impact of the SHIBOR shock event in June.

Special Section: Bond Financing for Infrastructure

The poor state of infrastructure in the region can hamper future growth prospects and poverty reduction efforts. The Asian Development Bank (ADB) has estimated that Asia needs to invest about US$8 trillion in transport, communication, and energy infrastructure between 2010 and 2020.

The region's governments missed an opportunity during the recent period of easy liquidity to ramp up spending on infrastructure. Given recent market turmoil, financing infrastructure needs will now become harder.

Infrastructure financing tends to be carried out by banks using project finance. However, the recent Basel III capital adequacy requirements are reducing the attractiveness for banks of providing long-term infrastructure financing. There has been a notable decline in infrastructure financing from European banks in the aftermath of the global financial crisis.

Developing regional bond markets can help emerging East Asia bridge the financing gap for infrastructure projects. Deeper and more liquid bond markets can draw in non-traditional investors, such as pension funds, into financing infrastructure projects.

Guarantees and the creation of subordinated tranches can help improve the ratings of infrastructure projects to make them attractive to institutional investors that are often mandated to only invest in investment grade bonds. Increasing the transparency and availability of data on infrastructure project costs and performance would also facilitate investment.

Global and Regional Market Developments

Emerging East Asia has witnessed an outflow of funds following the remarks of United States (US) Federal Reserve Chairman Ben Bernanke on 22 May that US monetary policy could soon be tightened.[2] Assuming that economic conditions do not deteriorate, the Federal Reserve could start tapering its quantitative easing program in late 2013 and end its asset purchases by the middle of 2014. These remarks sparked a sell-off in bond markets in the US, with 10-year bond yields rising from 2.1% at the beginning of June to 2.6% on 8 July. Interest rates have since eased a little, settling at around 2.5% on 19 July, after the Federal Reserve clarified that tapering was not imminent and would remain dependent on economic conditions.

Both the US economic recovery and the expected phasing-out of quantitative easing have had the effect of pushing up bond yields. The key question is whether the Federal Reserve may act too soon in tightening policy. With unemployment still high and inflation low, the fear is that the rise in interest rates could stunt the recovery that is just getting underway.

While the initial trigger for capital outflows from the region may have been the Federal Reserve's announcement that the end of quantitative easing could be near, weaker economic prospects are also now contributing as most of the region's economies are reporting slower growth in 2Q13. In addition, interbank interest rates in the People's Republic of China (PRC) spiked in June as the authorities tried to engineer a slowdown in the rapid expansion of credit. This raised worries that the PRC's growth could also slow considerably, which would have repercussions for other economies in the region. The bond market sell-off in the US has subsequently spread to emerging East Asian markets, with the immediate impact being rising bond yields and depreciating currencies **(Table A)**. While the sell-off has affected most bond markets in the region, the impact has not been even across all economies.

[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.

The bond markets in economies where economic fundamentals are weaker, particularly those with current account and fiscal deficits, have been more affected. For example, Indonesia experienced a 225 basis points (bps) increase in its 10-year government bond yield between April and July. Rising inflation and widening fiscal and current account deficits likely contributed to increased risk perceptions in the Indonesian government bond market. Meanwhile, the bond markets of Malaysia and the Philippines, where economic fundamentals are stronger, have shown smaller increases in bond yields.

Even Singapore and Hong Kong, China, which exhibit strong economic fundamentals and are traditionally seen as safe havens in the region, saw their 10-year bond yields rise significantly between April and July. However, in both cases, the increase was from a very low level and the rise in yield was likely due to a reassessment of risk by investors. Singapore's 10-year bonds have been yielding about 50 bps less than US 10-year bonds since the beginning of the year, but the differential has since narrowed to less than 20 bps. Meanwhile, bond yields for the PRC and Viet Nam were also relatively unaffected by the selloff.

The withdrawal of foreign investors also resulted in most of the currencies in the region depreciating against the US dollar. Between April and July, the currencies of Thailand, the Philippines, and Indonesia depreciated 6.6%, 6.4%, and 5.3% against the US dollar, respectively. The renminbi, however, bucked the trend and appreciated against the US dollar over the same period.

Reflecting the more pessimistic outlook for the region, credit default swap (CDS) spreads in the region have been rising, particularly in Indonesia, where the CDS spread increased by almost 60 bps from the beginning of April through the end of July **(Figure A)**. Over the same period, there have been increases of around 40 bps in CDS spreads in Malaysia and the PRC. While CDS spreads in most

Table A: Changes in Global Financial Conditions

	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	7	74	–	7.9	–
United Kingdom	12	59	(10)	3.3	0.1
Japan	6	23	(9)	13.5	(5.0)
Germany	18	38	(10)	6.2	(3.5)
Emerging East Asia					
China, People's Rep. of	47	16	44	(10.8)	1.3
Hong Kong, China	31	115	11	(1.9)	0.1
Indonesia	279	225	57	(6.6)	(5.3)
Korea, Rep. of	32	68	12	(4.1)	(0.8)
Malaysia	27	63	40	6.3	(4.9)
Philippines	0	44	20	(2.9)	(6.4)
Singapore	(1)	93	–	(2.6)	(2.5)
Thailand	0	41	23	(8.2)	(6.6)
Viet Nam	(13)	(10)	–	(2.8)	(1.1)
Select European Markets					
Greece	(136)	(189)	–	1.8	(3.5)
Ireland	(13)	(27)	(39)	3.7	(3.5)
Italy	(33)	(34)	(38)	7.5	(3.5)
Portugal	74	4	10	(1.7)	(3.5)
Spain	(15)	(45)	(44)	6.5	(3.5)

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 1 April 2013 and 31 July 2013.
2. For emerging East Asia, a positive (negative) value for the FX rate indicates the appreciation (depreciation) of the local currrency against the US dollar.
3. For European markets, a positive (negative) value for the FX rate indicates the depreciation (appreciation) of the local currrency against the US dollar.
Source: Bloomberg LP, Institute of International Finance (IIF), and Thomson Reuters.

European economies have trended downward, there has been a rise in Portuguese spreads as ministerial resignations raised concerns about the Portuguese government's ability to implement its bailout program **(Figure B)**. In general, emerging market CDS spreads have widened in recent months as investors are showing reduced appetite for emerging markets bonds **(Figure C)**.

Bond yields in the advanced countries have generally risen along with expectations that the Federal Reserve will soon tighten its monetary policy **(Figure D)**. Furthermore, a string of good economic news from the US since the announcement has strengthened the likelihood of imminent tightening.

Interest rates have increased across emerging East Asia as capital outflows from the region result in tighter liquidity conditions. While the initial increase was rather large, yields have since fallen somewhat **(Figure E)**. Foreign holdings of the region's local currency (LCY) government bonds have leveled off as foreign capital left the region following the rise in US interest rates. Foreign holdings of government bonds in Indonesia are the highest in the region at 31.9% **(Figure F)**.

One impact of the turmoil in global financial markets is that it has become harder and more expensive for companies to issue bonds. This is especially the case with foreign currency (FCY) bond issuance. After US$81 billion of issuance in the first 5 months of 2013, FCY bond issuance fell substantially to just US$7.5 billion in June and July. One particular corner of the FCY market that has been badly affected is the high-yield market, which is nearly at a standstill. This represents a major change from the situation at the beginning of the year when high-yield bonds in Asia were popular with global investors hunting for yield in a low-interest-rate environment. The change in the Federal Reserve's stance will likely make it more difficult for Asian companies to issue

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

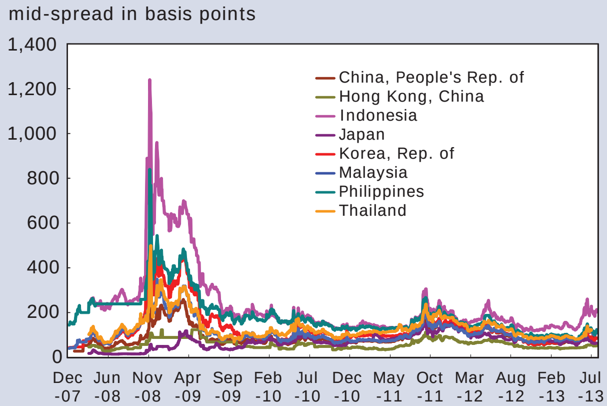


Figure B: Credit Default Swap Spreads for Select European Markets[a, b] (senior 5-year)

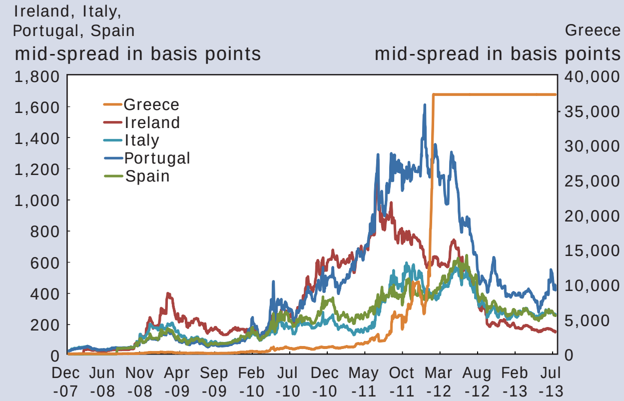


Figure C: US Equity Volatility and Emerging Market Sovereign Bond Spreads[b] (% per annum)

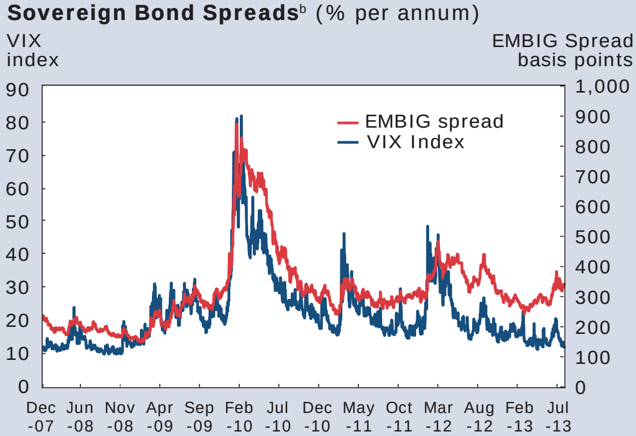


Figure D: 10-Year Government Bond Yields[b] (% per annum)

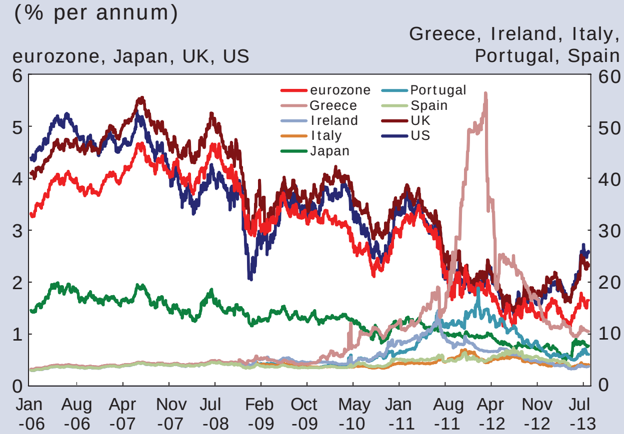


Figure E: JPMorgan EMBI Sovereign Stripped Spreads[a,b]

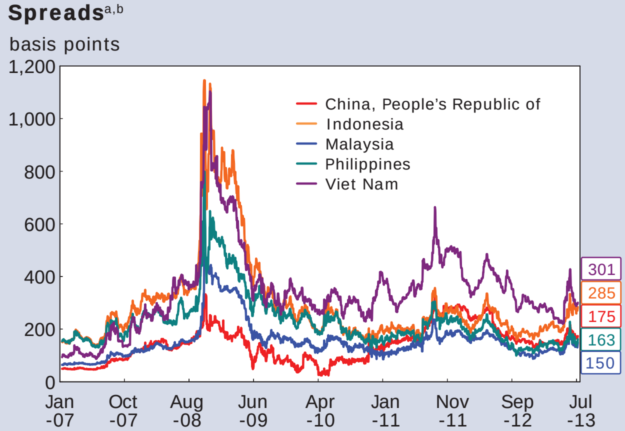
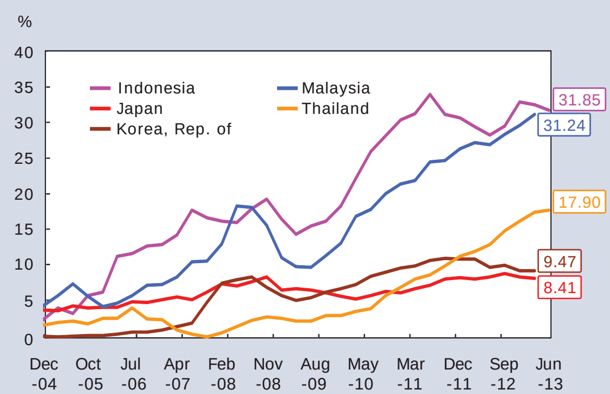


Figure F: Foreign Holdings of LCY Government Bonds in Select Asian Economies[c] (% of total)



EMBI = Emerging Markets Bond Index, EMBIG = Emerging Markets Bond Index Global, LCY = local currency, 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 end-July 2013.

[c] Data as of end-March 2013 except for Indonesia and Thailand as of end-June 2013.

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

non-investment grade bonds to fund their financing needs. The end of quantitative easing in the US may have less of an impact on the issuance of investment grade bonds and LCY bonds. The yields will be higher, but funding is still likely to be available.

The outflow of funds from the region also highlights the need for authorities to continue to promote more stable sources of funding. Promoting greater intra-Asian holdings of financial assets can help shield the region's financial markets from global financial volatility. However, underdeveloped financial markets combined with differing rules and regulations across economies have made it unduly difficult for the region's investors to make intra-regional investments. Instead, they prefer to park their funds in more liquid and developed financial markets. Collective efforts by the region's governments—such as the Asian Bond Markets Initiative (ABMI) and ASEAN+3 Bond Market Forum (ABMF)—can be further strengthened to facilitate greater intra-regional bond investment in emerging East Asia.

The recent sell-off in regional bond markets brings back memories of previous crises in emerging East Asia. However, financial systems in the region are more resilient this time around. One key difference is that the growing use of LCY bonds means that Asian financial markets are no longer plagued by the problem of currency mismatches. During the 1997/98 Asia financial crisis, currency depreciations meant that government and corporate financial conditions worsened as FCY-denominated liabilities grew. Today, with the vast proportion of debt denominated in LCY, there is less prevalence of currency mismatches. For most economies, LCY bonds account for more than 90% of total bonds. However, in Indonesia and the Philippines, FCY-denominated bonds account for more than 30% of total bonds outstanding.

In spite of the reduced risk from currency mismatches, other risks to the region's LCY bond markets have increased:

The region's interest rates could rise further once the Federal Reserve starts to tighten policy. So far, the rise in US interest rates has been driven by anticipation of the end of quantitative easing operations. When the Federal Reserve actually starts reducing its purchase of securities, US interest rates, which remain at historically low levels, could rise further and lead to another round of increases in bond yields for the region's markets.

Growth momentum in the region has been weakening. Most of the region's economies have reported slower growth in 2Q13. The PRC's growth has been revised downward as it seeks to slow the rapid pace of credit expansion, especially in the shadow banking sector. This has dampened imports from other regional economies for which the PRC is a large and important export market. Other economies in the region are also facing tighter liquidity conditions and higher interest rates as foreign inflows have dried up. Growth in the region had been fueled by the easy availability of credit, which will now become more restricted. Rising levels of corporate indebtedness also suggest that the impact of higher interest rates on the economy may be intensifying.

Continued outflows of funds could result in vulnerable economies raising interest rates to prop up currencies. The Asian markets most affected by the recent sell-off have been India and Indonesia. Foreign investors are concerned about rising current account deficits and weak fiscal conditions in both economies. Other economies facing deteriorating external and fiscal conditions could also face a withdrawal of funds by foreign investors. So far, most policymakers have been allowing their currencies to slide without much intervention, which has helped them to preserve their foreign exchange reserves. Authorities should be cautious about raising interest rates to defend their currencies. It may not have the impact of restoring investor confidence and encouraging inflows, and would likely worsen growth prospects.

Bond Market Developments in the Second Quarter of 2013

Size and Composition

Total bonds outstanding in emerging East Asian bond markets grew 1.7% q-o-q and 11.9% y-o-y to reach US$6.8 trillion at the end of 2Q13, driven mainly by growth in the region's corporate sector.[3]

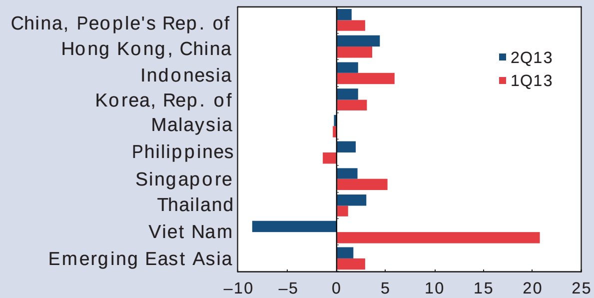
The quarter-on-quarter (q-o-q) growth rate for emerging East Asian local currency (LCY) bond markets in 2Q13 was 1.7%, down significantly from 2.9% growth in 1Q13 **(Figure 1a)**. The region's most rapidly growing markets on a q-o-q basis in 2Q13 were Hong Kong, China (4.4%); Thailand (3.0%); Indonesia and the Republic of Korea (2.2% each); and Singapore (2.1%) **(Table 1)**. The growth of the bond market in Hong Kong, China was driven by Exchange Fund Bills (EFBs)—one of the principal monetary policy tools of the Hong Kong Monetary Authority (HKMA)—and, to a lesser extent, by growth of HKSAR bonds.[4] In the Thai bond market, growth was driven primarily by a 4.3% q-o-q expansion in treasury bonds, which is in line with expectations that the budget deficit for the current fiscal year (ending November 2013) will rise from the official target of 2.5% of gross domestic product (GDP) to 3.0% or higher.

The Indonesian bond market's growth in 2Q13 was driven mainly by 4.5% q-o-q growth in its corporate bond market. The 1.7% q-o-q rate of growth in Indonesian government bonds in 2Q13 will likely be sustained, or even increase, in 2H13 if the government is to meet its IDR231.8 trillion (net) issuance target for the year, which is necessary to fund a target budget deficit equivalent to 2.4% of GDP. Meanwhile, the growth of the bond market in the Republic of Korea in 2Q13 was well supported by expansion in both the government and corporate sectors.

[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.

[4] HKSAR bonds refer to bonds issued by the Government of the Hong Kong Special Administrative Region.

Figure 1a: Growth of LCY Bond Markets in 1Q13 and 2Q13 (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 an LCY base and do not include currency effects.
3. Emerging East Asia growth figures are based on end-June 2013 currency exchange rates and do not include currency effects.
4. For the Philippines, 2Q13 government bonds outstanding data carried over from May 2013. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates.

Sources: 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).

Bucking the regional trend, Malaysia experienced a modest 0.2% q-o-q decline in its domestic bond market in 2Q13, reflecting a dip in bill issuance by Bank Negara Malaysia (BNM) as it has reduced the magnitude of its sterilization activities this year. Furthermore, Malaysian corporate bonds outstanding, many of which come from government-owned companies, fell slightly by 0.3% q-o-q. On the other hand, the stock of Malaysian treasury bonds grew 2.8% q-o-q and 10.1% year-on-year (y-o-y), reflecting expectations that the budget deficit will reach 4.0% of GDP this year after having reached 4.5% in 2012. The other market to experience a decline in its q-o-q growth rate in 2Q13 was Viet Nam, where the size of government bonds outstanding fell 8.1% in 2Q13. Viet Nam had been the most rapidly growing government bond market in most recent quarters; in fact, it was still the most rapidly growing bond market on a y-o-y basis in 2Q13. Viet Nam's government bonds outstanding grew 34.3% y-o-y in 2Q13, while

Table 1: Size and Composition of LCY Bond Markets

	2Q12		1Q13		2Q13		Growth Rate (LCY-base %)				Growth Rate (US$-base %)			
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	2Q12		2Q13		2Q12		2Q13	
							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	3,469	100.0	3,937	100.0	4,045	100.0	1.5	6.9	1.5	12.6	0.6	8.7	2.7	16.6
Government	2,580	74.4	2,827	71.8	2,875	71.1	1.1	3.9	0.5	7.6	0.2	5.7	1.7	11.4
Corporate	889	25.6	1,110	28.2	1,170	28.9	2.6	16.5	4.2	27.2	1.7	18.5	5.4	31.7
Hong Kong, China														
Total	173	100.0	184	100.0	192	100.0	1.1	3.5	4.4	10.7	1.2	3.8	4.5	10.7
Government	93	53.6	100	54.7	107	56.0	2.1	5.3	7.0	15.7	2.2	5.6	7.1	15.7
Corporate	80	46.4	83	45.3	84	44.0	(0.1)	1.5	1.3	4.9	0.1	1.9	1.4	4.9
Indonesia														
Total	111	100.0	119	100.0	118	100.0	3.6	3.8	2.2	12.4	0.5	(5.6)	(0.5)	6.0
Government	94	84.2	98	83.0	97	82.6	3.0	0.5	1.7	10.3	(0.2)	(8.6)	(1.0)	4.0
Corporate	18	15.8	20	17.0	21	17.4	7.4	25.9	4.5	23.6	4.1	14.5	1.7	16.5
Korea, Rep. of														
Total	1,302	100.0	1,453	100.0	1,445	100.0	2.1	9.7	2.2	10.6	1.0	2.2	(0.5)	11.0
Government	525	40.3	560	38.6	558	38.6	(0.05)	3.0	2.3	6.0	(1.1)	(4.0)	(0.4)	6.3
Corporate	777	59.7	893	61.4	887	61.4	3.6	14.7	2.1	13.8	2.4	6.9	(0.6)	14.1
Malaysia														
Total	294	100.0	322	100.0	314	100.0	2.3	15.0	(0.2)	6.4	(1.3)	9.3	(2.3)	6.9
Government	176	59.8	190	59.1	186	59.1	1.6	15.3	(0.2)	5.1	(2.0)	9.6	(2.3)	5.7
Corporate	118	40.2	132	40.9	128	40.9	3.2	14.6	(0.3)	8.2	(0.4)	9.0	(2.4)	8.8
Philippines														
Total	87	100.0	98	100.0	95	100.0	2.3	11.8	1.9	12.1	4.2	15.1	(3.5)	9.5
Government	75	86.4	85	86.7	82	86.8	1.0	10.8	2.0	12.5	2.9	14.0	(3.5)	9.9
Corporate	12	13.6	13	13.3	13	13.2	11.5	18.7	1.7	9.3	13.5	22.2	(3.8)	6.7
Singapore														
Total	209	100.0	239	100.0	239	100.0	2.0	11.6	2.1	14.7	1.4	8.3	(0.1)	14.5
Government	129	61.7	148	62.0	148	61.8	0.8	13.3	1.9	14.9	0.2	10.1	(0.3)	14.6
Corporate	80	38.3	91	38.0	91	38.2	3.9	8.8	2.5	14.5	3.3	5.6	0.3	14.2
Thailand														
Total	254	100.0	295	100.0	286	100.0	4.1	17.7	3.0	10.6	1.7	14.6	(2.9)	12.5
Government	204	80.3	232	78.6	226	78.9	4.8	17.9	3.4	8.7	2.3	14.8	(2.6)	10.5
Corporate	50	19.7	63	21.4	60	21.1	1.6	16.9	1.8	18.5	(0.8)	13.9	(4.1)	20.4
Viet Nam														
Total	22	100.0	30	100.0	27	100.0	10.5	28.5	(8.6)	26.8	10.2	26.6	(9.8)	25.0
Government	20	91.6	29	96.5	26	97.0	12.6	33.5	(8.1)	34.3	12.3	31.5	(9.3)	32.4
Corporate	2	8.4	1	3.5	0.8	3.0	(7.9)	(8.7)	(22.5)	(55.5)	(8.2)	(10.1)	(23.5)	(56.2)
Emerging East Asia (EEA)														
Total	5,921	100.0	6,676	100.0	6,761	100.0	1.8	8.4	1.7	11.9	0.8	7.2	1.3	14.2
Government	3,896	65.8	4,270	64.0	4,306	63.7	1.3	5.4	1.1	8.1	0.2	4.9	0.8	10.5
Corporate	2,026	34.2	2,406	36.0	2,455	36.3	3.0	14.8	2.9	19.2	1.9	11.8	2.1	21.2
EEA excl. PRC														
Total	2,452	100.0	2,739	100.0	2,716	100.0	2.4	10.7	2.0	10.7	1.0	5.0	(0.8)	10.8
Government	1,315	53.6	1,444	52.7	1,431	52.7	1.6	8.5	2.2	8.9	0.1	3.3	(0.9)	8.8
Corporate	1,137	46.4	1,296	47.3	1,285	47.3	3.3	13.4	1.8	12.8	2.0	7.1	(0.8)	13.0
Japan														
Total	12,460	100.0	10,819	100.0	10,408	100.0	0.8	3.0	1.2	3.8	4.7	4.0	(3.8)	(16.5)
Government	11,369	91.2	9,927	91.8	9,567	91.9	1.1	3.5	1.4	4.6	5.0	4.5	(3.6)	(15.8)
Corporate	1,092	8.8	891	8.2	840	8.1	(1.9)	(1.9)	(0.8)	(4.4)	1.8	(1.0)	(5.7)	(23.0)
Memo Item: CNH														
Total	49	100.0	52	100.0	57	100.0	16.9	120.4	7.6	13.1	15.9	124.2	8.9	17.1
Government	12	23.9	12	23.2	14	25.2	59.1	146.7	17.2	19.6	57.7	150.9	18.6	23.8
Corporate	37	76.1	40	76.8	43	74.8	8.0	113.3	4.8	11.0	7.0	117.0	6.0	14.9

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

Notes:

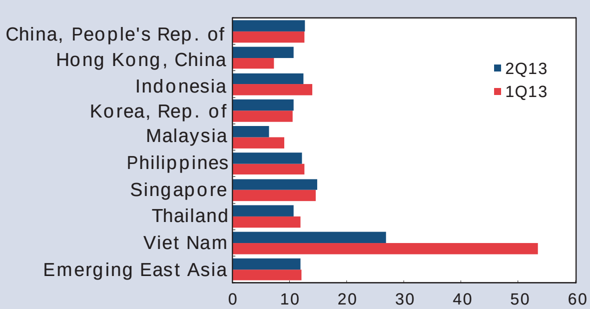
1. For the Philippines, 2Q13 government bonds outstanding data carried over from May 2013. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates.
2. Corporate bonds include issues by financial institutions.
3. CNH bonds are renminbi-denominated bonds issued in Hong Kong, China. Data includes certificates of deposits 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 based on end-June 2013 currency exchange rates and do not include currency effects.

Sources: 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).

its overall market expanded 26.8%. Meanwhile, Viet Nam's tiny corporate bond market, which is only US$0.8 billion in size, shrank 22.5% q-o-q and 55.5% y-o-y in 2Q13.

After Viet Nam, the next four most rapidly growing bond markets on a y-o-y basis in 2Q13 were Singapore, the People's Republic of China (PRC), Indonesia, and the Philippines **(Figure 1b)**. Singapore's government and corporate sector bond markets experienced almost identical y-o-y rates of growth over the last year at 14.9% and 14.5%, respectively. The y-o-y growth in Singapore's government bond market was driven mainly by issuance of Monetary Authority of Singapore (MAS) bills, rather than issuance by the government itself. The PRC bond market's 12.6% y-o-y growth rate was driven primarily by its corporate sector. This was also the case in Indonesia where rapid y-o-y growth in the corporate sector nearly matched that of the PRC (27.2% vs. 23.6%), although the Indonesian LCY corporate bond sector is far smaller than that of the PRC. Meanwhile, Philippine bond market growth of 12.1% y-o-y was driven by both its government (12.5%) and corporate (9.3%) sectors.

Figure 1b: Growth of LCY Bond Markets in 1Q13 and 2Q13 (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 figures are based on end-June 2013 currency exchange rates and do not include currency effects.
4. For the Philippines, 2Q13 government bonds outstanding data carried over from May 2013. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates.

Sources: 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).

Total government bonds outstanding in emerging East Asia grew 1.1% q-o-q in 2Q13, reflecting slow or even negative growth in most government bond markets.

The two most rapidly growing government sector bond markets on a q-o-q basis in 2Q13 were those of Hong Kong, China and Thailand. Government sector bonds in Hong Kong, China grew 7.0% q-o-q due to a 6.5% rise in EFBs issued by HKMA and an 18.4% increase in HKSAR bonds. EFBs constitute the largest share of securities in Hong Kong, China's government bond sector, accounting for 81.8% of total government securities at the end of 2Q13. The longer-dated Exchange Fund Notes (EFNs) are a smaller market segment by comparison, accounting for only 8.2% of the total at the end of 2Q13. The still substantial volumes of EFBs and EFNs reflect their important role in the operation of HKMA's Exchange Fund, which maintains the Hong Kong dollars exchange rate within its target trading band of HK$7.75–HK$7.85 against the US dollar.

Thai government sector bonds outstanding rose 3.4% q-o-q in 2Q13, driven by 4.3% growth in treasury bonds and 4.9% growth in central bank bonds. Central bank bills, which account for 24.2% of government sector bonds outstanding, were broadly unchanged. The q-o-q growth rate for treasury bonds outstanding is likely to maintain its pace, or even, accelerate in coming quarters given the government's recent announcements of increased spending for infrastructure and rural development. These proposals, which will require a significant increase in government spending and greater private sector participation, seek to raise Thailand's economic growth in 2013 from 4.0% to 5.0%.

The next most rapidly growing government bond sectors were in the Republic of Korea, the Philippines, and Singapore. Government bonds in the Republic of Korea expanded 2.3% q-o-q, mainly due to a 3.4% increase in treasury bonds outstanding. Treasury bonds amounted to US$362 billion and accounted for 64.9% of total government sector bonds at the end of 2Q13.

Preliminary GDP estimates from The Bank of Korea indicate economic growth of 1.1% q-o-q in April–June following a 0.8% expansion in January–March. The slight pick-up in GDP growth reflects increased spending by the government, with the likelihood that parliament will soon approve plans to accelerate spending further in the remaining months of the year.

Philippine government bonds rose 2.0% q-o-q in 2Q13, reflecting rapid growth in both Philippine treasury bonds and bills. The government has set a target budget deficit of 2.6% of GDP in 2013, with hopes to reduce this to 2.0% in 2014, although plans for increased infrastructure investment may lead to a continuation of the current pattern of modest growth in the LCY government bond market.

Finally, Singapore's 1.9% q-o-q increase in government bonds outstanding in 2Q13 reflects a 14.0% decline in government bills outstanding that was more than offset by a 33.3% increase in the stock of MAS bills outstanding, which have grown so rapidly since they were first introduced in 2011 that at US$39 billion they are almost equal to the US$41 billion stock of government bills. MAS's issuance of bills is based on internal estimates of sterilization requirements, which can be driven by factors such as capital flows in and out of the region.

The LCY corporate bond market in emerging East Asia grew 2.9% q-o-q in 2Q13, down significantly from 4.7% growth in 1Q13.

The two most rapidly growing corporate bond markets in emerging East Asia in 2Q13 on a q-o-q basis were those of Indonesia and the PRC, which grew 4.5% and 4.2%, respectively. These two countries provide an interesting combination of emerging East Asia's largest LCY corporate bond market, the PRC (US$1.2 trillion), and one of its smallest, Indonesia (US$21 billion), competing for the title of the region's most rapidly growing. Both corporate bond markets are part of rapidly expanding economies whose banks may be constrained by the imposition of more stringent BASEL III capital adequacy requirements in coming years. Meanwhile, the corporate sectors in both economies have become active issuers in the foreign currency (FCY) bond market as well. At the end of 2Q13, the PRC's FCY corporate bonds outstanding, issued by both financial and non-financial institutions, stood at US$144.2 billion. Meanwhile, Indonesia's FCY corporate bonds outstanding reached US$28.5 billion, exceeding Malaysian (US$26.6 billion) and Thai (US$14.8 billion) FCY corporate bonds.

The growth drivers in the PRC corporate bond market in 2Q13 were local corporate bonds and medium-term notes (MTNs), which grew 6.4% and 3.3% q-o-q, respectively. Commercial bank bonds, which grew 1.9% q-o-q, are predominantly issued in the form of subordinated notes and are being used by banks to bolster their capital bases as Basel III capital adequacy requirements are being implemented in the PRC.

In Indonesia, a total of 30 bond series were issued by 16 corporate entities in 2Q13. Most of the bonds issued in 2Q13 carried maturities of between 3 years and 5 years. The new corporate bond issues in 2Q13 were all conventional bonds except for one of each of the following types of issues: subordinated bond, *sukuk* (Islamic bond), and *sukuk mudharabah* (Islamic profit-sharing bond). Corporate bonds issued in recent months carried coupons ranging from 6.75% to 9.25%. The largest corporate issuer in Indonesia in 2Q13 remained PLN, the state-owned power company, while most of the other larger corporate bond issuers were financial institutions such as Indonesia Eximbank, Astra Sedaya Finance, and Bank Tabungan Negara.

Emerging East Asia's third and fourth most rapidly growing corporate bond markets on a q-o-q basis in 2Q13 were those of Singapore (2.5%) and the Republic of Korea (2.1%). Singapore's top LCY corporate bond issuers at the end of 2Q13 remained real estate and banking firms. Capital Land was the largest issuer in Singapore in 2Q13, issuing a 7-year bond for SGD1.3 billion at a coupon of 1.85%. Singapore's bond market was once again a regional leader in 2Q13 in terms of product diversity with two perpetual bonds issuances: (i) GLL IHT, a financial and risk management services company, issuing a SGD200 million bond carrying a 4.7% coupon; and (ii) Tiger Airways issuing a SGD220 million carrying a 2.0% coupon. Singapore's market also saw some relatively high-yield issues, including a SGD300 million 10-year bond from ABJA Investment at a coupon of 4.95% and a SGD160 million 4-year bond at a coupon of 7.13%.

The largest corporate issuers in the Republic of Korea remain government-owned companies such as Korea Land & Housing, Korea Deposit Insurance, and Industrial Bank of Korea. Some of the largest corporate bond issues in 2Q13 included Posco's KRW800 billion 30-year bond offering a coupon of 4.3%, Woori Bank's KRW500 billion 30-year bond at 4.4%, Korea Land & Housing's KRW400 billion 3-year bond at 2.83%, and SK Telecom's KRW400 billion 60-year bond at 4.21%.

Malaysia's LCY corporate bonds outstanding edged slightly lower by 0.3% q-o-q in 2Q13. About 67% of total LCY corporate bonds outstanding were *sukuk*, while conventional bonds accounted for about 33%. Among Islamic financial instruments, Islamic MTNs accounted for 74.0% of *sukuk* and 49.5% of total corporate bonds outstanding. Meanwhile, total LCY corporate bond issuance in 2Q13 fell 29.1% y-o-y and 29.3% q-o-q, due to a decline in *sukuk* issuance, particularly Islamic commercial paper and Islamic MTNs. Of the total issuance in 2Q13, conventional bonds accounted for 58.3%, while *sukuk* accounted for 41.7% of the total. Bond issuance from corporates was heavily concentrated in a handful of entities in 2Q13, as the top 30 issuers accounted for 93.0% of total issuance.

CNH Market Trends[5]

Market appetite for CNH bonds improved in 1H13 after it had fallen in 2H12 amid lowered expectations for renminbi appreciation. Total CNH issuance in 1H13 amounted to CNH114 billion, up from CNH77 billion in 2H12 but still lower than 1H12's CNH142 billion. The largest component of CNH issuance in 1H13 remained certificates of deposit, with only CNH43 billion issued as bonds. Improving demand in 1H13 was also evident in the level of renminbi deposits in Hong Kong, China, which rose to CNH698 billion in June from CNH602 billion in December 2012.

As a result of the increase in issuance in 2013, CNH bonds outstanding rose to CNH288 billion at end-June from CNH216 billion at end-December 2012. Issuance was boosted in part by a CNH13 billion multi-tranche issue by the PRC government on 26 June. This issuance was particularly remarkable because of the inclusion of a 30-year tranche, the longest CNH tenor to date.

Market sentiment changed in the latter half of 2Q13, due to concern over the possible tapering of the US Federal Reserve's quantitative easing program. Liquidity was also hampered by the Shanghai Interbank Offered Rate (SHIBOR)[6] shock event in June. Both events contributed to rising yields that prompted a reduction in bond issuance. In addition, the PRC's expansion of the QFII program provided an alternative to renminbi-denominated investments other than CNH bonds. Meanwhile, turnover for CNH bonds fell to CNH36 billion in July from CNH48 billion in June and CNH56 billion in May. CNH deposits also fell slightly to CNH698 billion in June from CNH698.5 billion in May.

Ratio of Bonds Outstanding

The ratio of LCY bonds outstanding to GDP in emerging East Asia fell slightly to 54.3% in 2Q13 from 54.7% in 1Q13.

The ratio of LCY bonds outstanding to GDP in emerging East Asia fell slightly to 54.3% in 2Q13 from 54.7% in 1Q13. Nevertheless, at 54.3%, this ratio was still higher than it was at the end of 2Q12 (52.7%) **(Table 2)**.

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

[6] The SHIBOR shock event was triggered when banks' liquidity requirements rose in response to withdrawals in preparation for the Dragon Boat holiday as well as the maturation of wealth products. While market expectations were for the PBOC to intervene by provide additional liquidity, it instead issued central bank bills on 18 June.

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

	2Q12	1Q13	2Q13
China, People's Rep. of			
Total	44.6	46.2	46.0
Government	33.1	33.1	32.7
Corporate	11.4	13.0	13.3
Hong Kong, China			
Total	68.1	69.2	71.5
Government	36.5	37.8	40.0
Corporate	31.6	31.4	31.5
Indonesia			
Total	13.3	13.7	13.8
Government	11.2	11.4	11.4
Corporate	2.1	2.3	2.4
Korea, Rep. of			
Total	118.4	126.2	125.5
Government	47.7	48.7	48.5
Corporate	70.7	77.5	77.0
Malaysia			
Total	102.5	105.5	105.3
Government	61.3	62.4	62.2
Corporate	41.2	43.1	43.0
Philippines			
Total	36.1	37.1	37.1
Government	31.2	32.2	32.2
Corporate	4.9	4.9	4.9
Singapore			
Total	77.6	85.6	85.5
Government	47.9	53.1	52.9
Corporate	29.7	32.6	32.7
Thailand			
Total	74.7	74.5	75.8
Government	59.9	58.6	59.8
Corporate	14.7	15.9	16.0
Viet Nam			
Total	16.8	20.5	14.8
Government	15.4	19.8	14.4
Corporate	1.4	0.7	0.4
Emerging East Asia			
Total	52.7	54.7	54.3
Government	34.7	35.0	34.6
Corporate	18.0	19.7	19.7
Japan			
Total	208.6	214.8	217.1
Government	190.3	197.1	199.5
Corporate	18.3	17.7	17.5

GDP = gross domestic product, LCY = local currency.
Notes:
1. Data for GDP is from CEIC. 2Q13 GDP figures carried over from 1Q13 for the Republic of Korea and Singapore.
2. For the Philippines, 2Q13 government bonds outstanding data carried over from May 2013. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates.

Sources: 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).

The decline in the ratio of bonds to GDP between 1Q13 and 2Q13 resulted from a drop in the ratio of government bonds to GDP from 35.0% to 34.6%. The ratio of corporate sector bonds to GDP in 2Q13 remained at the same level (19.7%) where it stood at the end of 1Q13 and rose markedly from 18.0% at the end of 2Q12.

The ratio of government bonds to GDP fell in all of the region's markets in 2Q13 except for Hong Kong, China and Thailand. The ratio of government bonds to GDP rose in Hong Kong, China by over 2 percentage points between 1Q13 and 2Q13 from 37.8 to 40.0, while rising from 58.6 to 59.8 in Thailand. In Indonesia and the Philippines, the ratio of government bonds to GDP remained unchanged at 11.4 and 32.2, respectively in 2Q13.

The ratio of corporate bonds to GDP rose in 2Q13 in five of the region's markets (the PRC; Hong Kong, China; Indonesia; Singapore; and Thailand) and fell in the remaining four (the Republic of Korea, Malaysia, the Philippines, and Viet Nam). However, the collective size of the markets that saw an increase in the ratio of corporate bonds to GDP, especially the PRC market, was enough to offset declining ratios elsewhere in the region.

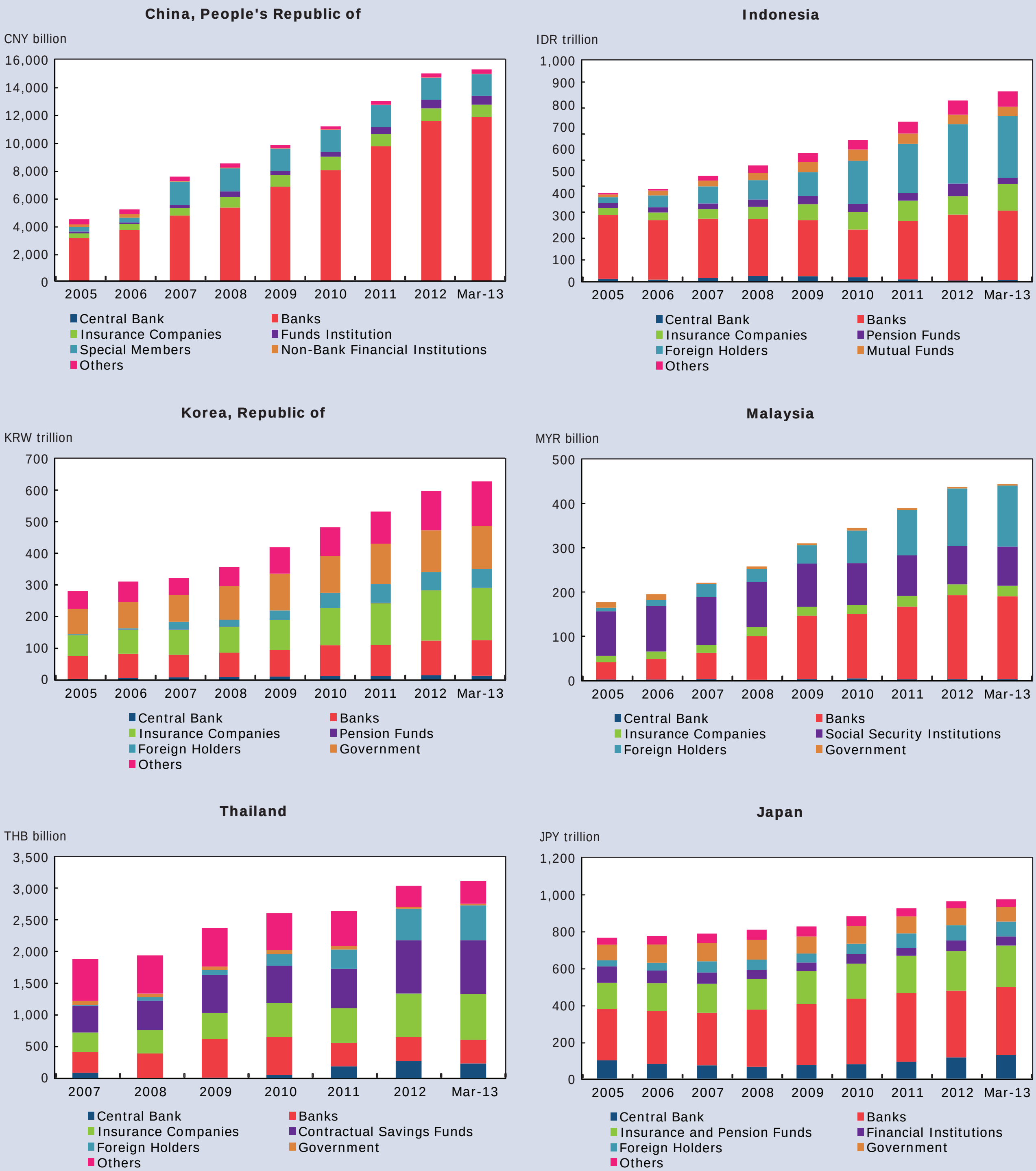
Investor Profiles

One of the most interesting developments in emerging East Asian LCY bond markets in recent years has been the role of institutional investors such as insurance companies and pension funds, though their role differs considerably from market to market.

Figure 2 illustrates changes in investor holdings (expressed in the currencies of individual markets) in recent years through end-March. Some of the leading themes in each market are discussed below.

In the PRC, commercial banks held 77% of government bonds at end-March, while insurance companies and other institutional investors remained a minimal presence in this market.

Figure 2: Investor Holdings



Note: For the People's Republic of China, data include treasury bonds and policy bank bonds. For Indonesia, data include treasury bills and treasury bonds. For the Republic of Korea, data include government and public bonds. For Malaysia, data include Malaysian Government Securities (MGSs) and Government Investment Issues (GIIs). For Thailand, data include treasury bills and government bonds. For Japan, data include treasury discount bills, central government securities, and Fiscal Investment and Loan Program (FILP) bonds.
Source: *AsianBondsOnline*.

Insurance company holdings of government bonds amounted to only 5.8% of the total at end-March, while the holdings of funds institutions were slightly less at 4.1%. These small shares are the result of the PRC's insurance and funds management industries still being in the early stages of development. For example, the insurance industry's assets totaled around CNY7.7 trillion at end-March, compared with CNY141.3 trillion of assets in the banking system. Furthermore, yields on government bonds are relatively low; although government sector bonds provide the highly desirable feature of safety, institutional investors must also seek yield. One such place where they look for yield in the PRC is the corporate bond market. At end-March, insurance companies held 20.9% of total corporate bonds and funds institutions held 24.3%, thereby resulting in institutional investors collectively accounting for 45.2% of the PRC's corporate bonds.

Banks in the PRC are the largest holders of government bonds and in recent years they have steadily increased their share of the total to reach 77.6% at end-March. Furthermore, the share of "special members" has declined steadily since 2006 to 10.3% at end-March. Special members, an important class of government bond holders in the PRC, include the People's Bank of China (PBOC), Ministry of Finance, policy banks, China Government Securities Depository Trust and Clearing Company, and China Securities Depository and Clearing Corporation.

While banks and foreign investors were the two largest holders of Indonesian government bonds at end-March, insurance companies nearly doubled their share of the total from 8.1% in 2005 to 14.0% at end-March.

Since 2005, insurance companies in Indonesia have nearly quadrupled their holdings of government bonds in nominal rupiah terms, while increasing their share of the total to 14.0% from 8.1%. Mutual funds have reduced their holdings in nominal rupiah terms since 2010, while their share of the total fell to 4.9% by end-March. The volume of government bonds held by Indonesian pension funds rose steadily in recent years through the end of 2012, but appears to have fallen by almost one-half since then.

The two largest classes of investors in Indonesian government bonds are banks and foreign investors. Banks have modestly increased their holdings from IDR290 trillion in 2005 to around IDR315 trillion at end-March, accounting for 36.7% of the total, while over the same period foreign investors have increased their holdings by nearly a factor of 10 to reach a share of 32.6%.

The insurance industry's share of government bonds in the Republic of Korea has grown faster than that of any other investor class, resulting in the insurance industry's emergence as the largest holder of Korean government bonds with 26.1% of the total at end-March.

The insurance industry in the Republic of Korea has rapidly increased its holdings of government bonds since 2005, resulting in its share of the total rising from 23.2% in 2005 to 26.1% at end-March. (Insurance companies in the Republic of Korea also invest in corporate bonds and their holdings accounted for 33.0% of total corporate bonds at end-March.) Meanwhile, funds for the government's social security program are included in the category labeled as "Government" in Figure 2, which accounted for 21.5% of total government bondholdings.

Korean banks have increased their nominal won holdings of government bonds every year since 2005, but their share of the total only amounted to 17.9% at end-March. With the exception of 2008, foreign investors have continued to increase their holdings every year since 2005, but their share of the total market has fallen slightly from a high of 11.2% in 2011 to 9.5% at end-March.

Social security institutions' holdings of Malaysian government bonds have fallen dramatically since 2005 both in nominal terms and as a percentage of the total, with the latter declining to 19.9% at end-March.

The most dramatic feature of Malaysian government bond holdings in recent years has been the falloff in holdings of social security institutions. Their holdings have fallen in nominal terms from MYR100 billion in 2005 to MYR88 billion at end-March, while declining as a share of the total from 57.0% to 19.9% over the same period. Insurance companies have increased their holdings by roughly 60% since 2005, but their share of the total nevertheless has fallen from 8.4% to 5.3%.

On the other hand, insurance companies and the Employees Provident Fund are prominent investors in corporate bonds. Taken together, these two investor groups held around 40% of corporate bonds at the end of 2012.

The two major gainers in terms of Malaysian government bond holdings have been banks and foreign investors. Banks have increased their holdings by a factor of approximately four and one-half since 2005, and increased their share of the total from 22.0% in 2005 to 42.3% at end-March. Meanwhile, foreign investors increased their share of the total from only 4.5% to 31.2% over the same period.

Thailand stands out as the LCY government bond market where insurance companies and contractual savings funds are the two most rapidly growing investor classes in their market.

Insurance companies and contractual savings institutions in Thailand have doubled their holdings of government bonds in nominal terms, increasing their shares of the total from 16.3% to 23.1% and from 22.4% to 27.4%, respectively, between end-2007 and end-March.

Institutional investors, however, are relatively small investors in the Thai corporate bond market. Mutual funds, insurance companies, and contractual savings institutions accounted for only about 9%, 8%, and 6%, respectively, of Thai corporate bonds at the end of 2012. Individuals, on the other hand, held 51% of Thai corporate bonds at the end of 2012.

Foreign investors have become eager participants in the Thai government bond market, raising their share of total holdings from negligible levels in 2007 to 17.6% at end-March. Holdings of Thai government bonds by banks doubled between 2007 and 2009, before nearly returning to its 2007 level in 2012, which resulted in a reduction of their share of total holdings from 25.7% in 2009 to 11.9% in 2012.

The growth sectors for Japanese government bonds in terms of holdings have been the insurance industry and, to a lesser extent, foreign investors.

Holdings of Japanese government bonds by insurance companies have risen by almost 60% since 2005, resulting in their share increasing from 18.5% in 2005 to 23.1% at end-March. The share held by foreigners rose modestly from 4.4% in 2008 to 8.4% at end-March. Holdings by the Bank of Japan (BOJ) fell from 13.0% of the total in 2005 to a low of 8.0% in 2008, before rising dramatically over the last 2 years and resulting in BOJ's share of total holdings at 13.2% at end-March. Japanese banks are the largest holders of Japanese government bonds, with nominal holdings that rose steadily between 2005 and 2011 before leveling off in a range of JPY360 trillion–JPY370 trillion in recent years, resulting in a 37.9% share of total holdings at end-March.

Issuance

LCY bond issuance in 2Q13 totaled US$827 billion, a 4.0% q-o-q increase over 1Q13 that was driven by a 26.8% increase in issuance by central governments and agencies.

LCY bond issuance in 2Q13 totaled US$827 billion, a 4.0% q-o-q increase over 1Q13. This was driven by a 26.8% q-o-q increase in issuance by central governments and agencies, while issuance by central banks rose a more modest 5.1%. Corporate sector issuance experienced a sharp 20.1% q-o-q decline, but still amounted to US$168 billion **(Table 3)**.

Table 3: LCY-Denominated Bond Issuance (gross)

	2Q12		1Q13		2Q13		Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
							2Q13		2Q13	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)										
Total	248	100.0	205	100.0	240	100.0	15.8	(6.2)	17.2	(2.9)
Government	173	70.0	117	56.8	194	80.9	65.0	8.4	66.9	12.2
Central Bank	0	0.0	0	0.0	19	7.7	–	–	–	–
Treasury and Other Govt.	173	70.0	117	56.8	176	73.1	49.2	(1.9)	51.0	1.5
Corporate	74	30.0	89	43.2	46	19.1	(48.8)	(40.3)	(48.2)	(38.2)
Hong Kong, China										
Total	228	100.0	231	100.0	220	100.0	(4.8)	(3.5)	(4.7)	(3.5)
Government	219	96.0	223	96.6	212	96.1	(5.3)	(3.4)	(5.2)	(3.4)
Central Bank	217	95.2	222	96.2	210	95.3	(5.7)	(3.3)	(5.6)	(3.3)
Treasury and Other Govt.	2	0.8	1	0.4	2	0.8	85.7	(13.3)	85.9	(13.3)
Corporate	9	4.0	8	3.4	9	3.9	10.6	(5.3)	10.7	(5.3)
Indonesia										
Total	8	100.0	12	100.0	9	100.0	(23.7)	7.6	(25.8)	1.4
Government	6	68.8	10	86.8	7	77.2	(32.1)	20.8	(34.0)	13.9
Central Bank	2	18.2	3	25.8	2	22.2	(34.2)	31.1	(36.0)	23.7
Treasury and Other Govt.	4	50.5	7	61.0	5	55.0	(31.3)	17.1	(33.1)	10.4
Corporate	3	31.2	2	13.2	2	22.8	31.5	(21.6)	28.0	(26.1)
Korea, Rep. of										
Total	144	100.0	148	100.0	146	100.0	2.0	1.4	(0.7)	1.7
Government	58	40.5	60	40.4	67	45.6	15.1	14.2	12.0	14.6
Central Bank	37	25.8	39	26.3	39	26.7	3.8	5.3	1.0	5.6
Treasury and Other Govt.	21	14.7	21	14.1	28	18.8	36.1	29.9	32.4	30.3
Corporate	86	59.5	88	59.6	80	54.4	(6.9)	(7.4)	(9.4)	(7.1)
Malaysia										
Total	41	100.0	43	100.0	39	100.0	(8.8)	(6.7)	(10.8)	(6.2)
Government	32	77.7	34	78.1	32	83.0	(3.1)	(0.2)	(5.1)	0.3
Central Bank	23	55.8	25	57.9	24	61.7	(2.9)	3.1	(5.0)	3.6
Treasury and Other Govt.	9	21.9	9	20.2	8	21.4	(3.6)	(8.8)	(5.7)	(8.3)
Corporate	9	22.3	9	21.9	7	17.0	(29.3)	(29.1)	(30.8)	(28.7)
Philippines										
Total	5	100.0	5	100.0	3	100.0	(37.4)	(34.8)	(40.7)	(36.3)
Government	3	64.2	5	90.9	3	89.6	(38.3)	(9.1)	(41.6)	(11.2)
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	3	64.2	5	90.9	3	89.6	(38.3)	(9.1)	(41.6)	(11.2)
Corporate	2	35.8	0.5	9.1	0.3	10.4	(28.2)	(81.1)	(32.1)	(81.5)
Singapore										
Total	84	100.0	75	100.0	88	100.0	19.8	5.7	17.2	5.5
Government	79	94.7	72	95.6	85	96.6	21.1	7.9	18.5	7.7
Central Bank	32	38.2	38	50.4	56	64.1	52.3	77.2	49.0	76.8
Treasury and Other Govt.	47	56.4	34	45.2	29	32.5	(13.8)	(39.1)	(15.7)	(39.2)
Corporate	4	5.3	3	4.4	3	3.4	(8.3)	(32.9)	(10.3)	(33.1)
Thailand										
Total	83	100.0	76	100.0	79	100.0	10.4	(6.9)	4.0	(5.3)
Government	74	89.3	63	82.9	57	72.7	(3.2)	(24.2)	(8.8)	(23.0)
Central Bank	66	79.4	54	71.8	51	64.5	(0.6)	(24.3)	(6.4)	(23.0)
Treasury and Other Govt.	8	9.9	8	11.1	6	8.2	(19.7)	(23.7)	(24.3)	(22.4)
Corporate	9	10.7	13	17.1	22	27.3	76.3	137.5	66.1	141.4

continued on next page

Table 3 *continued*

	2Q12		1Q13		2Q13		Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
							2Q13		2Q13	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	q-o-q	y-o-y	q-o-q	y-o-y
Viet Nam										
Total	4	100.0	9	100.0	3	100.0	(71.8)	(40.7)	(72.2)	(41.6)
Government	4	100.0	9	100.0	3	100.0	(71.8)	(40.7)	(72.2)	(41.6)
Central Bank	2	54.3	5	58.9	0	0.0	(100.0)	(100.0)	(100.0)	(100.0)
Treasury and Other Govt.	2	45.7	4	41.1	3	100.0	(31.5)	29.6	(32.3)	27.7
Corporate	0	0.0	0	0.0	0	0.0	–	–	–	–
Emerging East Asia (EEA)										
Total	846	100.0	804	100.0	827	100.0	4.0	(3.3)	2.9	(2.2)
Government	650	76.8	592	73.6	659	79.7	12.6	0.4	11.4	1.5
Central Bank	379	44.9	387	48.1	401	48.5	5.1	5.4	3.6	5.7
Treasury and Other Govt.	270	31.9	205	25.5	259	31.3	26.8	(6.3)	26.1	(4.3)
Corporate	196	23.2	212	26.4	168	20.3	(20.1)	(15.8)	(21.0)	(14.5)
EEA excl. PRC										
Total	598	100.0	599	100.0	587	100.0	(0.1)	(2.1)	(2.1)	(1.9)
Government	476	79.6	475	79.4	465	79.3	(0.5)	(2.5)	(2.2)	(2.4)
Central Bank	379	63.4	387	64.6	382	65.2	0.2	0.5	(1.2)	0.8
Treasury and Other Govt.	97	16.2	88	14.8	83	14.1	(3.9)	(14.5)	(6.6)	(14.7)
Corporate	122	20.4	124	20.6	122	20.7	1.4	(0.3)	(1.5)	(0.1)
Japan										
Total	635	100.0	540	100.0	546	100.0	6.4	6.9	1.1	(14.0)
Government	595	93.8	511	94.6	503	92.1	3.5	5.0	(1.7)	(15.5)
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	595	93.8	511	94.6	503	92.1	3.5	5.0	(1.7)	(15.5)
Corporate	40	6.2	29	5.4	43	7.9	57.8	36.1	(50.0)	(9.6)

( ) = negative, – = 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 are based on end-June 2013 currency exchange rates and do not include currency effects.
Sources: 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).

In nominal terms, the largest component of bond market issuance in 2Q13 was that of central banks and monetary authorities. Although such issuance grew by a relatively modest 5.1% q-o-q, it amounted to US$401 billion, or 48.5% of total issuance for the region. The largest amount of issuance from central banks and monetary authorities came in the form of HKMA's EFBs and EFNs at US$210 billion, and MAS bills at US$56 billion. As mentioned earlier, these two institutions remained active issuers in 2Q13 for monetary policy purposes. One of the more striking developments in 2Q13 among central banks was the issuance of US$19 billion in bills by the PBOC. The PBOC had not issued anything since early 2011 before issuing bills in June to reduce liquidity in the market at a time when expectations had been for the PBOC to add liquidity to the market.

By individual market, the largest amount of central government issuance in 2Q13 came from the PRC at US$176 billion, representing a 49.2% q-o-q increase. The next largest amount of central government issuance came from Singapore at US$29 billion, representing a 13.8% decline from 1Q13. The third largest issuance amount came from the Republic of Korea at US$28 billion, representing a 36.1% increase over 1Q13.

These three amounts comprised 90% of total issuance from the region's treasuries and other government agencies in 2Q13. The next largest central government issuances in 2Q13 were much smaller amounts: US$8 billion from Malaysia and US$6 billion from Thailand, representing modest declines from 1Q13 levels in nominal terms.

Corporate bond issuance in emerging East Asia fell 20.1% q-o-q to US$168 billion in 2Q13, primarily driven by a surprising 48.8% decline in corporate issuance in the PRC to US$46 billion. The sudden decline in the PRC's corporate issuance from the very high volumes of past years was due, in large part, to negligible issuance in 2Q13 from the large state-owned companies that were key instruments of the government's efforts to stimulate growth and investment after the 2008/09 global financial crisis. Issuance of commercial bank bonds and local corporate bonds also declined somewhat, reflecting the domestic financial volatility surrounding the SHIBOR shock event in June. In a reversal of sorts, the government's current emphasis is on rationalization of the economy and the creation of a firmer basis for sustained growth. Thus, while PRC corporate bond issuance is expected to remain substantial, it is expected to be lower in the post-crisis period and is more in line with other major economies in the region. Meanwhile, corporate issuance in the Republic of Korea also fell in 2Q13, but by a smaller percentage of only 6.9% q-o-q, resulting in corporate issuance of US$80 billion, which exceeded issuance levels in the PRC.

The two highest q-o-q corporate issuance growth rates in 2Q13 were in Thailand (76.3%) and Indonesia (31.5%). Thailand's issuance amounted to US$22 billion and Indonesia's totaled US$2 billion. In terms of corporate bonds outstanding, Indonesia's growth rate of 4.5% q-o-q in 2Q13 exceeded that of Thailand at 1.8%. The main reason for this seeming inconsistency is the fact that about 79% of Thailand's corporate bonds have tenors of 1 year or less.

These trends are summarized in **Figures 3a**, **3b**, **3c**, which detail issuance in recent years in the

Figure 3a: Government (including SOE) **and Central Bank Bond Issuance**

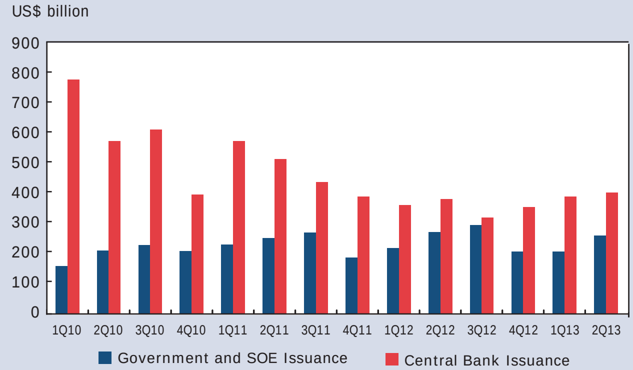


Figure 3b: Government (including SOE) **and Corporate Bond Issuance**

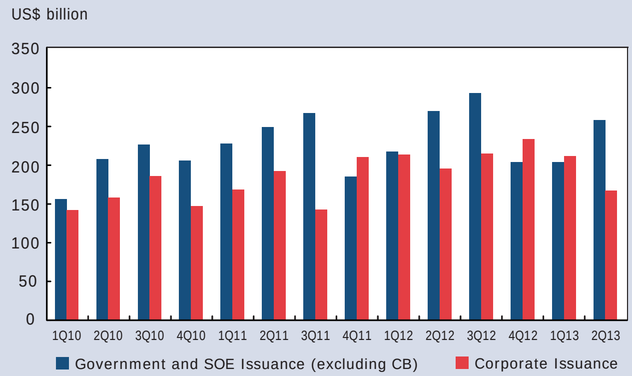
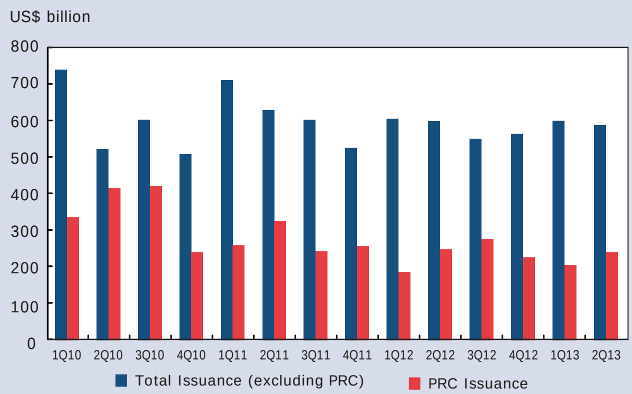


Figure 3c: Total LCY Bond Issuance



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

Notes:

1. Includes data for the People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Thailand; and Viet Nam.
2. Bonds issued by state-owned entities are categorized as government bonds for the Philippines, Thailand, and Viet Nam.
3. For the PRC, government issuance includes policy bank bonds, local government bonds, and savings bonds.
4. For the Republic of Korea, government issuance include bonds issued by Korea Development Bank, Korea National Housing Corp., and Seoul Metro (formerly Seoul Metropolitan Subway Corp).

Source: *AsianBondsOnline*.

Box 1: Impact of Financial Volatility on Bond Holdings

The region's government and corporate bond markets have grown rapidly in recent years, occupying an important place in emerging East Asian economies. However, in an environment of increasing interest rate volatility, bonds can also be an important source of risk. To better understand the potential for such problems in emerging East Asia, this section assesses data on corporate bonds outstanding and total bond holdings of the corporate sector in five markets: the PRC, Indonesia, the Republic of Korea, Malaysia, and Thailand **(Figure B1)**.

At the end of 2Q13, corporate bonds outstanding in the PRC reached CNY15.6 trillion, compared with total corporate holdings of both government and corporate bonds of CNY19.6 trillion. Thus, the liabilities of the corporate sector (total corporate bonds outstanding) in the PRC versus the assets of the corporate sector (total holdings of both government and corporate bonds) resulted in a ratio of 0.79. In the Republic of Korea, there were KRW992 trillion of corporate bonds outstanding versus KRW1,435.2 trillion of bonds held by corporates at the end of 2Q13, resulting in a ratio of 0.69. Meanwhile, Malaysia had a ratio of 0.62 of corporate bonds outstanding to the corporate sector's total bond holdings. Thus, the liabilities and assets of the corporate sectors of the PRC, the Republic of Korea, and Malaysia are relatively evenly matched. In Thailand and Indonesia, however, the ratios of corporate bonds outstanding to total bond holdings of corporate entities at the end of 4Q12 (the most recently available data) were much smaller: 0.36 in Thailand and 0.24 in Indonesia.

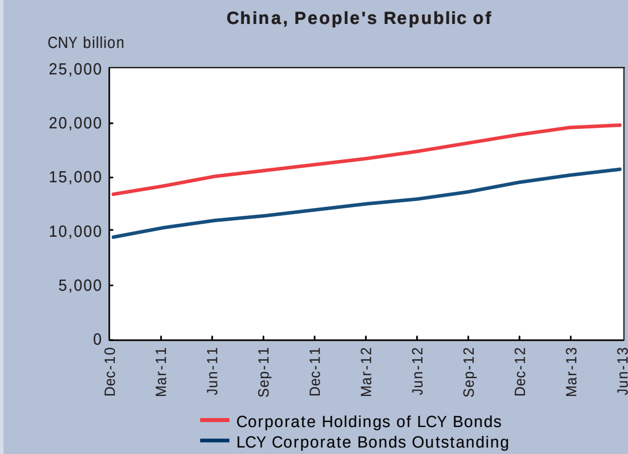
Another feature of the five markets under review is that the mixture of government and corporate bonds held by banks and other corporate entities can differ a great deal. In Malaysia, corporate holdings of corporate bonds amounted to MYR339 billion at the end of 2Q13, compared with government bond holdings of MYR314 billion. This resulted in a 1.29 ratio of corporate bonds outstanding to corporate holdings of government bonds, while the ratio of corporate bonds outstanding to corporate holdings of both government and corporate bonds stood at a much lower 0.62. The Republic of Korea has a somewhat similar profile. Its ratio of corporate bonds outstanding to holdings of government bonds at the end of 1Q13 was 1.25, while its ratio of corporate bonds outstanding to total holdings of government and corporate bonds was 0.69. Meanwhile, the ratios of corporate bonds outstanding to the total bond holdings of the corporate sector in Indonesia and Thailand were much smaller.

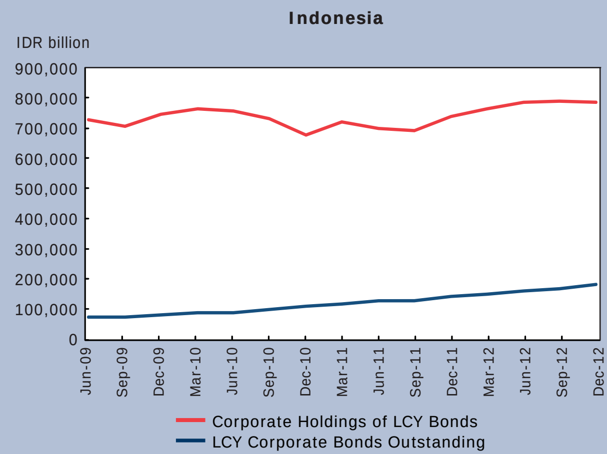
The major concern, however, is not the proportions of corporate and government bonds in a given market, but rather the gap between total holdings of both government and corporate bonds and total corporate bonds outstanding. The larger this gap is, the greater the impact of a reduction to the mark-to-market value of total bond holdings during a financial crisis. This could make defaults more likely, with the resulting restructuring exercise imposing losses on bond holders. Thus, the ratio of corporate bonds outstanding to total holdings of both government and corporate bonds is a useful measure of this gap.

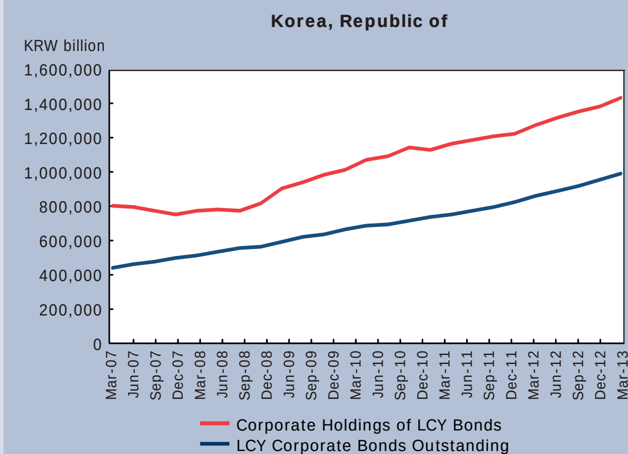
The movements of these ratios of corporate bonds outstanding to total bond holdings over the past few years are presented for each market in **Figure B2**. These ratios can be viewed as indicators of potential losses: the larger the ratio, the smaller the probability of losses; the smaller the ratio, the greater the probability of losses. Hence, a rising ratio—even from a low level—is a positive trend and a declining ratio is a negative trend. These ratios have been rising sharply for the PRC and Indonesia in recent quarters. They are also increasing, albeit at a much slower pace, for the Republic of Korea, Malaysia, and Thailand. The rising ratios for the PRC and Indonesia reflect the fact that the PRC and Indonesia have been the most rapidly growing corporate bond markets in emerging East Asia in recent quarters. But in spite of recent gains in the ratios for Indonesia and Thailand, their ratios are nevertheless still much lower than those for the PRC, the Republic of Korea, and Malaysia.

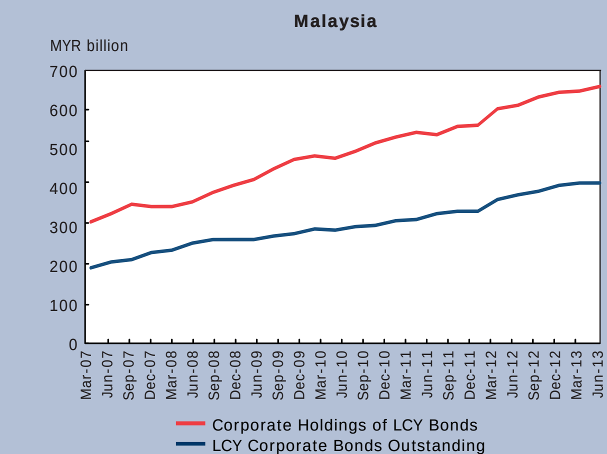
When formulating monetary policy, in addition to assessing the impact on funding costs, policymakers must also take into account the impact of interest rate changes on corporate balance sheets. In an economy where corporate bond holdings are high, raising interest rates will result in large mark-to-market losses for the corporate sector, reducing the sector's market value and potentially pushing some firms toward default. The impact of this is partly offset by a decline in the market value of the corporate sector's outstanding bonds. Thus, the effect of higher interest rates on corporate balance sheets will be more keenly felt in economies where the corporate sector's holdings of bonds are much larger than the amount of corporate bonds outstanding.

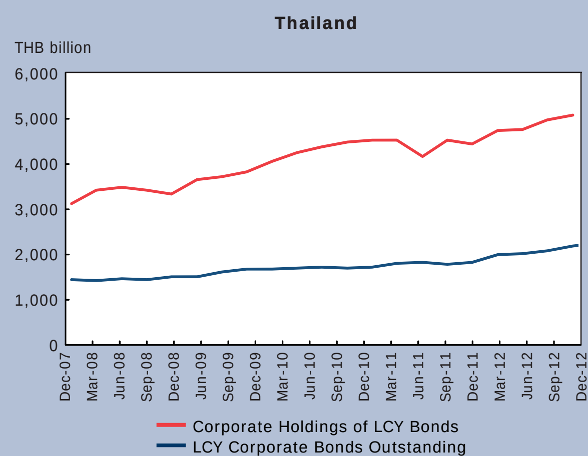
Figure B1: LCY Corporate Bonds Outstanding and Corporate Holdings of LCY Bonds











LCY = local currency.
Notes:
1. "Corporate" includes banks, non-bank financial institutions, and other corporate entities. It excludes government institutions, foreigners, and individuals.
2. "Corporate Holdings of Bonds" include holdings of both government and corporate bonds.
Source: *AsianBondsOnline*.

Figure B2: Ratios of LCY Corporate Bonds Outstanding to Corporate Holdings of LCY Bonds

LCY = local currency.
Notes:
1. "Corporate" includes banks, non-bank financial institutions, and other corporate entities. It excludes government institutions, foreigners, and individuals.
2. "Corporate Holdings of Bonds" include holdings of both government and corporate bonds.
Source: *AsianBondsOnline*.

region's government, corporate, and overall bond markets, as well as total LCY bond issuance in the PRC.

Bills-to-Bonds Ratios

The ratio of bills to bonds fell in six out of the nine markets of emerging East Asia in 2Q13.

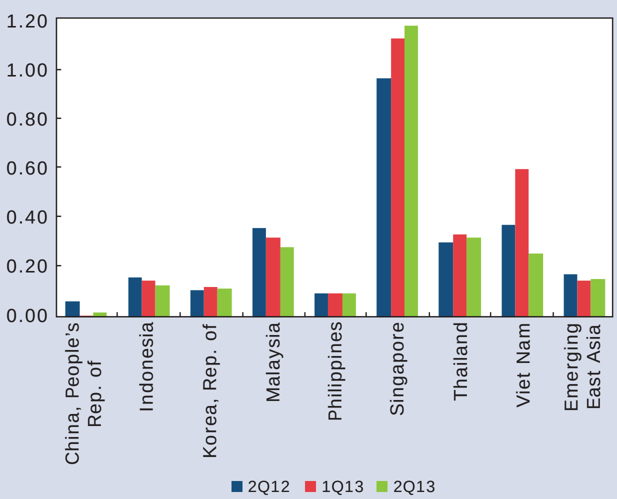
The ratio of bills to bonds issued by governments, central banks, and monetary authorities rose slightly in the PRC, increased by a more significant amount in Singapore, remained unchanged in the Philippines, and fell in all other markets in 2Q13 **(Figure 4a)**. The rise in this ratio for the PRC is explained by the PBOC issuing bills in 2Q13 for the first time since late 2011 **(Figure 4b)**.

HKMA has continued to increase its stock of EFBs, resulting in a rise in the ratio of central bank bills to bonds in Hong Kong, China, but not the ratio of total bills to bonds since the rise in HKSAR bonds issued by the government has increased the denominator for the total bills-to-bonds ratio. The rise in the Singapore bills-to-bonds ratio is explained by the steady rise of bills issued by MAS.

Sertifikat Bank Indonesia (SBI) fell slightly in 2Q13, resulting in a slight decline in the total bills-to-bonds ratio for Indonesia. The decline in the total bills-to-bonds ratio for the Republic of Korea, as well as the ratio of central bank bills to bonds, is explained by a US$5 billion decline in the stock of central bank bills outstanding **(Table 4)**. The decline in the bills-to-bonds ratio for Malaysia is explained by a US$5 billion decline in BNM bills outstanding in 2Q13. Meanwhile, the stock of central bank bills also fell in Thailand in 2Q13, while Viet Nam experienced a sharp decline in its relatively small stock of both treasury and central bank bills outstanding.

The largest category of government sector securities in emerging East Asia remained treasury bonds, which amounted to US$2.1 trillion at the end of 2Q13, representing a modest 4.4% increase from 1Q13. The PRC's stock of treasury bonds rose 5.2% to US$1.2 trillion. The next largest holdings of treasury bonds at the end of the quarter were in the Republic of Korea (US$362 billion) and Malaysia

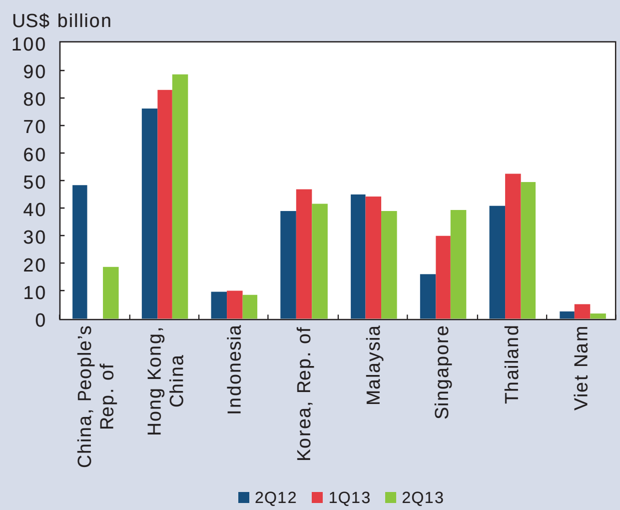
Figure 4a: Total Bills-to-Bonds Ratios



Notes:
1. 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.
2. Hong Kong, China is not included in the chart due to its much higher bills-to-bonds ratio.
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.

Source: *AsianBondsOnline*.

Figure 4b: Central Bank Bills Outstanding



Notes:
1. The People's Republic of China ceased issuance of central bank bills in 2012.
2. The Philippines has no central bank bills outstanding.

Source: *AsianBondsOnline*.

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

	2Q12		1Q13		2Q13		Government Bills-to-Bonds Ratio			Growth Rate (LCY-base %) 2Q13		Growth Rate (US$-base %) 2Q13	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	2Q12	1Q13	2Q13	q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of (PRC)													
Total	1,309	100.0	1,353	100.0	1,338	100.0				(2.3)	(1.3)	(1.1)	2.2
Total Bills	80	6.1	9	0.6	23	1.7	0.07	0.01	0.02	164.4	(72.5)	167.6	(71.5)
Treasury Bills	32	2.4	9	0.6	4	0.3	0.03	0.01	0.004	(50.9)	(87.2)	(50.3)	(86.8)
Central Bank Bills	48	3.7	0	0.0	19	1.4	0.23	0.00	0.16	–	(62.7)	–	(61.4)
Total Bonds	1,229	93.9	1,345	99.4	1,315	98.3				(3.3)	3.4	(2.2)	7.0
Treasury Bonds	1,018	77.8	1,129	83.4	1,202	89.8				5.2	14.0	6.5	18.1
Central Bank Bonds	211	16.1	215	15.9	113	8.5				(48.1)	(48.1)	(47.4)	(46.2)
Hong Kong, China													
Total	93	100.0	100	100.0	107	100.0				7.0	15.7	7.1	15.7
Total Bills	76	81.5	82	82.1	88	81.8	4.42	4.60	4.49	6.5	16.0	6.6	16.1
Treasury Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Central Bank Bills	76	81.5	82	82.1	88	81.8	8.51	9.32	9.97	6.5	16.0	6.6	16.1
Total Bonds	17	18.5	18	17.9	20	18.2				9.1	14.2	9.2	14.2
Treasury Bonds	8	8.9	9	9.0	11	10.0				18.4	30.5	18.5	30.5
Central Bank Bonds	9	9.6	9	8.8	9	8.2				(0.4)	(0.9)	(0.3)	(0.9)
Indonesia													
Total	94	100.0	98	100.0	97	100.0				1.7	10.3	(1.0)	4.0
Total Bills	13	13.8	12	12.5	11	11.3	0.16	0.14	0.13	(8.2)	(9.7)	(10.7)	(14.9)
Treasury Bills	3	3.3	2	2.4	2	2.4	0.04	0.03	0.03	2.0	(18.9)	(0.7)	(23.5)
Central Bank Bills	10	10.5	10	10.1	9	8.9	–	–	–	(10.6)	(6.8)	(13.0)	(12.1)
Total Bonds	81	86.2	86	87.5	86	88.7				3.2	13.5	0.4	7.0
Treasury Bonds	81	86.2	86	87.5	86	88.7				3.2	13.5	0.4	7.0
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Korea, Rep. of													
Total	471	100.0	519	100.0	516	100.0				2.3	9.2	(0.5)	9.5
Total Bills	46	9.8	55	10.5	52	10.0	0.11	0.12	0.11	(2.4)	12.2	(5.1)	12.5
Treasury Bills	7	1.5	8	1.6	11	2.0	0.02	0.02	0.03	33.3	45.8	29.7	46.2
Central Bank Bills	39	8.2	46	8.9	41	8.0	0.38	0.44	0.40	(8.7)	6.0	(11.1)	6.3
Total Bonds	425	90.2	464	89.5	464	90.0				2.8	8.9	0.1	9.2
Treasury Bonds	324	68.7	359	69.3	362	70.1				3.4	11.4	0.6	11.8
Central Bank Bonds	102	21.6	105	20.2	103	19.9				0.8	0.8	(1.9)	1.1
Malaysia													
Total	176	100.0	188	100.0	184	100.0				(0.2)	4.0	(2.3)	4.6
Total Bills	46	26.2	45	24.1	40	21.8	0.35	0.32	0.28	(9.8)	(13.3)	(11.7)	(12.8)
Treasury Bills	1	0.8	1	0.7	1	0.7	0.01	0.01	0.01	0.0	0.0	(2.1)	0.5
Central Bank Bills	45	25.4	44	23.4	39	21.1	–	–	–	(10.1)	(13.7)	(12.0)	(13.2)
Total Bonds	130	73.8	143	75.9	144	78.2				2.8	10.1	0.7	10.7
Treasury Bonds	130	73.8	143	75.9	144	78.2				2.8	10.1	0.7	10.7
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Philippines													
Total	72	100.0	82	100.0	80	100.0				2.1	13.4	(3.4)	10.8
Total Bills	6	8.4	7	8.6	7	8.6	0.09	0.09	0.09	1.9	15.7	(3.6)	13.1
Treasury Bills	6	8.4	7	8.6	7	8.6	0.09	0.09	0.09	1.9	15.7	(3.6)	13.1
Central Bank Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Total Bonds	66	91.6	75	91.4	73	91.4				2.1	13.2	(3.4)	10.6
Treasury Bonds	66	91.6	75	91.4	73	91.4				2.1	13.2	(3.4)	10.6
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–

continued on next page

Table 4 *continued*

	2Q12		1Q13		2Q13		Government Bills-to-Bonds Ratio			Growth Rate (LCY-base %)		Growth Rate (US$-base %)	
										2Q13		2Q13	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share	2Q12	1Q13	2Q13	q-o-q	y-o-y	q-o-q	y-o-y
Singapore													
Total	129	100.0	148	100.0	148	100.0				1.9	15.2	(0.3)	14.9
Total Bills	63	48.9	78	52.9	80	54.0	0.96	1.12	1.17	4.1	27.1	1.8	26.9
Treasury Bills	47	36.4	48	32.6	41	27.5	0.71	0.69	0.60	(14.0)	(12.8)	(15.9)	(13.0)
Central Bank Bills	16	12.5	30	20.2	39	26.5	–	–	–	33.3	143.1	30.4	142.6
Total Bonds	66	51.1	70	47.1	68	46.0				(0.6)	3.7	(2.7)	3.5
Treasury Bonds	66	51.1	70	47.1	68	46.0				(0.6)	3.7	(2.7)	3.5
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Thailand													
Total	189	100.0	209	100.0	204	100.0				3.4	6.2	(2.6)	7.9
Total Bills	44	23.2	52	25.0	49	24.2	0.30	0.33	0.32	(0.1)	10.6	(5.8)	12.4
Treasury Bills	3	1.7	0	0.0	0	0.0	0.03	0.00	0.00	–	–	–	–
Central Bank Bills	41	21.5	52	25.0	49	24.2	0.76	1.02	0.97	(0.1)	19.2	(5.8)	21.2
Total Bonds	145	76.8	157	75.0	155	75.8				4.5	4.8	(1.5)	6.5
Treasury Bonds	92	48.6	106	50.6	104	51.0				4.3	11.4	(1.7)	13.2
Central Bank Bonds	53	28.2	51	24.4	51	24.8				4.9	(6.5)	(1.1)	(5.0)
Viet Nam													
Total	12	100.0	20	100.0	17	100.0				(13.2)	51.0	(14.3)	48.9
Total Bills	3	27.2	8	37.2	4	20.2	0.37	0.59	0.25	(52.9)	12.2	(53.5)	10.6
Treasury Bills	0.4	3.3	2	10.6	1	8.3	0.05	0.17	0.10	(31.4)	279.8	(32.3)	274.4
Central Bank Bills	3	23.9	5	26.7	2	11.9	–	–	–	(61.4)	–	(61.9)	–
Total Bonds	8	72.8	13	62.8	14	79.8				10.4	65.5	9.0	63.1
Treasury Bonds	8	72.8	13	62.8	14	79.8				10.4	65.5	9.0	63.1
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–
Emerging East Asia (EEA)													
Total	2,544	100.0	2,719	100.0	2,692	100.0				(0.1)	4.0	(1.0)	5.8
Total Bills	377	14.8	349	12.8	353	13.1	0.17	0.15	0.15	3.6	(7.0)	1.3	(6.3)
Treasury Bills	100	3.9	78	2.9	67	2.5	0.06	0.04	0.03	(11.6)	(33.1)	(13.5)	(32.6)
Central Bank Bills	277	10.9	271	9.9	286	10.6	0.74	0.71	1.04	8.0	2.4	5.6	3.2
Total Bonds	2,167	85.2	2,371	87.2	2,339	86.9				(0.6)	5.9	(1.3)	7.9
Treasury Bonds	1,793	70.5	1,991	73.2	2,063	76.7				4.4	13.0	3.7	15.1
Central Bank Bonds	374	14.7	380	14.0	275	10.2				(27.0)	(28.1)	(27.6)	(26.4)
EEA excl. PRC													
Total	1,235	100.0	1,366	100.0	1,354	100.0				2.1	9.8	(0.9)	9.6
Total Bills	297	24.0	340	24.9	330	24.4	0.32	0.33	0.32	(0.6)	11.3	(2.9)	11.3
Treasury Bills	68	5.5	69	5.1	63	4.7	0.09	0.08	0.07	(6.6)	(6.6)	(9.0)	(7.1)
Central Bank Bills	229	18.5	271	19.8	267	19.7	1.40	1.64	1.65	1.0	16.6	(1.3)	16.8
Total Bonds	938	76.0	1,026	75.1	1,023	75.6				3.0	9.3	(0.2)	9.1
Treasury Bonds	774	62.7	861	63.0	861	63.6				3.2	11.7	0.01	11.2
Central Bank Bonds	164	13.3	165	12.1	162	12.0				2.0	(1.7)	(1.6)	(1.0)
Japan													
Total	9,888	100.0	8,643	100.0	8,326	100.0				1.4	4.6	(3.7)	(15.8)
Total Bills	376	3.8	318	3.7	303	3.6	0.04	0.04	0.04	0.0005	0.0012	(5.0)	(19.5)
Treasury Bills	376	3.8	318	3.7	303	3.6	0.04	0.04	0.04	0.0005	0.0012	(5.0)	(19.5)
Central Bank Bills	0	0.0	0	0.0	0	0.0	–	–	–	–	–	–	–
Total Bonds	9,512	96.2	8,324	96.3	8,023	96.4				1.4	4.8	(3.6)	(15.7)
Treasury Bonds	9,512	96.2	8,324	96.3	8,023	96.4				1.4	4.8	(3.6)	(15.7)
Central Bank Bonds	0	0.0	0	0.0	0	0.0				–	–	–	–

( ) = negative, – = 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-June 2013 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 1 year or less.

Sources: 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).

(US$144 billion). Treasury bonds outstanding in these two markets rose approximately 3% over their respective 1Q13 levels.

The total stock of treasury bills in emerging East Asia fell sharply in 2Q13 by 33.1% y-o-y and 11.6% q-o-q to only US$67 billion at end-June. The largest stock of treasury bills at the end of 2Q13 resided in Singapore (US$41 billion), with the next largest amounts in the Republic of Korea (US$11 billion) and the Philippines (US$7 billion).

Bills issued by central banks and monetary authorities amounted to US$286 billion at the end of 2Q13, representing an 8.0% increase over 1Q13. These bills are distributed much more widely in the region than treasury bills, with US$88 billion in Hong Kong, China and between US$39 billion and US$49 billion in the Republic of Korea, Malaysia, Singapore, and Thailand.

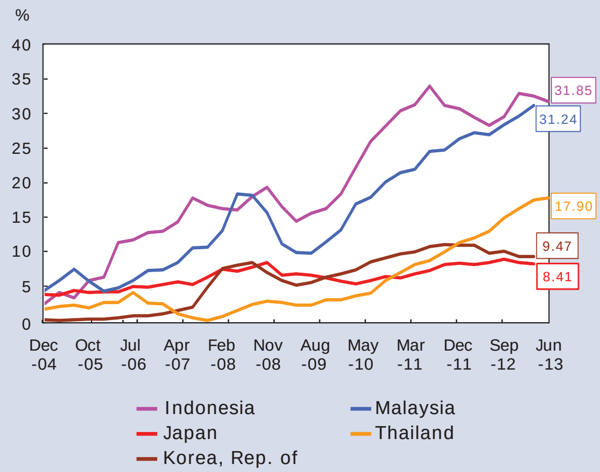
Outstanding central bank bonds in emerging East Asia amounted to US$275 billion in 2Q13, roughly the same as central bank bills, but the region's stock of central bank bonds fell 27.0% q-o-q. The main reason for this downturn was a 48.0% decline in PBOC bonds to US$113 billion. Meanwhile, the next largest amount of central bank bonds from The Bank of Korea remained largely unchanged at US$103 billion.

Foreign Holdings

The share of foreign holdings of Asian LCY government bonds was generally stable in the first half of 2013, after having risen rapidly in 2011 and 2012.

Foreign holdings of government bonds continued to rise in nominal terms in 2012 and the early months of 2013 in most countries, although the share of foreign holdings has begun to stabilize in some markets. In Indonesia, for example, the share of government bonds held by foreigners fell slightly to 31.9% at end-June from 32.6% at end-March and 33.0% at end-December 2012 **(Figure 5)**. The nominal value of foreign holdings of Indonesian bonds has continued to rise, but

Figure 5: Foreign Holdings of LCY Government Bonds in Select Asian Economies (% of total)



LCY = local currency.
Note: Data as of end-March 2013 except for Indonesia and Thailand as of end-June 2013.
Source: *AsianBondsOnline*.

holdings of domestic investors such as banks have also been rising since the end of 2010. Foreign holdings of Malaysian government bonds continued to increase in 2013, rising to 31.2% at end-March from 29.8% at end-December 2012 and 26.5% at end-December 2011. Foreign holders of Thai bonds have also increased their market share in 2013, which rose to 17.9% at end-June from 16.4% at end-December 2012. Foreign holdings of bonds in the Republic of Korea, however, have declined steadily over the last 2 years, from a high of 11.2% at end-September 2011 to 9.5% at end-March.

Maturity Structure

The maturity structures of emerging East Asian government and corporate bond markets have generally lengthened in 2013, although the region's corporate markets remain much more short-dated than government markets.

The maturity profiles of government bond markets remained concentrated at the shorter-end of the yield curve in Hong Kong, China; Republic of Korea; Thailand; and Viet Nam **(Figure 6a)**. These four markets had 40% or more of their bonds outstanding in remaining maturities of between more than 1 year and 3 years. For Hong Kong, China and Viet Nam, the portion of bonds outstanding with maturities between more than 1 year and 3 years was 49% and 63%, respectively. Indonesia and the Philippines, however, have much larger shares of their government bonds outstanding in bonds with remaining maturities of more than 10 years: 44% in the case of the Philippines and 46% in the case of Indonesia. Singapore, the PRC, and Malaysia, on the other hand, had the greatest concentration of government bonds—31%, 35%, and 40%, respectively—in remaining maturities of more than 5 years and up to 10 years.

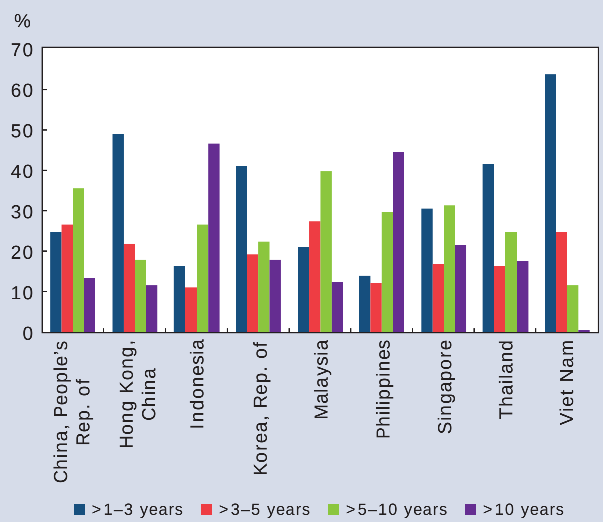
Figure 6b compares the proportion of bonds outstanding in remaining maturities of more than 10 years at the end of 2Q13 and the end of 2Q12 for each economy in the region. The largest increases in the proportion of bonds with maturities of more than 10 years were in Indonesia, the Republic of Korea, and Thailand. The PRC, Singapore, and Viet Nam, on the other hand, experienced a significant reduction in the proportion of bonds with an average maturity of more than 10 years.

Maturity Profiles for Corporate Bonds

The most common maturities for corporate bonds in the region are in the range of more than 5 years and up to 10 years **(Figure 7a)**. The markets in which the more-than-5-years-to-10-years range is most pronounced include the PRC; Hong Kong, China; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam. Meanwhile, the more-than-1-year-to-3-years category is the most common range of maturity for the Republic of Korea, while the more-than-3-years-to-5-years range is the most common range of maturity for Indonesian bonds.

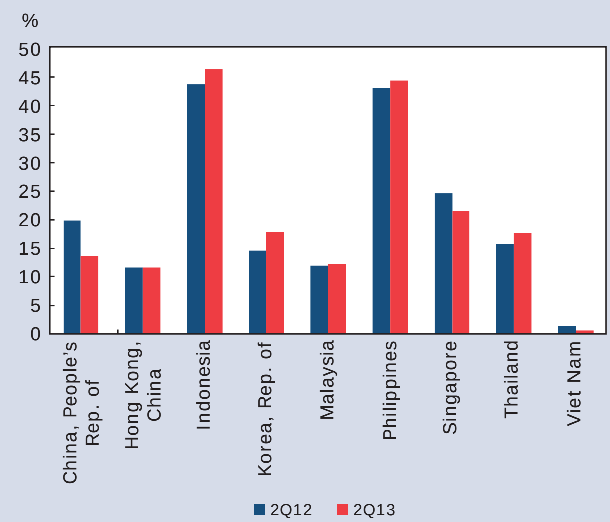
Figure 7b shows that the proportion of corporate bonds with maturities of more than 5 years and up to 10 years increased over the last year in all markets except Indonesia, where the proportion of bonds in this category actually fell.

Figure 6a: Government Bond Maturity Profiles (individual maturities as % of total)



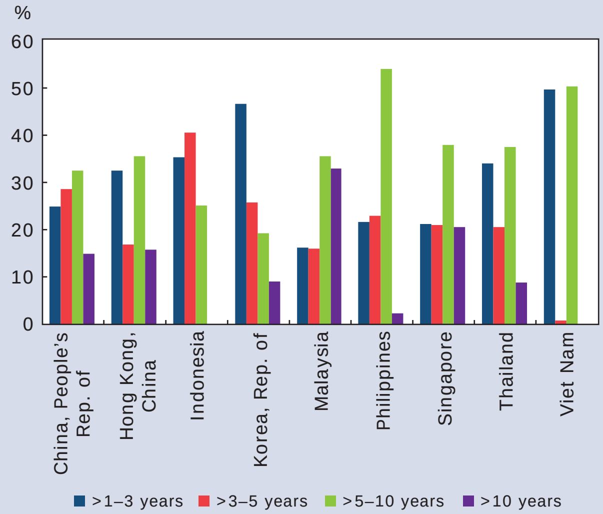
Note: Data as of end-June 2013 except for the Philippines as of end-May 2013.
Source: *AsianBondsOnline*.

Figure 6b: Government Bonds—Maturities of More than 10 years (% of total)



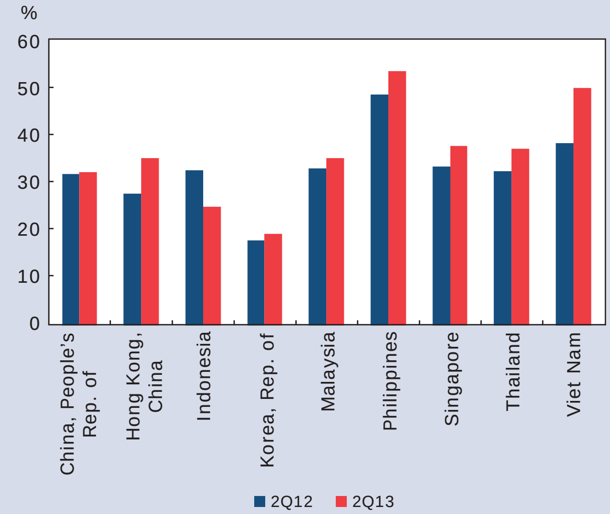
Note: For the Philippines, 2Q13 data as of end-May 2013.
Source: *AsianBondsOnline*.

Figure 7a: Corporate Bond Maturity Profiles
(individual maturities as % of total)



Note: Data as of end-June 2013.
Source: *AsianBondsOnline*.

Figure 7b: Corporate Bonds—Maturities of More than 5 Years to 10 Years (as % of total)



Source: *AsianBondsOnline*.

Government Bond Yield Curves

Most government bond yield curves in emerging East Asia have shifted upward since the Federal Reserve suggested on 22 May that the US might exit from its highly accommodative monetary policy sooner than expected.

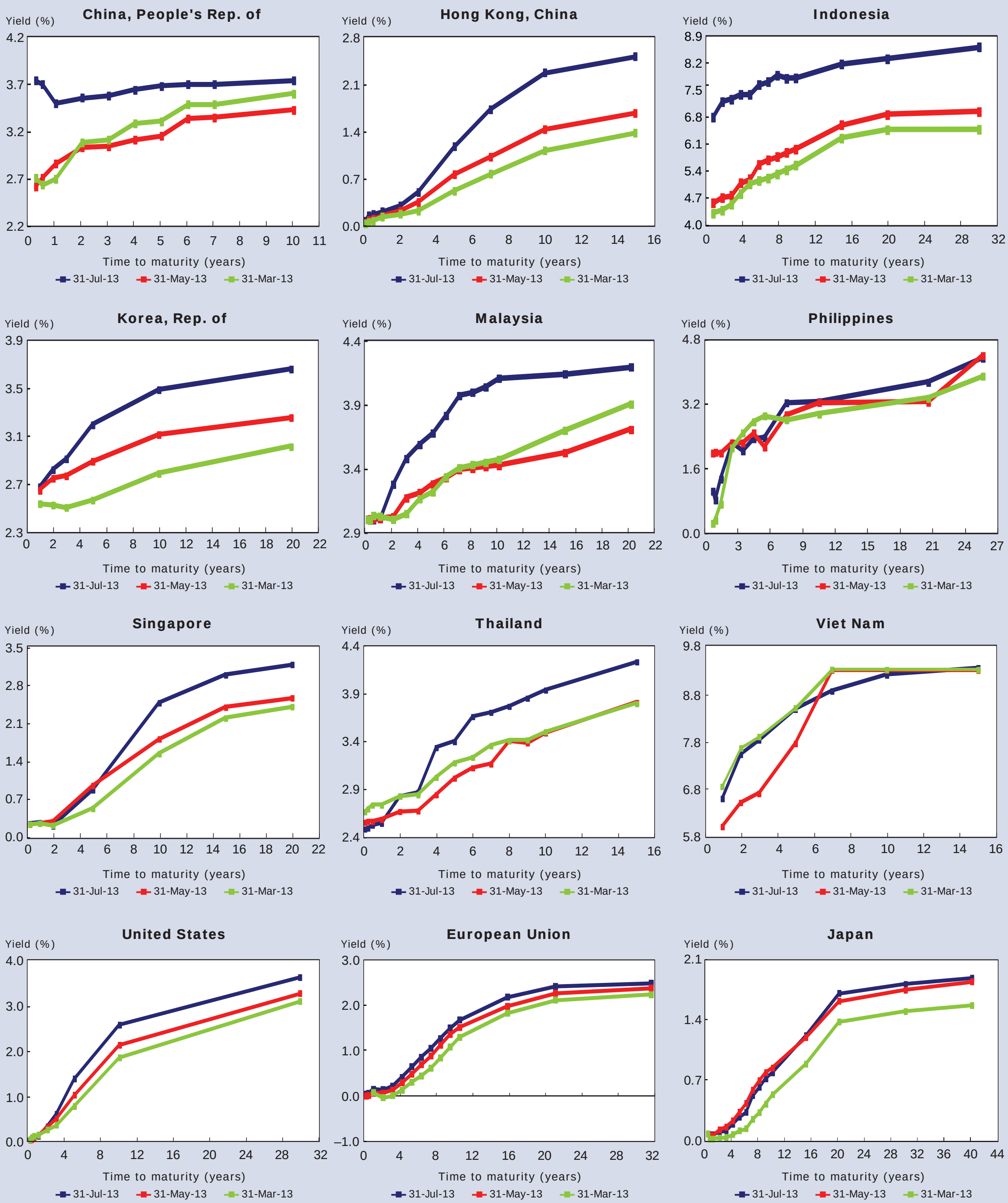
Most government bond yield curves in emerging East Asia shifted upward at the end of May—compared with end-March levels—following Federal Reserve Chairman Ben Bernanke's 22 May statement before the US Congress suggesting that the Federal Reserve might exit from its highly accommodative monetary policy sooner than had generally been expected **(Figure 8)**. The initial movements of government bond market yields between end-March and end-May, however, were muted because there was less concern about the Federal Reserve immediately exiting from its accommodative monetary policy stance. Also, there was considerable diversity in market movements: yield curves in some markets at end-May were tighter than they had been at end-March.

Yield curves did steepen modestly between end-March and end-May in Hong Kong, China; Indonesia; the Republic of Korea; and Singapore. The Philippine curve did not steepen overall, but experienced a rise in yields for tenors of 1 year or less, while yields for 10- and 25-year bonds increased 29 basis points (bps) and 51 bps, respectively. The Malaysian curve, however, fell from the belly to the longer-end between end-March and end-May. Yields on bonds with maturities of 2 years or more fell along the PRC curve at end-May relative to their end-March position. The Vietnamese curve fell somewhat from the shorter-end to the belly, but remained essentially unchanged for maturities of 5 years or more.

Yields from the belly to the shorter-end of the Thai curve fell at end-May relative to their position at end-March, while yields for longer-dated maturities were essentially unchanged. In part, this reflected a 25 bps reduction in the Bank of Thailand's policy rate after its 28–29 May meeting to a level of 2.5%. This followed a reduction in The Bank of Korea's policy rate by 25 bps to 2.5% on 9 May.

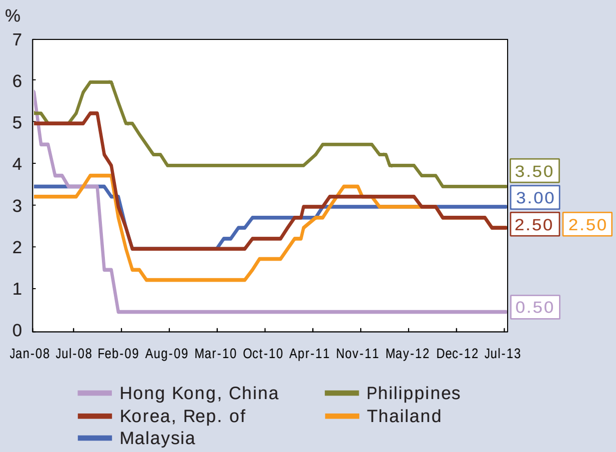
Policy rates have been quite stable across the region thus far in 2013 **(Figures 9a, 9b)**, with the only increases in rates being the successive hikes of the Indonesian policy rate in June and July to

Figure 8: Benchmark Yield Curves—LCY Bonds



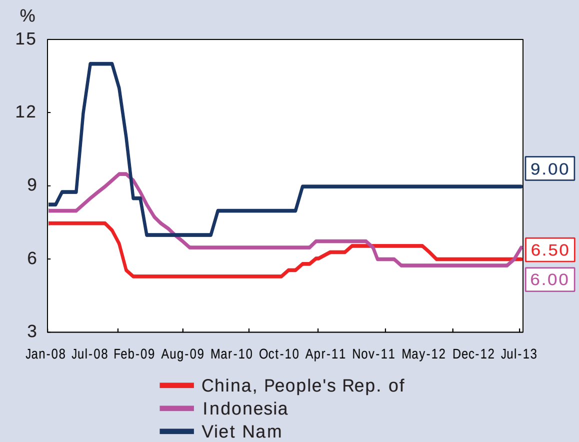
LCY = local currency.
Source: Based on data from Bloomberg LP.

Figure 9a: Policy Rates



Note: Data as of end-July 2013.
Source: Bloomberg LP.

Figure 9b: Policy Rates



Notes:
1. Data as of end-July 2013.
2. For Viet Nam, base interest rate was used.
Source: Bloomberg LP except for Viet Nam (State Bank of Viet Nam).

6.0% and 6.5%, respectively and more recently, to 7.0% on 29 August. The region's overall low policy rates are justified by inflation rates that have remained well below 3.0% in most markets since the beginning of 2012. Only Indonesia and Viet Nam have had inflation rates consistently above 4.0% over the last year **(Figures 10a, 10b)**.

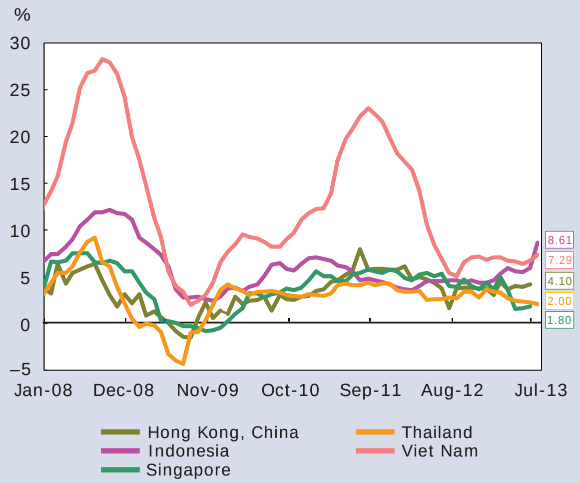
The market, however, became more concerned about the future direction of US monetary policy after the Federal Reserve statement on 19 June announcing that it may begin to taper its bond purchase program toward the latter part of the year. This resulted in a dramatic steepening of yield curves in Hong Kong, China; the Republic of Korea; Malaysia; Singapore; and Thailand between the time of the Federal Reserve statement and end-July. In the case of Indonesia, there was a dramatic shift upward along the entire curve. The yield curve in Viet Nam widened for some shorter-dated maturities, but remained more or less unchanged at the longer-end of the curve. Yields on the Philippine curve tightened for most maturities greater than 2 years between end-May and end-July, reflecting the availability of a cash-rich investor base in the Philippines as well as Bangko Sentral ng Pilipinas' (BSP) decision on 25 April to lower the Special Deposit Account (SDA) rate to 2.0% and limit the access of banks to the facility.

The PRC yield curve, however, shifted dramatically upward between end-May and end-July. But this was mainly due to domestic financial trends and policy developments, given the capital controls still in place in the PRC. The steep rise at the shorter-end of the yield curve reflected the SHIBOR shock event in June. At the start of June, the overnight SHIBOR rate was 4.6% and the 7-day interbank repo rate was 4.8%. By the end of the first week of June, liquidity demands had driven the SHIBOR rate to 7.5% and the 7-day repo rate rose to 7.8%. While the market expected the PBOC to step in and provide additional liquidity, it instead issued central bank bills on 18 June for the first time since 2011.

The PBOC's issuance sent a signal to markets regarding its stance toward liquidity; as a result, the SHIBOR overnight rate rose to a high of 13.4% on 20 June and the 7-day repo rate rose to 11.2%. The PBOC released a statement on 26 June that sought to clarify its actions by announcing that the rise in money market rates was due to temporary seasonal factors and rapid loan growth, while stating that overall liquidity in the system was sufficient. The PBOC also said that banks needed to be more prudent in their liquidity management.

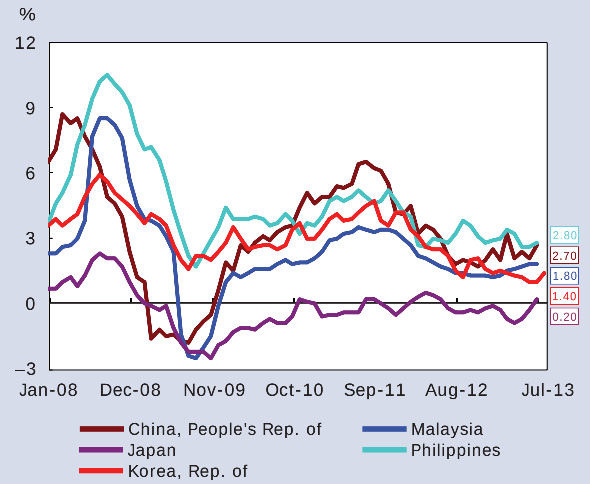
Another important change in monetary policy affecting the region since the beginning of 2013

Figure 10a: Headline Inflation Rates



Note: Data as of end-July 2013 except for Hong Kong, China and Singapore as of end-June 2013.
Source: Bloomberg LP.

Figure 10b: Headline Inflation Rates

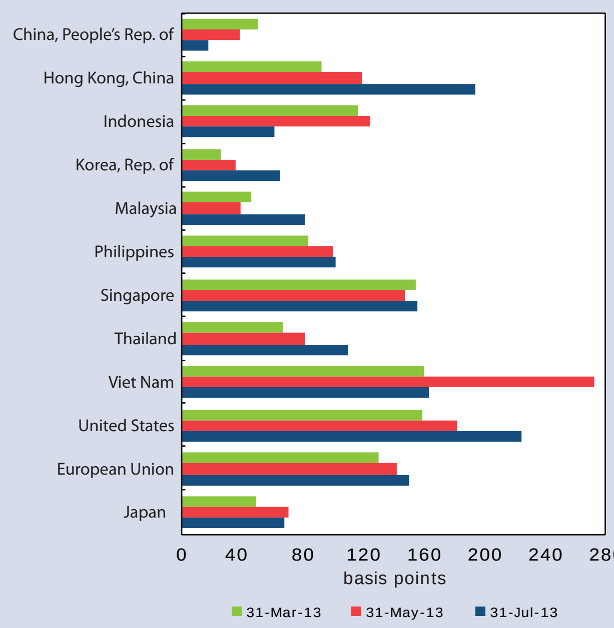


Note: Data as of end-June 2013 except for the Republic of Korea as of end-July 2013.
Source: Bloomberg LP.

has been the BOJ's adoption of a more aggressive stance toward monetary easing, which has resulted in a dramatic downward shift of the Japanese yield curve. The BOJ has stated that it will conduct monetary operations targeting an increase in the monetary base of JPY60 trillion–JPY70 trillion annually. The objective of this effort is to nudge the economy's prospects for sustainable growth upward and generate annual inflation of 2.0%. Figure 10b shows that while Japanese policy is still far from achieving its inflation goals, inflation returned to Japan in June following an extended period of deflation over the last several years.

Finally, the spread between yields for 2- and 10-year maturities widened in most markets between end-March and end-July as yields for 10-year maturities rose significantly and yields for shorter-dated maturities increased by a smaller amount or remained unchanged **(Figure 11)**. The spread between 2- and 10-year yields tightened, however, in the government bond markets of the PRC and Indonesia. In the PRC, the shorter-end of the yield curve rose dramatically in response to the SHIBOR shock event, resulting in a tightening yield spread between end-March and end-July. Indonesia also experienced a widening at the shorter-end of its curve between end-March and end-July, even

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



Source: Based on data from Bloomberg LP.

as its entire curve shifted upward, resulting in a reduction in the yield spread.

Viet Nam is a more complex story. The yield spread between 2- and 10-year government bonds rose dramatically between end-March and end-May as yields at the shorter-end of the government bond curve suddenly dropped, increasing the spread from 162 bps to 275 bps. But between end-May and end-July, shorter-dated yields rose sharply to nearly return to their end-March positions, reducing Viet Nam's yield spread to 165 bps.

Corporate Bond Credit Spreads

The movement of corporate credit spreads between end-March and end-July differed greatly across markets.

Credit spreads for high-grade corporate bonds demonstrated greater movement between end-March and end-July than was the case for credit spreads of lower-rated corporate bonds, which were largely unchanged. Credit spreads for shorter-dated maturities in the PRC high-grade corporate market shifted downward between end-March and end-July, while widening for the 15-, 20-, and 30-year maturities, particularly between end-May and end-July **(Figure 12a)**.

Movements in the yield curve for high-grade corporate bonds in Malaysia were much simpler. The corporate yield curve first steepened between end-March and end-May, and then shifted downward between end-May and end-July.

The high-grade corporate credit spread curve in the Republic of Korea flattened for shorter-dated maturities between end-March and end-May, and then shifted upward between end-May and end-July at the longer-end of the curve. Meanwhile, the shorter-end of the curve steepened, with credit spreads at the very short-end falling below their end-March levels.

There was little or no movement in credit spreads for lower-rated bonds in Malaysia and the Republic of Korea, reflecting, in large part, almost negligible liquidity for these instruments **(Figure 12b)**. Credit spreads for lower-rated corporate bonds in the PRC rose for almost all maturities between end-March and end-May, but then remained mostly unchanged between end-May and end-July.

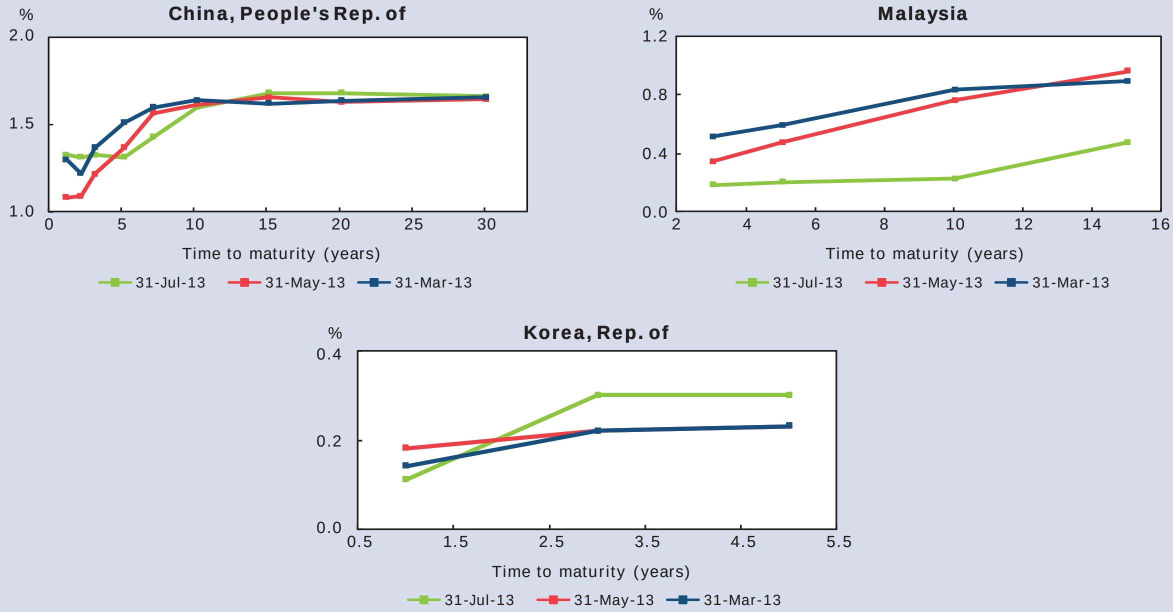
G3 Currency Issuance

Emerging East Asian G3 currency issuance in the first 7 months of 2013 reached US$89 billion, or approximately two-thirds of the record-breaking US$131 billion issued in 2012.

G3 currency issuance in the first 7 months of 2013 reached US$89 billion **(Table 5)**, about two-thirds of the record-breaking US$130.8 billion of G3 currency issuance in 2012, and well above the US$75 billion of G3 currency issuance in 2011. The three largest issuers remained the PRC (US$34.2 billion); Hong Kong, China (US$16.4 billion); and the Republic of Korea (US$14.8 billion). The two largest G3 currency issues out of the PRC in the first 7 months of 2013 were 10-year issues: a US$2 billion bond from CNOOC Finance with a 3.0% coupon, and a US$1.3 billion bond from Sinopec Capital with a 3.125% coupon. The largest deal out of Hong Kong, China was the US$2.3 billion perpetual bond from Hutchison Whampoa with a 3.75% coupon. The largest issue in the Republic of Korea was a euro-denominated bond worth US$1.3 billion from Korea Eximbank with a coupon of 2.0% that matures in 2020.

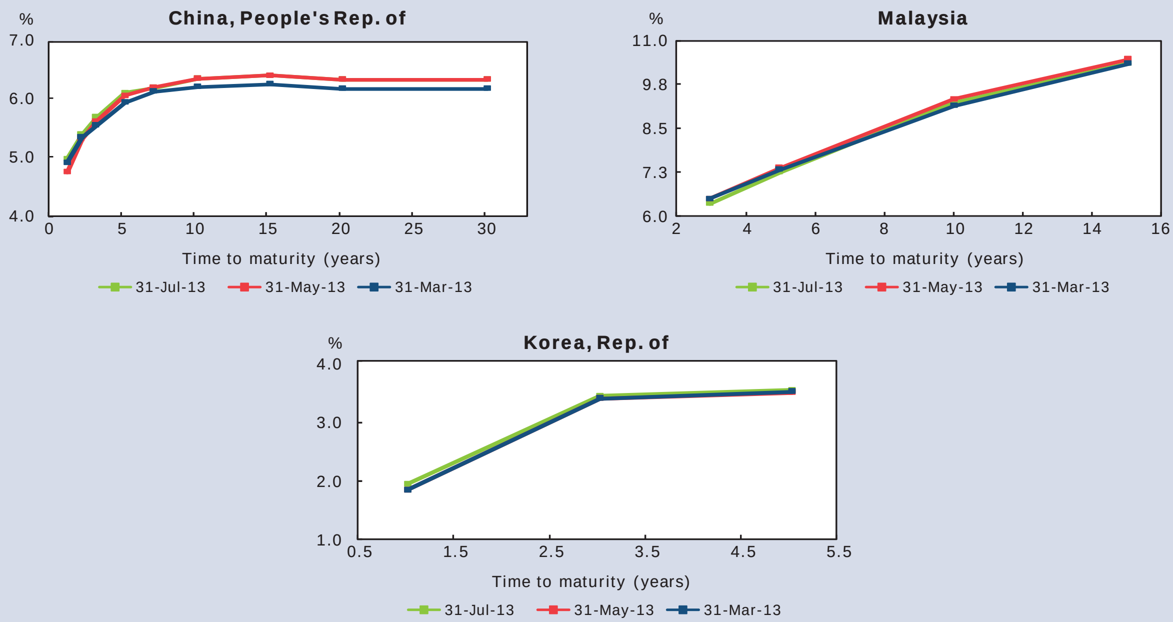
The fourth-largest issuer of G3 currency bonds thus far in 2013 is Indonesia. The Indonesian government and corporations issued US$10.4 billion of bonds in the first 7 months of 2013, slightly less than US$12.1 billion in all of 2012, but already more than US$6.7 billion in 2011. In 2012, the Indonesian government issued two US$-denominated bonds worth US$3.8 billion each and a 10-year samurai bond equivalent to US$692 million, compared with only one sovereign bond of US$2.5 billion in 2011. In the first 7 months of 2013, the Indonesian government issued three sovereign bonds worth US$4.0 billion: 10- and 20-year issues of US$1.5 billion each in April with coupons of 3.375% and 4.625%, respectively, and, in mid-July, another 10-year bond with a coupon of 5.375%. Additionally, the Indonesian state oil company, Pertamina, has been active in

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.
Sources: People's Republic of China (*ChinaBond*); Republic of Korea (EDAILY *BondWeb*); and Malaysia (Bank Negara Malaysia).

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 and the Republic of Korea, credit spreads are obtained by subtracting corporate indicative yields rated AAA from corporate indicative yields rated BBB+.
2. For Malaysia, credit spreads are obtained by subtracting corporate indicative yields rated AAA from corporate indicative yields rated BBB.
Sources: People's Republic of China (*ChinaBond*); Republic of Korea (EDAILY *BondWeb*); and Malaysia (Bank Negara Malaysia).

Table 5: G3 Currency Bond Issuance

2012 Issuer	US$ (million)	Issue Date
China, People's Rep. of	**31,115**	
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
Others	25,615	
Hong Kong, China	**27,942**	
Hutchison Whampoa 2.5% 2017	1,649	6-Jun-12
Hutchison Whampoa 4.625% 2022	1,500	13-Jan-12
Others	24,793	
Indonesia	**12,136**	
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	7,136	
Korea, Rep. of	**30,911**	
Korea Eximbank 4.0% 2017	1,250	11-Jan-12
Korea Eximbank 5.0% 2022	1,000	11-Jan-12
Korea Eximbank 1.25% 2015	1,000	20-Nov-12
Korea National Oil Corp. 3.125% 2017	1,000	3-Apr-12
Samsung Electronics 1.75% 2017	1,000	10-Apr-12
Others	25,661	
Malaysia	**6,778**	
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	3,428	
Philippines	**3,625**	
Philippines (Sovereign) 5.0% 2037	1,500	13-Jan-12
Philippines (Sovereign) 2.75% 2023	500	4-Dec-12
SM Investments 4.25% 2019	500	17-Oct-12
Others	1,125	
Singapore	**12,755**	
Temasek Financial 2.375% 2023	1,200	23-Jul-12
DBS Bank 2.35% 2017	1,000	28-Feb-12
OCBC Bank 1.625% 2015	1,000	13-Mar-12
OCBC Bank 3.15% 2023	1,000	11-Sep-12
Others	8,555	
Thailand	**5,000**	
PTT Global Chemical 4.25% 2022	1,000	19-Mar-12
Others	4,000	
Viet Nam	**550**	
Emerging East Asia Total	**130,814**	
Memo Items:		
India	**11,217**	
Reliance Holdings 5.4% 2022	1,500	14-Feb-12
State Bank of India 4.125% 2017	1,250	1-Aug-12
Others	8,467	
Sri Lanka	**2,434**	

1 January–31 July 2013 Issuer	US$ (million)	Issue Date
China, People's Rep. of	**34,216**	
CNOOC Finance 3.0% 2023	2,000	9-May-13
Sinopec Capital 3.125% 2023	1,250	24-Apr-13
Citic Pacific 8.625% Perpetual	1,000	22-May-13
State Grid Overseas 3.125% 2023	1,000	22-May-13
MCE Finance 5.0% 2021	1,000	7-Feb-13
Others	27,966	
Hong Kong, China	**16,406**	
Hutchison Whampoa 3.75% Perpetual	2,328	10-May-13
Shimao Property 6.625% 2020	800	14-Jan-13
Others	13,278	
Indonesia	**10,425**	
Pertamina 4.3% 2023	1,625	20-May-13
Pertamina 5.625% 2043	1,625	20-May-13
Indonesia (Sovereign) 3.375% 2023	1,500	15-Apr-13
Indonesia (Sovereign) 4.625% 2043	1,500	15-Apr-13
Indonesia (Sovereign) 5.375% 2023	1,000	17-Jul-13
Others	3,175	
Korea, Rep. of	**14,760**	
Korea Eximbank 2.0% 2020	1,330	30-Apr-13
Korea Development Bank 1.5% 2018	665	30-May-13
Harvest Operations 2.125% 2018	630	14-May-13
Others	12,134	
Malaysia	**4,065**	
1MDB Global Investments 4.4% 2023	**3,000**	19-Mar-13
Sime Darby 2.053% 2018	**400**	29-Jan-13
Malayan Bank 1.76% 2018	**200**	15-May-13
Others	**465**	
Philippines	**3,250**	
San Miguel Corporation 4.875% 2023	800	26-Apr-13
JG Summit 4.375% 2023	750	23-Jan-13
Petron Corporation 7.5% Perpetual	750	6-Feb-13
Others	950	
Singapore	**3,891**	
Olam International 6.75% 2018	750	29-Jan-13
Global A&T Electronics 10.0% 2019	625	7-Feb-13
Stats Chippac 4.5% 2018	611	20-Mar-13
Flextronics International 5.0% 2023	500	20-Feb-13
Others	1,405	
Thailand	**1,945**	
Krung Thai Bank 2.25% 2018	500	11-Mar-13
Others	1,445	
Viet Nam	**0**	
Emerging East Asia Total	**88,958**	
Memo Items:		
India	**10,270**	
Bharti Airtel International 5.125% 2023	1,500	11-Mar-13
Vedanta Resources 6.0% 2019	1,200	3-Jun-13
Others	7,570	
Sri Lanka	**781**	

Sources: Bloomberg LP, newspaper and wire reports.

recent years, issuing a 20-year bond in May 2012 for US$1.25 billion, which was followed by 10- and 20-year bonds in May of this year worth US$1.625 billion each and carrying coupons of 4.3% and 5.625%, respectively.

These trends in G3 currency issuance correspond roughly to the pattern for FCY bonds outstanding in the region **(Table 6)**. The largest issuer of FCY bonds in Indonesia, the Philippines, and Viet Nam is the government, while banks, financial

Table 6: Size and Composition of FCY Bond Markets

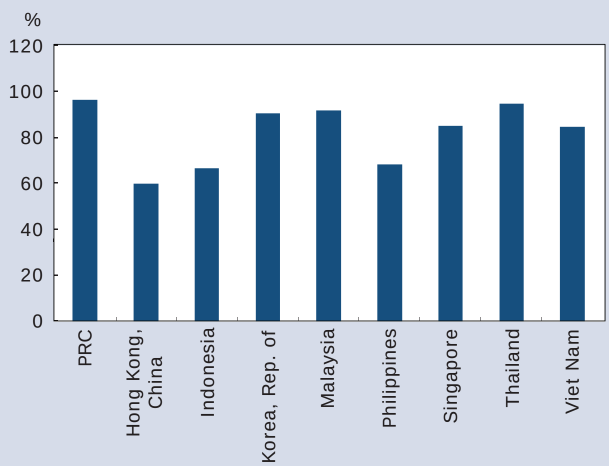
	2Q12		4Q12		2Q13	
	Amount (US$ billion)	% share	Amount (US$ billion)	% share	Amount (US$ billion)	% share
China, People's Rep. of (PRC)						
Total	122	100.0	148	100.0	160	100.0
Government	20	16.6	21	14.0	15	9.6
Banks and FIs	34	27.6	46	31.0	51	32.1
Corporate	68	55.9	82	55.0	93	58.3
Hong Kong, China						
Total	115	100.0	122	100.0	129	100.0
Government	2	1.4	2	1.3	2	1.2
Banks and FIs	31	27.1	33	26.6	34	26.1
Corporate	82	71.5	88	72.1	94	72.7
Indonesia						
Total	48	100.0	50	100.0	59	100.0
Government	26	54.0	27	54.5	30	51.4
Banks and FIs	3	6.5	3	5.8	3	5.5
Corporate	19	39.4	20	39.6	25	43.1
Korea, Rep. of						
Total	152	100.0	151	100.0	151	100.0
Government	25	16.1	24	15.7	23	15.2
Banks and FIs	67	43.9	68	45.3	70	46.6
Corporate	61	40.0	59	39.1	58	38.2
Malaysia						
Total	29	100.0	30	100.0	29	100.0
Government	3	11.3	3	10.7	2	7.2
Banks and FIs	11	36.8	12	39.4	8	29.4
Corporate	15	51.9	15	49.9	18	63.4
Philippines						
Total	44	100.0	43	100.0	45	100.0
Government	35	79.5	34	80.2	33	74.0
Banks and FIs	1	3.3	1	3.1	1	1.6
Corporate	7	17.2	7	16.7	11	24.3
Singapore						
Total	35	100.0	39	100.0	42	100.0
Government	0	0.0	0	0.0	0	0.0
Banks and FIs	24	67.0	25	65.3	26	62.6
Corporate	12	33.0	13	34.7	16	37.4
Thailand						
Total	9	100.0	13	100.0	16	100.0
Government	1	14.9	1	10.7	1	7.4
Banks and FIs	4	43.2	6	46.7	7	46.3
Corporate	4	41.9	5	42.6	7	46.3
Viet Nam						
Total	3	100.0	3	100.0	5	100.0
Government	2	77.4	2	76.6	4	82.3
Banks and FIs	0	8.6	0	9.2	0	0.0
Corporate	0	14.0	0	14.3	1	17.7
Emerging East Asia (EEA)						
Total	556	100.0	599	100.0	635	100.0
Government	114	20.4	114	19.1	111	17.3
Banks and FIs	175	31.4	195	32.5	201	31.7
Corporate	268	48.2	290	48.4	323	50.9
EEA Less PRC						
Total	434	100.0	451	100.0	475	100.0
Government	93	21.5	94	20.8	95	19.9
Banks and FIs	141	32.5	149	32.9	150	31.6
Corporate	200	46.0	209	46.3	230	48.4

FCY = foreign currency, FIs = financial institutions.
Source: *AsianBondsOnline*.

institutions, and corporates are the largest issuers in all other markets in the region. The largest amounts of FCY bond issuance in the region at the end of 2Q13 were in the PRC (US$160 billion); the Republic of Korea (US$151 billion); Hong Kong, China (US$129 billion); Indonesia (US$59 billion); and the Philippines (US$45 billion). While the amount of FCY government bonds issued in 2Q13 by the government in the Philippines (US$33 billion) was slightly larger than in Indonesia (US$30 billion), the FCY bonds issued by banks, financial institutions, and corporates in Indonesia (US$28 billion) were more than double those issued by the corporate sector in the Philippines (US$12 billion). Furthermore, banks and financial institutions were the largest FCY bond issuers in both the Republic of Korea and Singapore.

Figure 13 puts FCY issuance in emerging East Asia into perspective by providing data on LCY bonds as a share of total bonds at end-June. The lowest such ratio was found in Hong Kong, China, followed by Indonesia and the Philippines. The next lowest ratios were in Singapore and Viet Nam. Meanwhile, the PRC had the highest ratio.

Figure 13: LCY Bonds as % of Total Bonds



LCY = local currency, PRC = People's Republic of China.
Note: Data as of end-June 2013.
Source: *AsianBondsOnline*.

Market Returns

Market returns for Asia's bond and equity markets fell dramatically during the first 7 months of 2013.

Market returns in Asia fell dramatically during the first 7 months of 2013, with the Pan-Asian Index for LCY bonds falling 3.5% **(Table 7)** and the Far East ex-Japan Index of the MSCI Equity Index Returns falling 5.0% **(Table 8)**.

The most dramatic decline among the iBoxx Asia Bond Fund Index Family Returns was in Indonesia, where the bond market fell 17.8% on a US$ unhedged total return basis, followed by Singapore with a 7.8% decline, Malaysia with a 5.8% decline, and the Republic of Korea with a 4.4% decline. The only bond markets to report gains in the first 7 months of 2013 were the Philippines (7.5%) and the PRC (3.1%).

In equity markets, the Far East ex-Japan Index (US$ terms) fell 5.0% between the beginning of January and end-July. The largest declines were in the Republic of Korea (–10.6%) and the PRC (–9.8%). The Indonesian equity market was down 3.0%, compared with a 17.8% fall in bond returns on an US$ unhedged total return basis. The only market to have significantly positive returns in its equity market was the Philippines, which rose 9.7%. Equity markets in Hong Kong, China and Malaysia rose slightly at 1.1% and 0.7%, respectively. Over the same period, the MSCI index for the US rose 18.3%.

Table 7: iBoxx Asian Bond Fund Index Family Returns

Market	Modified Duration (years)	2011 Returns (%)		2012 Returns (%)		Jan–Jul 2013 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	6.64	5.6	10.4	2.4	3.6	1.5	3.1
Hong Kong, China	3.86	5.3	5.4	3.5	3.8	(3.3)	(3.4)
Indonesia	6.37	21.7	20.2	13.1	7.0	(12.3)	(17.8)
Korea, Rep. of	4.79	6.4	4.8	6.4	14.5	0.3	(4.4)
Malaysia	5.16	4.9	1.8	4.2	8.2	0.1	(5.8)
Philippines	7.80	15.9	15.8	10.4	17.9	14.0	7.5
Singapore	5.75	6.5	5.1	3.9	10.6	(3.8)	(7.8)
Thailand	5.11	5.0	0.3	3.3	6.5	0.3	(2.2)
Pan-Asian Index	5.51	–	7.0	–	7.9	–	(3.5)
HSBC ALBI	7.72	–	5.0	–	8.9	–	(5.6)
US Govt. 1–10 years	3.88	–	7.0	–	1.9	–	(1.3)

( ) = negative, – = not applicable, ALBI = Asian Local Bond Index, LCY = local currency, US = United States.
Notes:
1. Asian Bond Fund (ABF) indices contain only government debt and government-guaranteed debt obligations.
2. Market bond indices are from iBoxx Index Family. January–July 2013 returns reflect changes between end-December 2012 and end-July 2013 values.
3. Duration as of end-July 2013.
Sources: *AsianBondsOnline* and Bloomberg LP.

Table 8: MSCI Equity Index Returns

Market	2011 Returns (%)		2012 Returns (%)		Jan–Jul 2013 Returns (%)	
	LCY terms	US$ terms	LCY terms	US$ terms	LCY terms	US$ terms
China, People's Rep. of	(20.4)	(20.3)	18.7	19.0	(9.7)	(9.8)
Hong Kong, China	(18.5)	(18.4)	24.2	24.4	1.2	1.1
Indonesia	4.7	4.0	8.8	2.4	3.4	(3.0)
Korea, Rep. of	(11.5)	(12.8)	11.7	20.2	(6.1)	(10.6)
Malaysia	(0.2)	(2.9)	6.8	10.8	6.8	0.7
Philippines	(3.1)	(3.2)	34.7	43.9	16.0	9.7
Singapore	(20.0)	(21.0)	19.2	26.4	2.4	(1.8)
Thailand	(1.2)	(5.6)	26.9	30.9	(1.8)	(4.0)
Far East ex-Japan Index	(15.6)	(16.8)	15.5	19.0	(2.5)	(5.0)
MSCI US	–	(0.1)	–	13.5	–	18.3

( ) = negative, – = not applicable, LCY = local currency, MSCI = Morgan Stanley Capital International, US = United States.
Notes:
1. Market indices are from MSCI country indexes. January–July 2013 returns reflect changes between end-December 2012 and end-July 2013 values.
2. Far East ex-Japan includes the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Taipei,China; and Thailand.
Sources: *AsianBondsOnline* and Bloomberg LP.

Policy and Regulatory Developments

People's Republic of China

SAFE Issues New Requirements on Net Open Position

On 6 May, the State Administration of Foreign Exchange (SAFE) announced that local banks with foreign currency (FCY) loan-to-deposit ratios exceeding 75% and foreign banks with FCY loan-to-deposit ratios exceeding 100% would be required to maintain a net open position on FCY holdings of at least zero.

SMEs Allowed to Issue Exchangeable Bonds

On 31 May, the Shenzhen Stock Exchange announced that it would allow small and medium-sized enterprises (SMEs) to issue exchangeable bonds. Exchangeable bonds are bonds collateralized with the listed equity securities of other companies. The coupon rate for the bonds cannot be three times higher than the relevant benchmark rate and the tenor must be at least 1 year. The bond conversion price also cannot be less than 90% of the 20-day average trading price of the collateral.

CSRC Increases QFII Quota

On 12 July, the China Securities Regulatory Commission (CSRC) announced that it would increase the Qualified Foreign Institutional Investor (QFII) Program's quota to US$150 billion. It also expanded the Renminbi Qualified Foreign Institutional Investor (RQFII) Program. (For more detail, see the Hong Kong, China Market Summary.)

PBOC Removes Lending Rate Floor

On 20 July, the People's Bank of China (PBOC) announced that it would remove the floor on lending rates. Previously, banks could not set lending rates lower than 30% of the benchmark rate. The PBOC also removed the limits on interest rates for bill discounting. However, the PBOC did not remove the floor on mortgage interest rates. The PBOC said that the moves were part of the People's Republic of China's (PRC) policy of moving toward a market-based interest rate regime.

The PRC to Audit Local Government Debt

On 26 July, the PRC ordered a nationwide audit of local government debt. The National Audit Office said the last audit found that local governments had a total of CNY10.7 trillion in outstanding debt at the end of 2010.

Hong Kong, China

RQFII Expanded

On 12 July, the PRC expanded the RQFII program. The RQFII program had been limited to financial institutions in Hong Kong, China but will now be expanded to include firms in London; Singapore; and Taipei,China.

Revision to the Renminbi Liquidity Facility

On 25 July, Hong Kong Monetary Authority (HKMA) expanded the CNH liquidity facility that provides CNH[7] funds to banks in Hong Kong, China. Previously, banks availing of the facility would receive funds the following day, which had to be repaid after 1 week. With the expansion of the facility, HKMA will provide banks two additional funding options: (i) overnight borrowing with funds available on the same day, and (ii) 1-day borrowing with funds available the following day.

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

Indonesia

Parliament Approves 2013 Revised State Budget

In June, Indonesia's House of Representatives approved the 2013 revised state budget, which paved the way for the government to raise fuel prices. The revised budget includes a deficit target equivalent to 2.4% of gross domestic product (GDP), up from 1.6% in the original budget. The fuel price hike took effect on 22 June, with prices for gasoline rising 44% and diesel rising 22%.

BI's First FX Swap Auction Oversubscribed

Bank Indonesia's (BI) first foreign exchange (FX) swap auction received a warm response from market participants, with bids reaching US$1.2 billion compared with a target of US$500 million. BI awarded a total of US$600 million worth of FX swaps in its first auction held on 17 July. The FX swap action is BI's newest monetary tool to help boost rupiah liquidity in the market and increase FX reserves.

BI Tightens Monetary Policy in August

In a meeting held on 15 August, the central bank said that it will continue to strengthen its policy mix to curb inflation and maintain a more sustainable balance of payments. BI will continue to conduct monetary operations to absorb excess liquidity. In line with this, the central bank plans to issue a new short-term instrument—a BI Deposit Certificate—which will only be sold to domestic banks and will not be offered to foreign investors. BI will also raise the secondary reserve requirement of banks to 4.0% from the current 2.5%, while keeping the primary reserve requirement at 8.0%.

On 29 August, BI's Board of Governors decided to introduce supplementary measures to strengthen its monetary and macro-prudential policy mix to curb inflation, stabilize the rupiah exchange rate, ease the current account deficit, and ensure macroeconomic and financial system stability. BI decided to raise its benchmark rate 50 basis points (bps) to 7.0%. It also raised the lending facility rate 25 bps to 7.0% and the deposit facility rate 50 bps to 5.25%. The minimum holding period for its central bank certificates, or *Sertifikat* Bank Indonesia, was reduced from 6 months to 1 month.

Republic of Korea

MOSF Announces Amendments to Regulations on KTB Issuance and Primary Dealer System

The Republic of Korea's Ministry of Strategy and Finance (MOSF) announced in July amendments to regulations on Korean Treasury Bond (KTB) issuance and the primary dealer system, with the amendments aimed at attracting greater primary dealer participation in the primary and secondary markets. The amendments extend the (i) differential knock-down rates for 10-, 20-, and 30-year bonds to 3 bps from 2 bps; (ii) threshold of primary dealers' non-competitive purchasing option to 10%; and (iii) quote spreads for long-term bonds given their yield volatility. MOSF stated that the amendments would be implemented sometime between the 10-year KTB auction starting on 15 July and the end of 2013.

FSC Introduces Measures to Invigorate Corporate Bond Market

The Republic of Korea's Financial Services Commission (FSC) announced measures in July to invigorate the country's corporate bond market and prevent the worsening of corporate funding conditions and the possible spillover of "destabilizing factors" from the market to the real economy. Specifically, the FSC measures include (i) a liquidity support program through government issuance of primary collateralized bond obligations, (ii) tax incentives for dividends of corporate bond funds with more than 30% of bonds rated BBB– or below, (iii) improvements in the Qualified Institutional Buyer system, (iv) easing of relevant regulations to boost demand for corporate bonds, (v) revisions to the regulations on asset-backed securities, (vi) reforms in the credit rating system, (vii) enhancements to the system for corporate bond issuance, (viii) improvements in the system for corporate bond management, and (ix) strengthening the effectiveness and transparency of the bond distribution system.

Republic of Korea Introduces 2013 Supplementary Budget, KTB Market Stabilization Measures

MOSF reported in April that a supplementary budget of KRW17.3 trillion will be utilized to help stimulate the domestic economy through the remainder of 2013. Of the amount, KRW12.0 trillion will be used to finance government revenue shortfalls and the remaining KRW5.3 trillion will be spent to supplement the government's budget expenditures.

MOSF reported that the 2013 supplementary budget calls for an additional net increase in issuance of KTBs amounting to KRW15.8 trillion. Since this will likely trigger upward pressure on interest rates, thereby imposing a burden on the market, MOSF has decided to reduce the issue amount for buy-backs. Against this backdrop, total issuance of KTBs for the year is projected to reach KRW88.5 trillion, which is KRW8.8 trillion higher than the previous estimate of KRW79.7 trillion.

Basel III Capital Regulations to Apply to Bank Holding Companies

The FSC announced in August that the Basel III capital regulations will apply to bank holding companies effective 1 December 2013. These regulations establish the minimum capital requirement ratios for bank holding companies at 4.5% for common equity capital, 6.0% for Tier 1 capital, and 8.0% for total capital. A capital conservation buffer will also be introduced to bank holding companies starting in 2016.

Malaysia

Malaysia Enacts Financial Services Act and Islamic Financial Services Act

Malaysia enacted a new single legislative framework for conventional and Islamic financial services effective 30 June. The new legislation provides clearly defined regulatory objectives and establishes accountability for Bank Negara Malaysia (BNM) in pursuing its principal objective of safeguarding financial stability. It sets forth transparent assessment criteria for authorizing institutions to engage in regulated financial transactions. The acts include provisions to regulate financial holding companies and non-regulated entities in order to take account of systemic risks that can emerge from the interaction between regulated and unregulated institutions, activities, and markets. The IFSA provides a comprehensive legal framework that is fully consistent with *sharia'h* (Islamic law) in all aspects of regulation and supervision, from licensing to the winding-up of an institution.

Philippines

BSP Further Limits Access to SDA Facility

On 9 May, the Monetary Board of Bangko Sentral ng Pilipinas (BSP) approved revised guidelines on the access of banks and trust departments and entities (acting as trustees) to the BSP's Special Deposit Account (SDA) facility. BSP will gradually reduce the SDA placements of investment management accounts of trust entities until the end of the year. The Monetary Board also stated that the low inflation environment and strong domestic growth prospects provided flexibility for BSP to restructure its monetary policy tools.

BSP Maintains Policy Rates

On 25 July, the Monetary Board of BSP decided to keep its key policy rates—the overnight borrowing and lending rates—steady at 3.5% and 5.5%, respectively. The reserve requirement ratios and the interest rate for its SDA facility were also left unchanged. The decision to hold the policy rates at their current levels reflected the Monetary Board's assessment that the inflation environment remains benign, with inflation expected to remain on target through the remainder of 2013 and all of 2014.

Philippine BTr Raises PHP150 Billion from Sale of RTBs

On 5 August, the Bureau of the Treasury (BTr) ended the offer period for Retail Treasury Bonds (RTBs) after raising a total of PHP150 billion. The RTBs carry a maturity of 10 years and a yield of 3.25%. The banks were given until 13 August to sell the RTBs to the public. Banks were also required to sell at least 20% of the RTBs to retail buyers, net of the PHP26.9 billion sold to government-owned corporations.

Singapore

MAS Introduces Debt Servicing Framework for Property Loans

On 28 June, Monetary Authority of Singapore (MAS) announced its plan to introduce a total debt servicing ratio framework for all property loans granted by financial institutions to individuals. This will require financial institutions to take into consideration borrowers' other outstanding debt obligations when granting property loans in order to strengthen credit underwriting practices among financial institutions and encourage financial prudence among borrowers. MAS will also refine rules related to the application of the existing loan-to-value (LTV) limits on housing loans.

BOJ and MAS Sign Cross-Border Collateral Arrangement

On 26 July, the Bank of Japan (BOJ) and MAS established a cross-border collateral arrangement to enhance financial stability in Singapore. Under the arrangement, eligible financial institutions operating in Singapore may obtain Singapore dollar liquidity from MAS by pledging Japanese government securities. This widens the range of acceptable collateral in MAS' liquidity facility and permits greater flexibility in the liquidity management of eligible financial institutions, including Japanese banks, operating in Singapore. This collaboration reinforces BOJ and MAS' commitment to the long-standing economic and financial relationship between Japan and Singapore.

Thailand

Thailand's Cabinet Approves Measures to Promote Stable Economic Growth

The Government of Thailand's Cabinet agreed during its 6 August meeting on the implementation by the relevant government offices of measures focusing on private consumption, private investment, government spending, and exports. These measures, aimed at promoting stable economic growth, include (i) offering tax incentives to boost the tourism industry and promote the organization of seminars, (ii) promoting investments in the agro-processing industry, (iii) accelerating budget disbursements for fiscal years 2013 and 2014, (iv) expanding exports into potential new markets, and (v) increasing the access of SMEs to financing.

MOF Permits Two Foreign Entities to Issue LCY Bonds in Thailand

The Ministry of Finance (MOF) announced in May that it was permitting two foreign entities to sell THB-denominated bonds and debentures in Thailand, totaling THB14 billion, between 1 May 2013 and 31 January 2014. These two entities and their respective authorized bond issuance amounts are (i) Australia and New Zealand Banking Corporation (THB8 billion) and (ii) Westpac Banking Corporation (THB6 billion).

Amendments Approved to Regulations Governing REITs

Thailand's Securities and Exchange Commission (SEC) announced in July that the Capital Market Supervisory Board has approved amendment to regulations governing the creation and management of real estate investment trusts (REITs). The amendments will allow an REIT trustee to participate in more REIT-related businesses for as long as the trustee is independent from the REIT manager. Measures preventing conflicts of interest among REIT-related businesses will also be put in place.

Viet Nam

Viet Nam Devalues its Currency, Cuts Interest Rate Ceiling for Short-Term Deposits

Viet Nam recently devalued its currency by 1% versus the US dollar. Effective 28 June, the VND–US$ reference rate was adjusted from VND20,828 to VND21,036 per US$1. The objectives of the devaluation are to improve the country's trade balance and increase its foreign exchange reserves.

The State Bank of Viet Nam (SBV) announced a cut in the interest rate ceiling for VND deposits with tenors between 1 month and less than 6 months by another 50 bps to 7%, effective 28 June. The move aims to support economic growth. Short-term lending rates for five prioritized sectors—agriculture, exports, supporting industries, high-tech businesses, and SMEs—will now be capped at 9% rather than 10%.

Viet Nam Asset Management Company Begins Operations

On 26 July, Viet Nam Asset Management Company (VAMC) started operations with initial registered capital of VND500 billion. VAMC was created to better manage non-performing loans (NPLs) and promote credit growth in the country's banking system. VAMC—which is wholly state-owned and -managed, and supervised by SBV.

Bond Financing for Infrastructure

Introduction

It is widely agreed that major investment is needed for infrastructure in Asia. The poor level of infrastructure in the region threatens to hamper the region's growth prospects and the goal of reducing poverty. Improved connectivity can help improve trade and growth in less developed areas. Integrating electricity grids across countries would enable energy resources to be shared across borders, thus expanding the regional energy trade and increasing energy security. Increased investment in infrastructure can help remove the constraints that poor infrastructure facilities place on growth.

Most empirical studies have shown that infrastructure investment has strong spillover effects on other parts of the economy.[8] This suggests that there are positive externalities in infrastructure investment; therefore, in the absence of government intervention, there may be underinvestment in infrastructure. While the magnitude of the effects may vary, empirical studies have tended to find large and positive effects of investment in public infrastructure on economic growth.

In particular, the spillover effects of investment in infrastructure are found to be higher in developing countries. This is not surprising as developing countries tend to have poorer levels of infrastructure and can benefit more from additional investment. Another interesting finding is that spillover effects tend to be spread over a large area. The smaller the geographical area of the study, the smaller the effects of public investment tend to be. This suggests that spillover effects can be felt over quite a large area, which also implies that the benefits of infrastructure projects may sometimes spill over national borders.

There is substantial variation in the quality of infrastructure in the region. Some countries—such as Hong Kong, China; the Republic of Korea; and Singapore—have infrastructure that approaches or even exceeds developed world standards. However, other countries still lag behind in their infrastructure quality and considerable investment will have to be undertaken to bring their infrastructure standards up to global levels **(Table 9)**.

Given that infrastructure investment has proven to be beneficial to economic growth, there have been several attempts to estimate how much investment in infrastructure is needed in Asia. A joint Asian Development Bank (ADB) and ADB Institute report in 2008 estimated that Asia needed to invest about US$8 trillion in transport, communication, and energy infrastructure between 2010 and 2020. Of this amount, 68% would be designated for new infrastructure and the remainder for maintaining and replacing existing infrastructure. The detailed breakdown of infrastructure requirements given above reveals that the largest amount of funding is required in sectors that investors are usually the most cautious toward **(Table 10)**. These are sectors where construction risks are high (e.g., transport and energy), suggesting that the region faces a major challenge in financing the necessary infrastructure.

Public and Private Provision of Infrastructure

Financing infrastructure has its unique set of challenges. By its very nature, infrastructure has spillover effects and externalities. This suggests that private provisions will tend to be inadequate, thus requiring governments to regularly intervene to provide services. Furthermore, most infrastructure is part of a network and these systems tend to be public goods. The marginal cost of providing an extra unit of a public good is close to zero. So welfare will be maximized by providing a public good at marginal cost. However,

[8] A.M. Pereira and J.M. Andraz. 2013. On the Economic Effects of Public Infrastructure Investment: A Survey of the International Evidence. *Working Papers*. 108. Williamsburg, VA: Department of Economics, College of William and Mary.

Table 9: Quality of Asian Infrastructure

Region or Economy	Overall	Road	Railroad	Port	Air Transport	Electricity Supply
G7 Average	**5.7**	**5.7**	**5.3**	**5.4**	**5.8**	**6.3**
East Asia Average	**5.5**	**5.5**	**5.5**	**5.5**	**5.7**	**6.0**
China, People's Rep. of	4.3	4.4	4.6	4.4	4.5	5.2
Hong Kong, China	6.5	6.3	6.4	6.5	6.7	6.8
Korea, Rep. of.	5.8	5.8	5.6	5.5	5.9	6.0
Southeast Asia Average	**4.6**	**4.5**	**3.2**	**4.5**	**5.0**	**4.7**
Brunei Darussalam	5.1	5.2	2.1	4.5	4.9	5.5
Cambodia	4.2	4.0	2.3	4.2	4.4	3.6
Indonesia	3.7	3.4	3.2	3.6	4.2	3.9
Malaysia	5.4	5.4	4.9	5.5	5.9	5.9
Philippines	3.6	3.4	1.9	3.3	4.1	3.7
Singapore	6.5	6.5	5.7	6.8	6.8	6.7
Thailand	4.9	5.0	2.6	4.6	5.7	5.5
Viet Nam	3.2	2.7	2.6	3.4	3.6	3.1

Note: Based on a scale of 1 (underdeveloped) to 7 (extensive and efficient by international standards).
Source: World Economic Forum's *Global Competitiveness Report (2012–13)*.

Table 10: Infrastructure Requirements in Asia, 2010–20

Sector or Subsector	New Capacity (US$)	Replacement (US$)	Total (US$)
Energy (Electricity)	**3,176,437**	**912,202**	**4,088,639**
Telecommunications	**325,353**	**730,304**	**1,055,657**
Mobile Phones	181,763	509,151	690,914
Landlines	143,590	221,153	364,743
Transport	**1,761,666**	**704,457**	**2,466,123**
Airports	6,533	4,728	11,261
Ports	50,275	25,416	75,691
Railways	2,692	35,947	38,639
Roads	1,702,166	638,366	2,340,532
Water and Sanitation	**155,493**	**225,797**	**381,290**
Sanitation	107,925	119,573	227,498
Water	47,568	106,224	153,792
Total	**5,418,949**	**2,572,760**	**7,991,709**

Source: ADB. 2009. *Infrastructure for a Seamless Asia*. Manila.

this means that the fixed costs (sunk costs) will have to be financed somehow. Sometimes consumers are charged based on their demand for the goods, while at other times consumers are charged based on their ability to pay. But some government subsidies or support are common to ensure that services are available to a wide swath of the population.

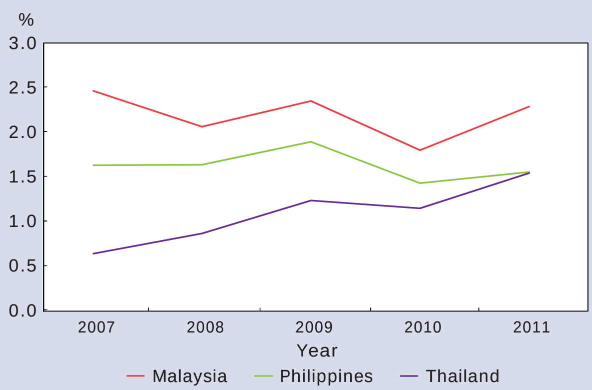
Because of market failures, infrastructure services in Asia are still mostly provided by the public sector, but there has been an increase in private sector participation since the 2008/09 global financial crisis. Looking at the breakdown of public and private investment in infrastructure in different countries, around 80% of infrastructure spending in the People’s Republic of China (PRC) comes from the public sector. Both Malaysia and the Philippines have roughly an equal split between public and private sector infrastructure spending. In Thailand, however, about one-quarter of infrastructure spending is handled by the public sector. For these countries, the public share of infrastructure investment has been on the decline since 2008/09.

One reason for increasing private sector participation in infrastructure projects is because of heightened concerns about growing government indebtedness. While most of the region's governments continue to maintain healthy fiscal balances, they are understandably wary of borrowing large amounts to finance infrastructure projects. As a result, this has prompted a search for greater private participation in infrastructure project financing. There are also expectations that the private sector can implement infrastructure projects more efficiently. Getting the providers of infrastructure projects to finance them can align more closely the needs of consumers and providers. The main drawback of private sector participation is that its costs of borrowing are usually higher than government's, which may increase the cost of an infrastructure project. However, some have argued that the greater efficiency of the private sector can result in lower overall costs. Others emphasize that the key to efficiency is how competition and regulation in the infrastructure sector are managed, rather than the issue of ownership. For example, a poorly regulated private monopoly is not likely to deliver efficient services. Hence, rather than focusing on attracting private investment in specific infrastructure projects, governments should instead aim to improve the overall business and investment climate to facilitate investment in infrastructure.

The region's governments missed an opportunity during the recent period of plentiful liquidity—resulting from advanced economies' easy monetary policies and the subsequent capital flows into emerging markets— to ramp up their infrastructure spending. Data show that central government spending on infrastructure as a share of gross domestic product (GDP) after the global financial crisis remained stable or even fell in most countries across the region. Bucking this trend, Hong Kong, China and Thailand took the opportunity to increase their infrastructure spending when liquidity was plentiful **(Figures 13a, 13b)**.

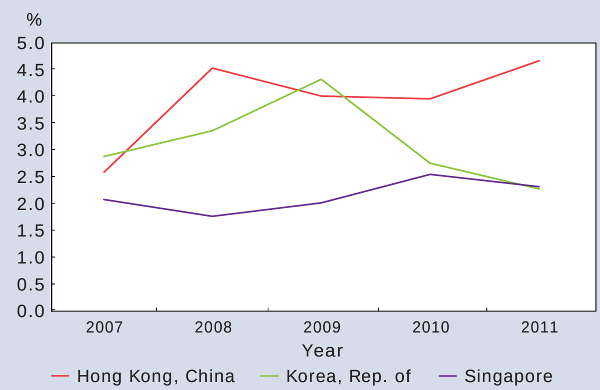
Meanwhile, private participation in infrastructure projects has not increased much in the region in recent years **(Figure 14)**. This suggests that most of the extra liquidity was channeled into consumption

Figure 13a: Infrastructure Spending as % of GDP for Selected ASEAN Countries



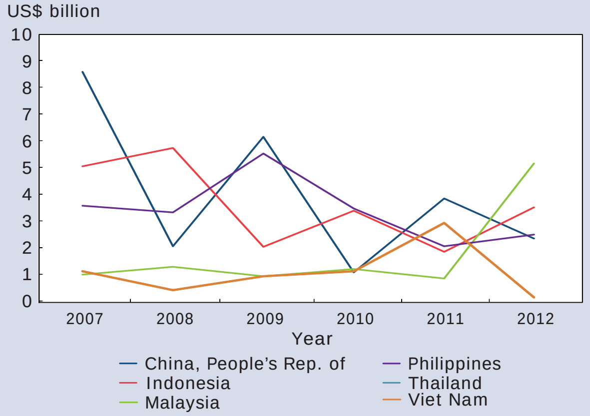
ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product.
Source: ADB staff calculations based on data from national sources.

Figure 13b: Infrastructure Spending as % of GDP for Selected Asian Economies



GDP = gross domestic product.
Source: ADB staff calculations based on data from national sources.

Figure 14: Total Commitments of Private Sector Participation in Infrastructure Projects in Selected Asian Economies



Source: The World Bank Private Participation in Infrastructure Database.

and financial assets rather than investment. With the prospects of the end of quantitative easing in the United States (US) and given current market turmoil, infrastructure financing will likely become more difficult and expensive for the region's governments. This suggests the need for governments to develop policies that incentivize financial institutions to direct more of their lending for productive activities.

The divergence between average and marginal costs, which tends to be large for infrastructure projects, deters private sector investment as there is the potential for ex post appropriation. This is because project owners will find it economically beneficial to continue operating projects as long as marginal costs are covered. This problem becomes more acute for long-term projects. The difficulty of getting governments to commit for the long-term has meant that the private sector has been reluctant to take on the burden of providing infrastructure services. Even when the private sector participates in infrastructure projects, the government still has an important role to play. As most infrastructure projects are long-term in nature, only the government is able to credibly commit to future payments. The failure to credibly commit will affect the cost of capital since this cost is affected by regulatory risk. Therefore, legal protection is needed to reduce the cost of capital.

Trends in Infrastructure Financing

As the region's infrastructure financing requirements are large, one of the questions raised is how to mobilize and channel the funds required. Infrastructure financing has several important characteristics. First, it tends to involve locking up funds for a long time. This means there has to be a significant maturity transformation undertaken by the financial intermediaries as most funds available are usually short-term. Therefore, the financial sector will have to develop the necessary risk assessment and management skills to intermediate funds for long-term infrastructure. The long-term nature of infrastructure also makes it more difficult to assess the risk. There also tends to be a divergence between the social and economic values of infrastructure projects. Government financing may be cheaper as the public sector may be able to internalize some of the risk inherent in infrastructure projects.

It is clear that the demand for infrastructure financing is high in the region. The good news is that the region's economies have plenty of domestic savings that can be mobilized to fund infrastructure projects. Given the weak conditions of the advanced economies, infrastructure spending in the region can also provide a welcome boost to domestic economies. The capacity of these economies to finance infrastructure spending will depend on the region's capacity to mobilize savings and attract investment from aboard, and on how it effectively channels those funds to productive infrastructure projects. While the level of savings is important, it is also crucial that savings are channeled to the proper infrastructure projects.

Among the region's economies, the source of most long-term financing for the private sector is still the banking system. Bond financing still comprises a relatively small share of the private sector's long-term financing, although this share has risen recently, particularly since the global financial crisis. The situation in the public sector is reversed, with most of its long-term funding being intermediated through bonds.

One concern is that infrastructure financing tends to be carried out by banks using project finance. But the new Basel III capital requirements, which mandate that banks hold more capital against long-term finance, will make it harder for banks to lend long-term. There are some signs that foreign bank lending to the region has already taken a hit as European banks have shed assets in Asia to shore up their capital bases. As **Figure 15** shows, long-term bank lending to the region has been in decline since the global financial crisis. Some of the slack has been taken up by bond financing, suggesting yield-hungry bond investors are still keen to invest in the region.

Looking at the flows of bank financing from different regions into Asia, there has been a clear drop in infrastructure financing from European Union (EU) banks since the global financial crisis. There has also been a decrease in bank financing from Asian banks based in India and Thailand. These declines have been offset to a certain extent by greater investment from Japanese and Australian banks **(Figure 16)**.

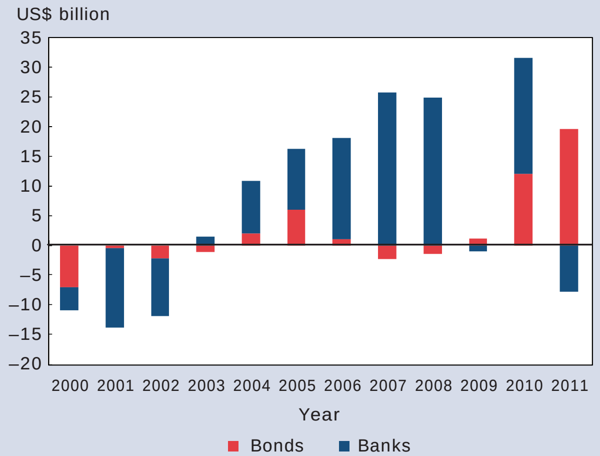
Infrastructure Financing

All infrastructure projects are ultimately financed by individuals. The question is whether they are financed through a private sector intermediary or the government via taxes. The main advantage of financing through the public sector is that governments tend to be able to borrow at lower rates than private companies. While on the surface, a government may be able to borrow more cheaply, one of the reasons for this is that the government is assuming the equity risk in the infrastructure project. This means that the government and taxpayers are responsible for any cost overruns.

Given the high initial costs and long service life of infrastructure projects, long-term financing is required. As the revenues generated from infrastructure projects will be in local currency (LCY), the preference will be to borrow in LCY to reduce the potential for currency mismatch. Borrowing in foreign currency (FCY) will leave the project exposed to adverse exchange rate movements that could result in much higher financing costs in LCY terms. The risks of currency mismatch were starkly revealed during the 1997/98 Asian financial crisis when infrastructure companies that had borrowed in FCY faced massive losses following the fall in value of regional currencies.

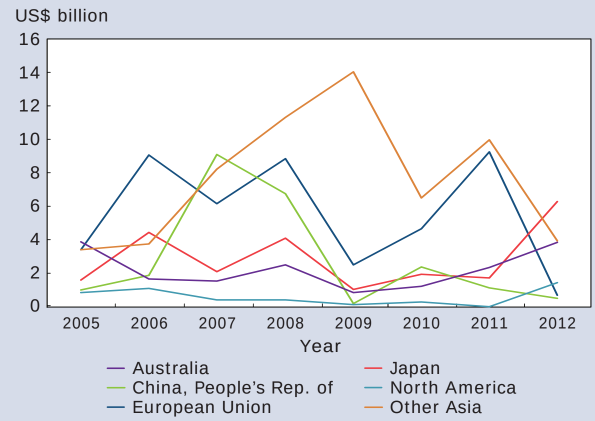
How best can private sector financing be structured? By its very nature, long-term financing is required

Figure 15: Sources of External Long-Term Private Debt Financing Flows to Asia



Note: Includes Cambodia, People's Republic of China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam.
Source: World Bank's World Development Indicators.

Figure 16: Sources of Infrastructure Project Financing Flows to Asia



Note: Other Asia includes Bangladesh, Brunei Darussalam, India, Indonesia, Malaysia, Pakistan, the Philippines, the Republic of Korea, Singapore, Thailand, and Viet Nam.
Source: *Infrastructure Journal Online*.

as the initial costs of constructing infrastructure projects are high, while the service life of projects tends to be long. Hence, capital costs have to be amortized over many years to match them with the revenue stream that infrastructure projects generate (after also taking into account operating costs).

There are two main stages to the development of an infrastructure project. These two distinct phases have different characteristics in terms of risks and returns. The initial phase of the project is known as the Greenfield phase. This covers the design process, securing the necessary permits, and construction of the infrastructure project. As the construction of infrastructure projects tends to be a complex process, the risks here can be quite high. Completed infrastructure projects, which are operating and generating revenue, are considered to be in the Brownfield phase. Whether or not a project is in the Brownfield phase will differ by type of asset. However, an infrastructure project will generally be considered to be in the Brownfield phase when it is generating a steady stream of income.

Given the two distinct phases and risk profiles of an infrastructure project, it may be preferable to have different types of investors at different stages of the project. At the initial construction stage, investors with the necessary project appraisal skills and risk appetite will be more suitable for providing the initial financing. Once the construction phase is completed and the revenue generating phase has begun, the initial investors can exit their investment and sell the project. With the construction phase over, the project is generating a steady stream of revenue that might be suitable to be packaged as bonds and sold to investors. This can be an attractive investment as the risk is quite small and the debt holders would have ownership of the asset.

Private investors are interested in investing in infrastructure projects for several reasons. Infrastructure projects tend to be monopolistic in nature either because a particular market is a natural monopoly or government regulations restrict new entrants. The high level of investment required for an infrastructure project serves as a barrier to entry and thus makes it difficult for new competitors to arise. Given the monopolistic nature of infrastructure projects, governments tend to regulate the prices that operators are allowed to charge. This means that infrastructure projects tend to generate a stable inflation-adjusted return.

Another advantage of infrastructure projects is that the demand for infrastructure services does not vary too much with economic cycles. As infrastructure services tend to be essential, their utilization tends to be quite stable even during economic downturns. Certain services may be more volatile (e.g., transportation) and may suffer a modest fall in demand during recessions, while the consumption of utilities (e.g., water and energy) tends to hold up even during recessions.

The revenue stream from infrastructure tends to be inflation-protected too. Regulated rates are usually indexed to inflation. This is useful as infrastructure bonds are often inflation-indexed bonds, which are desired by many investors but are in limited supply.

As mentioned above, banks are the dominant form of private sector financing for infrastructure projects in Asia. However, their ability to continue providing long-term financing may be limited. One problem is that the source of funding for banks is short-term deposits, which are hard to match with the maturity of most infrastructure loans. Basel III rules on bank funding, which increase the size of the capital buffer lenders must hold against losses and require that banks better match the duration of their own funding to their loans, have reduced banks' desire to lend for long-term infrastructure projects. Syndicated loans have also become less prevalent, as some traditional banks have stopped their participation in this area. Banks may be offering more short-term funding in the future, but this increases the refinancing risks and costs of the infrastructure projects. Long-term syndicated bank lending to Asia from outside the region has also been affected by the global financial crisis. As European banks struggle to deal with the fallout from the eurozone crisis, they have been shedding assets to meet more stringent capital requirements.

This makes it more important for the region to develop its bond markets to finance infrastructure projects. In some markets, bonds issued by infrastructure-related companies already represent a substantial share of total bond outstanding. For example, in Malaysia, 40% of bonds outstanding are issued by infrastructure-related firms. Developing the infrastructure bond market in the region can help draw non-traditional investors into financing infrastructure projects.

A key potential source of long-term financing for infrastructure projects is pension funds. The amount of money managed by pension funds in the region is increasing **(Table 11)**. In particular, the Republic of Korea, Malaysia, and Singapore have large and well-developed pension funds. As long-term investors, pension funds would seem to be natural financiers for infrastructure projects. The funding structure of pension funds, comprising long and stable contributions from participants, is well-suited for financing infrastructure. The long duration of infrastructure project cash flows is attractive to pension funds because it matches their liabilities. Also, infrastructure assets offer pension funds some measure of protection against inflation while pension funds offer financing in domestic currencies.

Table 11: Amount of Sovereign Pension Fund Assets (US$ million)

Country	2005	2012
China, People's Rep. of[a]	8,102	49,026
Hong Kong, China	110	211
Indonesia	4,000	14,399
Malaysia	69,659	183,761
Philippines[b,c]	4,452	7,443
Singapore	74,906	186,243
Korea, Rep. of	160,319	326,209
Thailand	6,986	18,253

Notes:
[a] Latest data as of end-2010.
[b] Earliest data as of end-2006.
[c] Latest data as of end-2011.
Source: OECD Pension Funds Data and Sovereign Pension Funds Annual Reports.

On the other hand, the main drawback of pension funds as a source of infrastructure project financing is that they tend not to have the expertise needed to evaluate and invest in such projects. Infrastructure assets are complex to evaluate and heterogeneous in nature. The number of risks involved is also myriad (e.g., political, reputational, environmental, and governance-related) and not the type that pension fund investors are familiar with. Generally, pension funds are restricted to invest in highly rated securities only. Hence, most financing by pension funds is usually done indirectly through the purchase of government securities. Even then, the share of LCY government bonds held by pension funds has declined in most economies in the region since 2005 **(Table 12)**. The rapid growth of pension funds has meant that they are running out of investment options, forcing them into assets offering only low returns. Thus, they are searching for alternative investments offering high and stable returns, which is why developing financial assets for infrastructure bonds can be useful. However, to entice pension funds to invest in infrastructure projects, financial assets must be structured to meet their investment criteria.

Institutional investors can invest in infrastructure assets through several avenues. They can directly invest in an infrastructure project, which is the most complex method and, as a result, quite rare. This is because the preparatory work required is significant, including identifying infrastructure projects, analyzing the risks involved, and estimating the expected returns. Direct investors would probably have to share management responsibilities as well. This option tends to be

Table 12: Share of LCY Government Bonds Outstanding Held by Sovereign Pension Funds (%)

Country	2005	2012
China, People's Rep. of	6.87	6.43
Indonesia	5.15	4.98
Malaysia	57.18	21.17
Korea, Rep. of	23.15	25.08
Thailand[a]	22.44	26.03

[a] Earliest data as of end-2007.
Source: *AsianBondsOnline*.

limited to the largest institutional funds that have in-house infrastructure teams.

A more common way for institutional investors to gain exposure is through participating directly in an unlisted fund. Unlisted funds are set up by management companies on behalf of institutional investors to provide them with exposure to infrastructure projects without having to develop in-house expertise. Data from Preqin shows that there are 88 unlisted infrastructure funds that invest in Asia with a total of US$22 billion of funds committed. The number of funds and amounts committed have risen since the global financial crisis, suggesting that investor confidence has not been dented. As of 21 July, funds were looking to raise an additional US$9.4 billion to invest in infrastructure in Asia. Most of these investors are from the US, but Korean and Indian investors also play a substantial role.

Institutional investors can also invest in the listed firms that operate infrastructure, including utilities, energy, and toll road companies. However, these listed firms are often diversified so they do not provide direct exposure to infrastructure projects. Also, the performance of listed companies may be more affected by the overall performance of equities than cash flows from the infrastructure projects.

Finally, investors can buy debt linked to infrastructure projects. There a growing number of bond funds that invest in infrastructure projects mostly through mezzanine debt. The funds are usually managed by former bankers who are specialists in infrastructure projects. The returns are usually lower than those of infrastructure equity funds, but then the risks are usually lower as well. Another option is to purchase debt that is issued by project operators and securitized by the revenue stream from infrastructure projects.

It is clear that there is an appetite among investors for infrastructure project investments. The funds potentially available for investment are considerable and could go a long way toward bridging the region's infrastructure gaps. To attract investors, however, a project must offer an appropriate rate of return. A common complaint of investors is that there is a shortage of bankable projects that they can invest in.

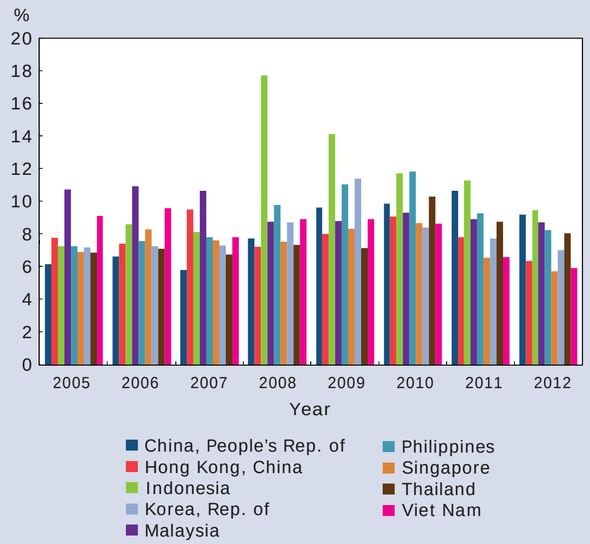
Return on Private Infrastructure Investment

In order to gauge the level of returns expected by infrastructure investors in the region, investor perceptions of risk in private providers of infrastructure were estimated in nine emerging East Asian economies: the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam. Our sample consists of 193 publicly traded companies providing infrastructure services, of which 78 are in electricity; 51 in telecommunications; and 64 in gas, water, and multi-utilities. The financial data for our sample of companies were obtained from Bloomberg and verified through the companies' published financial statements. The data covers the period 2005–12 at annual intervals.

Investors' expected rate of return for infrastructure firms is estimated by calculating the risk-adjusted cost of capital for the companies. The comparison of the weighted average cost of capital (WACC) estimated across countries provides us with an estimate of the relative competitiveness of infrastructure firms. The WACC is the required mean rate of return on each source of capital for a firm—such as stocks, bonds, and other debt—where the weights are based on the share of each source in the firm's capital structure. The sources of capital are grouped into two categories: equity and debt.

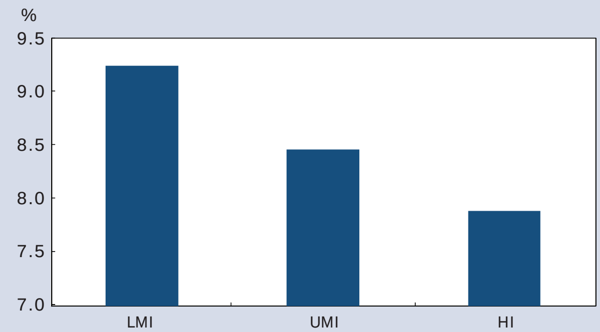
Our estimates of the WACC for the region's economies are presented in **Figure 17**. Before the global financial crisis, Malaysia displayed the highest level of WACC, but it has been on a downward trend since then. In Indonesia, the WACC for infrastructure firms rose sharply after the crisis but has since moderated somewhat. Nevertheless, the WACC of Indonesian firms remained the highest in the region in 2012. The WACC of companies in the

Figure 17: Average WACC of Infrastructure Firms by Economy



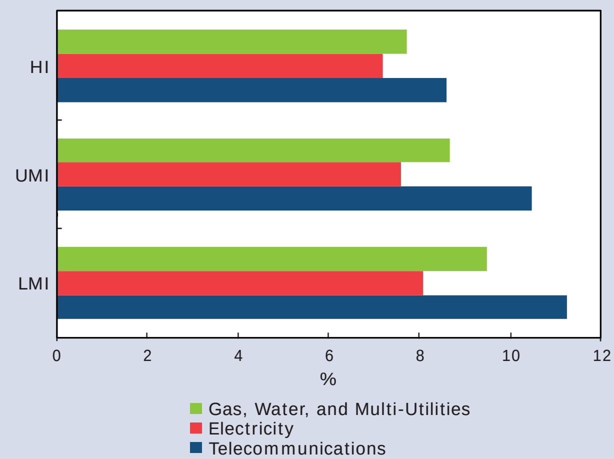
WACC = weighted average cost of capital.
Source: Author's calculations based on financial data from Bloomberg LP.

Figure 18: Average WACC of Infrastructure Firms by Income Group



HI = high-income, LMI = lower-middle income, UMI = upper-middle income, WACC = weighted average cost of capital.
Note: 2005–12 average.
Source: Author's calculations based on financial data from Bloomberg LP.

Figure 19: Average WACC of Infrastructure Firms by Type of Industry



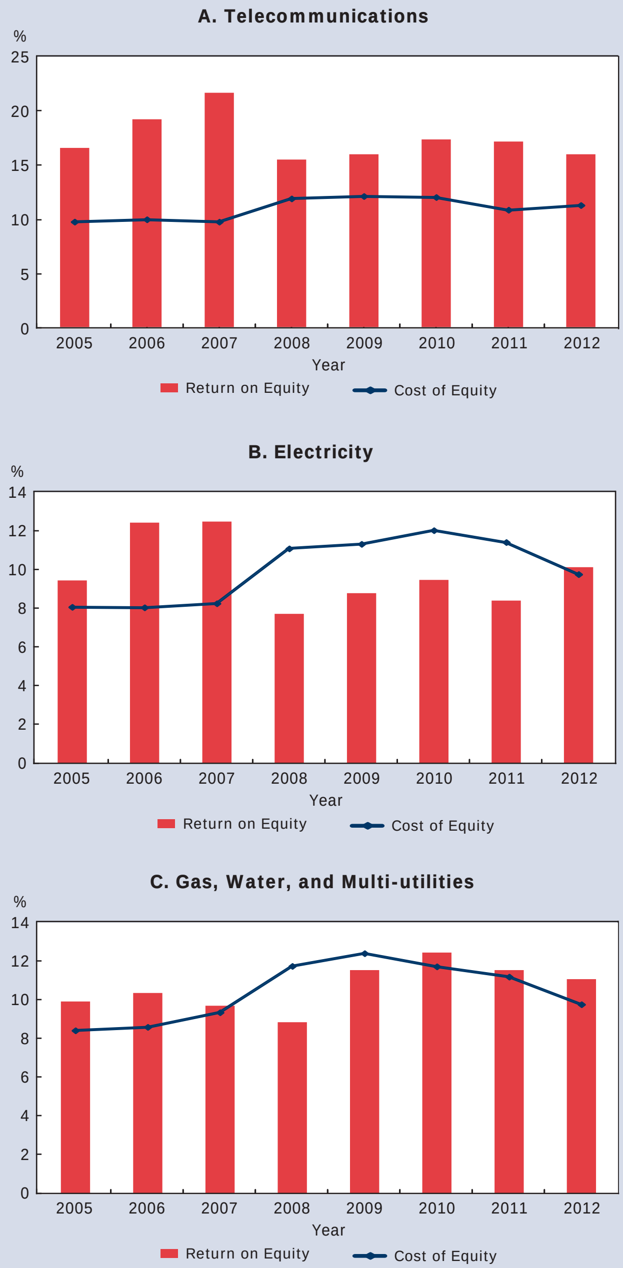
HI = high-income, LMI = lower-middle income, UMI = upper-middle income, WACC = weighted average cost of capital.
Note: 2005–12 average.
Source: Author's calculations based on financial data from Bloomberg LP.

PRC was quite low before the crisis but has been on a rising trend since then.

To simplify the comparisons, companies were grouped by the income level of their home economy. Lower-middle income (LMI) consists of Indonesia, the Philippines, and Viet Nam; upper-middle income (UMI) includes the PRC, Malaysia, and Thailand; and high-income (HI) consists of Hong Kong, China; Singapore; and the Republic of Korea. **Figure 18** shows the WACC of the three groupings. Specifically, the greater perceived risks of investing in LMI economies are reflected in a higher WACC. On average, infrastructure firms in LMI economies require a rate of return of about 0.75 percentage points more than infrastructure firms in UMI economies, which in turn require a rate of return 0.6 percentage points more than infrastructure firms in HI economies. This suggests poorer economies will have to offer bigger returns to investors even when their capacity to pay is less. Comparing the WACC of infrastructure firms by types of industry reveals that telecommunication firms have the highest WACC and electricity firms the lowest **(Figure 19)**. This could be because electricity firms are generally natural monopolies, while telecommunication firms operate in competitive markets.

For a sense of the relative risks and returns facing investors in infrastructure firms, the cost of equity can be compared with the return on equity. The results are presented for three sectors—telecommunications; electricity; gas, water, and multi-utilities—in **Figure 20**. For electricity firms, in roughly half of the years under observation, the return on equity exceeded the

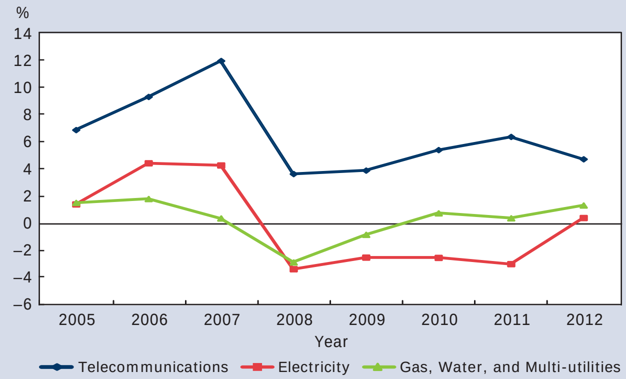
Figure 20: Cost of Equity vs Return on Equity of Infrastructure Firms by Type of Industry



Source: Bloomberg LP.

cost of equity **(Figure 21)**. The performance of telecommunication firms has been better when the return on equity has exceeded or matched the cost of equity. In the case of utilities, the return on equity has generally lagged behind the cost of equity.

Figure 21: Return on Equity Less Cost of Equity of Infrastructure Firms



Source: Bloomberg LP.

Policy Recommendations

It is clear that financing infrastructure is a huge challenge for the region. At the same time, bond financing can help attract a new class of investors to infrastructure projects. In the more developed bond markets in the region, bonds have already been successfully utilized by infrastructure companies to raise funds. Deep capital markets are important to ensure sufficient liquidity to facilitate the issuance of bonds. In addition, it will be important develop a pool of investors through the pension systems that can invest in these long-term bonds.

To encourage investors to purchase infrastructure bonds, several obstacles must be overcome. While there is a substantial pool of funds in the region ready to be invested in infrastructure projects, there is a shortage of infrastructure projects that meet the requirements of investors. Hence, there is a need to improve the pipeline of bankable projects. One way to do that is to develop a long-term strategic framework for infrastructure development to ensure that investors have a regular supply of infrastructure projects to invest in. Assisting less-developed economies in structuring bond financing for Brownfield phase infrastructure can also create additional supply. Without a steady supply of infrastructure projects coming on the market, it will be difficult to get investors interested.

Another hurdle is that infrastructure projects tend to be given a credit rating that is too low to be of interest to institutional investors. Most institutional investors will not purchase non-investment grade bonds. Unfortunately, most infrastructure projects, especially those located in developing countries, may not qualify for an investment grade rating. One way to raise the rating of an infrastructure projects is to provide guarantees. Traditionally, this guarantee has been provided by governments, but it carries a fiscal risk. Hence, the cost of providing the guarantee has to be carefully weighed. Another way to improve the credit rating of infrastructure bonds is to make subordinated debt tranches available to raise the credit rating of the senior tranches of the debt to investment grade. The amount of subordinated tranches will vary depending on the riskiness of the infrastructure project. More risky projects would require more subordinated tranches.

The securitization of infrastructure assets can allow banks to offload some of their long-term risk in infrastructure loans and help promote the development of a bond market. This would also allow banks to conserve their capital under the new Basel III rules. The pooling together of different infrastructure projects can help reduce the overall riskiness of the securities and improve their credit rating. However, securitization would require a well-developed bond market to provide liquidity and minimize risk. It would also involve having a regulatory framework that allows for the securitization of revenue streams, which may be lacking in lower-income economies.

Making data on infrastructure project costs and performance more transparent will facilitate the participation of institutional investors. Before investing in infrastructure projects, investors typically would like to examine the track record of similar projects. Without historical data on past financial performance, investors may be reluctant to invest because they lack the information to make the necessary estimate of future returns. Making historical data publicly available would improve transparency in the investment process. As a start, governments can make it mandatory for infrastructure projects to provide information on key financial and performance variables that can help inform the process. Furthermore, ADB can serve as the repository of infrastructure information. Being an independent body that has extensive knowledge of the infrastructure sector, ADB is well placed to manage such a database and standardize how infrastructure project performance is measured and reported. If infrastructure projects are to proliferate in the region, standardized performance measures are needed for returns and risks. ADB can use its huge database on existing infrastructure projects to generate a new database on returns. Using its project experience, ADB can provide indicative costs and returns for infrastructure projects across a wide range of Asian countries. This is especially true for less-developed economies where information is particularly scarce.

The issue of the willingness of investors to put their money in infrastructure projects is closely related to the issue of cost recovery. The returns from an infrastructure project will have to come from user charges or subsidies. Difficulty in obtaining financing for infrastructure is usually linked to the lack of a clear cost recovery strategy. In certain sectors—such as in water and sanitation, and electricity—cost recovery through user charges is difficult. This is especially true in developing countries where collection is not only difficult, but access to infrastructure services is seen as a right. Hence, governments generally will have to step in and subsidize production. Even if cost recovery is available in a developing country, the incomes of a large part of the population may not be able to afford it. Therefore, subsidies need to be higher in developing countries, yet their tax base is less able to afford it. Without a clear revenue stream, private financing for infrastructure will remain inadequate. Hence, a key challenge is that where the demand for and benefit of infrastructure is the highest, the ability to pay is the lowest.

Finally, it is important to recognize that some of the concerns about investing in infrastructure projects are not due to financial factors. While developing bond markets and improving the transparency of project information can help increase the availability of financing and reduce its cost, governments should also play their part to improve the investment climate for infrastructure projects. Given the long-term nature of infrastructure financing, governments should ensure that there is a stable long-term regulatory framework to reduce regulatory uncertainty.

Conclusion

Infrastructure financing needs in Asia are significant. The region cannot afford to skimp on infrastructure as maximizing the benefits of investment spending often depends on having an adequate level of infrastructure. Tighter global liquidity conditions and stronger prudential regulations under Basel III are constraining lending from banks, which have traditionally provided the bulk of infrastructure project financing. At the same time, there is growing demand for financial assets with long-term maturities among institutional investors such as pension funds. This makes it natural to promote the development of infrastructure bonds that can help bridge the financing gap. A key hurdle to overcome is the shortage of quality infrastructure projects that can be bundled and offered to institutional investors who are usually mandated to invest in investment grade bonds. Guarantees and the creation of subordinated debt tranches can help improve the ratings of infrastructure bonds, while greater data transparency and a database of costs and past performance can help close the information gap for investors.

Market Summaries

People's Republic of China

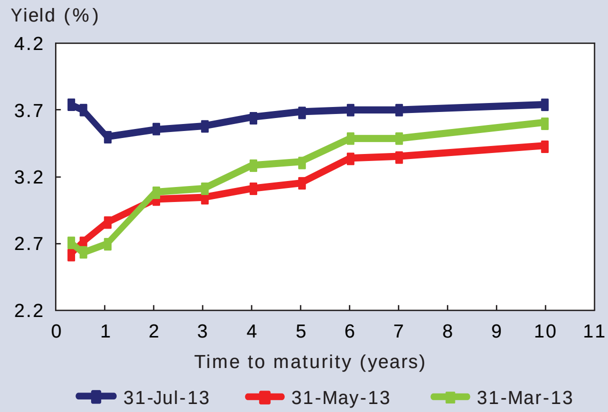
Yield Movements

The government bond yield curve of the People's Republic of China (PRC) was relatively unchanged between end-March and end-May **(Table 1)**. On the shorter-end, yields rose slightly for the 6-month and 1-year tenors, rising 7 basis points (bps) and 16 bps, respectively. Yields for the 2- and 3-year tenors, however, fell 5 bps and 7 bps, respectively. For tenors of 4 years and longer, yields rose between 14 bps and 17 bps.

A major change in the yield curve occurred between end-May and end-July, particularly at the shorter-end of the curve where yields rose between 63 bps and 111 bps for tenors of 1-year or less. In comparison, yields rose between 31 bps and 53 bps for tenors longer than 1-year. Meanwhile, the spread on 2- versus 10-year yields narrowed to 18 bps at end-July from 39 bps at end-May due to the significant rise in yields at the shorter-end of the curve.

The steep rise at the shorter-end of the yield curve was due to the lingering effects of the Shanghai Interbank Offered Rate (SHIBOR) shock event in late June. Bank liquidity requirements rose in June due to withdrawals in advance of the Dragon Boat holiday as well as the maturation of wealth products. At the beginning of June, the overnight SHIBOR rate was 4.6% and the 7-day interbank repo rate was 4.8%. By 8 June, liquidity demands had driven the SHIBOR rate up to 7.5% and the 7-day repo rate to 7.8%. Markets expected the People's Bank of China (PBOC) to step in and provide additional liquidity to the market; instead, the PBOC issued central bank bills on 18 June for the first time since 2011. The issuance sent a signal to markets regarding the PBOC's stance toward liquidity, resulting in a rise in the SHIBOR rate to a high of 13.4% on 20 June, while the 7-day repo rate rose to 11.2%. United States (US) Federal Reserve Chairman's Ben Bernanke's statements regarding the possibility of tapering its quantitative easing program also served to increase market anxiety, which led to an increase in yields at the longer-end of the curve.

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



LCY = local currency.
Source: Bloomberg LP.

The PBOC released a statement on 26 June that sought to clarify its actions by stating that the rise in money market rates was due to temporary seasonal factors and rapid loan growth, but claimed that overall liquidity in the system was sufficient. The PBOC also said that banks needed to be more prudent in their liquidity management.

At the longer-end of the curve, the rise in yields also reflected concerns about somewhat higher levels of inflation and a lack of policy stimulus despite weak economic growth. Even with gross domestic product (GDP) growth falling to 7.5% year-on-year (y-o-y) in 2Q13 from 7.7% in 1Q13, and exports falling 3.1% y-o-y in June, consumer price inflation rose to 2.7% y-o-y in June from 2.1% in May.

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

	Outstanding Amount (billion)						Growth Rates (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	CNY	US$	CNY	US$	CNY	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	22,042	3,469	24,448	3,937	24,825	4,045	1.5	6.9	1.5	12.6
Government	16,396	2,580	17,555	2,827	17,644	2,875	1.1	3.9	0.5	7.6
Treasury Bonds	7,500	1,180	8,071	1,300	8,438	1,375	1.1	8.0	4.5	12.5
Central Bank Bonds	1,644	259	1,338	215	809	132	(14.7)	(41.0)	(39.5)	(50.8)
Policy Bank Bonds	7,251	1,141	8,146	1,312	8,397	1,368	5.6	20.0	3.1	15.8
Corporate	5,646	889	6,893	1,110	7,180	1,170	2.6	16.5	4.2	27.2
Memo Item: Local Government Bonds including Treasury Bonds Issued on Behalf of Local Government	455	72	650	105	664	108	(23.8)	13.7	2.1	45.9
Policy Bank Bonds										
China Development Bank	4,921	775	5,422	873	5,525	900	5.2	14.9	1.9	12.3
Export–Import Bank of China	930	146	1,183	191	1,268	207	3.1	36.0	7.2	36.4
Agricultural Devt. Bank of China	1,400	220	1,541	248	1,604	261	8.4	30.0	4.1	14.5

( ) = negative, LCY = local currency, 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 an LCY base and do not include currency effects.
5. The balance of outstanding commercial paper as of 2Q13 was CNY1.5 trillion based on data from *Wind*.
Sources: *ChinaBond* and Bloomberg LP.

More recent data, however, has suggested a slight rebound in the PRC's economy. Exports rose 5.1% y-o-y and imports rose 10.9% in July, while consumer price inflation remained at 2.7%. Also, the Purchasing Managers' Index (PMI) for manufacturing showed improvement in July, rising to 50.3 from 50.1 in June, while the services PMI rose to 54.1 from 53.9 in the previous month.

The government has undertaken a number of policy measures to improve the outlook for continued economic and financial stability. In a recent statement supporting the development of small and medium-sized enterprises (SMEs), the PBOC said that it would continue to ensure a sound monetary policy and keep monetary and aggregate credit at a reasonable level. On 22 June, the PBOC removed the floor on the bank lending rates but maintained the floor on interest rates for mortgages. The PBOC took these steps to curb investment and speculative demand in the real estate market. On 6 May, the State Administration of Foreign Exchange (SAFE) instituted a new rule requiring banks with foreign currency (FCY) loan-to-deposit ratios exceeding a certain level to maintain an FCY net open position greater than zero.

Size and Composition

The amount of outstanding local currency (LCY) bonds in the PRC market reached CNY25 trillion (US$4.0 trillion) at end-June, an increase of 12.6% y-o-y and 1.5% quarter-on-quarter (q-o-q), largely driven by growth in policy bank and corporate bonds.

Government Bonds. LCY government bonds outstanding grew 7.6% y-o-y and 0.5% q-o-q in 2Q13, largely driven by growth in policy bank bonds, which expanded 15.8% y-o-y and 3.1% q-o-q. Central bank bonds continued to act as a drag on government bond growth, falling 50.8% y-o-y and 39.5% q-o-q due to a lack of issuance as the PBOC elected to use other means to affect monetary policy. Meanwhile, treasury bonds increased 12.5% y-o-y and 4.6% q-o-q.

Less than 10% of treasury bonds consist of bonds issued by the central government on behalf of local governments and bonds issued directly by local governments. While many companies owned by local governments issue bonds in the corporate bond market, only a few provinces and municipalities are permitted to issue bonds in

Table 2: Corporate Bonds Outstanding in Key Sectors

	Outstanding Amount (CNY billion)				Growth Rates (%)				
					q-o-q				y-o-y
	3Q12	4Q12	1Q13	2Q13	3Q12	4Q12	1Q13	2Q13	2Q13
Commercial Bank Bonds	1,106.2	1,265.3	1,304.5	1,329.0	0.6	14.4	3.1	1.9	20.8
State-Owned Corporate Bonds	991.4	992.9	1,024.4	652.9	(0.1)	0.2	3.2	(36.3)	(34.2)
Local Corporate Bonds	1,103.2	1,304.9	1,484.3	1,579.6	11.8	18.3	13.7	6.4	60.0
Asset- and Mortgage-Backed Securities	8.2	7.6	5.0	5.0	–	(7.5)	(35.0)	–	(39.8)
Medium-Term Notes	2,340.1	2,492.2	2,661.5	2,749.5	9.9	6.5	6.8	3.3	29.1

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

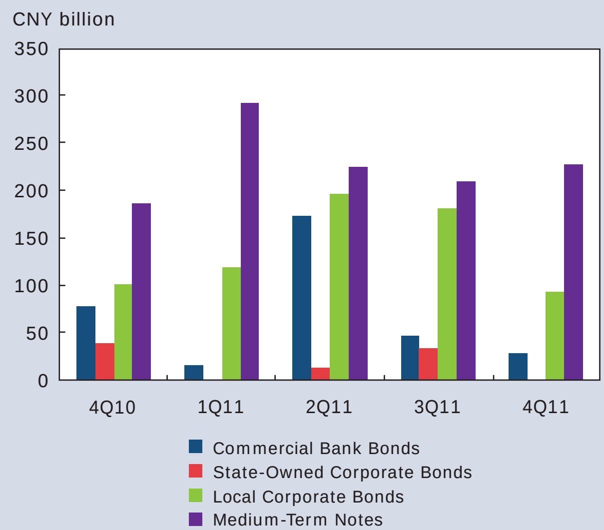
their own name. Those that are permitted include Guangzhou, Zheijiang, Shanghai, and Shangdong. Whether or not local governments should be allowed to issue bonds more freely is currently an important policy question.

Corporate Bonds. Corporate bonds outstanding grew 4.2% q-o-q and 27.2% y-o-y in 2Q13 **(Table 2)**. Growth was driven mainly by increases of 6.4% q-o-q and 60.0% y-o-y in outstanding local corporate bonds. Commercial bank bonds grew 20.8% y-o-y, largely due to the issuance of subordinated notes in 2012 as the PRC's banks sought to bolster capital bases amid the implementation of Basel III capital adequacy requirements. State-owned enterprise (SOE) bonds outstanding fell 34.2% y-o-y and 36.3% q-o-q in 2Q13. Medium-term notes (MTNs) expanded 29.1% y-o-y. Outstanding asset-backed securities (ABS) continued to decline, falling 39.8% y-o-y due to a lack of issuance that began in 2008 when ABS issuance was halted by the government. ABS issuance resumed in 4Q12.

The issuance of corporate bonds was down in 2Q13 on a q-o-q basis **(Figure 2)**, with the exception of MTNs. Issuance was negatively affected by tighter liquidity conditions and higher interest rates brought about by the June SHIBOR shock.

A relatively small number of issuers dominate the PRC's corporate bond market **(Table 3)**. At end-June, the top 30 corporate bond issuers accounted for CNY4 trillion worth of corporate

Figure 2: Corporate Bond Issuance in Key Sectors



Source: *ChinaBond*.

bonds outstanding, or about 58% of the market. Among the top 30 corporate issuers, the 10 largest accounted for CNY3.5 trillion worth of bonds outstanding.

State-owned companies—defined as majority-owned by the government—continued to dominate the corporate bond market in 2Q13. Among the top 30 corporate issuers at end-June, 23 were state-owned, with a total of CNY3.3 trillion worth of bonds outstanding.

Table 4 presents the most significant issuances of 2Q13.

Table 3: Top 30 Issuers of LCY Corporate Bonds in the People's Republic of China

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (CNY billion)	LCY Bonds (US$ billion)			
1. China Railway	747.00	120.29	Yes	No	Transportation
2. China National Petroleum	380.00	61.19	Yes	No	Energy
3. State Grid Corporation of China	349.50	56.28	Yes	No	Public Utilities
4. Industrial and Commercial Bank of China	230.00	37.04	Yes	Yes	Banking
5. Bank of China	219.93	35.41	Yes	Yes	Banking
6. China Construction Bank	200.00	32.21	Yes	Yes	Banking
7. Agricultural Bank of China	150.00	24.15	Yes	Yes	Banking
8. China Petroleum & Chemical	144.70	23.30	Yes	Yes	Energy
9. Central Huijin Investment	109.00	17.55	Yes	No	Diversified Financial
10. Petrochina	107.50	17.31	Yes	Yes	Energy
11. Shenhua Group	105.00	16.91	Yes	No	Energy
12. China Guodian	103.20	16.62	Yes	No	Public Utilities
13. China Minsheng Bank	102.31	16.47	No	Yes	Banking
14. Shanghai Pudong Development Bank	79.20	12.75	No	Yes	Banking
15. Bank of Communications	76.00	12.24	No	Yes	Banking
16. China Three Gorges Project	75.50	12.16	Yes	No	Public Utilities
17. Industrial Bank	72.08	11.61	No	Yes	Banking
18. China Life	68.00	10.95	Yes	Yes	Insurance
19. China Power Investment	67.30	10.84	Yes	No	Public Utilities
20. China Merchants Bank	61.70	9.94	No	Yes	Banking
21. China Southern Power Grid	60.50	9.74	Yes	No	Public Utilities
22. State-Owned Capital Operation and Management Center of Beijing	58.50	9.42	Yes	No	Diversified Financial
23. Huaneng Power International	54.20	8.73	Yes	Yes	Public Utilities
24. Citic Group	53.50	8.61	Yes	No	Diversified Financial
25. Bank of Beijing	53.50	8.61	No	Yes	Banking
26. China Huaneng Group	53.00	8.53	Yes	No	Public Utilities
27. China Everbright Bank	52.70	8.49	No	Yes	Banking
28. China United Network Communications	50.00	8.05	Yes	Yes	Telecommunications
29. China Citic Bank	42.50	6.84	No	Yes	Banking
30. China Datang	42.20	6.80	Yes	No	Public Utilities
Total Top 30 LCY Corporate Issuers	**3,968.52**	**639.03**			
Total LCY Corporate Bonds	**6,892.54**	**1,109.87**			
Top 30 as % of Total LCY Corporate Bonds	**57.6%**	**57.6%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on *Wind* data.

Table 4: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (CNY billion)
China National Petroleum		
6-year bond	4.7	20
China Railway		
5-year bond	4.5	20
China Railway Construction		
7-year bond	5.1	10
Anshan Iron and Steel Group		
3-year bond	4.4	5
China Three Gorges		
5-year bond	4.4	5
Tianjin Bohai State-owned Assets Management		
5-year bond	4.8	5
Datong Coal Mining Group		
15-year bond	5.2	5
Shanxi Lu'an Mining Group		
10-year bond	5.2	3
Changsha Metro Group		
10-year bond	6.2	2.5

LCY = local currency.
Source: *Wind*.

In 2011, the PRC's Audit Office released the results of its audit on the indebtedness of the country's local governments. The report found that local governments had an outstanding debt obligation of CNY10.7 trillion at the end of 2010. Of this amount, CNY6.7 trillion comprised direct obligations of local governments, CNY2.3 trillion came from local government guarantees, and CNY1.7 trillion came from other contingent liabilities.

Local government debt increased at a slower pace of 18.9% y-o-y in 2010 from 61.9% in 2009. The report also shows that the bulk of local government borrowing came from corporations set up for the sole purpose of raising funds: 46.4% of the debt was funded through local-government-owned corporations and 23.3% came from the local government agencies.

By instrument, bank loans were the primary source of the local government funding, comprising 79% of total loans versus 7% for bonds. In June 2013, the audit office released a partial audit report for 36 local government units. The estimated debt of the 36 local governments under review grew 12.9% y-o-y to CNY3.8 trillion at the end of 2012. CNY1.8 trillion comprised direct obligations of the local government and CNY0.9 trillion comprised guarantees.

By vehicle, the bulk of local government funding came from corporations owned by local government, which comprised 45.7% of the total, followed by government agencies at 25.4%.

By instrument, bank loans were still the largest source of debt, comprising 78% of the total, while bonds comprised 12%.

By region, the largest issuances of local corporate bonds come from the Greater Shanghai region, which accounted for 34% of outstanding local corporate bonds in 2Q13. Within the Greater Shanghai region, outstanding bonds from Jiangsu alone comprised 14% of all local corporate bonds **(Table 5)**.

Investor Profile

Treasury Bonds. Banks remained the largest category of investors in the PRC's treasury bond market, which includes policy bank bonds, holding a slightly larger share of these bonds at the end of 2Q13 (77.7%) than at the end of 2Q12 (76.7%) **(Figure 3)**. The share held by special members fell to 10.0% from 11.2% during the same period. Special members comprise the PBOC, Ministry of Finance, policy banks, China Government Securities Depository Trust and Clearing Company, and China Securities Depository and Clearing Corporation.

Corporate Bonds. Banks were also the largest holder of corporate bonds at the end of 2Q13, albeit with a comparatively smaller share than their holdings of treasury bonds and policy bank bonds. Banks' share of corporate bonds fell to 31.3% at the end of 2Q13 from 40.1% a year earlier **(Figure 4)**. The second largest holder of corporate bonds were insurance companies, with a 16.1% share at end-June, which was less than their 26.3% share at end-June 2012.

Figure 5 presents the investor profile across different bond categories. Based on the latest data available, banks were the largest holders of

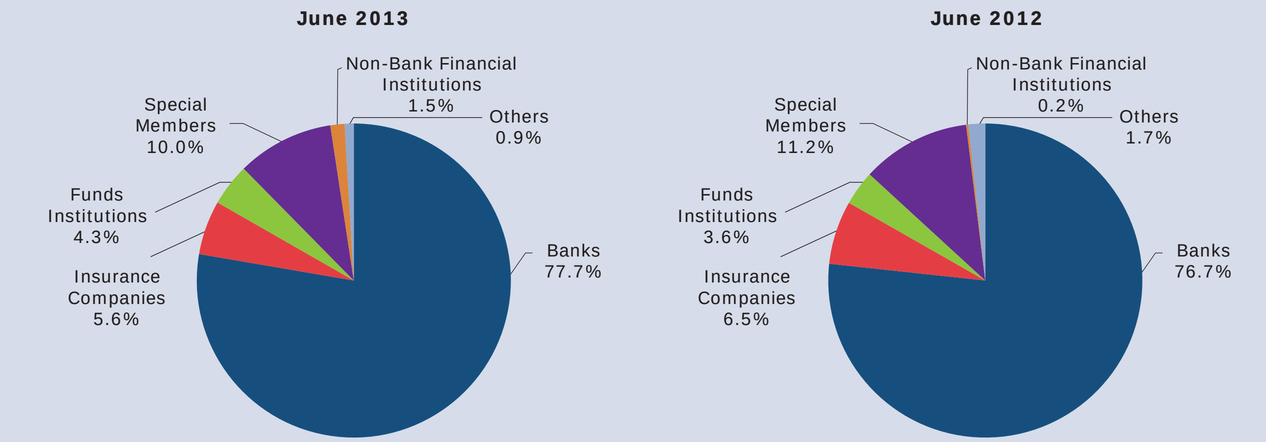
Table 5: Local Corporate Bonds Outstanding by Region

	Number of Issuers	Number of Issuances	Outstanding Amount (CNY billion)		% Change
			4Q12	2Q13	
Greater Shanghai					
Shanghai	26	36	50	51	1.1
Zhejiang	105	126	114	139	21.4
Jiangsu	146	180	192	229	19.3
Anhui	45	68	69	76	10.2
Jiangxi	32	40	36	47	30.2
Subtotal	**354**	**450**	**461**	**541**	**17.3**
Greater Beijing					
Beijing	35	45	78	84	8.2
Tianjin	23	34	42	62	44.9
Hebei	21	29	29	33	15.2
Subtotal	**79**	**108**	**149**	**179**	**20.0**
Greater Guangdong					
Guangdong	36	38	37	52	39.9
Fujian	40	44	27	42	52.8
Hunan	49	65	73	82	13.0
Guangxi	19	26	26	27	3.9
Subtotal	**144**	**173**	**164**	**203**	**24.4**
The Southwest					
Chongqing	42	56	63	76	20.9
Yunnan	33	39	37	43	16.7
Sichuan	36	46	39	49	23.6
Subtotal	**111**	**141**	**140**	**168**	**20.5**
Central					
Henan	39	44	39	47	21.4
Hubei	31	36	26	34	28.8
Shaanxi	25	31	26	33	30.0
Subtotal	**95**	**111**	**91**	**114**	**26.0**
The West					
Inner Mongolia	26	32	31	36	18.6
Gansu	4	5	6	7	12.7
Xinjiang	22	23	20	24	22.9
Qinghai	5	7	5	6	12.0
Ningxia	6	9	9	9	0.0
Subtotal	**63**	**76**	**71**	**82**	**16.5**
The Northeast					
Jilin	11	13	13	15	13.4
Liaoning	35	49	62	72	17.1
Heilongjiang	17	23	26	28	9.8
Subtotal	**63**	**85**	**101**	**115**	**14.7**
Others					
Shangdong	69	89	70	89	26.1
Hainan	8	9	7	12	85.0
Shanxi	25	31	34	50	49.0
Guizhou	26	28	28	33	18.5
Xizang	0	0	0	0	–
Subtotal	**128**	**157**	**139**	**185**	**32.9**

– = not applicable.
Notes:
1. Data as of end-June 2013.
2. Local corporate bonds are bonds approved by the China Securities Regulatory Commission, and are tradable on the exchanges. They exclude bonds issued by state-owned corporations.

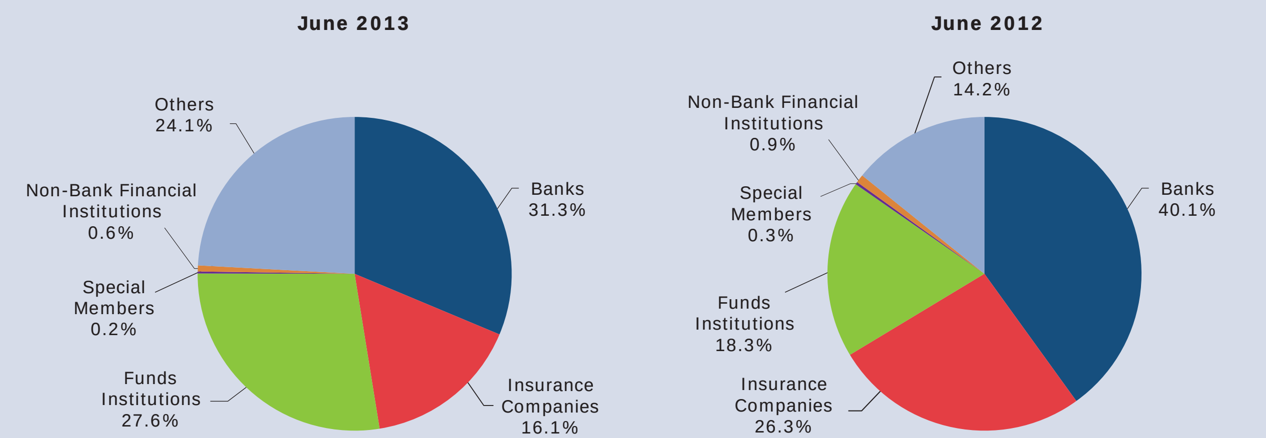
Source: *Wind*.

Figure 3: LCY Treasury Bonds Investor Profile



LCY = local currency.
Source: *ChinaBond*.

Figure 4: LCY Corporate Bonds Investor Profile



LCY = local currency.
Source: *ChinaBond*.

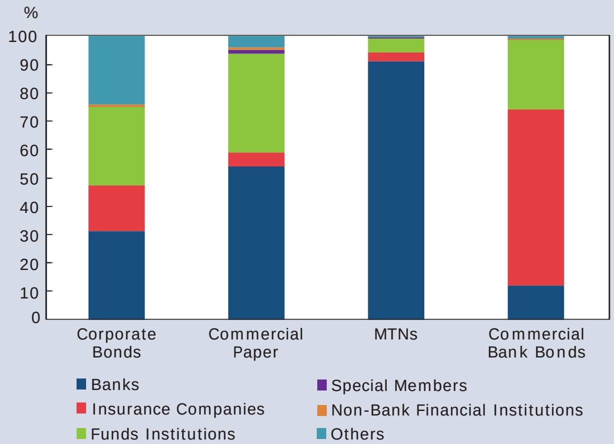
MTNs and policy bank bonds at end-December 2012 with more than 80% of MTNs and policy bank bonds outstanding. Meanwhile, insurance companies were the largest holders of commercial bank bonds.

Liquidity

Figure 6 presents the turnover ratio for government bonds, including both spot trading and repo trading volumes. The volume of repo trading is larger than that of spot trading in the PRC bond market, and the repo market is also the more active of the two. In 2Q13, spot turnover ratios for treasury, central bank, and policy bank bonds all fell due to concerns over potential US monetary policy tightening and local liquidity conditions. Tight liquidity conditions in 2Q13 also prompted a rise in the repo turnover ratio.

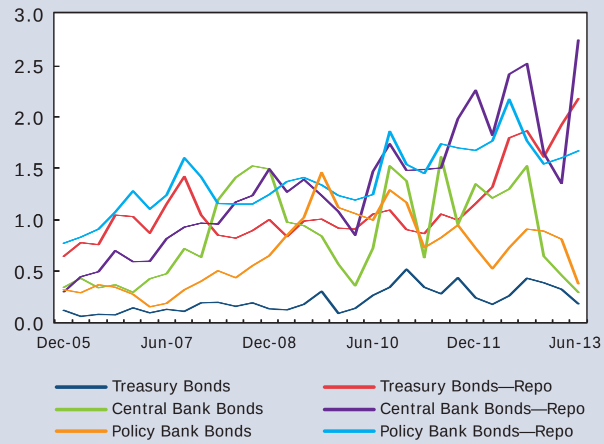
Bid–ask spreads rose in June, reflecting tight liquidity conditions domestically and negative sentiment created by the possibility of US monetary policy tightening **(Figure 7)**. Bid–ask

Figure 5: Investor Profile across Bond Categories



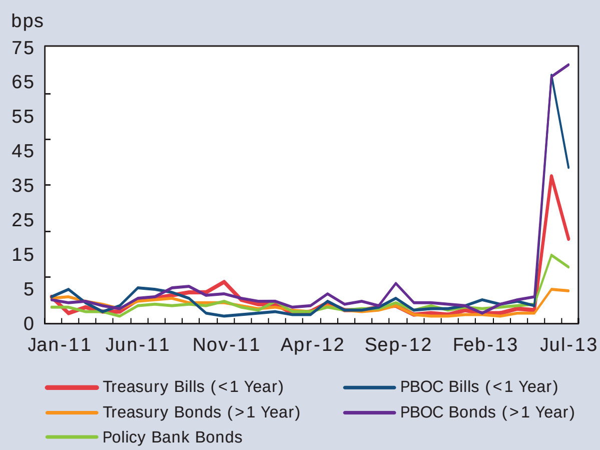
bps = basis points, MTNs = medium-term notes.
Note: Data as of end-June 2013.
Source: *ChinaBond*.

Figure 6: Turnover Ratios for Government Bonds



Repo = repurchase.
Source: *ChinaBond*.

Figure 7: Bid–Ask Spreads among Market Makers



PBOC = People's Bank of China.
Source: *Wind*.

spreads for treasury bills and PBOC bills rose the most, owing to their short-term nature. The SHIBOR shock in June led to higher interest rates at the shorter-end of the yield curve, prompting market participants to become bearish on shorter-dated securities.

Interest Rate Swaps

In 2Q13, the total notional amount of signed interest rate swap (IRS) agreements in the PRC reached CNY795.8 billion on 7,005 transactions **(Table 6)**. The most popular benchmark was the 7-day repo, which accounted for 66% of all transactions.

Rating Changes

On 9 April, Fitch Ratings (Fitch) affirmed the PRC's FCY rating of A+ with a stable outlook. However, Fitch downgraded the LCY rating to A+ from AA–. Fitch said that its affirmation of the country's FCY ratings reflects the central government's strong FCY balance sheet that includes significant foreign reserves. However, the LCY rating was affected by a worsening outlook for the PRC's financial stability due to rapid credit growth in bank balance sheets and local government liabilities. Also, the country's revenues are more volatile than its peers.

Moody's Investors Service (Moody's) downgraded the PRC's FCY rating outlook to stable from positive, but affirmed the rating at AA– on 16 April. Moody's rationale for the downgrade in outlook was similar to that of Fitch for the rating downgrade, including concerns over the level of credit growth and risks associated with the liabilities of local government units.

Table 6: Notional Values of the PRC's Interest Rate Swap Market in 2Q13

Interest Rate Swap Benchmarks	Notional Amount (CNY billion)	% of Total Notional Amount	Number of Transactions	Growth Rate (%)	
	2Q13			q-o-q	y-o-y
7-Day Repo Rate	532.8	66.9	5,524	29.9	53.3
Overnight SHIBOR	179.1	22.5	440	(21.7)	(23.3)
3-Month SHIBOR	73.8	9.3	749	(17.3)	(2.3)
1-Year Term Deposit Rate	3.8	0.5	26	313.5	(82.0)
1-Year Lending Rate	5.3	0.7	259	(27.0)	122.1
3-Year Lending Rate	0.9	0.1	6	32.4	105.0
Above 5-Year Lending Rate	0.2	0.03	1	43.9	(68.3)
Total	**795.8**	**100.0**	**7,005**	**7.9**	**16.7**

( ) = negative, 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.
Sources: *AsianBondsOnline* and *ChinaMoney*.

Policy, Institutional, and Regulatory Developments

SAFE Issues New Requirements on Net Open Position

On 6 May, SAFE announced that local banks with FCY loan-to-deposit ratios exceeding 75% and foreign banks with FCY loan-to-deposit ratios exceeding 100% would be required to maintain a net open position on FCY holdings of at least zero.

SMEs Allowed to Issue Exchangeable Bonds

On 31 May, the Shenzhen Stock Exchange announced that it would allow SMEs to issue exchangeable bonds. Exchangeable bonds are bonds collateralized with the listed equity securities of other companies. The coupon rate for the bonds cannot be three times higher than the relevant benchmark rate and the tenor must be at least 1 year. The bond conversion price also cannot be less than 90% of the 20-day average trading price of the collateral.

CSRC Increases QFII Quota

On 12 July, the China Securities Regulatory Commission (CSRC) announced that it would increase the Qualified Foreign Institutional Investor (QFII) Program's quota to US$150 billion. It also expanded the Renminbi Qualified Foreign Institutional Investor (RQFII) Program. (For more detail, see the Hong Kong, China Market Summary.)

PBOC Removes Lending Rate Floor

On 20 July, the PBOC announced that it would remove the floor on lending rates. Previously, banks could not set lending rates lower than 30% of the benchmark rate. The PBOC also removed the limits on interest rates for bill discounting. However, the PBOC did not remove the floor on mortgage interest rates. The PBOC said that the moves were part of the PRC's policy of moving toward a market-based interest rate regime.

The PRC to Audit Local Government Debt

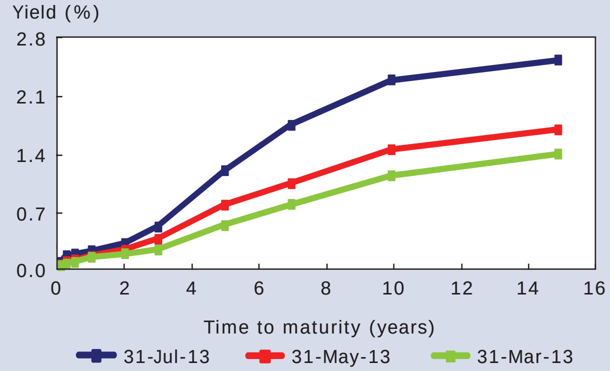
On 26 July, the PRC ordered a nationwide audit of local government debt. The National Audit Office said the last audit found that local governments had a total of CNY10.7 trillion in outstanding debt at the end of 2010.

Hong Kong, China

Yield Movements

The yield curve for Hong Kong, China's Exchange Fund Bills and Notes (EFBNs) has been rising since end-March, particularly at the longer-end **(Figure 1)**. Between end-March and end-May, yields rose 4 basis points (bps) or less for tenors of 2-years or less, while yields rose 13 bps–31 bps for longer-dated tenors. The rise in yields was prompted by statements from United States (US) Federal Reserve (Fed) Chairman Ben Bernanke in May that the pace of Fed bond purchases could be tapered later in 2013 and halted in 2014 should economic data support such action.

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



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

Between end-May and end-July, yields rose between 3 bps and 15 bps on tenors of 3-years or less, and between 41 bps and 84 bps on longer-dated tenors. The larger increase in yields at the longer-end of the curve caused the 2- versus 10-year spread to rise to 196 bps at end-July from 120 bps at end-May.

The rise in Hong Kong, China's bond yields tracks closely with yield changes in the US Treasuries market as Hong Kong, China does not have an independent monetary policy and pegs its dollar to the US dollar.

The rise in yields also reflects improvements in Hong Kong, China's economy as well as rising inflation. Hong Kong, China's economic growth rose in 2Q13, to 3.3% year-on-year (y-o-y) from 2.9% in 1Q13. Growth was supported mostly by domestic demand, with private consumption adding 2.9 percentage points to GDP growth. In June, retail sales rose 14.7% y-o-y in June from 12.9% in May.

The government now expects GDP growth for 2013 to be between 2.5%-3.5% compared with its original forecast of 1.5%-3.5%.

Inflation has also risen in Hong Kong, China mostly due to the feed-through effects of higher housing rents in 2012. Consumer price inflation rose to 6.9% y-o-y in July from 4.1% in June. Inflation in May was at 3.9%. The government expects further upside risks to inflation from the feed-through effects of housing rents but noted moderating influences on inflation in the latter half of 2013, such as lower import prices and a slower pace of increases in housing rents in certain areas.

Size and Composition

The size of Hong Kong, China's local currency (LCY) bond market grew 10.7% y-o-y to HKD1.5 trillion (US$192 billion) at end-June **(Table 1)**. On a quarter-on-quarter (q-o-q) basis, LCY bonds outstanding rose 4.4% in 2Q13.

Total LCY government bonds outstanding rose 15.7% y-o-y and 7.0% q-o-q as of end-June. Government bonds include Exchange Fund Bills (EFBs), Exchange Fund Notes (EFNs), and bonds issued under the Institutional Bond Issuance Programme (HKSAR Bonds).

The amount of LCY government bonds outstanding at end-June reached HKD834 billion. Most of the growth in government bonds in 2Q13 could be attributed to growth in EFBs, which expanded

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

	Outstanding Amount (billion)						**Growth Rate** (%)			
	2Q12		**1Q13**		**2Q13**		**2Q12**		**2Q13**	
	HKD	**US$**	**HKD**	**US$**	**HKD**	**US$**	**q-o-q**	**y-o-y**	**q-o-q**	**y-o-y**
Total	1,345	173	1,426	184	1,488	192	1.1	3.8	4.4	10.7
Government	720	93	779	100	834	107	2.1	5.3	7.0	15.7
Exchange Fund Bills	587	76	640	82	682	88	0.1	0.4	6.5	16.0
Exchange Fund Notes	69	9	69	9	68	9	(0.4)	(0.9)	(0.4)	(0.9)
HKSAR Bonds	64	8	71	9	84	11	29.3	113.3	18.4	30.5
Corporate	624	80	646	83	655	84	(0.1)	1.5	1.3	4.9

( ) = negative, HKSAR = Hong Kong Special Administrative Region, LCY = local currency, 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 an LCY base and do not include currency effects.
Sources: Hong Kong Monetary Authority and Bloomberg LP.

16.0% y-o-y to HKD682 billion from HKD587 billion at end-June 2012. On the other hand, the stock of EFNs declined slightly by 0.9% y-o-y to HKD68 billion. HKSAR bonds grew rapidly in 2Q13, rising 30.5% y-o-y, although the absolute amount of HKSAR bonds remains much lower than EFBs.

Under the Institutional Bond Issuance Programme, HKD3 billion of 3-year HKSAR bonds were issued in May and HKD2 billion of 5-year HKSAR bonds were issued in July. Under the Retail Bond Issuance Programme, HKD10 billion of 3-year HKSAR bonds were issued. A total of HKD15 billion worth of HKSAR bonds were issued in 2Q13.

Turnover volumes for EFBs and EFNs declined significantly in 2012 and 2013 compared with 2011 levels. The turnover volumes in 1H12 and 1H13 were equivalent to only 3% and 2%, respectively, of the turnover volume in the first half of 2011. The drop in trading volumes was due to a December 2011 change in the criteria for market makers, which previously included trading volume, as the Hong Kong Monetary Authority (HKMA) had become concerned with "round-tripping" trades used to artificially increase trading volume.

The amount of LCY corporate bonds outstanding rose to HKD655 billion at end-June, reflecting growth of 4.9% y-o-y and 1.3% q-o-q. The top 24 non-bank corporate issuers in Hong Kong, China accounted for about 16% of total corporate bonds outstanding in 2Q13 **(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 HKD17.4 billion at end-June. CLP Power Hong Kong Financing Ltd. was the next largest issuer with outstanding bonds of HKD10.9 billion. Sun Hung Kai Properties (Capital Market) Ltd. was the third-largest issuer with outstanding bonds of HKD10 billion.

Financial firms were well represented among the top 24 non-bank corporate issuers in 2Q13, accounting for six of the 24 issuers. Five state-owned companies were included on the list, while 19 were privately owned. Among the companies in Table 2, six are listed on the Hong Kong Exchange. **Table 3** presents some notable issuances from non-bank institutions in 2Q13.

Policy, Institutional, and Regulatory Developments

Taxation on *Sukuk* to be Revised

On 19 June, Hong Kong, China's Inland Revenue Department released the Inland Revenue and Stamp Duty Legislation (Alternative Bond Schemes) (Amendment) Ordinance 2013. The amendment seeks to promote the development of the *sukuk* (Islamic bond) market in Hong Kong, China by revising the taxation framework for some types of *sukuk*.

Table 2: Top 24 Non-Bank Corporate Issuers in Hong Kong, China

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (HKD billion)	LCY Bonds (US$ billion)			
1. The Hong Kong Mortgage Corporate	17.38	2.24	Yes	No	Finance
2. CLP Power Hong Kong Financing	10.93	1.41	No	No	Electric
3. Sun Hung Kai Properties (Capital Market)	10.01	1.29	No	No	Real Estate
4. MTR Corporation (C.I.)	6.50	0.84	Yes	Yes	Transportation
5. Wharf Finance	6.18	0.80	No	No	Diversified
6. The Link Finance (Cayman) 2009	5.79	0.75	No	No	Finance
7. HKCG (Finance)	5.60	0.72	No	No	Gas
8. Hongkong Electric Finance	5.51	0.71	No	No	Electric
9. Swire Pacific	4.88	0.63	No	Yes	Diversified
10. Kowloon-Canton Railway	4.80	0.62	Yes	No	Transportation
11. Cheung Kong Bond Finance	4.62	0.60	No	Yes	Finance
12. Urban Renewal Authority	3.90	0.50	Yes	No	Property Development
13. Wheelock Finance	3.74	0.48	No	No	Diversified
14. Yue Xiu Enterprises (Holdings)	3.00	0.39	No	No	Diversified
15. Airport Authority Hong Kong	2.85	0.37	Yes	No	Transportation
16. Hysan (MTN)	2.43	0.31	No	No	Finance
17. Henderson Land MTN	1.83	0.24	No	Yes	Finance
18. Cathay Pacific MTN Financing	1.70	0.22	No	Yes	Airlines
19. Nan Fung Treasury	1.31	0.17	No	No	Real Estate
20. Dragon Drays	1.00	0.13	No	No	Diversified
21. R-Reit International Finance	0.78	0.10	No	No	Real Estate
22. Wing Tai Properties (Finance)	0.58	0.07	No	No	Real Estate
23. HLP Finance	0.56	0.07	No	Yes	Real Estate
24. The Hongkong Land Notes Company	0.20	0.03	No	No	Finance
Total Top 24 Non-Bank LCY Corporate Issuers	**106.04**	**13.67**			
Total LCY Corporate Bonds	**654.90**	**84.43**			
Top 24 as % of Total LCY Corporate Bonds	**16.19%**	**16.19%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Hong Kong Monetary Authority data.

Table 3: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (HKD billion)
Hong Kong Mortgage Corporation		
2-year bond	0.46	0.78
3-year bond	0.68	0.78
2-year bond	0.38	0.50
Urban Renewal Authority		
7-year bond	1.64	0.30
10-year bond	2.14	0.30
Sun Hung Kai Properties		
10-year bond	2.95	0.30
Hong Kong Electric Finance		
15-year bond	3.00	0.20

LCY = local currency.
Source: Central Moneymarkets Unit (CMU) HKMA.

RQFII Expanded

On 12 July, the People's Republic of China expanded the Renminbi Qualified Institutional Investor (RQFII) program. The RQFII program had been limited to financial institutions in Hong Kong, China but will now be expanded to include firms in London; Singapore; and Taipei,China.

Revision to the Renminbi Liquidity Facility

On 25 July, HKMA expanded the CNH liquidity facility that provides CNH funds to banks in Hong Kong, China. Previously, banks availing of the facility would receive funds the following day, which had to be repaid after 1 week. With the expansion of the facility, HKMA will provide banks two additional funding options: (i) overnight borrowing with funds available on the same day, and (ii) 1-day borrowing with funds available the following day.

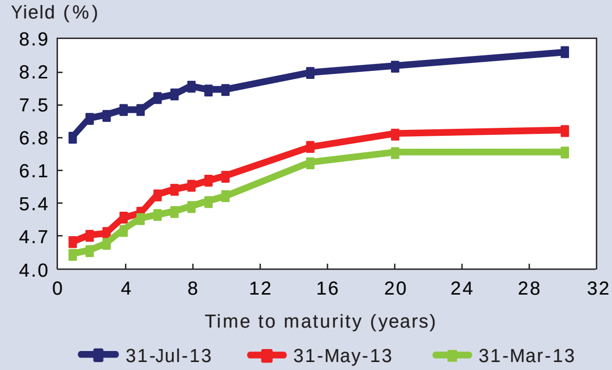
Indonesia

Yield Movements

Between end-March and end-May, Indonesia's local currency (LCY) government bond yields rose across all maturities. Yields rose the most for 7-year maturities, rising 47 basis points (bps), while climbing 46 bps for both 9- and 30-year maturities.

Between end-May and end-July, government bond yields rose dramatically, shifting the curve further upward **(Figure 1)**. Yields climbed between 145 bps and 250 bps across the length of the curve, rising more at the shorter-end than at the longer-end, resulting in a flattening of the yield curve. The yield spread between 2- and 10-year maturities narrowed to 62 bps at end-July from 117 bps at end-March and 126 bps at end-May.

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



LCY = local currency.
Source: Bloomberg LP.

Bond yields have been on the rise since May over uncertainty related to United States (US) monetary policy. The remarks made by US Federal Reserve (Fed) Chairman Ben Bernanke on 19 June signaling that the Fed may begin to taper its bond purchase program toward the latter part of the year resulted in a significant increase in bond yields and a sell-off in the rupiah bond market.

The Indonesian bond market is still largely influenced by external factors as nearly one-third of government bonds are held by foreign investors, leaving the market vulnerable to the risk of sudden capital outflows. Immediately after the Fed announcement, the Indonesian rupiah breached the psychological IDR10,000–US$1 barrier, and has remained above that level since then. Data from the Indonesia Debt Management Office showed foreign investors as net sellers of bonds in June with a capital outflow of IDR15.76 trillion.

These developments coupled with other domestic factors—including (i) rising inflation expectations as the government was pressured to cut fuel subsidies, (ii) a widening current account deficit and weakening rupiah, (iii) greater budget financing requirements to be funded by increased issuance of bonds, and (iv) warnings from rating agencies of a possible sovereign rating downgrade—dampened bond market sentiments in 2Q13.

The government's decision to raise fuel prices by an average of 33%, effective 22 June, pushed Indonesia's inflation rate to the highest level in emerging East Asia. Inflation jumped to 8.6% year-on-year (y-o-y) in July and 8.8% in August, from relatively stable levels of 5.6%, 5.5%, and 5.9% in April, May, and June, respectively. The celebration of *Ramadan*, which commenced in July, also contributed to pressure on the prices of goods and services. For the January–August period, inflation stood at 7.9%, breaching Bank Indonesia's (BI) annual target of between 3.5% and 5.5%.

Rising inflation expectations led BI's Board of Governors to raise the benchmark interest rate by 25 bps to 6.0% in June, 50 bps to 6.5% in July, and 50 bps to 7.0% in August. The central bank also raised its deposit facility rate twice in June by a combined 75 bps to 4.75%, and another 50 bps to 5.25% in August. The lending facility rate was also raised by 25 bps to 7.0% in August. The rate hikes were initiated to contain inflation, stabilize the rupiah exchange rate, and ease the current account deficit.

Economic growth in Indonesia fell below 6.0% y-o-y in 2Q13 for the first time since September 2010. Real gross domestic product (GDP) growth eased to 5.8% y-o-y in 2Q13 from 6.0% in 1Q13. Domestic consumption and investment moderated to 5.1% and 4.7% y-o-y, respectively, in 2Q13. Growth in government spending, on the other hand, rose to 2.1% y-o-y in 2Q13 from 0.4% in the previous quarter. On a quarter-on-quarter (q-o-q) basis, the economy grew 2.6% in 2Q13 compared with 1.4% in 1Q13. BI expects Indonesia's annual economic growth to fall to between 5.8% and 6.2% in 2013, based on a forecast that has economic growth rising marginally to 5.9% in 3Q13 before further accelerating in 4Q13.

Size and Composition

Total LCY bonds outstanding in Indonesia climbed to IDR1,180.4 trillion (US$118 billion) at end-June, expanding a modest 2.2% q-o-q **(Table 1)**. On a y-o-y basis, the bond market grew at a robust pace of 12.4%.

At end-June, growth in LCY government bonds moderated to 1.7% q-o-q and 10.3% y-o-y to reach IDR975.1 trillion. Growth in the government bond sector was mainly driven by central government bonds, comprising treasury bills and treasury bonds issued by the Ministry of Finance. Central bank bills, on the other hand, recorded negative growth on both a q-o-q and y-o-y basis.

Central Government Bonds. The stock of central government bonds rose 3.1% q-o-q to IDR888.5 trillion in 2Q13. On a y-o-y basis, central government bonds rose 12.3%. Fixed-rate bonds, which accounted for 71% of total central government bonds outstanding in 2Q13, were the main drivers of growth, expanding 3.7% q-o-q and 16.7% y-o-y **(Table 2)**. Islamic treasury instruments, such as Islamic treasury bills and project-based *sukuk* (Islamic bonds), also contributed to the growth.

New issuance of treasury bills and treasury bonds totaled IDR47.4 trillion in 2Q13, declining 31.3% q-o-q. Since May, most treasury auctions have failed to meet their target as investors seek higher yields. On a y-o-y basis, however, issuance of treasury instruments rose 17.1%.

Based on the revised state budget for 2013, the government needs to issue a total of IDR231.8 trillion (net) this year to fund a deficit equivalent to 2.4% of GDP. To fulfill the additional budgetary requirements, the government plans to issue treasury bills, retail government bonds, fixed-rate bonds, and foreign currency (FCY) bonds. The allotment for FCY bond issuance was increased from 14% to a maximum of 18%–20% of total government debt issuance for the year. The

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

	Outstanding Amount (billion)						**Growth Rate** (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	IDR	US$	IDR	US$	IDR	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	1,050,246	111	1,154,804	119	1,180,422	118	3.6	3.8	2.2	12.4
Government	884,029	94	958,369	98	975,057	97	3.0	0.5	1.7	10.3
Central Govt. Bonds	791,180	84	861,515	88	888,514	89	4.0	14.5	3.1	12.3
Central Bank Bills	92,849	10	96,854	10	86,543	9	(5.3)	(50.9)	(10.6)	(6.8)
Corporate	166,217	18	196,435	20	205,365	21	7.4	25.9	4.5	23.6

( ) = negative, 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-June stood at IDR269.1 trillion.
Sources: Bank Indonesia, Indonesia Debt Management Office, Indonesia Stock Exchange, and Bloomberg LP.

Table 2: Central Government Bonds Outstanding by Type of Bond

Government Bonds	Outstanding Amount (IDR billion)	% Share	Growth Rate (%)	
			q-o-q	y-o-y
Treasury Bills (SPN)	20,790	2.3	(4.3)	(26.2)
Fixed-Rate Bonds	631,067	71.0	3.7	16.7
Variable-Rate Bonds	122,755	13.8	0.0	(5.4)
Zero-Coupon Bonds	0	0.0	–	–
Retail Bonds	34,153	3.8	0.0	14.7
Islamic Treasury Bills	3,020	0.3	87.0	154.9
Sukuk	17,137	1.9	0.0	0.0
Retail *Sukuk*	35,924	4.0	0.0	23.9
Project-Based *Sukuk*	23,669	2.7	21.3	83.5
Total	**888,515**	**100.0**	**3.1**	**12.3**

( ) = negative, – = not applicable, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Note: Data as of end-June 2013.
Source: Indonesia Stock Exchange.

Table 3: Corporate Bonds Outstanding by Type of Bond

Corporate Bonds	Outstanding Amount (IDR billion)	% Share	Growth Rate (%)	
			q-o-q	y-o-y
Conventional Bonds	174,112	84.8	6.2	26.7
Subordinated Bonds	23,486	11.4	(4.9)	3.9
Convertible Bonds	150	0.1	0.0	0.0
Zero-Coupon Bonds	500	0.2	0.0	0.0
Sukuk Ijarah	4,224	2.1	(10.0)	(5.7)
Sukuk Mudharabah	1,079	0.5	(15.6)	39.2
Sukuk Mudharabah Subordinate	1,814	0.9	62.8	477.7
Total	**205,365**	**100.0**	**4.5**	**23.6**

( ) = negative, q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:
1. Data as of end-June 2013.
2. *Sukuk Ijarah* refers to Islamic bonds backed by a lease agreement.
3. *Sukuk Mudharabah* refers to Islamic bonds backed by a profit-sharing scheme from a business venture or partnership.
Source: Indonesia Stock Exchange.

government still plans to issue US$-denominated bonds in the domestic market as part of its debt strategy for 2013.

Central Bank Bills. The stock of central bank bills known as *Sertifikat* Bank Indonesia (SBI) declined 10.6% q-o-q and 6.8% y-o-y to reach IDR86.5 trillion at end-June. Issuance of SBI and *shari'a* (Islamic law)–compliant SBI fell 34.2% q-o-q. On a y-o-y basis, however, issuance rose 31.1% in 2Q13. SBI are issued by the central bank as one of its monetary tools to help contain inflation.

Corporate Bonds. The LCY corporate bond market in Indonesia reported robust growth in 2Q13, expanding 4.5% q-o-q and 23.6% y-o-y. Total corporate bonds outstanding stood at IDR205.4 trillion. Growth came mainly from an increase in outstanding conventional corporate bonds and *sukuk mudharabah* (profit-sharing) subordinated bonds. **Table 3** presents a breakdown of corporate bonds outstanding by type of bond as of end-June. Conventional corporate bonds, which grew 6.2% q-o-q and 26.7% y-o-y, comprised a large chunk of the total with a share of 84.8% in 2Q13. *Sukuk mudharabah* subordinated bonds grew at a much faster pace of 62.8% q-o-q and 477.7% y-o-y in 2Q13, albeit while coming from a low base.

LCY bonds outstanding among the top 30 corporate bond issuers in Indonesia reached IDR160.5 trillion at the end of 2Q13, representing 78.1% of total corporate bonds outstanding **(Table 4)**. Financial and banking institutions dominated the list of the top 30 issuers of corporate bonds in 2Q13. About one-third of the firms are state-owned or those in which the government holds a 50% (or more) ownership stake. State-power firm PLN led the list with LCY corporate bonds outstanding valued at IDR14.2 trillion. It was followed by state-owned Indonesia Eximbank with outstanding stock amounting to IDR13.0 trillion. The third largest corporate bond issuer was automotive leasing company Astra Sedaya Finance with a total bond stock amounting to IDR10.7 trillion.

Corporate bond issuance in 2Q13 remained strong on a q-o-q basis, posting a significant 31.5% hike. On a y-o-y basis, however, corporate bond issuance fell 21.6% in 2Q13. A total of 30 bond series were issued by 16 corporate entities during the quarter. Most of the bonds carried maturities of between 3 years and 5 years. The new corporate bond issues in 2Q13 were all conventional bonds except for one of each of the following: subordinated bond, *sukuk*, and *sukuk mudharabah*. Corporate

Table 4: Top 30 Issuers of LCY Corporate Bonds in Indonesia

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (IDR billion)	LCY Bonds (US$ billion)			
1. PLN	14,208	1.42	Yes	No	Energy
2. Indonesia Eximbank	12,994	1.30	Yes	No	Banking
3. Astra Sedaya Finance	10,710	1.07	No	No	Finance
4. Adira Dinamika Multifinance	10,277	1.03	No	Yes	Finance
5. Bank Tabungan Negara	8,850	0.88	Yes	Yes	Banking
6. Federal International Finance	7,901	0.79	No	No	Finance
7. Indosat	7,820	0.78	No	Yes	Telecommunications
8. Bank Internasional Indonesia	7,000	0.70	No	Yes	Banking
9. Bank Pan Indonesia	7,000	0.70	No	Yes	Banking
10. Bank CIMB Niaga	6,480	0.65	No	Yes	Banking
11. Jasa Marga	5,000	0.50	Yes	Yes	Toll Roads, Airports, and Harbors
12. Bank Tabungan Pensiunan Nasional	4,585	0.46	No	Yes	Banking
13. Perum Pegadaian	4,514	0.45	Yes	No	Finance
14. Medco-Energi International	4,487	0.45	No	Yes	Petroleum and Natural Gas
15. Bank Permata	4,250	0.42	No	Yes	Banking
16. Sarana Multigriya Finansial	3,936	0.39	Yes	No	Finance
17. Bank OCBC NISP	3,880	0.39	No	Yes	Banking
18. Indofood Sukses Makmur	3,610	0.36	No	Yes	Food and Beverages
19. Agung Podomoro Land	3,600	0.36	No	Yes	Property, Real Estate, and Building Construction
20. Bank Mandiri	3,500	0.35	Yes	Yes	Banking
21. Antam	3,000	0.30	Yes	Yes	Petroleum and Natural Gas
22. Telekomunikasi Indonesia	3,000	0.30	Yes	Yes	Telecommunications
23. BCA Finance	2,850	0.28	No	No	Finance
24. Bank Danamon Indonesia	2,800	0.28	No	No	Banking
25. Bumi Serpong Damai	2,750	0.27	No	Yes	Property, Real Estate, and Building Construction
26. Toyota Astra Financial Services	2,716	0.27	No	No	Finance
27. Indomobil Finance Indonesia	2,518	0.25	No	No	Finance
28. Bank Jabar Banten	2,400	0.24	No	Yes	Banking
29. Bank Rakyat Indonesia	2,000	0.20	Yes	Yes	Banking
30. BII Finance Center	1,824	0.18	No	No	Finance
Total Top 30 LCY Corporate Issuers	**160,458**	**16.04**			
Total LCY Corporate Bonds	**205,365**	**20.53**			
Top 30 as % of Total LCY Corporate Bonds	**78.1%**	**78.1%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Indonesia Stock Exchange data.

bonds issued in recent months carried coupons ranging from 6.75% to 9.25%. **Table 5** presents some notable corporate bonds issues in 2Q13.

Investor Profile

Central Government Bonds. Banking institutions remained the biggest holder of central government bonds in Indonesia in 2Q13 **(Figure 2)**. The stock of bonds held by banks stood at IDR314.3 trillion in 2Q13, representing a 35.4% share of the total. However, banks' share of government bonds has steadily declined from highs of 70%–80% between 2003 and 2006.

The second largest holder of LCY central government bonds in 2Q13 was foreign investors whose share climbed to 31.8% at end-June from 28.4% a year earlier. In contrast to bank holdings, foreign investors' share in LCY government bonds has steadily increased since 2008 **(Figure 3)**. In absolute amounts, outstanding bonds held by foreign investors reached IDR283.0 trillion at end-June.

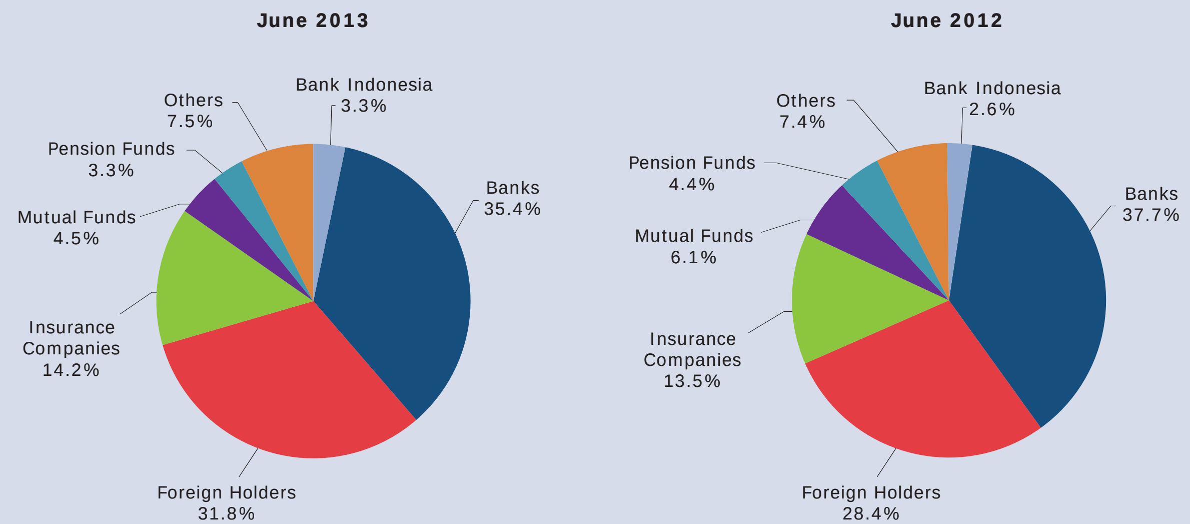
Long-term investors comprise a significant share of foreign investors in Indonesia's LCY central government bond market. At end-June, 44% of

Table 5: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (IDR billion)
Indonesia Eximbank		
370-day bond	6.15	1,920
3-year bond	6.40	1,940
Federal International Finance		
370-day bond	6.75	710
3-year bond	7.75	1,690
Bumi Serpong Damai		
5-year bond	8.375	1,750
Astra Sedaya Finance		
370-day bond	6.75	650
2-year bond	7.25	100
3-year bond	7.75	950
BCA Finance		
370-day bond	6.50	750
3-year bond	7.50	350
4-year bond	7.60	200
BII Finance		
3-year bond	7.75	775
5-year bond	8.25	525
Agung Podomoro Land		
5-year bond	9.25	1,200
Toyota Astra Financial Services		
370-day bond	6.60	400
3-year bond	7.60	700
4-year bond	7.65	100

LCY = local currency.
Source: Indonesia Stock Exchange.

Figure 2: LCY Central Government Bonds Investor Profile



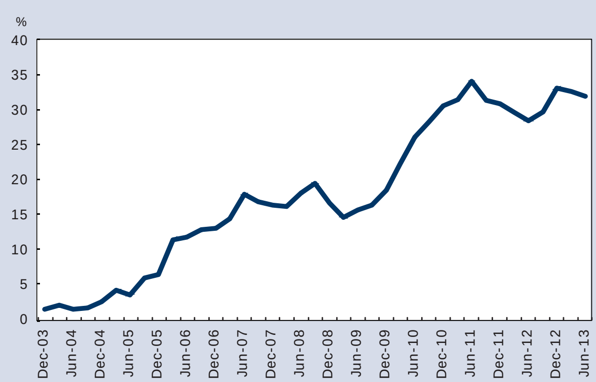
LCY = local currency.
Source: Indonesia Debt Management Office.

bonds held by offshore investors were in maturities of more than 10 years, while foreign investors' holdings of bonds with maturities of more than 5 years and up to 10 years accounted for 30% **(Figure 4)**. Offshore holdings of short-dated tenors (bonds with maturities of 1 year or less) only accounted for a 4% share.

Among domestic investors, only insurance companies increased their share of central governments bond holdings in 2Q13, which rose to 14.2% from 13.5% a year earlier. Mutual fund and pension fund holdings of government bonds remained relatively small compared with other investor classes, accounting for shares of only 4.5% and 3.3%, respectively, at the end of 2Q13. Meanwhile, the share of government bonds held by BI rose slightly to 3.3% as central bank actively supported the bond market in recent months.

Central Bank Bills. Central bank bills were held primarily by banking institutions, which had a share of 98.6% at end-June **(Figure 5)**. In absolute terms, outstanding SBI held by banks stood at IDR80.8 trillion at end-June, down from IDR91.7 trillion at end-March. Foreign investors accounted for the remaining 1.4% share of SBI holdings. Their share dropped significantly after the central bank implemented a 6-month holding period for SBI in 2011.

Figure 3: Foreign Investor Share of LCY Central Government Bonds

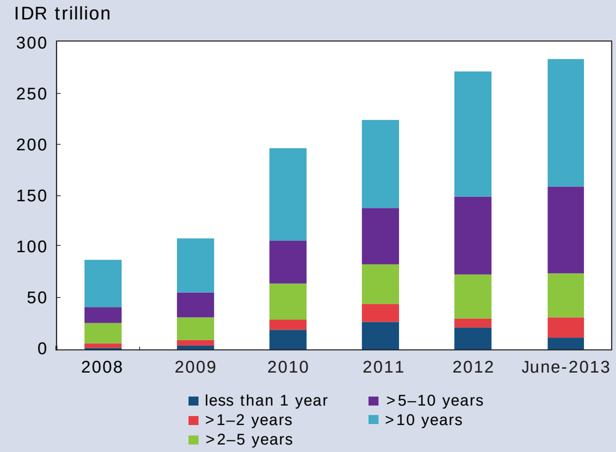


LCY = local currency.
Source: Indonesia Debt Management Office.

Rating Changes

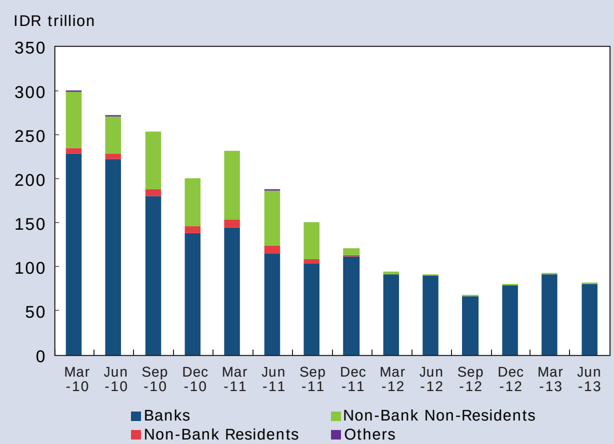
On 2 May, Standard and Poor's (S&P) revised Indonesia's ratings outlook to stable from positive and affirmed its long-term and short-term sovereign credit ratings at BB+ and B, respectively. According to S&P, Indonesia's weakening policy environment may ultimately have a negative impact on the country's growth prospects and its generally sound economic conditions. S&P also noted that the external sector is experiencing vulnerability as evidenced by the

Figure 4: Foreign Holdings of LCY Central Government Bonds by Maturity



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

Figure 5: LCY Central Bank Bills Investor Profile



LCY = local currency.
Source: Bank Indonesia.

current account deficit and increasing private sector external debt.

On 22 July, the Japan Credit Rating Agency (JCR) affirmed Indonesia's sovereign credit rating at BBB–. The outlook for the rating was stable. JCR took note of the following factors in its decision to affirm Indonesia's ratings: (i) sustainable economic growth outlook, (ii) low-level of public debt, and (iii) resilience to external shocks.

Policy, Institutional, and Regulatory Developments

MOF to Conduct Debt Switch of US$-Denominated Bonds

In May, the Ministry of Finance (MOF) announced plans to exchange some of its outstanding US$-denominated bonds for longer-term debt as part of this year's liability management strategy. The government in the past has conducted debt switches involving IDR-denominated bonds.

Parliament Approves 2013 Revised State Budget

In June, Indonesia's House of Representatives approved the 2013 revised state budget, which paved the way for the government to raise fuel prices. The revised budget includes a deficit target equivalent to 2.4% of GDP, up from 1.6% in the original budget. The fuel price hike took effect on 22 June, with prices for gasoline rising 44% and diesel rising 22%.

BI's First FX Swap Auction Oversubscribed

BI's first foreign exchange (FX) swap auction received a warm response from market participants, with bids reaching US$1.2 billion compared with a target of US$500 million. BI awarded a total of US$600 million worth of FX swaps in its first auction held on 17 July. The FX swap action is BI's newest monetary tool to help boost rupiah liquidity in the market and increase FX reserves.

BI Tightens Monetary Policy in August

In a meeting held on 15 August, the central bank said that it will continue to strengthen its policy mix to curb inflation and maintain a more sustainable balance of payments. BI will continue to conduct monetary operations to absorb excess liquidity. In line with this, the central bank plans to issue a new short-term instrument—a BI Deposit Certificate—which will only be sold to domestic banks and will not be offered to foreign investors. BI will also raise the secondary reserve requirement of banks to 4.0% from the current 2.5%, while keeping the primary reserve requirement at 8.0%. The central bank also plans to revise the loan-to-deposit ratio reserve requirements. Other measures to be undertaken by BI include the following: (i) conduct rupiah long-term exchange rate stabilization in line with economic fundamentals, (ii) conduct supervisory actions to control relatively high credit growth among several banks and sectors, and (iii) improve policies to develop the domestic FX market and increase the FX supply.

On 29 August, BI's Board of Governors decided to introduce supplementary measures to strengthen its monetary and macro-prudential policy mix to curb inflation, stabilize the rupiah exchange rate, ease the current account deficit, and ensure macroeconomic and financial system stability. BI decided to raise its benchmark rate 50 basis points (bps) to 7.0%. It also raised the lending facility rate 25 bps to 7.0% and the deposit facility rate 50 bps to 5.25%. The minimum holding period for its central bank certificates, or *Sertifikat* Bank Indonesia, was reduced from 6 months to 1 month.

Republic of Korea

Yield Movements

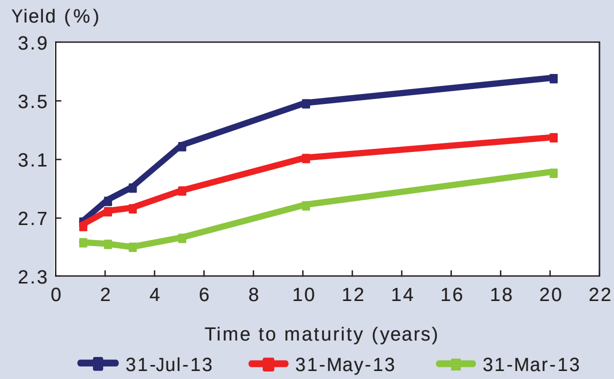
Local currency (LCY) government bond yields in the Republic of Korea rose for all tenors between end-March and end-July, with the yield hikes ranging from 14 basis points (bps) for the 1-year tenor to 69 bps for the 10-year tenor **(Figure 1)**. Yields for all tenors initially climbed between end-March and end-May, and further rose through end-July amid concerns that the United States (US) Federal Reserve could start tapering its asset purchase program later this year. Meanwhile, the yield spread between 2- and 10-year tenors widened 40 bps between end-March and end-July.

The Bank of Korea's Monetary Policy Committee decided on 8 August to keep the base rate—the 7-day repurchase rate—steady at 2.50%. In its monetary policy decision, the committee took note of external events—such as the sustained moderate recovery in the US, the ongoing sluggishness in the euro area, and the economic slowdown in emerging markets, particularly the PRC—as well as domestic events including the country's moderate economic growth, an uptick in inflationary pressures, the stabilization of domestic financial markets, and the appreciation of the Korean won. Consumer price inflation moderated in August to 1.3% year-on-year (y-o-y) from 1.4% in July.

The Republic of Korea's real gross domestic product (GDP) growth stood at 1.1% quarter-on-quarter (q-o-q) and 2.3% y-o-y in 2Q13, based on preliminary estimates of The Bank of Korea. On a q-o-q basis, GDP expansion was bolstered by positive growth in final consumption expenditure, gross fixed capital formation, and exports of goods and services on the demand side, and the agriculture/forestry/fishing, construction, manufacturing, and services sectors on the production side. A supplementary budget of KRW17.3 trillion was announced in April to be utilized through the remainder of 2013 to help stimulate the domestic economy.

The Bank of Korea in July revised upward its GDP growth outlook for 2013 to 2.8% from its previous

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



LCY = local currency.
Source: Bloomberg LP.

forecast of 2.6% made in April. The revised GDP growth rate projections for 1H13 and 2H13 stood at 1.9% and 3.7% y-o-y, respectively. By expenditure type, the central bank reported that its revised 2013 growth rates for private consumption, facilities investment, exports, and imports were lower compared with the earlier forecasts made in April. On the other hand, the revised 2013 growth rate for construction investment was higher than the April forecast. The central bank also stated in the same report that the headline inflation rate for 2013 would average 1.7%, compared with an April forecast of 2.3%.

Manufacturing production in the Republic of Korea posted a 0.2% month-on-month (m-o-m) decrease in July following a 0.5% increase in June, according to Statistics Korea data. However, on a y-o-y basis, manufacturing production grew 0.8% in July following a 2.6% decrease in June.

The country's current account surplus shrank to US$6.8 billion in July from US$7.2 billion in June, according to data culled from The Bank of Korea, despite a 13.0% m-o-m rise in the trade surplus in goods; exports of goods climbed 6.7% m-o-m, which was more significant than the 5.9% increase in merchandise imports. The narrowing of the current account surplus mainly stemmed from a 67.4% m-o-m fall in the service account surplus. The merchandise trade surplus for the month of August stood at US$4.9 billion, higher than July's US$2.5 billion, based on figures from the Ministry of Trade, Industry, and Energy, as merchandise exports rose to US$46.4 billion in August from July's US$45.8 billion, and merchandise imports fell to US$41.4 billion from US$43.3 billion. On a y-o-y basis, merchandise exports expanded 7.7% in August and imports of goods increased 0.8%.

Total external debt rose to US$411.8 billion at end-June from US$410.3 billion at end-March, based on data from The Bank of Korea. The quarterly uptick can be largely attributed to an increase in long-term external debt. Between end-March and end-June, the country's short-term external debt decreased from US$122.2 billion to US$119.6 billion, while long-term external debt rose from US$288.0 billion to US$292.1 billion. Meanwhile, banks' external debt fell to US$183.1 billion at end-June from US$184.3 billion at end-March.

The domestic stock market has exhibited volatility in recent months. The Korea Stock Price Composite Index (KOSPI) fell from 2,001 in May to 1,863 in June, before climbing to 1,914 in July. According to The Bank of Korea, the rebound in July resulted from diminished concerns over the US Federal Reserve's quantitative easing exit strategy, the reduced possibility of a hard landing in the PRC, and favorable earnings reports from listed companies.

The banking sector posted lower earnings in 2Q13 compared with the previous quarter. According to the Financial Supervisory Service (FSS), the net income of domestic banks stood at KRW1.1 trillion in 2Q13, down 35.3% on a q-o-q basis and 48.0% on a y-o-y basis. The drop mainly came from a decline in interest income, amid falling interest rates, and losses in the valuation of securities. Meanwhile, the FSS also reported that the delinquency rate of domestic banks' LCY-denominated loans fell 0.3 percentage points in June to 1.0% as newly delinquent loans declined and the status of a number of existing delinquent loans improved.

Size and Composition

Total LCY bonds outstanding in the Republic of Korea grew 10.6% y-o-y and 2.2% q-o-q to reach KRW1,650 trillion (US$1.4 trillion) at the end of 2Q13 **(Table 1)**. Growth for the quarter was higher compared with 2Q12. Outstanding LCY government bonds amounted to KRW637.3 trillion at end-June, growing 6.0% y-o-y and 2.3% q-o-q. This growth can be attributed to the government's supplementary budget to stimulate economic activity that required additional issuance of Korea

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

	Outstanding Amount (billion)						**Growth Rate** (%)			
	2Q12		**1Q13**		**2Q13**		**2Q12**		**2Q13**	
	KRW	**US$**	**KRW**	**US$**	**KRW**	**US$**	**q-o-q**	**y-o-y**	**q-o-q**	**y-o-y**
Total	1,491,463	1,302	1,614,631	1,453	1,650,267	1,445	2.1	9.7	2.2	10.6
Government	601,162	525	622,659	560	637,277	558	(0.05)	3.0	2.3	6.0
Central Bank Bonds	164,580	144	167,830	151	165,420	145	(2.0)	(1.5)	(1.4)	0.5
Central Government Bonds	408,361	357	426,699	384	439,059	384	1.1	5.5	2.9	7.5
Industrial Finance Debentures	28,221	25	28,130	25	32,798	29	(5.0)	(4.4)	16.6	16.2
Corporate	890,301	777	991,972	893	1,012,990	887	3.6	14.7	2.1	13.8

( ) = negative, LCY = local currency, 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.
Sources: EDAILY *BondWeb* and The Bank of Korea.

Treasury Bonds (KTBs). LCY central government bonds rose 7.5% y-o-y and 2.9% q-o-q to KRW439.1 trillion, led by increases in KTBs. Industrial finance debentures also expanded 16.2% y-o-y and 16.6% q-o-q, leveling off at KRW32.8 trillion. Meanwhile, outstanding central bank bonds, or Monetary Stabilization Bonds (MSBs), increased 0.5% on a y-o-y basis, but contracted 1.4% on a q-o-q basis, and stood at KRW165.4 trillion at end-June.

Issuance of LCY government bonds quickened at a double-digit pace in 2Q13, growing 14.2% y-o-y and 15.1% q-o-q to reach KRW76.3 trillion at end-June. Issuance of central government bonds rose 8.2% y-o-y and 8.7% q-o-q to KRW24.4 trillion, central bank bonds increased 5.3% y-o-y and 3.8% q-o-q to KRW44.7 trillion, and industrial finance debentures issued by the Korea Development Bank (KDB) surged 321.7% y-o-y and 952.4% q-o-q to KRW7.1 trillion.

Corporate LCY bonds outstanding reached KRW1,013 trillion at end-June, growing 13.8% y-o-y and 2.1% q-o-q. Private sector corporate bonds accounted for 46% of the corporate bond market in 2Q13, expanding 20.1% y-o-y and 3.2% q-o-q in nominal terms. Special public bonds, which are issued by government-owned corporations, accounted for one-third of total corporate bonds and increased 13.3% y-o-y and 1.9% q-o-q. Financial debentures (excluding KDB bonds) accounted for 21% of total corporate bonds and had the smallest increase in 2Q13 compared with other types of corporate bonds, rising 2.4% y-o-y and 0.2% q-o-q.

Issuance of LCY corporate bonds was down 7.4% y-o-y and 6.9% q-o-q during 2Q13 amid less bond issuance from private corporations (down 10.4% y-o-y and 9.9% q-o-q) and special public companies (down 13.5% y-o-y and 12.2% q-o-q). On the other hand, issuance of financial debentures (excluding KDB bonds) rose 9.1% y-o-y and 8.1% q-o-q.

As of end-June, the top 30 LCY corporate bond issuers had outstanding bonds of KRW635.0 trillion, accounting for 63% of total LCY corporate bonds **(Table 2)**. Korea Land & Housing Corporation was the largest issuer of corporate bonds with bonds outstanding of KRW58.7 trillion.

In 2Q13, the five largest LCY corporate bond issues included Posco's KRW800 billion 30-year bond offering a coupon of 4.3%, Woori Bank's KRW500 billion 30-year bond at 4.4%, Korea Land & Housing Corporation's KRW400 billion 3-year bond at 2.83%, SK Telecom's KRW400 billion 60-year bond at 4.21%, and Woori Bank's KRW350 billion 10-year bond at 3.9% **(Table 3)**.

Liquidity

Liquidity in the LCY government bond market appears to have improved in 2Q13, as the turnover ratio for government bonds climbed to 1.27 from 1.09 in 1Q13 and 1.01 in 4Q12. By type of government bond, the turnover ratio for central government bonds, mostly KTBs, increased to 1.32 in 2Q13 from 1.20 in 1Q13, while the turnover ratio for MSBs rose to 1.39 in 2Q13 from 1.04 in 1Q13 **(Figure 2)**.

Liquidity also appears to have improved in 2Q13 in the KTB futures market, with the total number of contracts traded rising to 13.2 million from 9.8 million in 1Q13 and 9.3 million in 4Q12, led by greater trading of 3-year KTB futures **(Figure 3)**. In 2Q13, about 73% of the total KTB futures contracts traded were for the 3-year tenor, an increase of about 11 percentage points from the previous quarter, while the remainder were for the 10-year tenor.

Liquidity in the LCY corporate bond market was unchanged in 2Q13, as the turnover ratio for corporate bonds remained at 0.14. Between 1Q13 and 2Q13, the turnover ratio for financial debentures inched up from 0.29 to 0.33, while it fell for special public bonds from 0.16 to 0.13, and for private corporate bonds from 0.07 to 0.06 **(Figure 4).**

Investor Profile

Insurance companies and pension funds were the largest investor group in LCY government

Table 2: Top 30 Issuers of LCY Corporate Bonds in the Republic of Korea

Issuers	Outstanding Amount		State-Owned	Listed on		Type of Industry
	LCY Bonds (KRW billion)	LCY Bonds (US$ billion)		KOSPI	KOSDAQ	
1. Korea Land & Housing	58,735.0	51.4	Yes	No	No	Real Estate
2. Korea Housing Finance	57,307.6	50.2	Yes	No	No	Financial
3. Korea Finance	45,590.0	39.9	Yes	No	No	Financial
4. Korea Deposit Insurance	43,960.0	38.5	Yes	No	No	Insurance
5. Industrial Bank of Korea	32,524.7	28.5	Yes	Yes	No	Bank
6. KDB Daewoo Securities	31,623.6	27.7	Yes	Yes	No	Securities
7. Korea Electric Power	30,270.0	26.5	Yes	Yes	No	Utillity
8. Korea Investment and Securities	27,698.2	24.3	No	No	No	Securities
9. Woori Investment and Securities	27,625.9	24.2	Yes	Yes	No	Securities
10. Mirae Asset Securities	23,487.2	20.6	No	Yes	No	Securities
11. Korea Expressway	20,090.0	17.6	Yes	No	No	Infrastructure
12. Kookmin Bank	18,905.2	16.6	No	No	No	Bank
13. Tong Yang Securities	18,740.8	16.4	No	Yes	No	Securities
14. Shinhan Bank	18,258.2	16.0	No	No	No	Bank
15. Korea Rail Network Authority	15,490.0	13.6	Yes	No	No	Infrastructure
16. Small & Medium Business	15,005.0	13.1	Yes	No	No	Financial
17. Hana Daetoo Securities	14,169.4	12.4	No	No	No	Securities
18. Korea Gas	13,665.0	12.0	Yes	Yes	No	Utility
19. Woori Bank	13,462.5	11.8	Yes	No	No	Bank
20. Hana Bank	12,315.0	10.8	No	No	No	Bank
21. Hyundai Securities	11,755.1	10.3	No	Yes	No	Securities
22. Shinhan Investment	11,223.2	9.8	No	No	No	Securities
23. Samsung Securities	10,098.3	8.8	No	Yes	No	Securities
24. Standard Chartered First Bank Korea	9,990.0	8.7	No	No	No	Bank
25. Korea Water Resources	9,987.0	8.7	Yes	Yes	No	Utility
26. Shinhan Card	9,350.3	8.2	No	No	No	Financial
27. Korea Eximbank	9,110.0	8.0	Yes	No	No	Bank
28. Hyundai Capital Services	8,295.0	7.3	No	No	No	Securities
29. Korea Student Aid Foundation	8,270.0	7.2	Yes	No	No	Financial
30. Korea Railroad	7,960.0	7.0	Yes	No	No	Infrastructure
Total Top 30 LCY Corporate Issuers	**634,962.3**	**556.0**				
Total LCY Corporate Bonds	**1,012,990.0**	**887.0**				
Top 30 as % of Total LCY Corporate Bonds	**62.7%**	**62.7%**				

KOSDAQ = Korean Securities Dealers Automated Quotations, KOSPI = Korea Composite Stock Price Index, LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg and EDAILY *BondWeb* data.

Table 3: Notable LCY Corporate Bond Issuance in 2Q13

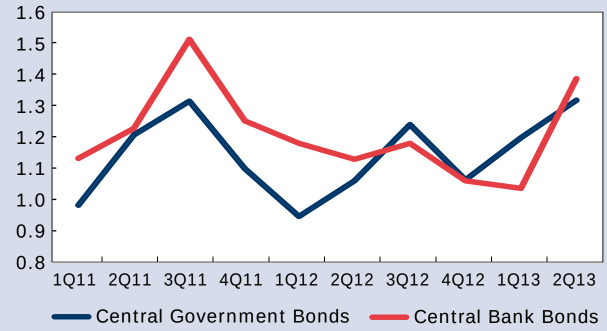
Corporate Issuers	Coupon Rate (%)	Issued Amount (KRW billion)
Kookmin Bank		
7-year bond	3.61	300.0
Korea Land & Housing Corp.		
3-year bond	2.83	400.0
Posco		
30-year bond	4.30	800.0
SK Telecom		
60-year bond	4.21	400.0
Woori Bank		
10-year bond	3.90	350.0
30-year bond	4.40	500.0

LCY = local currency.
Source: Bloomberg LP.

bonds, holding 26% of the total as of end-March, an increase of 1 percentage point from the same month in the previous year **(Figure 5)**. General government entities—the central government, local governments, and social security funds—held 22% of the total, and stood as the second-largest holder of LCY government bonds at end-March; their share, however, slipped 2 percentage points from March 2012. The share of banks' holdings of LCY government bonds fell 1 percentage point from a year earlier, leveling off at 18% in March 2013. Meanwhile, the share of foreign investors holdings of LCY government bonds fell from 11% to 9% over the same period.

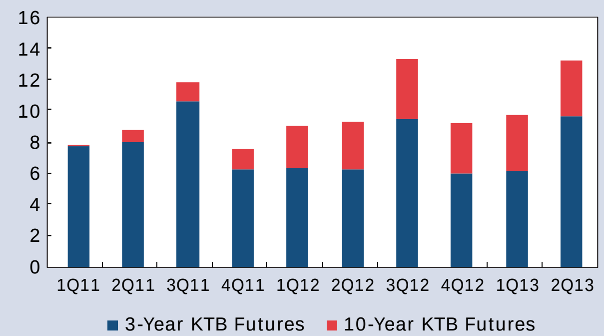
Insurance companies and pension funds remained the largest investor group in LCY corporate bonds, holding 33% of the total at end-March **(Figure 6)**. They were followed by financial companies other than banks, insurance firms, and pension funds, with a share of 28%, banks at 15%, the general government at 12%, households and nonprofit organizations at 8%, non-financial companies at 3%, and foreign investors at 1%. Compared with the same month in the previous year, the shares of households and nonprofit organizations, and non-financial businesses, climbed 3 percentage points and 1 percentage point, respectively, while those of banks and other financial companies fell 3 percentage points and 1 percentage point, respectively.

Figure 2: Turnover Ratios for Central Government and Central Bank Bonds



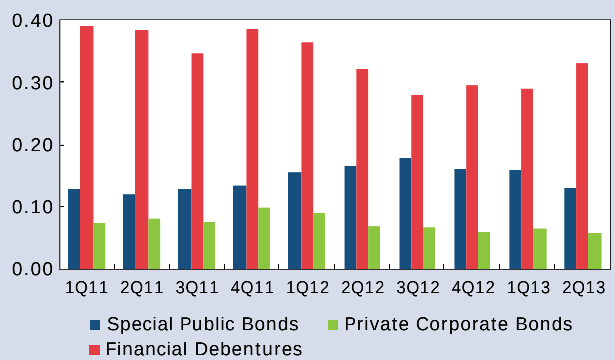
Note: Central government bonds include Korea Treasury Bonds and National Housing Bonds.
Sources: The Bank of Korea and EDAILY *BondWeb*.

Figure 3: Trading Volume for KTB Futures Contracts (millions of contracts)



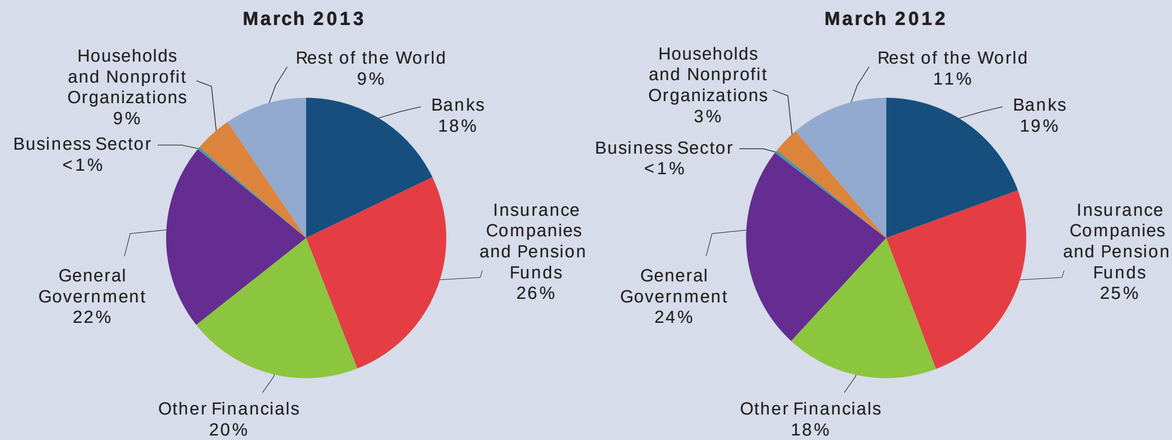
KTB = Korea Treasury Bond.
Source: Korea Exchange.

Figure 4: Turnover Ratios for Special Public Bonds, Financial Debentures, and Private Corporate Bonds



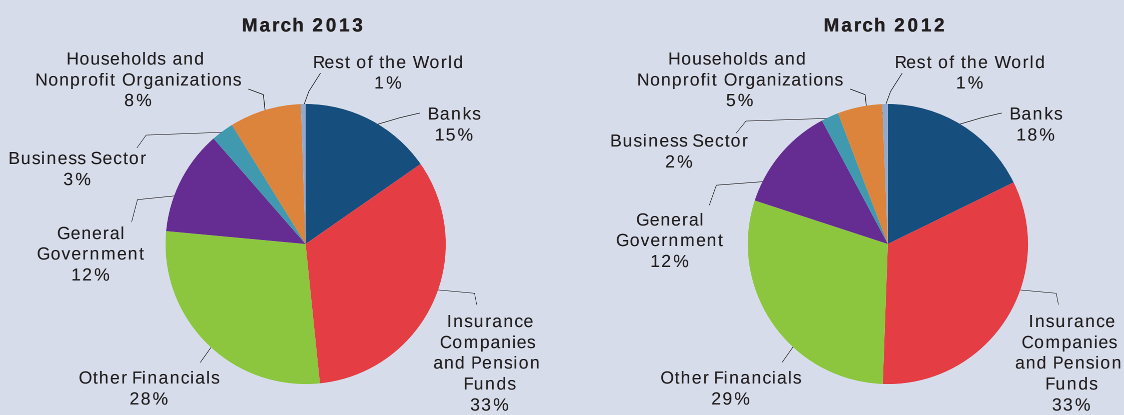
Source: EDAILY *BondWeb*.

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.

Rating Changes

On 11 June, Rating and Investment Information (R&I) affirmed the Republic of Korea's LCY and foreign currency (FCY) issuer ratings at AA– and A+, respectively, with the outlook remaining stable for both.

On 22 August, Fitch Ratings affirmed the Republic of Korea's long-term FCY issuer default rating (IDR) at AA–, the long-term LCY IDR at AA, the short-term FCY IDR at F1+, and the country ceiling at AA+, with the outlook remaining stable for both long-term ratings.

Policy, Institutional, and Regulatory Developments

MOSF Announces Amendments to Regulations on KTB Issuance and Primary Dealer System

The Republic of Korea's Ministry of Strategy and Finance (MOSF) announced in July amendments to regulations on KTB issuance and the primary dealer system, with the amendments aimed at attracting greater primary dealer participation in the primary and secondary markets. The amendments extend the (i) differential knock-down rates for 10-, 20-, and 30-year bonds to 3 bps from 2 bps; (ii) threshold of primary dealers' non-competitive purchasing option to 10%; and (iii) quote spreads for long-term bonds given their yield volatility. MOSF stated that the amendments would be implemented sometime between the 10-year KTB auction starting on 15 July and the end of 2013.

FSC Introduces Measures to Invigorate Corporate Bond Market

The Republic of Korea's Financial Services Commission (FSC) announced measures in July to invigorate the country's corporate bond market and prevent the worsening of corporate funding conditions and the possible spillover of "destabilizing factors" from the market to the real economy. Specifically, the FSC measures include (i) a liquidity support program through government issuance of primary collateralized bond obligations, (ii) tax incentives for dividends of corporate bond funds with more than 30% of bonds rated BBB– or below, (iii) improvements in the Qualified Institutional Buyer system, (iv) easing of relevant regulations to boost demand for corporate bonds, (v) revisions to the regulations on asset-backed securities, (vi) reforms in the credit rating system, (vii) enhancements to the system for corporate bond issuance, (viii) improvements in the system for corporate bond management, and (ix) strengthening the effectiveness and transparency of the bond distribution system.

Republic of Korea Introduces 2013 Supplementary Budget, KTB Market Stabilization Measures

MOSF reported in April that a supplementary budget of KRW17.3 trillion will be utilized to help stimulate the domestic economy through the remainder of 2013. Of the amount, KRW12.0 trillion will be used to finance government revenue shortfalls and the remaining KRW5.3 trillion will be spent to supplement the government's budget expenditures. Under the 2013 supplementary budget, government expenditures will amount to KRW349 trillion, which is KRW7 trillion higher than what was specified in the original 2013 budget. Also, government revenues in the 2013 supplementary budget are projected to reach KRW360.8 trillion, which is KRW11.8 trillion less than in the original budget.

MOSF reported that the 2013 supplementary budget calls for an additional net increase in issuance of KTBs amounting to KRW15.8 trillion. Since this will likely trigger upward pressure on interest rates, thereby imposing a burden on the market, MOSF has decided to reduce the issue amount for buy-backs. Against this backdrop, total issuance of KTBs for the year is projected to reach KRW88.5 trillion, which is KRW8.8 trillion higher than the previous estimate of KRW79.7 trillion. In addition, MOSF reported that it intends to continue with the monthly issuance of KTBs at similar levels. It will continue to optimize the proportions of KTBs by maturity (3-, 5-, 10-, 20-, and 30-year tenors), with plans to increase the issuance of "on-the-run" KTBs. MOSF will also conduct flexible application of "partial knock-down rates" and ensure that primary dealers' obligations are strengthened.

Basel III Capital Regulations to Apply to Bank Holding Companies

The FSC announced in August that the Basel III capital regulations will apply to bank holding companies effective 1 December 2013. These regulations establish the minimum capital requirement ratios for bank holding companies at 4.5% for common equity capital, 6.0% for Tier 1 capital, and 8.0% for total capital. A capital conservation buffer will also be introduced to bank holding companies starting in 2016.

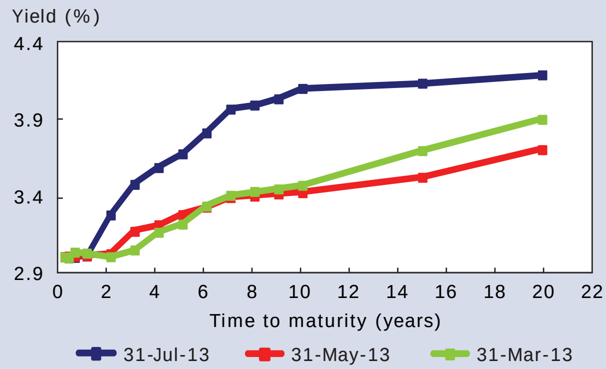
Malaysia

Yield Movements

Malaysia's local currency (LCY) government bond yield curve slightly flattened between end-March and end-May, as yields dropped across the length of the curve, with the exception of tenors between 2 years and 5 years. Yields of longer-dated tenors (maturities more than 6 years) slumped the most, falling between 17 basis points (bps) and 20 bps.

By end-July, however, the yield curve steepened between the shorter-end, where yields continued to slide, and the belly through the longer-end, where yields continued their upward trend. Yields for tenors of 2 years and longer rallied—by as much as 68 bps for 10-year Malaysian Government Securities (MGSs). In contrast to the rest of the curve, yields fell for short-term instruments with maturities of 1 year or less, with decreases ranging from 0.1 bps for the 1-year tenor to 1.1 bps for the 3-month tenor. The yield spread between 2- and 10-year tenors widened to 43 bps at end-July from 1 bp at end-June **(Figure 1)**.

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



LCY = local currency.
Source: Bloomberg LP.

Yields surged on concerns that the United States (US) Federal Reserve might taper its asset purchase program and that inflation might be accelerating. Consumer price inflation in Malaysia rose to 2.0% year-on-year (y-o-y) in July, following 1.8% in both June and May. The increase reflected higher food and housing costs, which inched up 3.9% and 1.9% y-o-y. On a month-on-month (m-o-m) basis, Malaysia's inflation increased 0.2% in July.

In its Monetary Policy Committee meeting on 11 July, Bank Negara Malaysia (BNM) decided to keep its overnight policy rate unchanged at 3.0%. BNM has kept its benchmark rate at the same level since May 2011. The central bank expects private consumption to remain steady, underpinned by income growth and stable labor market conditions, although sustained weakness in the external sector may affect the overall growth momentum. BNM also expects capital spending in domestic-oriented industries and the ongoing implementation of infrastructure projects to support investment activity.

Malaysia's economic growth has slowed but still remains robust in 2013, supported by buoyant domestic demand amid weakness in the external sector. Real gross domestic product (GDP) growth picked up slightly in 2Q13, rising to 4.3% y-o-y from 4.1% in 1Q13. Government consumption, which rose 11.1% y-o-y in 2Q13, cushioned the moderation in private consumption, which slowed to 7.2% in 2Q13 from 7.5% in the previous quarter. Total exports of goods and services, on the other hand, fell 5.2% y-o-y in 2Q13. On a quarter-on-quarter (q-o-q) and seasonally adjusted basis, the economy recorded growth of 1.4% in 2Q13. With continued weaknesses in the external economy, BNM has revised downward its 2013 GDP growth forecast to 4.5%–5.0% from 5.0%–6.0%.

Size and Composition

Total LCY bonds outstanding in Malaysia rose 6.4% y-o-y to MYR993.5 billion (US$314.4 billion) at end-June; LCY government bonds increased 5.1% and LCY corporate bonds grew 8.2%. On a quarter-on-quarter (q-o-q) basis, however, total

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

	Outstanding Amount (billion)						Growth Rate (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	MYR	US$	MYR	US$	MYR	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	934	294	996	322	994	314	2.3	15.0	(0.2)	6.4
Government	559	176	589	190	588	186	1.6	15.3	(0.2)	5.1
Central Government Bonds and Bills	417	131	446	144	459	145	2.3	10.9	2.8	10.0
Central Bank Bills	142	45	136	44	123	39	(0.3)	31.0	(10.1)	(13.7)
Sukuk Perumahan Kerajaan	0	0	6	2	6	2	–	–	0.0	–
Corporate	375	118	407	132	406	128	3.2	14.6	(0.3)	8.2

( ) = negative, – = not applicable, 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.
Sources: Bank Negara Malaysia Fully Automated System for Issuing/Tendering (FAST) and Bloomberg LP.

LCY bonds outstanding declined 0.2% in 2Q13 **(Table 1)**.

Government Bonds. LCY government bonds outstanding stood at MYR587.5 billion at end-June, rising 5.1% y-o-y. About 63% of total government bonds outstanding were conventional bonds, while 37% were *sukuk* (Islamic bonds). Growth in the government bond market was driven by central government bonds, specifically Government Investment Issues (GIIs) and *Sukuk Perumahan Kerajaan* (SPK). Central government bonds and bills, which accounted for 77.3% of the total government bonds, grew 10.1% y-o-y to MYR458.8 billion. Outstanding SPK amounted to MYR6.2 billion. In contrast, total central bank bills outstanding slumped 13.7% y-o-y and 10.1% q-o-q due to a decline in monetary note issuance by BNM.

Government bond issuance fell 3.1% q-o-q to MYR101.1 billion in 2Q13, as issuance volumes declined for central government bills and central bank bills. On a y-o-y basis, the issuance of government bonds also saw negative growth of 0.2% due to a drop in central government bond issuance, particularly MGSs.

Corporate Bonds. Malaysia's LCY corporate bonds outstanding expanded 8.2% y-o-y to MYR406 billion (US$128.5 billion) at end-June, but edged slightly lower by 0.3% on a q-o-q basis. Some 67% of the total LCY corporate bonds were *sukuk*, while conventional bonds accounted for 33%. Medium-term notes (MTNs) accounted for 74.0% of total *sukuk* and 49.5% of total corporate bonds outstanding.

Corporate issuance declined in 2Q13, continuing a trend in place since 4Q12. Total LCY corporate bond issuance dropped to MYR20.6 billion, down 29.1% y-o-y and 29.3% q-o-q, due to a decline in *sukuk* issuance, particularly Islamic commercial paper and MTNs. Of the total issuance during the quarter, conventional bonds accounted for 58.3% of the total, while *sukuk* registered 41.7%.

Bond issuance from corporate entities was heavily concentrated among a handful of corporates, as the top 30 issuers accounted for 93.0% of the total issuance for the quarter. **Table 2** lists some notable corporate bonds issued during 2Q13.

The largest corporate issuer in 2Q13 was TNB Northern Energy (TNB NE), a wholly owned subsidiary of state-owned Tenaga Nasional. TNB NE sold MYR1.63 billion worth of *sukuk* consisting of 39 series with tenures ranging from 4 years to 23 years. The proceeds from the bond sale will be used to finance construction, delivery,

Table 2: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (MYR million)	Corporate Issuers	Coupon Rate (%)	Issued Amount (MYR million)
TNB Northern Energy			17-year *sukuk*	4.42	50
4-year *sukuk*	3.55	30	17.5-year *sukuk*	4.46	50
4.5-year *sukuk*	3.59	30	18-year *sukuk*	4.48	50
5-year *sukuk*	3.63	30	18.5-year *sukuk*	4.52	55
5.5-year *sukuk*	3.67	30	19-year *sukuk*	4.55	50
6-year *sukuk*	3.71	30	19.5-year *sukuk*	4.59	55
6.5-year *sukuk*	3.75	30	20-year *sukuk*	4.62	55
7-year *sukuk*	3.79	30	20.5-year *sukuk*	4.66	55
7.5-year *sukuk*	3.83	35	21-year *sukuk*	4.69	50
8-year *sukuk*	3.87	30	21.5-year *sukuk*	4.73	55
8.5-year *sukuk*	3.91	30	22-year *sukuk*	4.76	50
9-year *sukuk*	3.95	30	22.5-year *sukuk*	4.80	55
9.5-year *sukuk*	3.99	35	23-year *sukuk*	4.83	55
10-year *sukuk*	4.03	35	Cagamas		
10.5-year *sukuk*	4.06	35	3-month Islamic commercial paper	3.21	500
11-year *sukuk*	4.08	35	1-year Islamic MTNs	3.23	50
11.5-year *sukuk*	4.11	35	1-year medium term notes	3.30	70
12-year *sukuk*	4.13	35	2-year Islamic MTNs	3.40	80
12.5-year *sukuk*	4.16	35	3-year Islamic MTNs	3.40	450
13-year *sukuk*	4.18	35	Perbadanan Tabung Pendidikan Tinggi Nasional		
13.5-year *sukuk*	4.21	45	10-year Islamic MTNs	3.80	100
14-year *sukuk*	4.23	40	15-year Islamic MTNs	4.19	100
14.5-year *sukuk*	4.26	45	15-year Islamic MTNs	4.19	500
15-year *sukuk*	4.28	45	Telekom Malaysia		
15.5-year *sukuk*	4.32	50	10-year Islamic MTNs	3.93	250
16-year *sukuk*	4.35	50	10-year Islamic MTNs	3.95	400
16.5-year *sukuk*	4.39	50			

LCY = local currency, MTNs = medium-term notes.
Source: Bank Negara Malaysia Bond Info Hub.

and working capital requirements for a 1,071.43 megawatt gas-fired power plant in Prai, Penang. The bond was rated AAAIS by Malaysian Rating Corp Berhad.

Other notable issuances in 2Q13 came from state-owned companies such as national mortgage corporation Cagamas, which issued MYR1.15 billion worth of conventional bonds and *sukuk*, and Perbadanan Tabung Pendidikan Tinggi Nasional (National Higher Education Fund Corporation), which raised a total of MYR700 million from IMTNs carrying 10- and 15-year maturities. Meanwhile, publicly-listed Telekom Malaysia also issued MYR650 million worth of AAA-rated 10-year *sukuk*.

Table 3 provides a breakdown of the top 30 LCY corporate bond issuers as of end-June. The amount of LCY bonds outstanding of the top 30 corporate bond issuers in Malaysia stood at MYR223.2 billion, representing 55.0% of total corporate bonds outstanding. Financial firms comprised 14 of the 30 largest corporate

Table 3: Top 30 Issuers of LCY Corporate Bonds in Malaysia

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (MYR billion)	LCY Bonds (US$ billion)			
1. Project Lebuhraya Usahasama.	30.60	9.68	No	Yes	Transport, Storage, and Communications
2. Cagamas	20.65	6.53	Yes	No	Finance
3. Khazanah	18.70	5.92	Yes	No	Quasi-Govt.
4. Pengurusan Air	11.28	3.57	Yes	No	Energy, Gas, and Water
5. Prasarana	9.91	3.14	Yes	No	Finance
6. Binariang GSM	9.89	3.13	No	No	Transport, Storage, and Communications
7. Maybank	9.70	3.07	No	Yes	Finance
8. CIMB Bank	7.00	2.21	No	No	Finance
9. Cagamas MBS	6.03	1.91	No	No	Finance
10. Senai Desaru Expressway	5.57	1.76	No	No	Construction
11. Sarawak Energy	5.50	1.74	Yes	No	Energy, Gas, and Water
12. Perbadanan Tabung Pendidikan Tinggi Nasional	5.40	1.71	Yes	No	Quasi-Govt.
13. Turus Pesawat	5.31	1.68	Yes	No	Quasi-Govt.
14. Malakoff Power	5.10	1.61	No	No	Finance
15. Public Bank	5.07	1.61	No	Yes	Finance
16. Aman Sukuk	5.03	1.59	Yes	No	Construction
17. Celcom Networks	5.00	1.58	No	No	Transport, Storage, and Communications
18. 1Malaysia Development	5.00	1.58	Yes	No	Finance
19. Hong Leong Bank	4.86	1.54	No	Yes	Finance
20. KL International Airport	4.86	1.54	Yes	No	Transport, Storage, and Communications
21. Manjung Island Energy	4.85	1.53	No	No	Energy, Gas, and Water
22. Putrajaya Holdings	4.76	1.51	No	No	Finance
23. AM Bank	4.71	1.49	No	No	Finance
24. RHB Bank	4.60	1.46	No	No	Finance
25. YTL Power International	4.32	1.37	No	Yes	Energy, Gas, and Water
26. Tanjung Bin Power	4.20	1.33	No	No	Energy, Gas, and Water
27. Jimah Energy Ventures	4.03	1.28	No	No	Energy, Gas, and Water
28. Danainfra Nasional	3.90	1.23	Yes	No	Finance
29. Rantau Abang Capital	3.80	1.20	No	No	Quasi-Govt.
30. Danga Capital	3.60	1.14	No	No	Finance
Total Top 30 LCY Corporate Issuers	**223.21**	**70.63**			
Total LCY Corporate Bonds	**406.04**	**128.48**			
Top 30 as % of Total LCY Corporate Bonds	**55.0%**	**55.0%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bank Negara Malaysia Fully Automated System for Issuing/Tendering (FAST) data.

bond issuers, with bonds outstanding worth MYR94.9 billion.

Highway-operator Project Lebuhraya Usahasama. (PLUS) remained the largest issuer with outstanding bonds valued at MYR30.6 billion. Among the top 30 issuers, 19 were privately-owned companies, five of which were listed on Bursa Malaysia.

Investor Profile

Financial institutions remained the largest holder of MGSs and GIIs, accounting for 42.3% of total government debt outstanding at end-March **(Figure 2)**, which was down slightly from 43.3% in March 2012 and 44.1% in June 2012. In absolute terms, the holdings of financial institutions stood at MYR187 billion at end-March, up from MYR174.7 billion a year earlier.

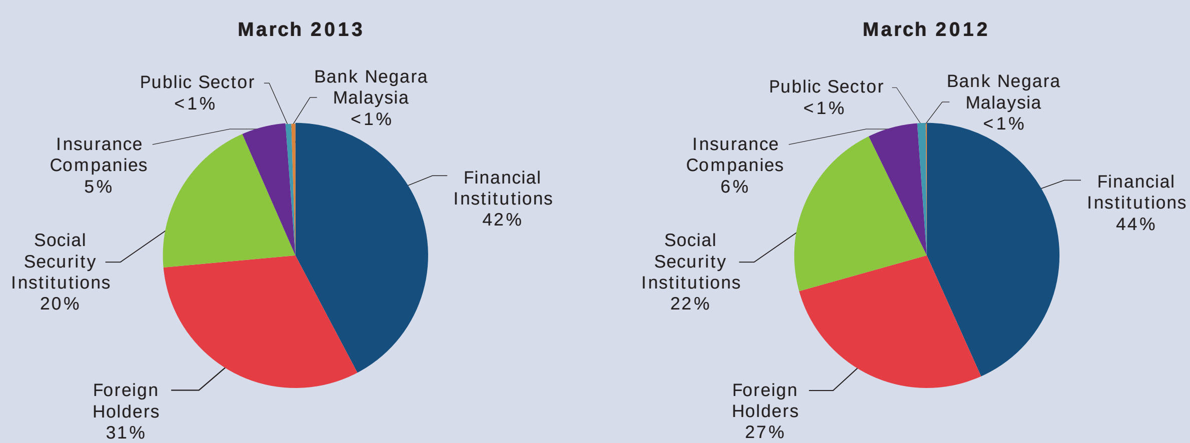
Foreign investors comprised the second-largest investor group with 31.2% of total government bonds outstanding. This number has steadily risen from 10% in March 2009 as a result of the appreciation of the ringgit versus the US dollar. Meanwhile, the holdings of social security institutions fell to 19.9% at end-March from 22.2% a year earlier due to a decrease in the Employees Provident Fund's holdings.

Domestic commercial and Islamic banks increased their already dominant share of the Malaysian corporate bond market at the end of 2012 to 48% from 44% at the end of 2011 **(Figure 3)**. Holdings of insurance companies remained at 30% of the total corporate bonds in 2012, while holdings of corporate bonds by the Employees Provident Fund fell to 10% from 13% of the total in 2011. Holdings of corporate bonds by insurance companies have more than doubled since 2006 **(Table 4)** and continued to rise in 2012 in nominal terms, but holdings of corporate bonds by Employees Provident Fund have risen much more slowly over the last 7 years and even declined in 2012.

Rating Changes

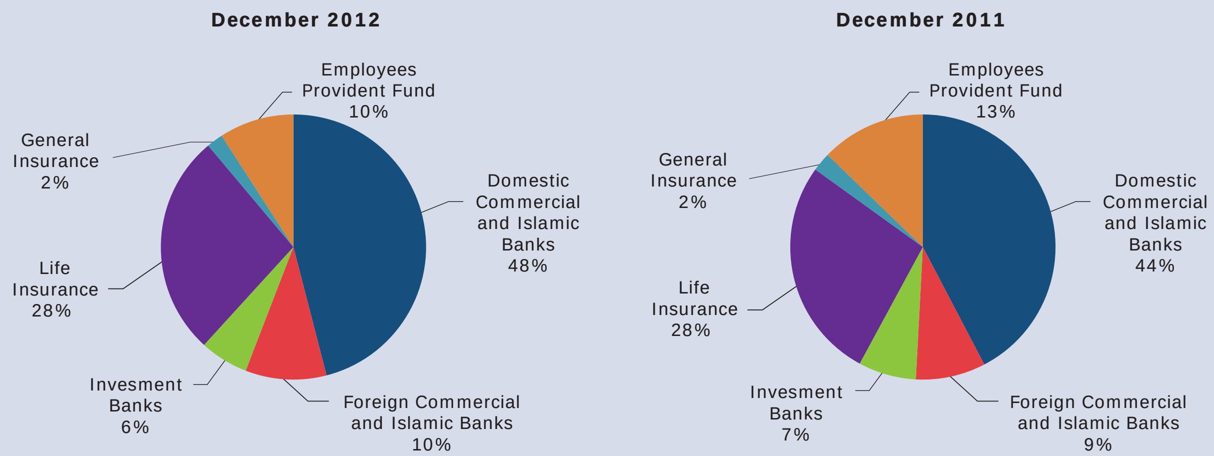
In July, Standard & Poor's Ratings Services (S&P) affirmed Malaysia's long-term foreign currency (FCY) and LCY ratings at A– and A, respectively. S&P also maintained its long-term rating outlook at stable on account of the country's strong external

Figure 2: LCY Government Bonds Investor Profile



LCY = local currency.
Source: Bank Negara Malaysia.

Figure 3: LCY Corporate Bonds Investor Profile



LCY = local currency.
Source: Bank Negara Malaysia.

Table 4: Corporate Bonds Held By Insurance Companies and the Employees Provident Fund in Malaysia (MYR billion)

	2006	2007	2008	2009	2010	2011	2012
Malaysia Total	**88.0**	**102.2**	**106.2**	**122.8**	**141.7**	**147.5**	**160.3**
Insurance	54.4	63.4	67.3	85.3	100.5	102.8	122.1
Employees Provident Fund	33.6	38.8	39.0	37.5	41.1	44.7	38.2
as % of Total Corporate Bonds	**46%**	**44%**	**40%**	**43%**	**46%**	**44%**	**40%**

Source: Bank Negara Malaysia and Employees Provident Fund.

position and monetary flexibility, and in spite of its weak fiscal performance. The rating agency expects government reform efforts to continue along with other economic reform policies.

In the same month, Fitch Ratings (Fitch) downgraded Malaysia's credit outlook to negative from stable, with the long-term FCY and LCY issuer default ratings affirmed at A– and A, respectively. Fitch cited Malaysia's public finances as its key rating weakness with worsening prospects for budgetary reform and fiscal consolidation. The rating agency believes that it will be difficult for the government to achieve its interim 3% federal budget deficit target in 2015 without additional consolidation measures.

In August, Moody's Investors Service (Moody's) maintained a stable outlook for Malaysia and an A3 rating for LCY and FCY government bonds based on its assessment of moderate economic resiliency that is supported by a highly open, medium-sized economy and a well-diversified external sector. Moody's said the high degree of government financial strength is underpinned by the country's strong external position and high savings rate compared with its peers. It added that Malaysia has strong and well-managed corporate and banking sectors, and that its state-owned enterprises were undergoing needed reform. Moody's noted, however, that Malaysia's economic growth has been relatively dependent on public sector expenditure.

Policy, Institutional, and Regulatory Developments

Malaysia Enacts Financial Services Act and Islamic Financial Services Act

Malaysia enacted a new single legislative framework for conventional and Islamic financial services effective 30 June. The Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA) repealed and consolidated the provisions included in several previous laws: the Banking and Financial Institutions Act 1989, Islamic Banking Act 1983, Insurance Act 1996, Takaful Act 1984, Payment Systems Act 2003, and Exchange Control Act 1953.

The new legislation provides clearly defined regulatory objectives and establishes accountability for BNM in pursuing its principal objective of safeguarding financial stability. It sets forth transparent assessment criteria for authorizing institutions to engage in regulated financial transactions. The acts include provisions to regulate financial holding companies and non-regulated entities in order to take account of systemic risks that can emerge from the interaction between regulated and unregulated institutions, activities, and markets. The IFSA provides a comprehensive legal framework that is fully consistent with *sharia'h* (Islamic law) in all aspects of regulation and supervision, from licensing to the winding-up of an institution.

BNM Implements Measures to Mitigate Household Debt Risks

BNM implemented measures to limit risks stemming from rising household debt. The measures set limits for mortgages and personal loans—including a maximum tenure of 10 years for personal financing and 35 years for financing for residential and non-residential properties—and prohibit the offering of pre-approved personal financing products.

Philippines

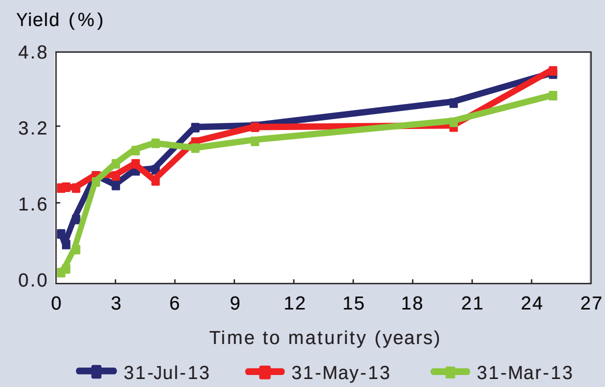
Yield Movements

Between end-March and end-May, Philippine local currency (LCY) government bond yields rose for most tenors **(Figure 1)**. The rise in yields was most evident for tenors of 1 year and below, with yields rising between 127 basis points (bps) and 175 bps. Yields for 10- and 25-year bonds increased 29 bps and 51 bps, respectively. The rise in yields was due to a sell-off at the end of May driven by speculation that the United States (US) Federal Reserve would soon start tapering its quantitative easing program. In contrast, yields for 3-, 5-, and 7-year bonds fell between 25 bps and 78 bps.

Between end-May and end-July, yields fell for most tenors. Yields for tenors of 1 year and below plunged between 65 bps and 119 bps, while yields for 3- and 4-year bonds fell 20 bps and 14 bps, respectively. The fall in yields was due to a correction in the market after the aforementioned sell-off in late May. Yields fell in the Philippines in July due to continued high liquidity in the market and as a result of the Bangko Sentral ng Pilipinas (BSP) lowering the Special Deposit Account (SDA) rate to 2.0% at its 25 April meeting of the Monetary Board and limiting the access of banks to the facility. Data from BSP showed that SDA deposits totaled PHP1.79 trillion during the week of 8–12 July, down 1.5% from PHP1.82 trillion at end-May and 3.5% from PHP1.86 trillion at end-April. Funds from these accounts may have shifted to government securities or time deposits as SDA investors typically have low risk appetites.

Economic data in the Philippines continues to be positive. Inflation remained benign, enabling the pursuit of expansionary fiscal and monetary policy goals. Consumer price inflation was 2.1% year-on-year (y-o-y) in August, bringing year-to-date inflation to the slow and steady rate to 2.8%, which is below BSP's 2013 target range of 3%–5%. This led BSP to hold its policy rates steady during its two most recent Monetary Board meetings on 13 June and 25 July.

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



LCY = local currency.
Source: Bloomberg LP.

In 2Q13, the Philippine economy grew 7.5% y-o-y, following a revised 7.7% growth in 1Q13. The growth was mainly due to strong business and consumer sentiment, as well as sustained government capital expenditure. This growth was also supported by the strong performance of the services sector, which offset the negative contribution of exports. Exports declined in 2Q13 due to continued weakness in the global economy. However, industry participants are hopeful that global demand will benefit from the gradual recovery of the US economy and efforts in Japan to revive its moribund economy.

Size and Composition

The Philippine LCY bond market grew at a robust rate of 12.1% y-o-y as of end-June, led by both treasury bills and bonds **(Table 1)**. Total LCY bonds reached PHP4.1 trillion (US$95 billion) at end-June, up 1.9% from PHP4 trillion at end-March. Government securities accounted for the majority of bonds outstanding, totaling PHP3.5 trillion, while corporate bonds summed to PHP540.8 billion.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	PHP	US$	PHP	US$	PHP	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	3,646	87	4,008	98	4,086	95	2.3	11.8	1.9	12.1
Government	3,151	75	3,476	85	3,545	82	1.0	10.8	2.0	12.5
Treasury Bills	255	6	290	7	295	7	(4.7)	(33.1)	1.9	15.7
Treasury Bonds	2,772	66	3,073	75	3,137	73	1.8	18.1	2.1	13.2
Others	124	3	113	3	113	3	(2.4)	6.4	0.0	(8.5)
Corporate	495	12	532	13	541	13	11.5	18.7	1.7	9.3

( ) = negative, LCY = local currency, 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. Data for government bonds as of end-May 2013.
5. "Others" comprises bonds issued by government agencies, instrumentalities, and corporations with which repayment was guaranteed by the central government. These include issues of Power Sector Assets and Liabilities Management (PSALM), National Food Authority, and others.
6. Peso Global Bonds (PHP-denominated bonds payable in US$) and multi-currency Retail Treasury Bonds (RTBs) are not included. As of end-June 2013, the Government of the Philippines and Petron Corporation had PHP129.7 billion and PHP20 billion of outstanding Peso Global Bonds, respectively. There was a total of PHP6 billion of outstanding multi-currency treasury bonds as of end-May 2013.

Sources: Bureau of the Treasury and Bloomberg LP.

Government Bond Market Development. Outstanding fixed-income instruments issued by the Philippine government and government-controlled companies rose 12.5% y-o-y and 2.0% quarter-on-quarter (q-o-q) to close at PHP3.5 trillion at end-May. Treasury bills advanced at the fastest pace—15.7% y-o-y and 1.9% q-o-q—to stand at PHP295.1 billion at end-May. Treasury bonds expanded 13.2% y-o-y and 2.1% q-o-q to PHP3.1 trillion. Meanwhile, fixed-income instruments issued by government-controlled companies registered a decline of 8.5% y-o-y to PHP113.5 billion at the end of 2Q13.

In terms of issuance in 2Q13, PHP90.9 billion worth of treasury bills were sold compared with PHP30 billion of treasury bonds. The government has programmed LCY borrowing of PHP150 billion through its regular auction schedule in 3Q13: PHP60 billion of treasury bills with 91-, 182-, and 364-day tenors; PHP60 billion of treasury bonds with 3- and 5-years tenors; and PHP30 billion of 10-year Retail Treasury Bonds (RTBs). As of end-July, PHP20 billion and PHP30 billion had been raised through treasury bills and bonds, respectively.

Corporate Bond Market Development. As of end-June, total outstanding LCY corporate bonds grew 9.3% y-o-y and 1.7% q-o-q to reach PHP540.8 billion (US$13 billion). The sole issuer of corporate bonds in 2Q13 was the Energy Development Corporation, which raised PHP14 billion worth of 7- and 10-year bonds **(Table 2)**.

Only 51 companies are actively tapping the capital market in the Philippines. The top 31 issuers accounted for 92.2% of the total amount of LCY corporate bonds outstanding (PHP540.8 billion) at end-June **(Table 3)**. Out of the top 31 bond issuers, only five companies are privately-held corporations and the rest are publicly listed with the Philippine Stock Exchange (PSE). San Miguel Brewery (SMB) remained the largest corporate issuer in the country with PHP45.2 billion of outstanding debt. Ayala Corporation followed SMB as the next largest borrower with PHP40 billion. Banco de Oro Unibank was in the third spot with PHP38 billion of outstanding bonds.

Table 2: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuer	Coupon Rate (%)	Issued Amount (PHP billion)
Energy Development Corp.		
7-year bond	4.16	7.00
10-year bond	4.73	7.00

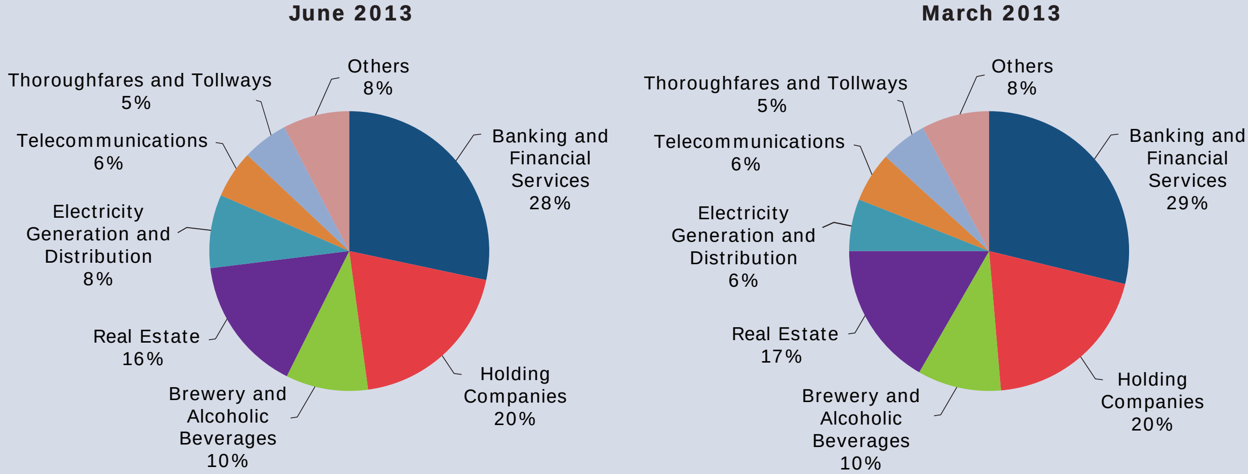
Source: Bloomberg LP.

Table 3: Top 31 Issuers of LCY Corporate Bonds in the Philippines

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (PHP billion)	LCY Bonds (US$ billion)			
1. San Miguel Brewery	45.2	1.0	No	Yes	Brewery
2. Ayala Corporation	40.0	0.9	No	Yes	Diversified Operations
3. BDO Unibank	38.0	0.9	No	Yes	Banking
4. SM Investments	36.1	0.8	No	Yes	Diversified Operations
5. Ayala Land	31.2	0.7	No	Yes	Real Estate
6. Energy Development	26.0	0.6	No	Yes	Electricity Generation
7. Philippine National Bank	21.9	0.5	No	Yes	Banking
8. Manila Electric	19.4	0.4	No	Yes	Electricity Distribution
9. Philippine Long Distance Telephone	17.3	0.4	No	Yes	Telecommunications
10. Maynilad Water Services	16.6	0.4	No	Yes	Water
11. Filinvest Land	14.5	0.3	No	Yes	Real Estate
12. SM Development	14.3	0.3	No	Yes	Real Estate
13. Rizal Commercial Banking	14.0	0.3	No	Yes	Banking
14. Petron	13.6	0.3	No	Yes	Oil Refining and Marketing
15. JG Summit Holdings	13.3	0.3	No	Yes	Diversified Operations
16. Security Bank	13.0	0.3	No	Yes	Banking
17. First Metro Investment	12.0	0.3	No	No	Investment Banking
18. MTD Manila Expressway	11.5	0.3	No	No	Transport Services
19. South Luzon Tollway	11.0	0.3	No	No	Transport Services
20. Globe Telecom	10.0	0.2	No	Yes	Telecommunications
21. GT Capital Holdings	10.0	0.2	No	Yes	Investment Companies
22. Metropolitan Bank & Trust	10.0	0.2	No	Yes	Banking
23. Robinsons Land	10.0	0.2	No	Yes	Real Estate
24. United Coconut Planters Bank	9.5	0.2	No	No	Banking
25. Allied Banking	8.0	0.2	No	Yes	Banking
26. Megaworld	6.4	0.1	No	Yes	Real Estate
27. Manila North Tollways	6.1	0.1	No	No	Public Thoroughfares
28. Bank of the Philippine Islands	5.0	0.1	No	Yes	Banking
29. China Banking	5.0	0.1	No	Yes	Banking
30. SM Prime Holdings	5.0	0.1	No	Yes	Real Estate
31. Tanduay Distilleries	5.0	0.1	No	Yes	Alcoholic Beverages
Total Top 31 LCY Corporate Issuers	**498.8**	**11.6**			
Total LCY Corporate Bonds	**540.8**	**12.5**			
Top 31 as % of Total LCY Corporate Bonds	**92.2%**	**92.2%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. Petron Corporation has PHP20 billion of Global Peso Bonds outstanding that are not included in this table.
3. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg data.

Figure 2: LCY Corporate Bond Issuers by Industry



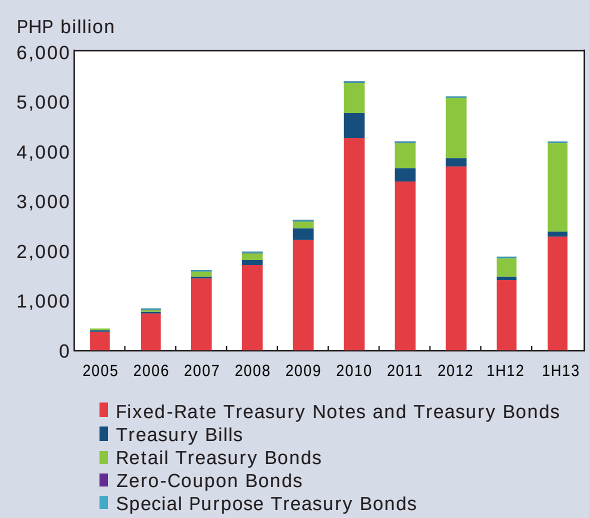
LCY = local currency.
Source: Bloomberg LP.

The diversity of LCY corporate bond issuers in 2Q13 was comparable with that in 1Q13 **(Figure 2)**. Banks and financial service companies, including investment houses, remained the leading issuers of debt in 2Q13 with 28.3% of the total as BSP moved toward more stringent liquidity and capital requirements. The market share of most industries remained unchanged, except for electricity generation and distribution, which rose to 8.5% in 2Q13 from 6.0% in 1Q13, and real estate, which fell to 15.7% from 16.7%. Firms from industries as diverse as (i) electricity generation and distribution, (ii) telecommunications, and (iii) thoroughfares and tollways continued to have shares of total corporate bonds outstanding in the single-digit levels.

As the sole fixed-income exchange in the country, the Philippine Dealing and Exchange Corporation (PDEx) captures the secondary trading of listed fixed-income issues. The volume of secondary trading of government securities surged between 2005 and end-2012 **(Figure 3)**. From an annual trading volume of PHP437.7 billion in 2005, trading volume increased to PHP5 trillion in 2012. The largest annual volume was recorded in 2010, when secondary trading reached PHP5.4 trillion.

Total trading volume for the first half of 2013 increased 125.0% y-o-y to PHP4.2 trillion, from PHP1.9 trillion in the same period in the previous year, equivalent to 82.4% of the total trade volume in 2012. Between January 2005 and June 2013, treasury bonds accounted for almost 76.9% of all trades in the secondary market as investors sought greater capital gains and interest income from these securities.

Figure 3: PDEx Trade Volume Trends—Government Securities

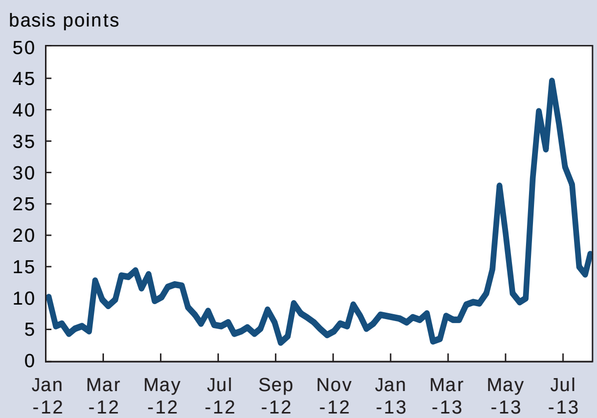


Note: PDEx reports one side of the trade only.
Source: Philippine Dealing and Exchange Corporation (PDEx).

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 in the Philippine market from 6 January 2012 to 31 July 2013. 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 4)**. From January through July, bid–ask spreads averaged 16 bps. The average bid–ask spread stood at 7 bps in 1Q13 before increasing to 23 bps in 2Q13 due to rising risk aversion amid speculation that the US Federal Reserve would start to taper its quantitative easing program. For the month of July, bid–ask spreads narrowed to an average of 21 bps on renewed risk appetite resulting from the announcement of Moody's Investors Service (Moody's) that it would undertake a review of the Philippine government's rating for a possible upgrade to investment grade.

Figure 4: Weekly Average Bid–Ask Spreads of the Philippines' Most Active Government Securities



Note: The following were included among the monitored government securities: (i) FXTN 7-51, (ii) FXTN 10-42, (iii) RTB 10-2, (iv) FXTN 10-54, (v) FXTN 10-55, (vi) RTB15-1, (vii) RTB15-2, (viii) FXTN 20-17, (ix) RTB 20-1, (x) FXTN RTB 25-1, and (xi) FXTN 25-8.
Source: *AsianBondsOnline*.

From 1 April to 31 July, the two series with the tightest bid–ask spreads were FXTN 20-17 and RTB 25-1, with an average of 12 bps and 15 bps, respectively. The other series considered the most liquid were (i) RTB 15-1 (15.8 bps), (ii) RTB 20-1 (17 bps), (iii) RTB 10-2 (18.7 bps), and (iv) FXTN 10-54 (19.5 bps). FXTN 25-08 and FXTN 10-55 had bid–ask spreads of 21.3 bps and 22.5 bps, respectively.

Investor Profile

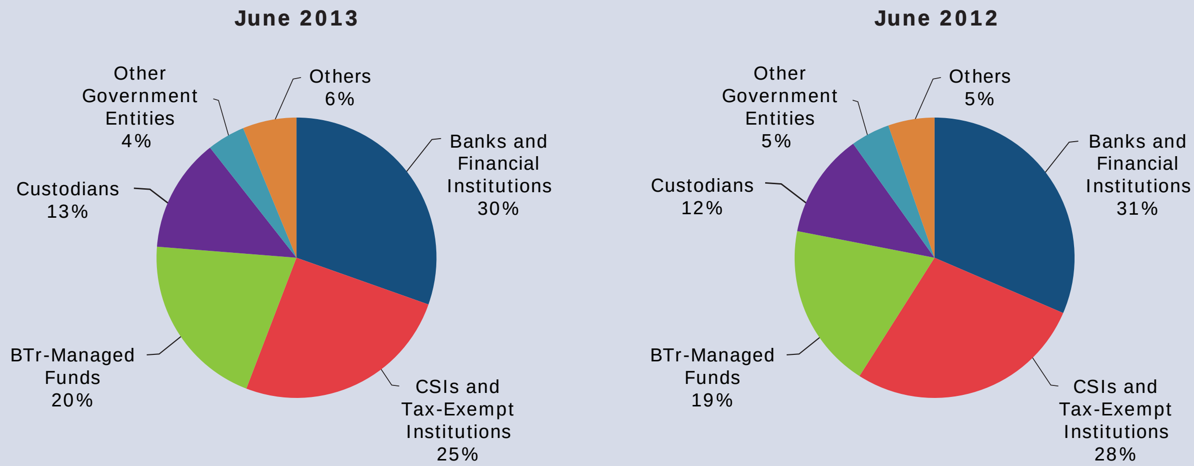
The largest grouping of investors of government securities in 2Q13 comprised banks and financial institutions with 30.4% of the total **(Figure 5)**. This was slightly lower than its share of 31.4% in 2Q12. Contractual savings institutions—including the Social Security System (SSS), Government Service Insurance System (GSIS), Pag-ibig, and life insurance companies—and tax-exempt institutions—such as trusts and other tax-exempt entities—accounted for 25.4% in 2Q13, 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, increased to 20.5% in 2Q13 from 19.0% in 2Q12. The participation of custodians increased to 13.2% from 12.1% in the same period. Other government entities and other investors, which include individuals and private corporations, increased to 10.6% in 2Q13 from 9.9% in 2Q12.

Rating Changes

S&P Raises the Philippines' Long-Term FCY Debt to Investment Grade

Standard & Poor's (S&P) upgraded its rating for the Philippines' long-term foreign currency (FCY)-denominated debt to BBB– from BB+, with a stable outlook. S&P stated that the upgrade reflected a strengthening external profile, moderating inflation, and the government's declining reliance on FCY debt. S&P expects the Philippines to

Figure 5: LCY Government Bonds Investor Profile



BTr = Bureau of the Treasury, CSIs = contractual savings institutions, LCY = local currency.
Source: Bloomberg LP.

move toward a near-balanced external position because of persistent current account surpluses being driven by large net transfers from Filipinos working abroad that more than offset ongoing trade deficits.

R&I Raises the Philippines' FCY Issuer Rating Outlook to Positive

Rating and Investment Information (R&I) raised its outlook for the Philippines' FCY issuer rating of BBB– from stable to positive. R&I cited the country's strong growth due to robust consumption being driven by remittances from overseas Filipino workers, rising public investment and exports, and stable inflation as contributors to the change in outlook. R&I also stated that it will consider a rating upgrade if the fundamentals for economic growth are solidified and steady increases in per capita income become more promising.

Policy, Institutional, and Regulatory Developments

BSP Further Limits Access to SDA Facility

On 9 May, the Monetary Board of BSP approved revised guidelines on the access of banks and trust departments and entities (acting as trustees) to the BSP's Special Deposit Account (SDA) facility. BSP will gradually reduce the SDA placements of investment management accounts of trust entities until the end of the year. The Monetary Board also stated that the low inflation environment and strong domestic growth prospects provided flexibility for BSP to restructure its monetary policy tools.

BSP Approves Further Amendments to Regulations on FX Transactions

On 5 July, BSP released additional amendments to the Manual of Regulations on Foreign Exchange (FX) Transactions. To broaden investment options available in the domestic capital market, BSP will allow (i) custodian banks to register non-resident investments in PSE-listed equity securities of non-residents and (ii) non-resident issuers to convert the peso proceeds from the onshore sale of their PSE-listed equity securities to FX, conditional upon prior BSP approval. To facilitate legitimate banking transactions that require payment in FX, BSP will allow prepayment of BSP-registered short-term loans.

BSP Maintains Policy Rates

On 25 July, the Monetary Board of BSP decided to keep its key policy rates—the overnight borrowing and lending rates—steady at 3.5% and 5.5%, respectively. The reserve requirement ratios and the interest rate for its SDA facility were also left unchanged. The decision to hold the policy rates at their current levels reflected the Monetary Board's assessment that the inflation environment remains benign, with inflation expected to remain on target through the remainder of 2013 and all of 2014. The Monetary Board also noted possible upside pressures to inflation, which include the modest pace of global economic growth, power rate adjustments, and continued increases in liquidity due to capital inflows.

Philippine BTr Raises PHP150 Billion From Sale of RTBs

On 5 August, BTr ended the offer period for RTBs after raising a total of PHP150 billion. The RTBs carry a maturity of 10 years and a yield of 3.25%. The banks were given until 13 August to sell the RTBs to the public. Banks were also required to sell at least 20% of the RTBs to retail buyers, net of the PHP26.9 billion sold to government-owned corporations. Philippine Treasurer Rosalia De Leon stated that the success of the offer reflected the level of liquidity in the market.

Singapore

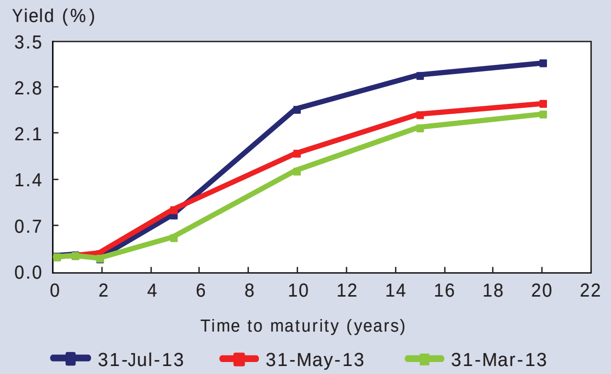
Yield Movements

Between end-July and end-May, the yield curve for Singapore's local currency (LCY) government bonds rose at the longer-end but remained stable at the shorter-end, resulting in a steepening of the curve **(Figure 1)**. Yields declined 8 basis points (bps) for both the 2- and 5-year tenors. Yields at the longer-end of the curve—including 10-, 15-, and 20-year tenors—rose between 59 bps and 66 bps. As a result, the yield spread between 2- and 10-year tenors widened to 225 bps at end-July from 151 bps at end-May.

On 15 July, Moody's announced its decision to downgrade the outlook for Singapore's banking system from stable to negative due to a recent period of rapid loan growth and rising real estate prices. According to Moody's, Singapore's banking system has been operating in a favorable low interest rate environment amid strong economic growth. With the risk of a turn in the interest rate cycle, Moody's views the trends of asset inflation and credit growth as vulnerabilities that are likely to lead to credit costs rising from their current low base.

According to the Ministry of Trade and Industry (MTI), Singapore's economy expanded 3.8% year-on-year (y-o-y) in 2Q13 after posting nearly flat growth of 0.2% in 1Q13. On a quarter-on-quarter (q-o-q) and seasonally adjusted annualized basis, the economy grew 15.5% in 2Q13, up substantially from 1.7% in the previous quarter. In 2Q13, growth in the construction sector eased to 5.1% y-o-y from 5.8% in 1Q13, while the services sector expanded at an accelerated pace of 5.5% y-o-y from 2.7% in the previous quarter. The manufacturing sector expanded 0.2% y-o-y in 2Q13 after contracting 6.7% in 1Q13. MTI also announced that it has upgraded the gross domestic product (GDP) growth forecast for 2013 from 1.0%–3.0% to 2.5%–3.5%.

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



LCY = local currency.
Source: Bloomberg LP.

Consumer price inflation in Singapore climbed to 1.8% y-o-y in June from 1.6% in May. This was mainly due to petrol pump prices, which increased with the recent pick-up in global oil prices. In addition, healthcare costs rose 4.3%, housing and recreation prices each advanced 3.0%, and education costs grew 2.9%. On a month-on-month (m-o-m) basis, consumer price inflation eased slightly to 0.2% in June from 0.4% in May.

Size and Composition

The size of Singapore's LCY bond market stood at SGD303 billion (US$239 billion) at end-June, representing modest growth of 2.1% q-o-q **(Table 1)**. On a y-o-y basis, the bond market grew 14.7%, driven by both the government and corporate sectors of the bond market

Government Bonds. LCY government bonds outstanding at end-June rose 1.9% q-o-q and 14.9% y-o-y to SGD187 billion. Growth in the government bond market was largely driven by a substantial increase in Monetary Authority of Singapore (MAS) bills, which have been issued since April 2011 as part of MAS' money market operations. In 2Q13, the stock of MAS bills rose

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

	Outstanding Amount (billion)						**Growth Rate** (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	SGD	US$	SGD	US$	SGD	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	264	209	297	239	303	239	2.0	11.6	2.1	14.7
Government	163	129	184	148	187	148	0.8	13.3	1.9	14.9
Central Govt. Bills and Bonds	143	113	147	118	138	109	(0.8)	3.0	(6.1)	(3.4)
MAS Bills	20	16	37	30	50	39	13.3	–	33.3	143.1
Corporate	101	80	113	91	116	91	3.9	8.8	2.5	14.5

( ) = negative, – = not applicable, LCY = local currency, MAS = Monetary Authority of Singapore, 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 bills and bonds 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.
Sources: Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP.

33.3% q-o-q and 143.1% y-o-y to SGD50 billion. Meanwhile, outstanding Singapore Government Securities (SGSs), comprising treasury bills and bonds, fell 6.1% q-o-q and 3.4% y-o-y.

Corporate Bonds. Singapore's LCY corporate bonds outstanding were estimated to stand at SGD116 billion at end-June, expanding 2.5% q-o-q and 14.5% y-o-y.

At end-June, the amount of LCY bonds outstanding of the top 30 corporate bond issuers in Singapore reached SGD64.1 billion, representing 55.4% of the total corporate bond market **(Table 2)**. The Housing and Development Board ranked as the top corporate issuer in Singapore with outstanding bonds valued at SGD14.4 billion, followed by DBS Bank with bonds outstanding of SGD5.0 billion. The third largest corporate issuer was CapitaLand—one of the largest real estate and real estate fund management companies headquartered in Singapore—with a total bond stock amounting to SGD4.8 billion.

Corporate issuers from the financial sector dominated the list of the top 30 LCY corporate bond issuers in Singapore. Other major issuers were from the utilities, industrial, real estate, telecommunications, transportation, and energy sectors. Only three companies on the list were state-owned firms.

Corporate bond issuance reached SGD3.8 billion in 2Q13, down from SGD4.1 billion in 1Q13. A total of 26 bond series were issued by 25 companies during 2Q13, with maturities ranging from 1 year to 10 years, and coupon rates between 1.0% and 7.125%. Two perpetual bonds were also issued in 2Q13. **Table 3** lists notable corporate bonds issued in 2Q13.

Policy, Institutional, and Regulatory Developments

MAS Introduces Debt Servicing Framework for Property Loans

On 28 June, MAS announced its plan to introduce a total debt servicing ratio framework for all property loans granted by financial institutions to individuals. This will require financial institutions to take into consideration borrowers' other outstanding debt obligations when granting property loans in order to strengthen credit underwriting practices among financial institutions and encourage financial prudence among borrowers. MAS will also refine rules related to the application of the existing loan-to-value (LTV) limits on housing loans. These refinements seek to ensure the effectiveness of the LTV limits that were put in place to cool demand in the housing market. In particular, they aim to prevent circumvention of the tighter LTV limits on second and subsequent housing loans.

Table 2: Top 30 Issuers of LCY Corporate Bonds in Singapore

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (SGD billion)	LCY Bonds (US$ billion)			
1. Housing and Development Board	14.4	11.4	Yes	No	Financial
2. DBS Bank	5.0	3.9	No	Yes	Financial
3. CapitaLand	4.8	3.8	No	Yes	Financial
4. United Overseas Bank	4.5	3.6	No	Yes	Financial
5. Temasek Financial I	3.6	2.8	No	No	Financial
6. Oversea-Chinese Banking	2.7	2.1	No	Yes	Financial
7. SP PowerAssets	2.4	1.9	No	No	Utilities
8. Public Utilities Board	2.1	1.7	Yes	No	Utilities
9. Land Transport Authority	1.8	1.4	Yes	No	Industrial
10. GLL IHT Pte	1.8	1.4	No	No	Real Estate
11. Olam International	1.6	1.3	No	Yes	Consumer
12. Keppel Corp	1.5	1.2	No	Yes	Industrial
13. Mapletree Treasury Services	1.3	1.1	No	No	Financial
14. Overseas Union Enterprise	1.3	1.0	No	Yes	Consumer
15. Temasek Financial III	1.3	1.0	No	No	Financial
16. Neptune Orient Lines	1.3	1.0	No	Yes	Industrial
17. City Developments	1.3	1.0	No	Yes	Consumer
18. CapitaMalls Asia Treasury	1.1	0.9	No	No	Financial
19. Keppel Land	1.1	0.9	No	Yes	Real Estate
20. PSA Corporation	1.0	0.8	No	No	Consumer
21. CapitaMall Trust	1.0	0.8	No	Yes	Financial
22. F&N Treasury Pte	1.0	0.8	No	No	Financial
23. Hyflux	1.0	0.8	No	Yes	Industrial
24. Singtel Group Treasury	0.9	0.7	No	No	Telecommunications
25. Singapore Airlines	0.8	0.6	No	No	Transportation
26. Swiber Holdings	0.8	0.6	No	Yes	Energy
27. Global Logistic Properties	0.8	0.6	No	Yes	Industrial
28. CapitaLand Treasury	0.7	0.6	No	No	Financial
29. Joynote	0.7	0.6	No	No	Financial
30. Sembcorp Financial Services	0.7	0.6	No	No	Industrial
Total Top 30 LCY Corporate Issuers	**64.1**	**50.5**			
Total LCY Corporate Bonds	**115.7**	**91.3**			
Top 30 as % of Total LCY Corporate Bonds	**55.4%**	**55.4%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg data.

Table 3: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (SGD million)
Capitaland Ltd.		
7-year bond	1.85	1,300
TML Holdings Pte Ltd.		
5-year bond	4.25	350
GLL IHT Pte Ltd.		
perpetual bonds	4.70	200
7-year bond	4.10	125
ABJA Investment		
10-year bond	4.95	300
Tiger Airways		
perpetual bond	2.00	220
Swiber Holdings Ltd.		
4-year bond	7.13	160

LCY = local currency.
Source: Bloomberg LP.

BOJ and MAS Sign Cross-Border Collateral Arrangement

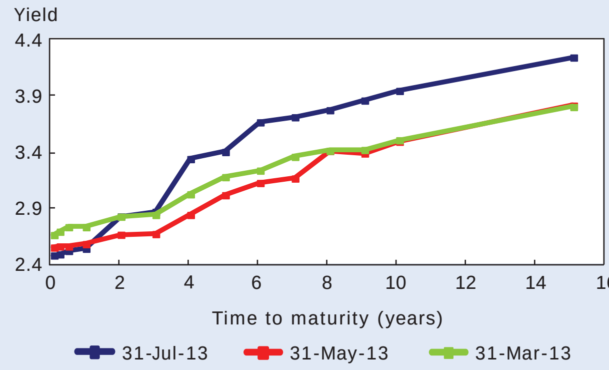
On 26 July, the Bank of Japan (BOJ) and MAS established a cross-border collateral arrangement to enhance financial stability in Singapore. Under the arrangement, eligible financial institutions operating in Singapore may obtain Singapore dollar liquidity from MAS by pledging Japanese government securities. This widens the range of acceptable collateral in MAS' liquidity facility and permits greater flexibility in the liquidity management of eligible financial institutions, including Japanese banks, operating in Singapore. This collaboration reinforces BOJ and MAS' commitment to the long-standing economic and financial relationship between Japan and Singapore.

Thailand

Yield Movements

Thailand's local currency (LCY) government bond yields fell for tenors of 1 year or less and rose for tenors of more than 1 year between end-March and end-July, resulting in a steepening of the yield curve **(Figure 1)**. The largest drop in yields during this period was for the 6-month tenor at 21 basis points (bps), while the largest hikes were for the 9-, 10-, and 15-year tenors at 44 bps each. Between end-March and end-May, yields fell for all tenors except the 15-year. However, between end-May and end-July, yields rose for most tenors, especially for tenors of more than 1 year, while falling for tenors of 1 year or less. Meanwhile, the yield spread between the 2- and 10-year tenors widened 43 bps between end-March and end-July to reach 111 bps.

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



LCY = local currency.
Source: Bloomberg LP.

The fall in short-term LCY government bond yields in Thailand between end-March and end-July followed the 28–29 May decision of the Bank of Thailand's (BOT) Monetary Policy Committee to lower the policy rate—the 1-day repurchase rate—by 25 bps to 2.50%. In its subsequent meetings on 9–10 July and 21 August, the committee decided to keep the policy rate steady at 2.50%. On the other hand, the rise in medium- to long-term yields during this period mainly reflected market expectations of a tapering in the United States (US) Federal Reserve's purchase of Treasuries and agency mortgage-backed securities, which triggered an increase in the sell-off by foreign investors of THB-denominated medium- to long-term government bonds.

Consumer price inflation moderated to 1.6% year-on-year (y-o-y) in August from 2.0% in July. The price index for food and nonalcoholic beverages rose 2.7% following a 2.8% increase in July. Meanwhile, the price index for non-food and beverage items climbed 1.1% y-o-y in August, lower than the 1.6% hike posted in the previous month.

Real gross domestic product (GDP) growth decelerated to 2.8% y-o-y in 2Q13 from 5.4% y-o-y in 1Q13 amid slower growth in domestic demand and exports. On the expenditure side, the y-o-y growth rate between 1Q13 and 2Q13 fell from 4.4% to 2.4% for private consumption, from 5.8% to 4.5% for gross fixed capital formation, from 8.3% to 2.8% for total exports, and from 8.1% to 4.1% for total imports, whereas it rose from 2.9% to 5.8% for government spending. On the production side, growth in the non-agriculture sector slowed to 3.0% y-o-y in 2Q13 from 5.8% in 1Q13, as the y-o-y growth rate for the manufacturing sector fell to –1.0% from 4.9%, while growth in the agriculture sector slipped to 0.1% y-o-y in 2Q13 from 0.8% in the previous quarter. In August, the Government of Thailand's Cabinet approved measures—covering the areas of private consumption, private investment, government spending, and exports—aimed at promoting stable economic growth.

For the month of July, manufacturing production dropped 4.5% y-o-y after contracting 3.2% in June, according to Bank of Thailand data.

The country's current account deficit widened to US$708.9 million in July from US$664.3 million in June. The m-o-m increase was on the back of a 56.2% monthly drop in the merchandise trade surplus, which stood at US$257.6 million in July, as merchandise imports rose 1.7% m-o-m while merchandise exports slipped 0.1% m-o-m. Moreover, the deficit in the net services, primary income, and secondary income account narrowed 22.8% m-o-m to US$966.4 million in July.

Size and Composition

LCY bonds outstanding in Thailand totaled THB8.9 trillion (US$286 billion) at the end of 2Q13, reflecting increases of 3.0% q-o-q and 10.6% y-o-y **(Table 1)**. The growth rates for 2Q13, however, were lower compared with 2Q12. The value of LCY government bonds outstanding, which accounted for 79% of the overall bond market at the end of 2Q13, climbed 3.4% q-o-q and 8.7% y-o-y, slower than the growth posted in 2Q12. Central government bonds reached THB3.2 trillion at the end of 2Q13 on moderating growth rates of 4.3% q-o-q and 7.7% y-o-y. Central bank bonds rose at a slower pace than central government bonds—2.4% q-o-q and 4.6% y-o-y—to level off at THB3.1 trillion, while state-owned enterprise (SOE) and other bonds grew 3.4% q-o-q and 40.5% y-o-y to reach THB676 billion at the end of 2Q13.

Issuance of LCY government bonds fell 3.2% q-o-q and 24.2% y-o-y in 2Q13. This was on the back of reduced issuance from the central bank (–0.6% q-o-q and –24.3% y-o-y) and central government (–19.5% q-o-q and –36.8% y-o-y). Meanwhile, issuance of SOE bonds had a mixed performance in 2Q13, falling 20.1% q-o-q but rising 55.3% y-o-y.

LCY corporate bonds outstanding amounted to THB1.9 trillion at the end of 2Q13, up 1.8% q-o-q and 18.5% y-o-y. The top 30 corporate issuers had combined bonds outstanding of THB1.2 trillion, which comprised 61.7% of total corporate bonds, with PTT and Siam Cement as the two largest corporate bond issuers **(Table 2)**. Issuance of LCY corporate debt securities jumped 76.3% q-o-q and 137.5% y-o-y in 2Q13 on the back of a sharp rise in debt issues with tenors of 1 year or less.

The two largest corporate bonds issued in 2Q13 were Siam Cement's 4-year bond worth THB25 billion and with a coupon rate of 4.0%, and True Corporation's 4-year bond valued at THB7.8 billion and carrying a coupon of 5.8% **(Table 3)**. The two bond issues with the highest coupon rates in 2Q13 were Property Perfect's 2-year bond worth THB2 billion and offering a 6.05% coupon and True Corporation's 4-year bond at 5.8% coupon. Mitr Phol Sugar Corporation issued the bond with the longest tenor at 12 years.

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

	Outstanding Amount (billion)						**Growth Rate** (%)			
	2Q12		**1Q13**		**2Q13**		**2Q12**		**2Q13**	
	THB	**US$**	**THB**	**US$**	**THB**	**US$**	**q-o-q**	**y-o-y**	**q-o-q**	**y-o-y**
Total	8,027	254	8,621	295	8,882	286	4.1	17.7	3.0	10.6
Government	6,444	204	6,779	232	7,007	226	4.8	17.9	3.4	8.7
Government Bonds and Treasury Bills	3,000	95	3,098	106	3,231	104	8.0	17.3	4.3	7.7
Central Bank Bonds	2,963	94	3,026	103	3,099	100	1.7	22.1	2.4	4.6
State-Owned Enterprise and Other Bonds	481	15	654	22	676	22	4.5	(0.2)	3.4	40.5
Corporate	1,583	50	1,842	63	1,875	60	1.6	16.9	1.8	18.5

( ) = negative, LCY = local currency, 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 an LCY base and do not include currency effects.
Sources: Bank of Thailand (BOT) and Bloomberg LP.

Table 2: Top 30 Issuers of LCY Corporate Bonds in Thailand

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (THB billion)	LCY Bonds (US$ billion)			
1. PTT	180.0	5.8	Yes	Yes	Energy
2. Siam Cement	131.5	4.2	Yes	Yes	Diversified
3. Krung Thai Bank	75.1	2.4	Yes	Yes	Financial
4. Charoen Pokphand Foods	64.5	2.1	No	Yes	Consumer
5. Bank of Ayudhya	59.7	1.9	No	Yes	Financial
6. Kasikorn Bank	47.1	1.5	No	Yes	Financial
7. Thanachart Bank	40.5	1.3	No	No	Financial
8. Siam Commercial Bank	40.0	1.3	No	Yes	Financial
9. Thai Airways International	39.7	1.3	Yes	Yes	Consumer
10. Ayudhya Capital Auto Lease	37.4	1.2	No	No	Financial
11. PTT Global Chemical	33.3	1.1	Yes	Yes	Basic Materials
12. Thai Oil	27.8	0.9	Yes	Yes	Energy
13. TMB Bank	27.7	0.9	No	Yes	Financial
14. Toyota Leasing Thailand	27.1	0.9	No	No	Consumer
15. Mitr Phol Sugar	25.2	0.8	No	No	Consumer
16. Banpu	25.2	0.8	No	Yes	Energy
17. PTT Exploration and Production Company	24.2	0.8	Yes	Yes	Energy
18. Indorama Ventures	23.9	0.8	No	Yes	Basic Materials
19. DAD SPV	22.5	0.7	Yes	No	Financial
20. Krung Thai Card	22.5	0.7	Yes	Yes	Financial
21. Tisco Bank	20.3	0.7	No	No	Financial
22. Bangkok Bank	20.0	0.6	No	Yes	Financial
23. IRPC	19.6	0.6	Yes	Yes	Energy
24. Bangkok Expressway	19.2	0.6	No	Yes	Consumer
25. Glow Energy	19.1	0.6	No	Yes	Utilities
26. Quality Houses	18.0	0.6	No	Yes	Real Estate
27. Pruksa Real Estate	17.0	0.5	No	Yes	Real Estate
28. True Corporation	16.7	0.5	No	Yes	Communications
29. Land & Houses	16.5	0.5	No	Yes	Real Estate
30. Minor International	16.4	0.5	No	Yes	Consumer
Total Top 30 LCY Corporate Issuers	**1,157.4**	**37.3**			
Total LCY Corporate Bonds	**1,875.3**	**60.4**			
Top 30 as % of Total LCY Corporate Bonds	**61.7%**	**61.7%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsiaBondsOnline* calculations based on Bloomberg data.

Table 3: Notable LCY Corporate Bond Issuance in 2Q13

Corporate Issuers	Coupon Rate (%)	Issued Amount (THB billion)
Bank Ayudhya		
2-year bond	3.48	6.0
Charoen Phokpand Foods		
5-year bond	3.93	6.0
Siam Cement		
4-year bond	4.00	25.0
Toyota Leasing (Thailand)		
3-year bond	3.21	5.4
True Corporation		
4-year bond	5.80	7.8

LCY = local currency.
Source: Bloomberg LP.

The bond is worth THB2.4 billion and carries a 5.0% coupon.

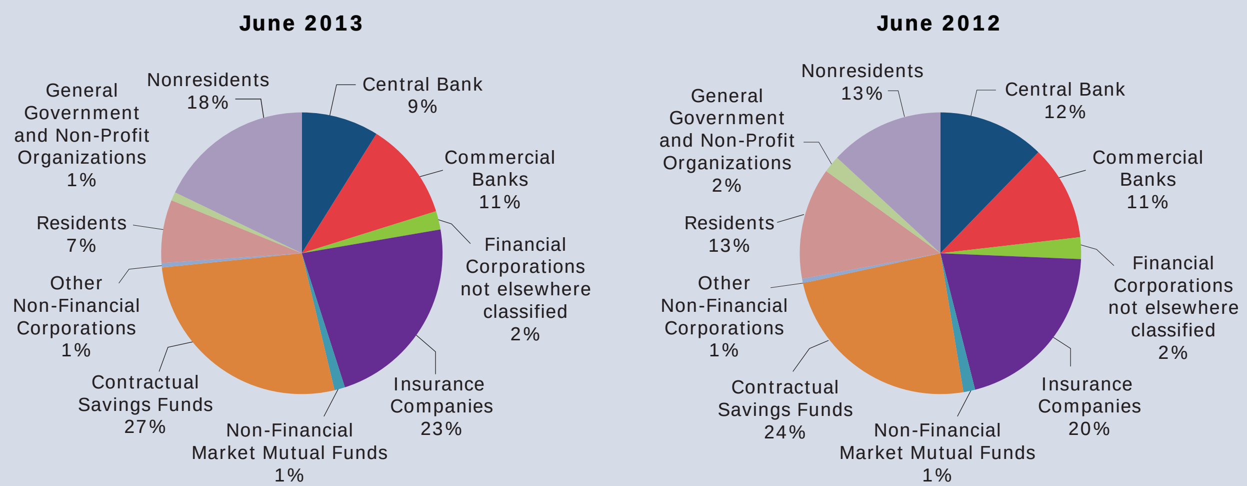
Investor Profile

Contractual savings funds remained the largest investor group in Thailand's LCY government bond market at the end of June, accounting for 27% of the total, followed by insurance companies with a 23% share **(Figure 2)**.

Between June 2012 and June 2013, the shares of contractual savings funds, insurance companies, and nonresidents all increased, while those of the central bank, general government and non-profit organizations, and residents all fell. The share of nonresidents posted the biggest increase at 5 percentage points.

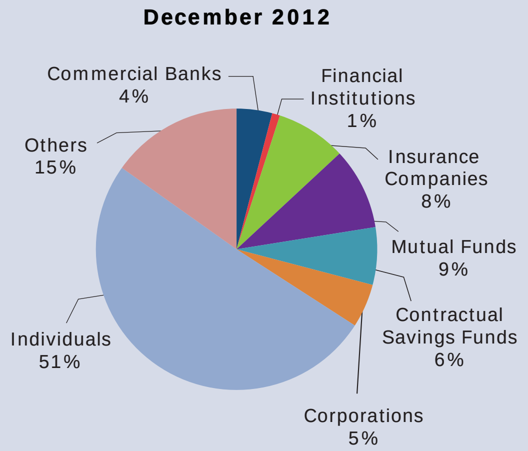
Retail investors remained the largest investor group in LCY corporate bonds, according to the most recent data, holding 51% of the total at end-December 2012 **(Figure 3)**. They were followed by other investors—such as the government, cooperatives, foundations, and temples—with a combined 15% share, then mutual funds (9%), insurance companies (8%), contractual savings funds (6%), non-financial corporations (5%), commercial banks (4%), and other financial institutions (1%). Compared with end-December 2011, the share of individual retail investors rose 6 percentage points, while the share of the combined group of government, cooperatives, foundations, and temples rose 1 percentage point. In contrast, the shares of commercial banks, contractual savings funds, insurance companies, and mutual funds, all fell compared with end-December 2011.

Figure 2: LCY Government Bonds Investor Profile



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

Figure 3: LCY Corporate Bonds Investor Profile



LCY = local currency.
Source: ThaiBMA.

Rating Changes

On 8 March, Fitch Ratings (Fitch) announced that it had upgraded Thailand's long-term foreign currency (FCY) issuer default rating (IDR) to BBB+ from BBB with a stable outlook, affirmed the long-term LCY IDR at A– with a stable outlook, upgraded the short-term FCY IDR to F2 from F3, and upgraded the country ceiling to A– from BBB+. In making its rating decisions, Fitch cited key rating drivers such as the economy's resilience to shocks, sound external finances, and low gross general government indebtedness, among other factors.

Policy, Institutional, and Regulatory Developments

Thailand's Cabinet Approves Measures to Promote Stable Economic Growth

The Government of Thailand's Cabinet agreed during its 6 August meeting on the implementation by the relevant government offices of measures focusing on private consumption, private investment, government spending, and exports. These measures, aimed at promoting stable economic growth, include (i) offering tax incentives to boost the tourism industry and promote the organization of seminars, (ii) promoting investments in the agro-processing industry, (iii) accelerating budget disbursements for fiscal years 2013 and 2014, (iv) expanding exports into potential new markets, and (v) increasing the access of small and medium-sized enterprises (SMEs) to financing.

MOF Permits Two Foreign Entities to Issue LCY Bonds in Thailand

The Ministry of Finance (MOF) announced in May that it was permitting two foreign entities to sell THB-denominated bonds and debentures in Thailand, totaling THB14 billion, between 1 May 2013 and 31 January 2014. These two entities and their respective authorized bond issuance amounts are (i) Australia and New Zealand Banking Corporation (THB8 billion) and (ii) Westpac Banking Corporation (THB6 billion).

Amendments Approved to Regulations Governing REITs

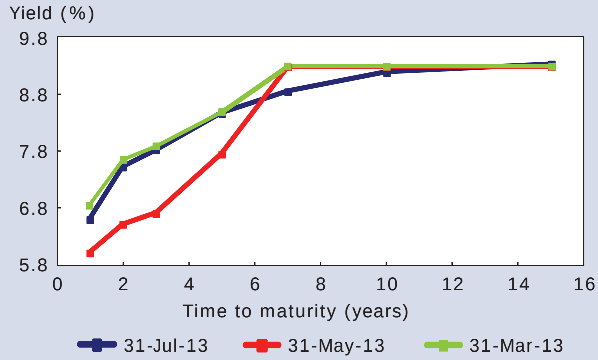
Thailand's Securities and Exchange Commission (SEC) announced in July that the Capital Market Supervisory Board approved amendments to regulations governing the creation and management of real estate investment trusts (REITs). The amendments will allow an REIT trustee to participate in more REIT-related businesses for as long as the trustee is independent from the REIT manager. Measures preventing conflicts of interest among REIT-related businesses will also be put in place.

Viet Nam

Yield Movements

Between end-March and end-May, Viet Nam's local currency (LCY) government bond yield curve shifted downward as yields plunged sharply for tenors between 1 year and 5 years **(Figure 1)**. Yields slumped the most at the shorter-end of the curve, dropping as much as 116 basis points (bps) for 3-year government bonds and 113 bps for 2-year bonds.

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



LCY = local currency.
Source: Bloomberg LP.

By end-July, yields for instruments with maturities of 5 years or less rose between 58 bps and 111 bps. The 2- and 3-year benchmark yields edged up to 7.55% and 7.85% at end-July from 6.55% and 6.74%, respectively, at end-May. In contrast, yields of longer-dated tenors (maturities of 7 years or more) continued to slide, narrowing the spread between 2- and 10-year tenors to 165 bps at end-July from 275 bps at end-May.

The volatility of Viet Nam's government bond yields reflects turbulence in the economy. In 2Q13, inflationary pressures and a currency devaluation dampened investor demand. Consumer price inflation has declined since May 2012 to reach single-digit rates, but picked up for a second consecutive month in July, reaching 7.3% year-on-year (y-o-y). July's inflation rate was the highest in 14 months and follows recent lows in the first half of the year. The price indices for 10 out of 11 baskets of goods increased on a y-o-y basis, with only postal services and telecommunications showing a decline. The price index for health care costs saw the steepest increase at 80.2%, while the price indices for other baskets posted increases of between 2.2% and 15.7%. The government has set an annual inflation target of 6.0%–6.5%.

Concerns that the Vietnamese dong would further weaken also prompted LCY bond yields to rise. The Viet Nam dong depreciated to a record-low VND21,243–US$1 in July following the central bank's decision to devalue the reference rate by 1% versus the US dollar for the first time since 2011.

Viet Nam's economic growth remained subdued as weak domestic demand and high levels of non-performing loans in the banking system continued to constrain growth. In 2Q13, gross domestic product (GDP) growth was at 5.0% y-o-y, up slightly from 4.8% in 1Q13 and 4.7% in 2Q12, but still raising concerns that it may fall short of the government's annual target of 5.5%. Growth in retail revenues slowed to 11.9% in 1H13 from 19.5% in the same period in 2012. To address bad debts in the banking sector, Viet Nam Asset Management Company (VAMC) began operations on 26 July with an initial charter capital of VND500 billion (US$25 million).

Size and Composition

Total LCY bonds outstanding in Viet Nam grew 26.8% y-o-y to VND578.0 trillion at end-June, as the rise in issuance of government bonds more than offset the decline in the corporate sector. On a quarter-on-quarter (q-o-q) basis, however, total LCY government and corporate bonds outstanding declined 8.1% and 22.5%, respectively, in 2Q13 **(Table 1)**.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	2Q12		1Q13		2Q13		2Q12		2Q13	
	VND	US$	VND	US$	VND	US$	q-o-q	y-o-y	q-o-q	y-o-y
Total	455,892	22	632,319	30	577,997	27	10.5	28.5	(8.6)	26.8
Government	417,525	20	610,310	29	560,938	26	12.6	33.5	(8.1)	34.3
Treasury Bonds	185,403	9	310,537	15	324,054	15	11.7	42.0	4.4	74.8
Central Bank Bonds	58,078	3	112,857	5	43,586	2	–	–	(61.4)	(25.0)
State-Owned Enterprise Bonds	174,044	8	186,916	9	193,298	9	(0.2)	(4.4)	3.4	11.1
Corporate	38,367	2	22,009	1	17,059	1	(7.9)	(8.7)	(22.5)	(55.5)

( ) = negative, – = 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. Growth rates are calculated from LCY base and do not include currency effects.
Source: Bloomberg LP.

Government Bonds. LCY government bonds outstanding stood at VND560.9 trillion at end-June, rising 34.3% y-o-y due to increased issuance of treasury bonds and state-owned enterprise (SOE) bonds.

In 2Q13, government issuance amounted to VND53.9 trillion, driven by issuance of treasury bonds and bills of VND34.7 trillion, and issuance by SOEs of VND19.3 trillion. The largest issuer among government-owned corporations was Viet Nam Development Bank, which issued bonds amounting to VND14.3 trillion. Viet Nam Bank for Social Policies and Hanoi Treasury raised VND4.0 trillion and VND1.0 trillion, respectively.

Corporate Bonds. The size of Viet Nam's corporate bond market has shrunk by half since 2Q12, plummeting 55.5% y-o-y to VND17.1 trillion in 2Q13. On a q-o-q basis, bonds outstanding fell 22.5% from VND22.0 trillion in 1Q13. Corporate bonds with maturities of 1–3 years were offering yields ranging from 7.5% to 17.25% in 2Q13, compared with 7.0% to 15.7% a year earlier.

Amid difficult market conditions, new issuance in Viet Nam's LCY corporate bond market has been non-existent since 1Q13. The most recent LCY corporate bond issuance occurred in October 2012 when Lam Son Sugar—a manufacturer and trader of sugar, malt, alcoholic and non-alcoholic drinks, and other sugar-based products and animal feeds—issued a 2-year VND150 billion bond with a 12% coupon.

As of end-June, the top 15 issuers in Viet Nam accounted for 98.0% of total LCY corporate bonds outstanding **(Table 2)**. The composition of the top three LCY corporate issuers remained unchanged from 1Q13, led by real estate company HAGL with bonds outstanding of VND4.1 trillion. Techcom Bank and Asia Commercial Joint Stock Bank followed with VND3 trillion each.

Policy, Institutional, and Regulatory Developments

Viet Nam Devalues its Currency, Cuts Interest Rate Ceiling for Short-Term Deposits

Viet Nam recently devalued its currency by 1% versus the US dollar. Effective 28 June, the VND–US$ reference rate was adjusted from VND20,828 to VND21,036 per US$1. The stated objectives of the devaluation were to improve the country's trade balance and increase its foreign exchange reserves.

The State Bank of Viet Nam (SBV) announced a cut in the interest rate ceiling for VND deposits with

Table 2: Top 15 Issuers of LCY Corporate Bonds in Viet Nam

Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
	LCY Bonds (VND billion)	LCY Bonds (US$ billion)			
1. HAGL	4,110.00	0.19	No	Yes	Real Estate
2. Techcom Bank	3,000.00	0.14	No	No	Finance
3. Asia Commercial Joint Stock Bank	3,000.00	0.14	No	Yes	Finance
4. Vinpearl	2,000.00	0.09	No	Yes	Resorts and Theme Parks
5. Vincom	1,000.00	0.05	No	Yes	Real Estate
6. Minh Phu Seafood	700.00	0.03	No	Yes	Fisheries
7. Hoa Phat Group	600.00	0.03	No	Yes	Miscellaneous Manufacturing
8. Kinh Bac City Development	500.00	0.02	No	Yes	Real Estate
9. Development Investment	350.00	0.02	No	No	Building and Construction
10. Phu Hoang Anh	350.00	0.02	No	No	Real Estate
11. Binh Chanh Construction	300.00	0.01	No	Yes	Building and Construction
12. Saigon Telecommunication	300.00	0.01	No	Yes	Technology
13. Thu Duc Housing Development	208.87	0.01	No	Yes	Real Estate
14. Lam Son Sugar	150.00	0.01	No	No	Diversified
15. Quoc Cuong Gia	150.00	0.01	No	No	Building and Construction
Total Top 15 LCY Corporate Issuers	**16,718.87**	**0.79**			
Total LCY Corporate Bonds	**17,058.99**	**0.80**			
Top 15 as % of Total LCY Corporate Bonds	**98.0%**	**98.0%**			

LCY = local currency.
Notes:
1. Data as of end-June 2013.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg data.

tenors between 1 month and less than 6 months by another 50 bps to 7%, effective 28 June. The move aims to support economic growth. Short-term lending rates for five prioritized sectors—agriculture, exports, supporting industries, high-tech businesses, and small and medium-sized enterprises (SMEs)—will now be capped at 9% rather than 10%.

SBV to Perform Settlement for Government Bond Transactions Beginning in 2Q14

The method of payment for government bonds will be changed to real-time gross settlement (RTGS) from multilateral netting. Starting in 2Q14, SBV will perform the settlement for government bond transactions, instead of the Bank for Investment and Development of Viet Nam. Only member banks of the Viet Nam Securities Depository are allowed to directly participate in the government bond settlement system, while members such as securities companies will make payments for government bond transactions through a settlement bank.

VAMC Begins Operation

On 26 July, Viet Nam Asset Management Company (VAMC) started operations with initial registered capital of VND500 billion. VAMC was created to better manage non-performing loans (NPLs) and promote credit growth in the country's banking system. VAMC—which is wholly state-owned and -managed, and supervised by SBV—will purchase the bad debts of credit institutions in one of two ways: by buying NPLs at their book value through the issuance of VAMC's special bonds or by buying NPLs at market value using other financing sources. Special bonds are 5-year zero-coupon bonds issued in exchange for banks' bad debts, which the lenders can use as collateral to access refinancing funds from the central bank. VAMC will only buy NPLs that meet five conditions: (i) the debts must arise from lending or the purchase of bonds, or from other activities prescribed by SBV; (ii) collateral assets must have proper title documentation; (iii) debts and collateral assets must be legal; (iv) borrowers must still be in operation and otherwise contactable and verifiable; and (v) the balances of bad loans or outstanding bad debts of borrowers cannot be lower than the level prescribed by SBV. Lenders NPL ratios of 3% and above will be required to sell their bad debts to VAMC or else face external audit.

Asia Bond Monitor
September 2013

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.

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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