

Bond Market Developments in the Third Quarter of 2015

Size and Composition

Emerging East Asia's local currency bond market expanded to a size of US\$8,782 billion at the end of September.³

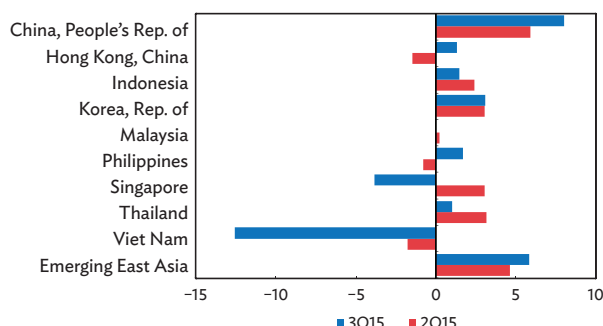
Emerging East Asia's local currency (LCY) bond market continued to expand in 3Q15 to reach a size of US\$8,782 billion at the end of September. The overall growth of the region's LCY bond market accelerated at a much faster pace of 5.8% quarter-on-quarter (q-o-q) in 3Q15 against 4.6% q-o-q in 2Q15 (**Figure 1a**). Growth was driven by the People's Republic of China (PRC) (8.0% q-o-q) and the Republic of Korea (3.1% q-o-q), which are the region's two largest markets. All other markets reported q-o-q growth rates of between 1.0% and 1.7%, except for Malaysia, Singapore, and Viet Nam, which experienced contractions during the review period.

The PRC's bond market remained the largest in emerging East Asia at US\$5,891 billion at the end of September. Its share of the region's aggregate bond stock climbed to 67.1% in 3Q15 from 64.8% in 2Q15. The PRC was also the fastest growing market on a q-o-q basis, posting growth of 8.0% in 3Q15, up from 5.9% in 2Q15. The strong q-o-q growth in 3Q15 came about from increases in its stocks of government bonds (9.9%) and corporate bonds (4.7%), supported by easing monetary policy as the People's Bank of China (PBOC) reduced policy rates and reserve requirement ratios.

Growth in the PRC's government bond market was boosted by increases in local government bonds resulting from a large amount of maturing debt this year. Corporate bond market growth in the PRC was supported by a rise in commercial paper. On the other hand, the stock of central bank bonds continued to decline due to the absence of issuance by the PBOC since December 2013. The PBOC is using other means to adjust liquidity such as repurchase agreements, adjustments to reserve requirement ratios, and the standing lending facility.

The Republic of Korea remained the second largest bond market in the region and also recorded the second

Figure 1a: Growth of LCY Bond Markets in 2Q15 and 3Q15 (q-o-q, %)



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

Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from LCY base and do not include currency effects.
3. Emerging East Asia growth figures are based on 30 September 2015 currency exchange rates and do not include currency effects.
4. For Hong Kong, China, 3Q15 corporate bonds outstanding based on *AsianBondsOnline* estimate. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Thailand, 3Q15 government and corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Japan, 3Q15 government and corporate bonds outstanding carried over from August 2015.

Sources: People's Republic of China (*ChinaBond* and *Wind*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; and Indonesia Stock Exchange); Republic of Korea (EDAILY *BondWeb*, Ministry of Strategy and Finance, 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).

fastest q-o-q growth rate in 3Q15. The total outstanding LCY bond stock in the Republic of Korea reached US\$1,703 billion at the end of September on 3.1% q-o-q growth. Growth was largely driven by increases in the stock of government bonds, particularly Treasury bonds and industrial finance debentures. The Republic of Korea's corporate bond sector recorded modest growth of 2.9% q-o-q in 3Q15 on the back of increases in the stock of special public bonds, financial debentures, and private corporate bonds. In contrast, central bank bonds declined in 3Q15 due to falling issuance.

At the end of September, Thailand's outstanding bond stock stood at US\$267 billion on growth of 1.0% q-o-q. Growth in 3Q15 was largely driven by an increase in the stock of corporate bonds, while the stock of government bonds contracted.

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.

The LCY bond market in Malaysia contracted a marginal 0.01% q-o-q in 3Q15 to US\$245 billion at the end of September. Increases in the stock of central bank bills, *Sukuk Perumahan Kerajaan*, and corporate bonds were more than offset by a decline in the stock of central government bonds.⁴ In 3Q15, there was less issuance of Government Investment Issues. Combined with maturing debt, this resulted in an overall decline in the stock of central government bonds. On the other hand, Bank Negara Malaysia resumed issuance of monetary notes in August after it had ceased issuance at the start of the year.

At the end of September, about 53% of Malaysia's LCY bond market comprised *sukuk* (Islamic bonds). (Malaysia maintained its position as the region's largest *sukuk* market in 3Q15.) *Sukuk* accounted for about 72% of Malaysia's LCY corporate bond stock and about 39% of the government bond stock at the end of September.

In Singapore, the LCY bond market contracted to a size of US\$224 billion at the end of September, posting a 3.9% q-o-q decline. Government bonds contracted in 3Q15 as the stocks of Singapore Government Securities bills and bonds, and Monetary Authority of Singapore bills declined during the review period. The corporate bond market saw weak growth in 3Q15 on fewer new corporate debt issues.

The LCY bond market of Hong Kong, China reached a size of US\$199 billion at the end of September on growth of 1.3% q-o-q. Growth was led mainly by government bonds, specifically Exchange Fund Bills and Hong Kong Special Administrative Region bonds. The Hong Kong Monetary Authority increased its issuance of Exchange Fund Bills in 3Q15 to mop up liquidity as some investors shifted their preference from renminbi deposits to Hong Kong dollar-denominated assets after the unexpected depreciation of the renminbi in August.

In Indonesia, LCY bonds outstanding climbed to US\$115 billion at the end of September on 1.5% q-o-q growth that was driven by increases in the stocks of central government bonds and corporate bonds. In contrast, the stock of central bank bills declined as Bank Indonesia focused on other monetary policy tools to siphon excess liquidity from the market. Bank Indonesia only resumed issuance of conventional *Sertifikat Bank*

Indonesia (SBI) in August after it had limited issuance to *shari'ah*-compliant SBI between April and July.

At the end of September, the LCY bond market in the Philippines stood at US\$101 billion, expanding 1.7% q-o-q in 3Q15. The outstanding stock of government bonds climbed 1.1% q-o-q, buoyed by a bond swap in September. New issuance of corporate bonds also contributed to the growth.

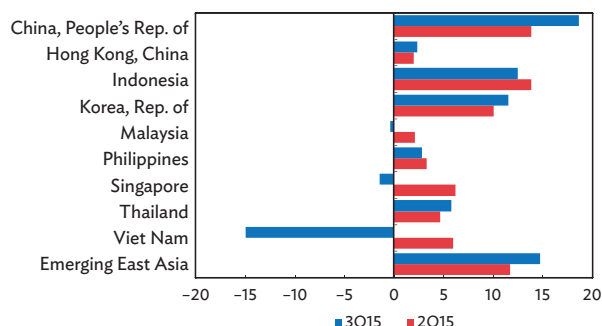
The LCY bond market in Viet Nam declined to US\$37 billion at the end of September, contracting 12.6% q-o-q in 3Q15. Both Treasury bonds and central bank bonds declined during the review period, while only state-owned enterprise bonds experienced growth in 3Q15. Investors have sought higher yields at government auctions, resulting in most auctions falling short of target. Furthermore, banks, who are the largest holder of government bonds in Viet Nam, opted to channel most of their funds toward lending activities in 3Q15.

On a year-on-year (y-o-y) basis, emerging East Asia's LCY bond market expanded 14.7% in 3Q15 following 11.6% y-o-y growth in 2Q15 (**Figure 1b**). The PRC (18.6%), Indonesia (12.4%), and the Republic of Korea (11.5%) were the fastest growing bond markets on a y-o-y basis. All other emerging East Asian markets posted y-o-y growth rates of between 2.4% and 5.8%, with the exception of Malaysia, Singapore, and Viet Nam, which all saw a y-o-y decline in their respective bond markets.

Government bonds continued to dominate emerging East Asia's LCY bond market, increasing as a share of the region's total outstanding bonds from 60.2% in 2Q15 to 61.1% in 3Q15 (**Table 1**). At the end of September, total government bonds stood at US\$5,366 billion on growth of 7.2% q-o-q and 16.7% y-o-y. The largest government bond markets in the region were those of the PRC (US\$3,862 billion), the Republic of Korea (US\$703 billion), and Thailand (US\$200 billion). The PRC's government bond market accounted for 72.0% of emerging East Asia's total government bond stock at the end of September. The government bond market exceeds the corporate bond market in size in all emerging East Asian economies except the Republic of Korea, where the corporate bond market comprised 58.7% of its aggregate bond stock at the end of September.

⁴ *Sukuk Perumahan Kerajaan* are Islamic bonds issued by the government to refinance housing loans to government employees and to extend new housing loans.

Figure 1b: Growth of LCY Bond Markets in 2Q15 and 3Q15 (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 30 September 2015 currency exchange rates and do not include currency effects.
4. For Hong Kong, China, 3Q15 corporate bonds outstanding based on *AsianBondsOnline* estimate. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Thailand, 3Q15 government and corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Japan, 3Q15 government and corporate bonds outstanding carried over from August 2015.

Sources: People's Republic of China (*ChinaBond* and *Wind*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; and Indonesia Stock Exchange); Republic of Korea (*EDAILY BondWeb*, Ministry of Strategy and Finance, 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).

Emerging East Asia's corporate bond stock stood at US\$3,416 billion at the end of September, up 3.7% q-o-q and 11.6% y-o-y. The PRC (US\$2,029 billion) and the Republic of Korea (US\$1,000 billion) were home to the largest corporate bond markets in the region, representing shares of 59.4% and 29.3% of the region's total, respectively. The remaining emerging East Asian markets accounted for a cumulative share of 11.3% of the region's total corporate bond stock.

As a share of gross domestic product (GDP), the size of emerging East Asia's LCY bond market climbed to 60.9% in 3Q15 from 59.4% in 2Q15 (**Table 2**). The ratio of government bonds to GDP rose to 37.2% in 3Q15 from 35.8% in 2Q15, while the ratio of corporate bonds to GDP was largely unchanged at 23.7% in 3Q15 from 23.6% in 2Q15. As a share of GDP, the largest bond market was that of the Republic of Korea with a bond-to-GDP ratio of 125.1%. The next highest bond-to-GDP ratios were those of Malaysia (81.8%) and Singapore (76.4%).

Foreign investors cut their holdings of LCY governments bonds in Emerging East Asia.

Foreign investors' holdings of emerging East Asia's LCY government bonds declined in 3Q15 as markets were rattled by mounting concerns of a possible rate hike by the United States (US) Federal Reserve in the run-up to its Federal Open Market Committee meeting in September, and the unexpected devaluation of the Chinese renminbi in August. Foreign investors moved out of emerging market assets as they positioned themselves ahead of the expected US rate hike. While the Federal Reserve did not raise rates in September, concerns over an eventual rate hike resulted in a decline in foreign holdings of LCY government bonds for most emerging East Asian markets in 3Q15.

The largest declines were noted in Indonesia and Malaysia, where the holdings of foreign investors slipped about 2 percentage points each in 3Q15. More than 30% of LCY government bonds are held by foreign investors in both Indonesia and Malaysia, exposing their markets to the risk of capital flight in times of market stress. The currencies of Indonesia and Malaysia have also weakened the most versus the US dollar year-to-date among all emerging East Asian economies.

Foreign holdings of Indonesian LCY government bonds declined to 37.6% of the total in 3Q15 from 39.6% in 2Q15 (**Figure 2**). While foreign ownership of Indonesian government bonds has declined, it is still high compared with other markets in the region for which data are available. Foreign investors continued to be attracted to Indonesian government bonds by yields that are the highest in the region. Market participants in the 2015 *AsianBondsOnline* Liquidity Survey cited Indonesia's long-term macro fundamentals as another driver of investment in Indonesian government bonds. Some sovereign wealth funds and central banks have accumulated Indonesian government bonds as part of their reserve diversification strategy.

Foreign investors reduced their holdings of Malaysian government bonds to a share of 30.5% in 3Q15 from 32.4% in 2Q15. Despite the ringgit's depreciation in 2015, most investors are holding onto MYR-denominated bonds because of Malaysia's long-term economic fundamentals.

Table 1: Size and Composition of LCY Bond Markets

	3Q14		2Q15		3Q15		Growth Rate (LCY-base %)				Growth Rate (US\$-base %)			
	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	3Q14		3Q15		3Q14		3Q15	
							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														
Total	5,143	100.0	5,590	100.0	5,891	100.0	3.7	13.4	8.0	18.6	4.7	13.0	5.4	14.5
Government	3,315	64.5	3,603	64.5	3,862	65.6	3.7	12.3	9.9	20.6	4.8	12.0	7.2	16.5
Corporate	1,828	35.5	1,987	35.5	2,029	34.4	3.6	15.3	4.7	14.9	4.7	14.9	2.1	11.0
Hong Kong, China														
Total	194	100.0	196	100.0	199	100.0	0.9	0.7	1.3	2.4	0.7	0.6	1.3	2.6
Government	110	56.8	109	55.5	113	56.8	0.8	2.2	3.6	2.4	0.6	2.0	3.7	2.6
Corporate	84	43.2	87	44.5	86	43.2	1.1	(1.1)	(1.6)	2.4	0.9	(1.2)	(1.6)	2.6
Indonesia														
Total	124	100.0	125	100.0	115	100.0	2.7	22.7	1.5	12.4	0.1	14.9	(7.6)	(6.5)
Government	105	85.4	107	85.7	98	85.3	2.9	27.1	0.9	12.3	0.3	18.9	(8.1)	(6.6)
Corporate	18	14.6	18	14.3	17	14.7	1.3	2.5	4.4	13.4	(1.3)	(4.1)	(4.9)	(5.7)
Korea, Rep. of														
Total	1,715	100.0	1,756	100.0	1,703	100.0	1.7	7.7	3.1	11.5	(2.5)	9.7	(3.0)	(0.7)
Government	674	39.3	722	41.1	703	41.3	1.6	10.3	3.4	17.0	(2.6)	12.3	(2.7)	4.2
Corporate	1,041	60.7	1,033	58.9	1,000	58.7	1.8	6.1	2.9	7.9	(2.4)	8.0	(3.2)	(3.9)
Malaysia														
Total	329	100.0	285	100.0	245	100.0	2.5	8.7	(0.01)	(0.3)	0.3	8.0	(14.2)	(25.6)
Government	193	58.6	161	56.5	137	55.9	3.4	8.4	(1.0)	(4.9)	1.2	7.7	(15.0)	(29.0)
Corporate	136	41.4	124	43.5	108	44.1	1.1	9.0	1.3	6.1	(1.0)	8.3	(13.1)	(20.8)
Philippines														
Total	102	100.0	103	100.0	101	100.0	2.2	6.7	1.7	2.8	(0.8)	3.1	(1.8)	(1.1)
Government	86	83.7	86	83.9	84	83.4	0.7	2.2	1.1	2.4	(2.2)	(1.2)	(2.4)	(1.4)
Corporate	17	16.3	17	16.1	17	16.6	10.4	37.5	4.7	4.8	7.2	33.0	1.1	0.8
Singapore														
Total	253	100.0	246	100.0	224	100.0	3.5	6.4	(3.9)	(1.4)	1.2	4.8	(8.9)	(11.6)
Government	153	60.3	147	59.7	132	59.0	2.8	4.2	(5.0)	(3.6)	0.4	2.5	(10.0)	(13.6)
Corporate	100	39.7	99	40.3	92	41.0	4.7	10.1	(2.2)	2.0	2.3	8.3	(7.4)	(8.5)
Thailand														
Total	283	100.0	284	100.0	267	100.0	(0.1)	2.7	1.0	5.8	(0.1)	(1.1)	(6.1)	(5.7)
Government	213	75.4	216	76.0	200	75.1	(1.3)	(1.3)	(0.1)	5.4	(1.3)	(4.9)	(7.2)	(6.0)
Corporate	70	24.6	68	24.0	66	24.9	3.8	17.1	4.6	7.0	3.9	12.8	(2.8)	(4.6)
Viet Nam														
Total	46	100.0	44	100.0	37	100.0	8.8	54.8	(12.6)	(14.9)	9.3	53.9	(15.0)	(19.6)
Government	45	98.6	43	98.7	37	98.7	9.0	56.3	(12.5)	(14.7)	9.5	55.5	(15.0)	(19.4)
Corporate	0.7	1.4	0.6	1.3	0.5	1.3	(2.8)	(8.6)	(16.0)	(25.9)	(2.3)	(9.1)	(18.4)	(30.0)
Emerging East Asia														
Total	8,189	100.0	8,629	100.0	8,782	100.0	3.0	11.3	5.8	14.7	2.5	11.0	1.8	7.2
Government	4,895	59.8	5,195	60.2	5,366	61.1	3.1	11.1	7.2	16.7	2.9	10.6	3.3	9.6
Corporate	3,294	40.2	3,434	39.8	3,416	38.9	2.9	11.5	3.7	11.6	1.9	11.6	(0.5)	3.7
Japan														
Total	9,736	100.0	8,877	100.0	9,209	100.0	0.4	2.6	1.5	3.4	(7.2)	(8.1)	3.7	(5.4)
Government	8,993	92.4	8,224	92.6	8,544	92.8	0.5	2.9	1.7	3.9	(7.2)	(7.8)	3.9	(5.0)
Corporate	743	7.6	653	7.4	665	7.2	(0.4)	(1.6)	(0.3)	(2.2)	(7.9)	(11.8)	1.8	(10.5)

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

Notes:

1. For Hong Kong, China, 3Q15 corporate bonds outstanding based on *AsianBondsOnline* estimate. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Thailand, 3Q15 government and corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Japan, 3Q15 government and corporate bonds outstanding carried over from August 2015.

2. Corporate bonds include issues by financial institutions.

3. Bloomberg LP end-of-period LCY—US\$ rates are used.

4. For LCY base, emerging East Asia growth figures based on 30 September 2015 currency exchange rates and do not include currency effects.

5. 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.

Sources: People's Republic of China (*ChinaBond* and *Wind*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; and Indonesia Stock Exchange); Republic of Korea (EDAILY *BondWeb*, Ministry of Strategy and Finance, 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).

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

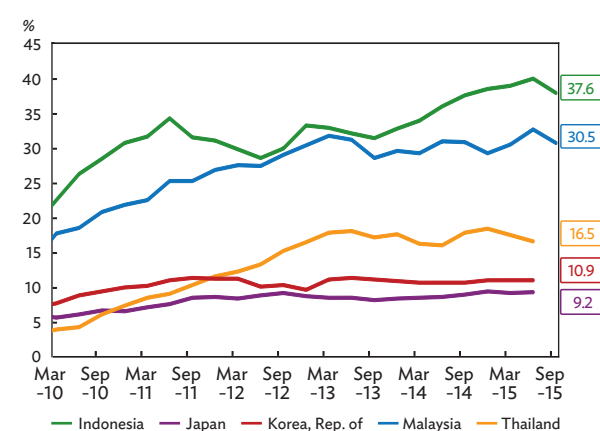
	3Q14	2Q15	3Q15
China, People's Rep. of			
Total	50.6	52.8	56.2
Government	32.6	34.0	36.8
Corporate	18.0	18.8	19.3
Hong Kong, China			
Total	67.6	65.6	66.5
Government	38.4	36.4	37.8
Corporate	29.2	29.2	28.7
Indonesia			
Total	14.6	15.1	14.0
Government	12.4	13.0	11.9
Corporate	2.1	2.2	2.1
Korea, Rep. of			
Total	122.9	128.9	125.1
Government	48.3	53.0	51.6
Corporate	74.6	75.9	73.5
Malaysia			
Total	98.9	95.3	81.8
Government	58.0	53.9	45.8
Corporate	40.9	41.5	36.0
Philippines			
Total	37.3	35.8	35.2
Government	31.2	30.1	29.3
Corporate	6.1	5.8	5.8
Singapore			
Total	83.0	83.9	76.4
Government	50.1	50.0	45.0
Corporate	32.9	33.8	31.3
Thailand			
Total	70.1	72.3	67.8
Government	52.9	54.9	51.0
Corporate	17.3	17.4	16.9
Viet Nam			
Total	25.5	23.5	20.2
Government	25.1	23.2	20.0
Corporate	0.4	0.3	0.3
Emerging East Asia			
Total	57.7	59.4	60.9
Government	34.5	35.8	37.2
Corporate	23.2	23.6	23.7
Japan			
Total	219.7	220.3	228.6
Government	203.0	204.1	212.0
Corporate	16.8	16.2	16.5

GDP = gross domestic product, LCY = local currency.

Notes:

1. Data for GDP is from CEIC. 3Q15 GDP figures carried over from 2Q15 except for the People's Republic of China and Viet Nam.
2. For Hong Kong, China, 3Q15 corporate bonds outstanding based on *AsianBondsOnline* estimate. For Singapore, corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Thailand, 3Q15 government and corporate bonds outstanding data based on *AsianBondsOnline* estimates. For Japan, 3Q15 government and corporate bonds outstanding carried over from August 2015.

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Figure 2: Foreign Holdings of LCY Government Bonds in Select Asian Economies (% of total)

LCY = local currency.

Note: Data as of end-June 2015 except for Indonesia and Malaysia (end-September 2015).

Source: *AsianBondsOnline*.

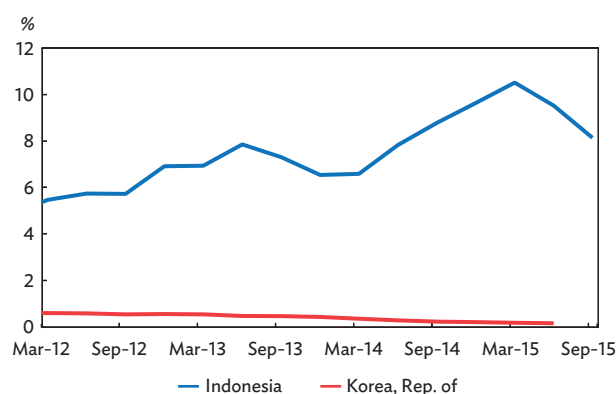
In Thailand, foreign holders' share slipped from 17.3% in 1Q15 to 16.5% in 2Q15, the latest quarter for which data are available, over concerns of weakening economic growth. In the Republic of Korea, the holdings of foreign investors held steady between 1Q15 and 2Q15, the latest quarter for which data are available, at a share of 10.9% of the total market.

Foreign investor interest in the region's corporate bonds remained weak. Foreign holdings account for a significantly lower share in the corporate bond market than in the government bond market in Indonesia and the Republic of Korea. This may be due to the illiquid nature of most corporate bonds. At the end of September, foreign holdings of Indonesian LCY corporate bonds stood at 8.1%, down from 9.5% at the end of June. In the Republic of Korea, foreign holdings of corporate bonds remained negligible at a share of only 0.2% of the total corporate bond stock (**Figure 3**).

August and September saw net foreign capital outflows from the region's LCY bond markets.

All four emerging East Asian markets for which data are available showed net capital outflows from their bond markets in August and September (**Figure 4**). The net capital outflows were driven by risk aversion ahead of the September meeting of the Federal Reserve, which was widely expected to be the earliest point at which it

Figure 3: Foreign Holdings of LCY Corporate Bonds in Indonesia and the Republic of Korea (% of total)



LCY = local currency.

Note: For Indonesia, data as of 2 October 2015. For the Republic of Korea, data as of end-June 2015.

Source: Based on data from Otoritas Jasa Keuangan and the Bank of Korea.

would raise policy rates. In addition, the devaluation of the renminbi in August resulting from the PBOC adjusting the exchange-rate-fixing mechanism led to most emerging East Asian currencies depreciating against the US dollar.

In August, the largest outflows were recorded in Malaysia and Indonesia. In Malaysia, net capital outflows reached US\$1.6 billion, driven by the depreciation of the currency and continued low oil prices. Indonesia reported net foreign bond outflows of US\$0.6 billion as the depreciation of the rupiah renewed concerns over the current account deficit.

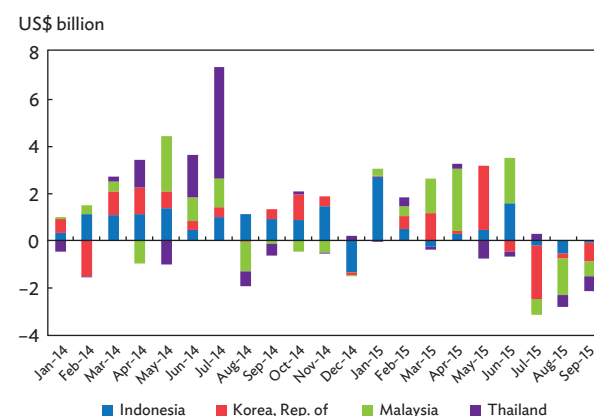
Thailand experienced net bond outflows of US\$0.5 billion in August, while the Republic of Korea had outflows of \$0.2 billion.

In September, all four markets reported net bond outflows, though outflows slowed from Indonesia to US\$0.08 billion and from Malaysia to US\$0.7 billion after the Federal Reserve delayed its rate hike. On the other hand, net bond outflows accelerated in September from the Republic of Korea to US\$0.8 billion and from Thailand to US\$0.6 billion.

Emerging East Asian LCY bond issuance expands in 3Q15.

Emerging East Asian LCY bond issuance grew to US\$1,589 billion in 3Q15 from US\$1,423 billion in 2Q15

Figure 4: Foreign Bond Flows in Select Emerging East Asian Markets



Notes:

1. The Republic of Korea and Thailand provides data on bond flows. For Indonesia and Malaysia, month-on-month changes in foreign holdings of local currency government bonds were used as a proxy for bond flows.
2. Data provided as of end-September 2015.
3. Figures were computed based on 30 September 2015 exchange rates to avoid currency effects.

Sources: Directorate General of Budget Financing and Risk Management, Ministry of Finance; Financial Supervisory Service; Bank Negara Malaysia; and Thai Bond Market Association.

and US\$1,129 billion in 3Q14, led by growth in the PRC and Hong Kong, China (**Table 3**).

LCY bond issuance in the PRC climbed to CNY4,283 billion (US\$674 billion) in 3Q15 on the back of double-digit growth in Treasury bond and other government bond issues. New issuance was driven mostly by the refinancing requirements of local governments seeking to reduce interest costs. Local government bond issuance climbed 82.5% q-o-q in 3Q15. Issuance of corporate bonds in the PRC also contributed to growth in overall bond issuance, largely due to the refinancing of short-term commercial paper.

Hong Kong, China's LCY bond sales exhibited double-digit growth in 3Q15 to reach HKD4,651 billion (US\$600 billion). Government bond issuance posted double-digit growth in 3Q15, while the Hong Kong Monetary Authority issued a large amount of Exchange Fund Bills to mop up excess liquidity resulting from increased demand for Hong Kong dollar assets among offshore investors following the renminbi's depreciation in August.

In the Republic of Korea, LCY bond issuance stood at KRW185,082 billion (US\$156 billion) in 3Q15, down 17.6%

Table 3: LCY-Denominated Bond Issuance (gross)

	3Q14		2Q15		3Q15		Growth Rate (LCY-base %)		Growth Rate (US\$-base %)	
	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	3Q15		3Q15	
							q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of										
Total	432	100.0	601	100.0	674	100.0	14.8	61.6	12.0	56.1
Government	212	49.2	370	61.6	432	64.2	19.7	110.8	16.8	103.7
Central Bank	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Treasury and Other Govt.	212	49.2	370	61.6	432	64.2	19.7	110.8	16.8	103.7
Corporate	219	50.8	231	38.4	241	35.8	7.1	14.0	4.5	10.1
Hong Kong, China										
Total	309	100.0	441	100.0	600	100.0	36.1	93.8	36.2	94.2
Government	300	97.2	434	98.6	594	98.9	36.7	97.3	36.7	97.7
Central Bank	298	96.5	434	98.4	592	98.7	36.6	98.2	36.6	98.6
Treasury and Other Govt.	2.1	0.7	0.6	0.1	1.4	0.2	125.5	(35.8)	125.6	(35.6)
Corporate	9	2.8	6	1.4	6	1.1	0.0	(26.8)	0.0	(26.6)
Indonesia										
Total	10	100.0	9	100.0	8	100.0	(3.8)	(13.4)	(12.5)	(28.0)
Government	10	94.7	7	79.4	6	85.4	3.4	(21.9)	(5.9)	(35.0)
Central Bank	2	19.6	0.2	1.9	1	18.9	843.1	(16.3)	758.5	(30.4)
Treasury and Other Govt.	8	75.0	7	77.5	5	66.5	(17.6)	(23.3)	(25.0)	(36.2)
Corporate	0.6	5.3	2	20.6	1	14.6	(31.7)	136.7	(37.8)	96.9
Korea, Rep. of										
Total	168	100.0	201	100.0	156	100.0	(17.6)	4.5	(22.5)	(7.0)
Government	79	47.0	79	39.3	71	45.7	(4.3)	1.6	(10.0)	(9.6)
Central Bank	47	27.9	46	23.1	36	23.2	(17.2)	(13.3)	(22.1)	(22.8)
Treasury and Other Govt.	32	19.0	33	16.3	35	22.5	14.0	23.4	7.3	9.8
Corporate	89	53.0	122	60.7	85	54.3	(26.2)	7.0	(30.6)	(4.7)
Malaysia										
Total	42	100.0	16	100.0	15	100.0	5.0	(52.8)	(9.9)	(64.8)
Government	32	76.8	8	51.8	9	62.5	26.7	(61.6)	8.8	(71.4)
Central Bank	25	59.6	0	0.0	3	20.9	-	(83.4)	-	(87.6)
Treasury and Other Govt.	7	17.3	8	51.8	6	41.6	(15.7)	13.4	(27.7)	(15.3)
Corporate	10	23.2	8	48.2	6	37.5	(18.4)	(23.6)	(29.9)	(43.0)
Philippines										
Total	7	100.0	2	100.0	10	100.0	298.5	38.3	284.7	33.1
Government	6	79.5	2	80.6	9	90.8	349.3	58.0	333.7	52.0
Central Bank	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Treasury and Other Govt.	6	79.5	2	100.0	9	90.8	349.3	58.0	333.7	52.0
Corporate	1	20.5	0.5	19.4	1	9.2	88.0	(38.1)	81.5	(40.4)
Singapore										
Total	86	100.0	77	100.0	63	100.0	(13.2)	(17.7)	(17.8)	(26.2)
Government	81	94.6	73	94.6	61	95.9	(12.0)	(16.6)	(16.6)	(25.2)
Central Bank	76	88.4	66	85.6	58	91.6	(7.1)	(14.8)	(12.0)	(23.6)
Treasury and Other Govt.	5	6.2	7	9.0	3	4.3	(58.1)	(42.6)	(60.3)	(48.6)
Corporate	5	5.4	4	5.4	3	4.1	(34.9)	(37.5)	(38.3)	(43.9)
Thailand										
Total	61	100.0	66	100.0	49	100.0	(19.5)	(10.1)	(25.2)	(19.9)
Government	48	79.0	54	81.6	38	77.6	(23.4)	(11.7)	(28.8)	(21.2)
Central Bank	35	57.6	41	62.8	28	57.5	(26.4)	(10.4)	(31.6)	(20.1)
Treasury and Other Govt.	13	21.4	12	18.8	10	20.2	(13.5)	(15.2)	(19.6)	(24.4)
Corporate	13	21.0	12	18.4	11	22.4	(2.1)	(4.3)	(9.0)	(14.7)

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Table 3 *continued*

	3Q14		2Q15		3Q15		Growth Rate (LCY-base %)		Growth Rate (US\$-base %)	
	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	3Q15		3Q15	
							q-o-q	y-o-y	q-o-q	y-o-y
Viet Nam										
Total	14	100.0	10	100.0	15	100.0	53.2	8.7	48.8	2.6
Government	14	100.0	10	100.0	15	100.0	53.2	8.7	48.8	2.6
Central Bank	12	83.1	8	85.1	14	93.6	68.4	22.3	63.6	15.5
Treasury and Other Govt.	2	16.9	1	14.9	0.9	6.4	(33.9)	(58.5)	(35.8)	(60.8)
Corporate	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Emerging East Asia										
Total	1,129	100.0	1,423	100.0	1,589	100.0	14.7	48.8	11.6	40.7
Government	783	69.3	1,037	72.9	1,235	77.7	21.8	66.2	19.1	57.7
Central Bank	495	43.8	596	41.9	733	46.1	25.0	55.4	23.0	48.0
Treasury and Other Govt.	288	25.5	441	31.0	502	31.6	17.5	84.8	13.8	74.4
Corporate	346	30.7	386	27.1	354	22.3	(4.6)	9.0	(8.4)	2.2
Japan										
Total	464	100.0	404	100.0	422	100.0	2.3	(0.5)	4.5	(9.0)
Government	432	93.1	379	93.7	392	92.8	1.4	(0.9)	3.6	(9.3)
Central Bank	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Treasury and Other Govt.	432	93.1	379	93.7	392	92.8	1.4	(0.9)	3.6	(9.3)
Corporate	32	6.9	26	6.3	30	7.2	16.4	4.4	18.9	(4.6)

(-) = 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. For Hong Kong, China, 3Q15 corporate bond issuance carried over from 2Q15. For Thailand, 3Q15 government and corporate bond issuance based on *AsianBondsOnline* estimates. For Japan, 3Q15 government and corporate bond issuance carried over from August 2015.

3. Bloomberg LP end-of-period LCY—US\$ rates are used.

4. For LCY base, emerging East Asia growth figures are based on 30 September 2015 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; Directorate General of Budget Financing and Risk Management, Ministry of Finance; and Indonesia Stock Exchange); Republic of Korea (EDAILY *Bondweb*, Ministry of Strategy and Finance, and the Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bloomberg LP); Singapore (Singapore Government Securities and Bloomberg LP); Thailand (Bank of Thailand and ThaiBMA); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

from the previous quarter due to lower bond sales from the Bank of Korea and the corporate sector. However, issuance was up 4.5% y-o-y due to increased issuance by the central government and corporates.

Cumulative LCY bond issuance in the six member economies of the Association of Southeast Asian Nations (ASEAN)—Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam—amounted to US\$159 billion in 3Q15, down from US\$180 billion in 2Q15 and US\$221 billion in 3Q14.

Indonesian bond issuance in 3Q15 fell 3.8% q-o-q and 13.4% y-o-y to IDR110,419 billion (US\$8 billion). The quarterly drop was caused by lower Treasury bond and corporate bond sales. On the other hand, central bank bill issuance rose significantly in 3Q15 as Bank Indonesia resumed issuance of conventional SBI in August after a hiatus between April and July. On a y-o-y basis, the drop

in issuance was ascribed to a reduction in government bond issues.

In Malaysia, LCY bonds sold reached MYR65 billion (US\$15 billion) in 3Q15, registering a 5.0% q-o-q increase on the back of central bank bond sales as Bank Negara Malaysia resumed issuance of monetary notes in August. Issuance in 3Q15 was down more than half on a y-o-y basis due to declines in both central bank notes and corporate bond issues.

In 3Q15, the Philippines posted PHP447 billion (US\$10 billion) in LCY bond issuance on growth of 298.5% q-o-q and 38.3% y-o-y, led by an increase in Treasury bonds from a successful bond swap conducted in September.

Bond issuance in Singapore fell 13.2% q-o-q and 17.7% y-o-y in 3Q15 to SGD90 billion (US\$63 billion)

due to less issuance of Singapore Government Securities bills and bonds, Monetary Authority of Singapore bills, and corporate bonds.

Thailand's bond issuance in 3Q15 was down 19.5% q-o-q and 10.1% y-o-y to level off at THB1,785 billion (US\$49 billion) as a result of less issuance of Bank of Thailand bills and bonds, central government bonds, and corporate debentures.

Viet Nam's LCY bond sales of VND329,004 billion (US\$15 billion) in 3Q15 saw gains of 53.2% q-o-q and 8.7% y-o-y, driven by increased issuance of central bank bills to mop up excess liquidity in the market. The issuance of central bank bills helped offset the 33.9% q-o-q decline in central government issuance as the Ministry of Finance had difficulty meeting investor demand for higher yields. There was no corporate issuance in Viet Nam in 3Q15, with firms preferring to raise funds through loans and private placements.

Intra-emerging East Asian bond issuance reached US\$3.5 billion in 3Q15, up 3.3% q-o-q. Issuers from the PRC sold US\$328 million worth of bonds denominated in Hong Kong dollars, Korean won, and Malaysian ringgit. Hong Kong, China-based entities issued US\$651 million worth of renminbi- and Singapore dollar-denominated bonds. In the Republic of Korea, seven domestic banks raised US\$1.6 billion from issuing bonds denominated in renminbi, Singapore dollars, and Thai baht.

Six firms from ASEAN economies raised a combined US\$900 million in 3Q15 from selling bonds denominated in currencies other than their respective home currencies. Malaysia-based Cagamas, CIMB Bank, Maybank, and Nam Cheong sold a combined US\$625 million worth of bonds denominated in renminbi and Singapore dollars. Singapore-based BOC Aviation issued a CNY300 million 7-year bond in July on a 4.7% coupon. Krung Thai Bank, a domestic bank in Thailand, sold a MYR1 billion 10-year bond carrying a 5.1% coupon in Malaysia.

The Asian Development Bank is promoting cross-border bond issuance through the ASEAN+3 Multicurrency Bond Issuance Framework. The first bond under this program was issued by Japan-based Mizuho Bank, which sold a THB3 billion 3-year bond in September carrying a coupon rate of 2.33%.

Emerging East Asia's G3 currency bond issuance totaled US\$141 billion in January–September.⁵

Emerging East Asia's G3 currency bond issuance amounted to US\$140.8 billion in January–September, equaling about 71% of the full-year 2014 total as G3 issuance fell 1.9% in 2015 compared with the first 9 months of the previous year (**Table 4**). In 3Q15, G3 currency bond issuance stood at US\$32.1 billion, down 48.7% q-o-q and 17.9% y-o-y.

The US dollar remained the dominant G3 currency in terms of issuance, accounting for 89.5% of the regional total, followed by the euro and the Japanese yen at 8.7% and 1.8%, respectively.

The PRC continued to be the largest source of G3 currency bonds in the region, totaling US\$80 billion in the first 9 months of the year. Financial institutions were again the largest issuer group during the review period. Sinopec was the largest PRC-based issuer of G3 currency bonds, raising US\$6.5 billion from a multiple-tranche bond sale in April. In 3Q15, the largest G3 currency bond issued from the PRC was a Bank of Communication US\$2.5 billion perpetual bond carrying a 5% coupon.

The Republic of Korea was the next largest source of G3 currency bonds in the first 9 months of the year with a total of US\$16.1 billion. Financial institutions, including Korea Eximbank and Korea Development Bank, comprised the largest issuer group. Korea Development Bank sold the largest G3 currency bond in the Republic of Korea in 3Q15: a US\$750 million 10-year bond on a 3.375% coupon.

Hong Kong, China was the region's third largest G3 issuer in January–September at US\$14.2 billion. While most issues came from financial institutions, the government also sold a US\$1 billion 5-year *sukuk* in June on a 1.894% coupon.

ASEAN member economies' G3 currency bond issuance amounted to US\$30.5 billion in the first 9 months of the year, or 90% of 2014's total. Indonesia's US\$11.6 billion of G3 currency issuance was largely the result of three US\$-denominated government bonds totaling US\$8.2 billion, three JPY-denominated bonds, and one

⁵ G3 currency bonds are bonds denominated in either euros, Japanese yen, or US dollars.

Table 4: G3 Currency Bond Issuance

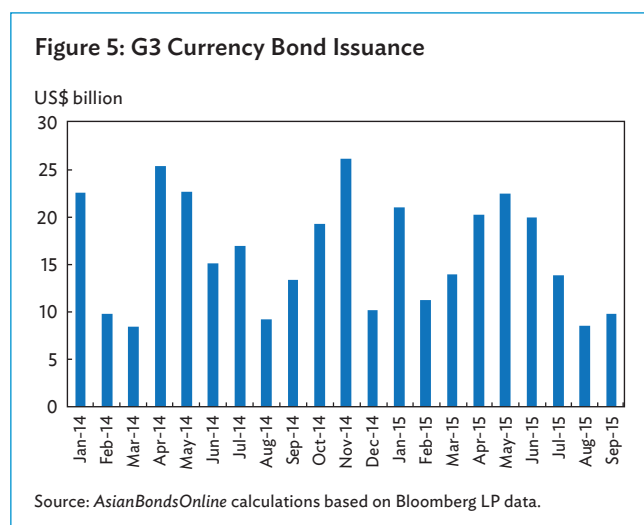
2014			1 January–30 September 2015		
Issuer	Amount (US\$ million)	Issue Date	Issuer	Amount (US\$ million)	Issue Date
China, People's Rep. of	98,227		China, People's Rep. of	80,009	
Bank of China 5% 2024	3,000	13-Nov-14	Sinopec 2.5% 2020	2,500	28-Apr-15
ICBC 6% Perpetual	2,940	10-Dec-14	Bank of Communications 5% Perpetual	2,450	29-Jul-15
Alibaba 2.5% 2019	2,250	28-Nov-14	China Construction Bank 3.875% 2025	2,000	13-May-15
Alibaba 3.6% 2024	2,250	28-Nov-14	CNOOC Finance 3.5% 2025	2,000	5-May-15
CNOOC Finance 4.25% 2024	2,250	30-Apr-14	ICBC 4.875% 2025	2,000	21-Sep-15
Tencent Holdings 3.375% 2019	2,000	29-Apr-14	China Cinda Finance (2015) 4.25% 2025	1,700	23-Apr-15
Sinopec 1.0136% 2017	1,800	10-Apr-14	Sinopec 3.25% 2025	1,500	28-Apr-15
State Grid Overseas Investment 4.125% 2024	1,600	7-May-14	CNOOC Finance 2.625% 2020	1,500	5-May-15
Others	80,137		Others	64,359	
Hong Kong, China	34,530		Hong Kong, China	14,183	
Hutchison Whampoa 1.625% 2017	2,000	31-Oct-14	Shimao Property 8.375% 2022	1,100	10-Feb-15
Hutchison Whampoa 1.375% 2021	1,815	31-Oct-14	Hong Kong, China (Sovereign) Sukuk 1.894% 2020	1,000	3-Jun-15
Others	30,715		Others	12,083	
Indonesia	11,423		Indonesia	11,614	
Indonesia (Sovereign) 5.875% 2024	2,000	15-Jan-14	Indonesia (Sovereign) 4.125% 2025	2,000	15-Jan-15
Indonesia (Sovereign) 6.75% 2044	2,000	15-Jan-14	Indonesia (Sovereign) 5.125% 2045	2,000	15-Jan-15
Pertamina 6.45% 2044	1,500	30-May-14	Perusahaan Penerbit SBSN 4.325% 2025	2,000	28-May-15
Indonesia (Sovereign) 4.35% 2024	1,350	10-Sep-14	Indonesia (Sovereign) 3.375% 2025	1,397	30-Jul-15
Perusahaan Gas Negara (PGN) 5.125% 2024	1,350	16-May-14	Pelabuhan Indonesia 4.25% 2025	1,100	5-May-15
Others	3,223		Others	3,117	
Korea, Rep. of	31,714		Korea, Rep. of	16,070	
Republic of Korea (Sovereign) 4.125% 2044	1,000	10-Jun-14	Korea Eximbank 2.875% 2025	1,250	21-Jan-15
Woori Bank 4.75% 2024	1,000	30-Apr-14	Korea Eximbank 2.25% 2020	1,000	21-Jan-15
Republic of Korea (Sovereign) 2.125% 2024	947	10-Jun-14	Korea Development Bank 3.375% 2025	750	16-Sep-15
Others	28,766		Others	13,070	
Malaysia	3,567		Malaysia	7,968	
Cahaya Capital 0.162% 2021	500	18-Sep-14	Petronas Capital 3.5% 2025	1,500	18-Mar-15
AmBank 3.125% 2019	400	3-Jul-14	Petronas Capital 4.5% 2045	1,500	18-Mar-15
EXIM Sukuk Malaysia 2.874% 2019	300	19-Feb-14	Petronas Global Sukuk 2.707% 2020	1,250	18-Mar-15
Others	2,367		Others	3,718	
Philippines	2,675		Philippines	3,936	
Philippines (Sovereign) 4.2% 2024	1,500	21-Jan-14	Philippines (Sovereign) 3.95% 2040	2,000	20-Jan-15
SM Investments 4.875% 2024	350	10-Jun-14	Royal Capital BV 5.5% Perpetual	450	26-Aug-15
SMC Global Power 7.5% Perpetual	350	7-May-14	Vista Land & Landscapes 7.375% 2022	300	18-Jun-15
Others	475		Others	1,186	
Singapore	11,661		Singapore	6,816	
OCBC Bank 4% 2024	1,000	15-Apr-14	Global Logistics Properties 3.875% 2025	1,000	4-Jun-15
OCBC Bank 4.25% 2024	1,000	19-Jun-14	DBS Bank 1.625% 2018	1,000	6-Aug-15
Avago Technologies 2% 2021	1,000	6-May-14	BOC Aviation 3% 2020	750	30-Mar-15
Others	8,661		Others	4,066	
Thailand	3,565		Thailand	176	
Viet Nam	1,000		Viet Nam	0	
Emerging East Asia Total	198,362		Emerging East Asia Total	140,773	
Memo Items:			Memo Items:		
India	18,323		India	10,323	
Bharti Airtel 5.35% 2024	1,000	20-May-14	Bharti Airtel 4.375% 2025	1,000	10-Jun-15
Abja Investment 5.95% 2024	1,000	31-Jul-14	Reliance Industries 4.125% 2025	1,000	28-Jan-15
Others	16,323		Others	8,323	
Sri Lanka	2,165		Sri Lanka	1,872	

Note: Data exclude certificates of deposit.

Source: AsianBondsOnline calculations based on data from Bloomberg LP.

EUR-denominated bond. Malaysia's US\$8 billion of G3 currency issuance came from both the government and corporate sectors, with the largest issuer being Petronas via its US\$5 billion multitranche bond sale in March. G3 currency bond sales from the Philippines totaled US\$3.9 billion, with the government selling a US\$2 billion 25-year bond carrying a 3.95% coupon in January. Financial institutions accounted for 73% of Singapore's G3 currency bond issuance of US\$6.8 billion. Two Thai banks sold US\$-denominated bonds totaling US\$176 million in January–September.

On a monthly basis, emerging East Asian G3 currency bond issuance fell from US\$13.8 billion in July to US\$8.5 billion in August before rising to US\$9.7 billion in September. The downturn was partly induced by market expectations of an eventual interest rate hike in the US (Figure 5).



Government bond yields fell for most tenors in most markets, after the Federal Reserve held off raising interest rates and as growth and inflation continued to fall.

During its 17 September meeting, the Federal Reserve left its monetary policy unchanged, which was in contrast with earlier expectations that September would mark the first increase in the Fed funds rate since 2006. In September, the Federal Reserve held rates steady while seeking greater clarity on the direction of the US economy and as continued low oil and commodity prices dampened the inflation outlook for 2015. The possibility that the

slowdown in emerging market economies, notably the PRC, could pose a drag on the US economy was also a concern. More recently, the Federal Reserve left monetary policy unchanged in October, but no longer seems to be concerned with the PRC's slowdown, suggesting a rate hike in December. Also, the October jobs report came in strong at 271,000 jobs, bolstering the case for a rate hike.

Government bond yields in emerging East Asia generally fell in most markets following the Federal Reserve's September announcement. Yields on 2-year bonds were mostly stable or fell through the middle of October (Figures 6a, 6b). The exceptions included Indonesia and Singapore, where 2-year yields showed a slight spike before drifting lower. In addition, the PRC's 2-year bond yield rose, mostly due to liquidity concerns as local governments continued issuing bonds to refinance maturing obligations.

Movements for 10-year yields were similar, with yields in Singapore and Indonesia showing an initial spike following the Federal Reserve decision in September before drifting lower (Figures 7a, 7b). The PRC's 10-year yield declined between 1 September and 31 October in line with trends in other markets.

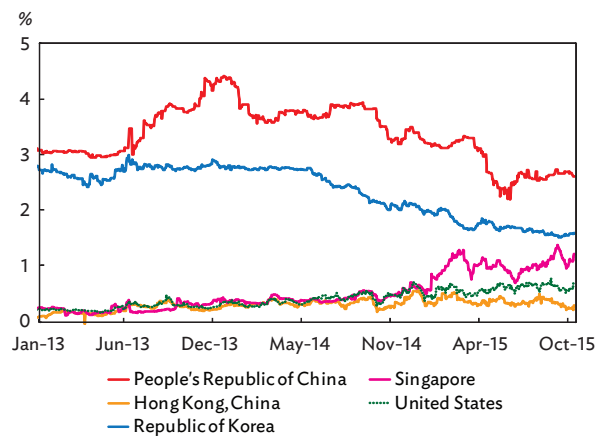
Weak economic growth in emerging East Asia, particularly the PRC, coupled with low oil and commodity prices, have kept inflation contained and drove down yield curves in all markets except the Philippines and Indonesia between 1 September and 31 October (Figure 8).

Inflation has eased in Malaysia on continued low oil prices (Figure 9a). As a result, the entire yield curve shifted downward with the exception of the 3-year tenor, which rose 17 basis points (bps).

In Indonesia, inflation softened due to lower food prices (Figure 9b). However, Indonesia's yield curve shifted upward for most tenors between 1 September and 31 October, as the market believes the central bank has no room to cut policy rates.

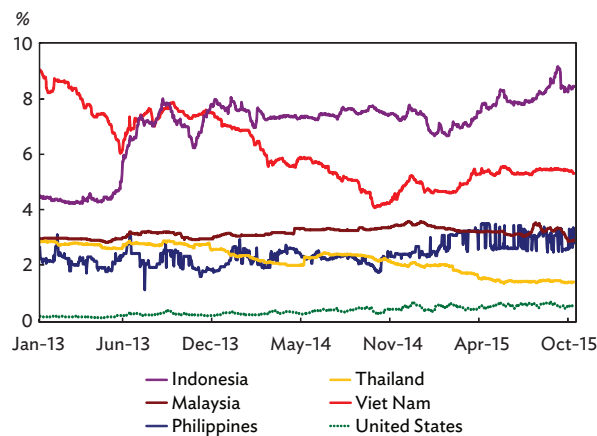
In addition to low oil prices, inflationary pressures are being contained by slowing economic growth in the region. In the PRC, GDP growth of 6.9% q-o-q was recorded in 3Q15, down from 2Q15's 7.0% q-o-q and 2014's 7.4% q-o-q growth. In Singapore, GDP growth was weak, with 3Q15's GDP rising only 0.1% q-o-q, narrowly missing a technical recession. Among the region's

Figure 6a: 2-Year LCY Government Bond Yields



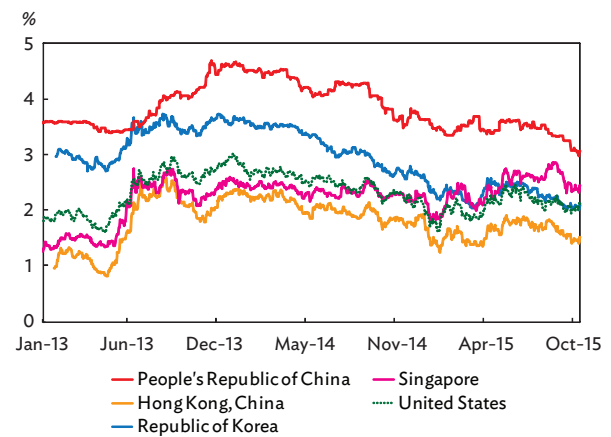
LCY = local currency.
 Note: Data as of 31 October 2015.
 Source: Based on data from Bloomberg LP.

Figure 6b: 2-Year LCY Government Bond Yields



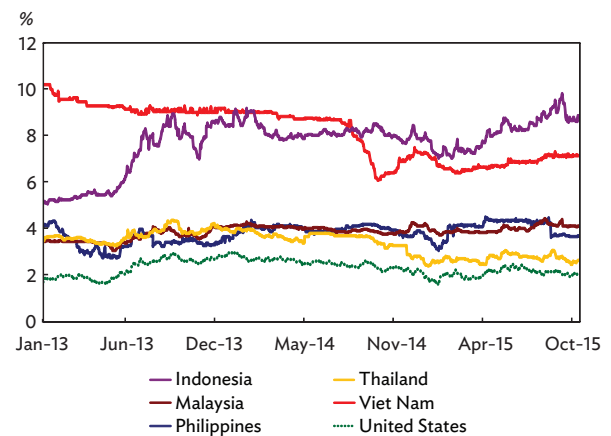
LCY = local currency.
 Note: Data as of 31 October 2015.
 Source: Based on data from Bloomberg LP.

Figure 7a: 10-Year LCY Government Bond Yields



LCY = local currency.
 Note: Data as of 31 October 2015.
 Source: Based on data from Bloomberg LP.

Figure 7b: 10-Year LCY Government Bond Yields



LCY = local currency.
 Note: Data as of 31 October 2015.
 Source: Based on data from Bloomberg LP.

economies that reported GDP growth in 3Q15, only the Republic of Korea and Viet Nam showed improvement.

Due to lowered growth expectations, most central banks maintained their prior accommodative stances and kept monetary policy rates stable (**Figure 10a**). In the Republic of Korea, GDP growth improved in 3Q15 and the entire yield curve shifted downward. The Bank of Korea has noted that while the domestic economy has improved, concerns remain regarding international financial market volatility and soft growth in emerging markets.

The PRC has engaged in additional monetary stimulus to boost the economy, lowering its policy rates 25 bps

in both August and October, taking the 1-year rate to 4.35% and the 1-year deposit rate to 1.50% (**Figure 10b**). In addition, the PRC removed the ceiling on deposit rates, allowing rates to move more freely, and reduced the reserve requirement ratio for financial institutions. These measures resulted in the PRC's yield curve shifting downward at the long-end, with yields falling an average of 32 bps for tenors of 3 years or longer. At the short-end, liquidity concerns pushed yields upward as local governments continued to issue bonds to refinance maturing obligations.

As Singapore has no monetary policy rate, the Monetary Authority of Singapore slightly reduced the slope of the

Figure 8: Benchmark Yield Curves—LCY Government Bonds

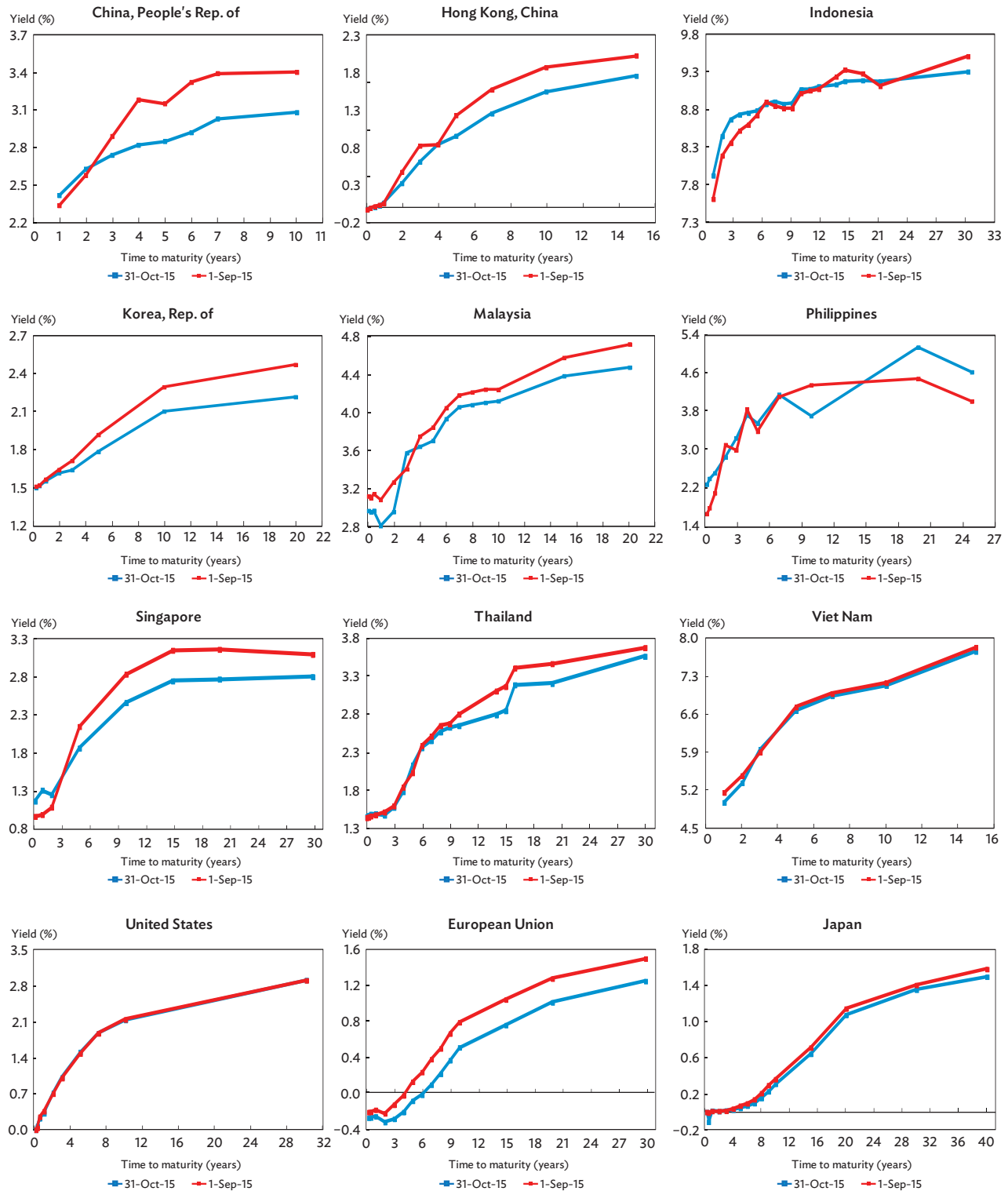
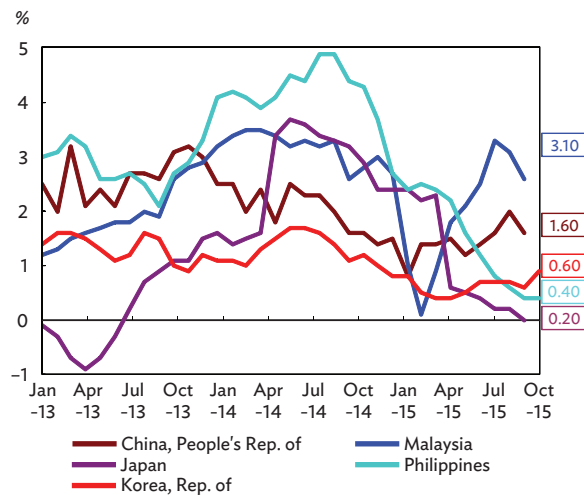


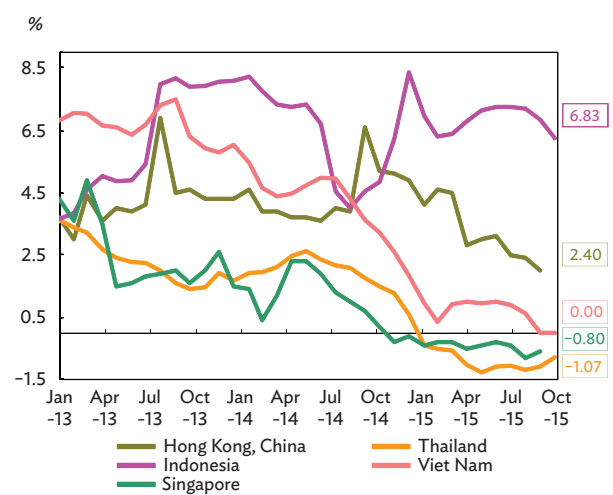
Figure 9a: Headline Inflation Rates



Note: Data as of end-September 2015 except for the Republic of Korea and the Philippines (end-October 2015).

Source: Based on data from Bloomberg LP.

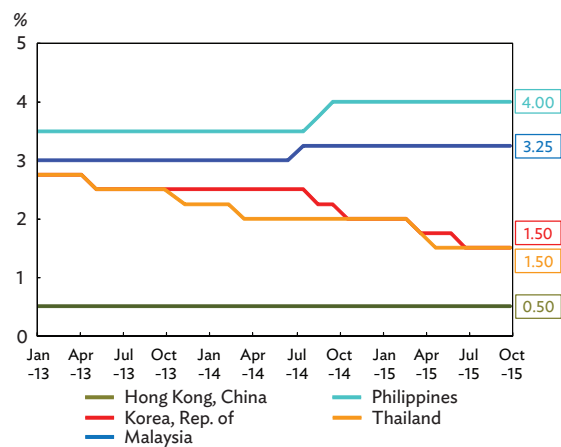
Figure 9b: Headline Inflation Rates



Note: Data as of end-October 2015 except for Hong Kong, China and Singapore (end-September 2015).

Source: Based on data from Bloomberg LP.

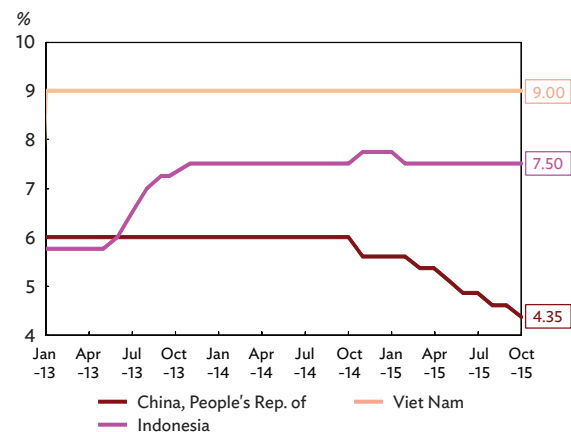
Figure 10a: Policy Rates



Note: Data as of end-October 2015.

Source: Based on data from Bloomberg LP.

Figure 10b: Policy Rates



Notes:

1. Data as of end-October 2015.

2. For Viet Nam base interest rate was used.

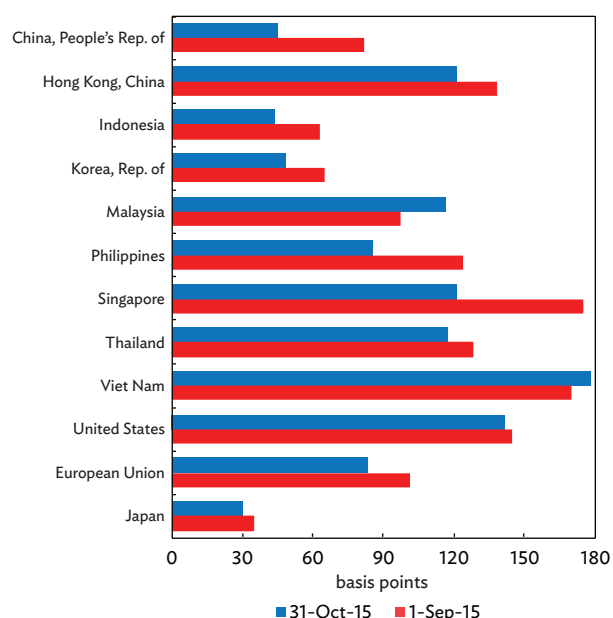
Source: Based on data from Bloomberg LP.

Singapore dollar nominal effective exchange rate policy band to provide additional stimulus. In response, yields fell an average of 35 bps for tenor of 5 years or longer.

The Philippines' yields rose for all tenors except the 2-year, 4-year, and 10-year. Yield movements in the Philippines were mostly driven by investors' risk aversion given uncertainty over the timing of the Federal Reserve's

eventual rate hike. In addition, traders expect interest rates to rise next year due to electoral spending.

Between 1 September and 31 October, the spread between the 2-year and 10-year maturities narrowed for all markets in emerging East Asia except Malaysia and Viet Nam as the delay in the US rate hike allowed for a correction in bond yields (**Figure 11**).

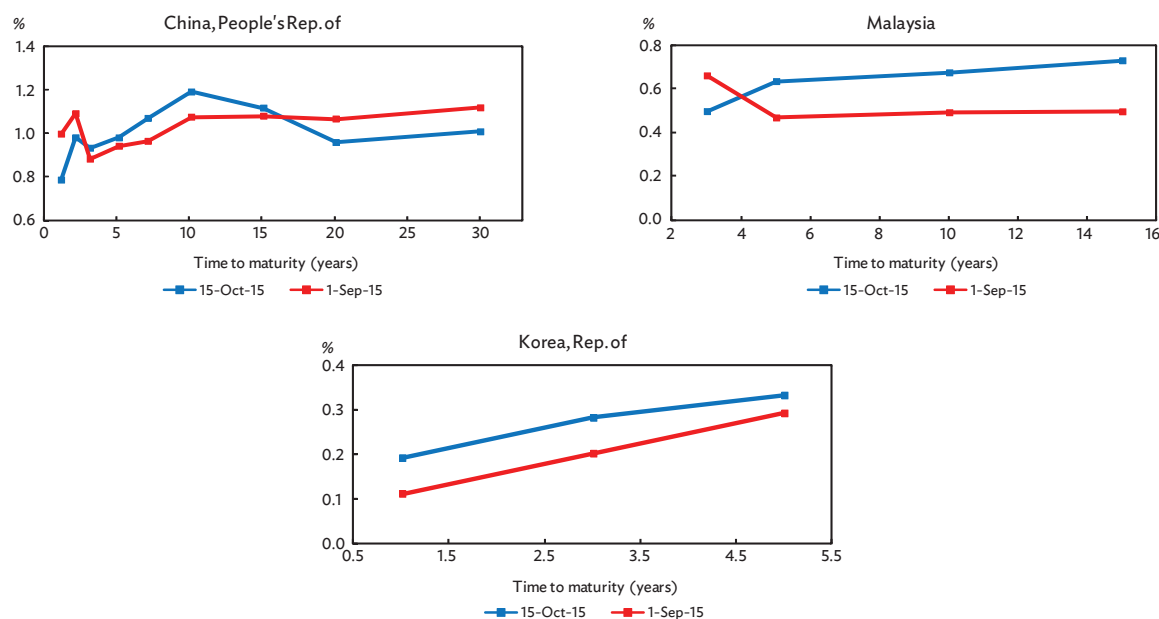
Figure 11: Yield Spreads Between 2-Year and 10-Year Government Bonds

Source: Based on data from Bloomberg LP.

Spreads between AAA-rated corporate yields and government yields widened in Malaysia and the Republic of Korea.

Credit spreads between AAA-rated corporate bonds and government bonds rose for all tenors in the Republic of Korea and Malaysia, and for most tenors in the PRC, between 1 September and 15 October. The rise in credit spreads was mostly due to increased credit concerns amid a weak growth outlook for the world economy (Figure 12a).

Between 1 September and 15 October, credit spreads between lower-rated corporate bonds and AAA-rated bonds were roughly unchanged in all three markets for which data are available (Figure 12b).

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

LCY = local currency.

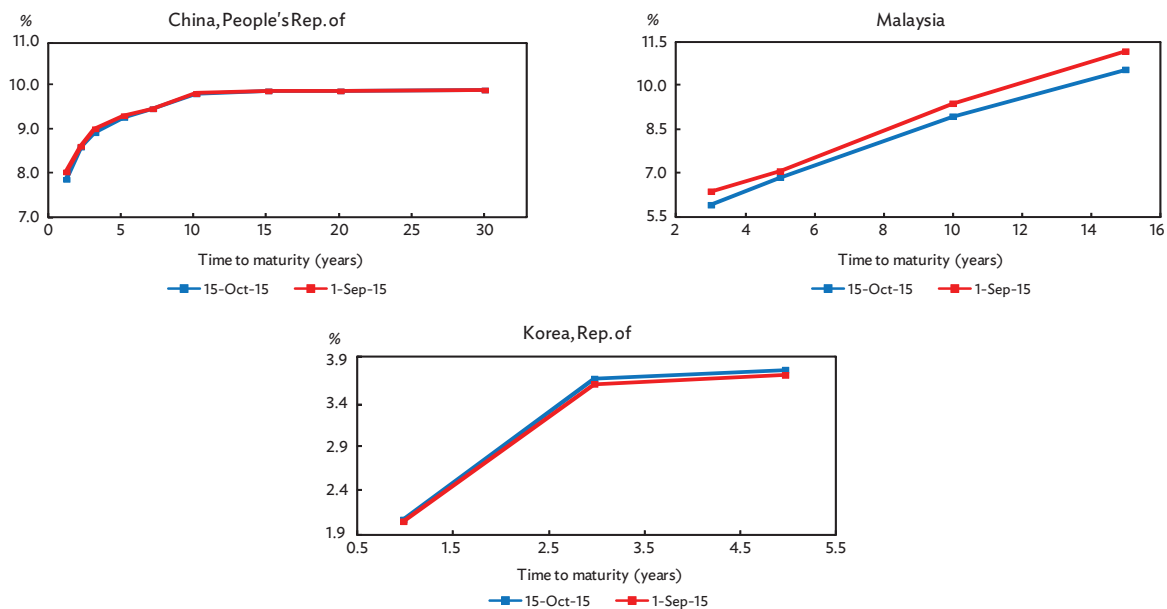
Notes:

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

2. For Malaysia, data on corporate bond yields are as of 28 August 2015 and 13 October 2015.

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. 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.
3. For Malaysia, data on corporate bond yields are as of 28 August 2015 and 13 October 2015.

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