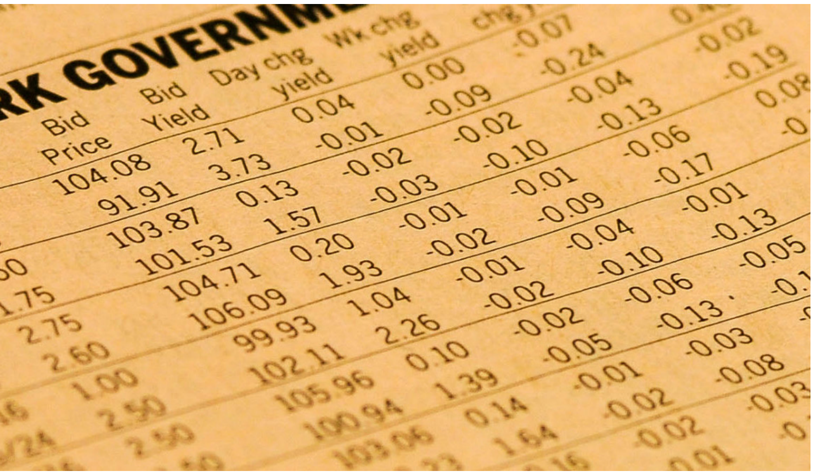

ASIA BOND MONITOR
SEPTEMBER 2017

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How to reach us:
Asian Development Bank
Economic Research and Regional Cooperation Department
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 6688
Fax +63 2 636 2183
E-mail: asianbonds_feedback@adb.org

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ASIAN DEVELOPMENT BANK

6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines
Tel +63 2 632 4444; Fax +63 2 636 2444
www.adb.org

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Contents

Emerging East Asian Local Currency Bond Markets: A Regional Update

Highlights

Bond Yields Up in Most Emerging East Asian Economies

The brightening global outlook has pushed up local currency (LCY) government bond yields in major advanced economies, leading to a rise in yields in most emerging East Asian economies between 1 June and 15 August.[1]

Advanced economies maintained their growth momentum during the second quarter (Q2) of 2017. Labor market conditions remained firm in the United States (US). Economic growth forecasts in the eurozone were upgraded and Japan also posted relatively strong gross domestic product (GDP) growth.

With economic prospects generally benign, financial risks are receding in emerging East Asia but downside risks loom over a longer time horizon. These include the normalization of the US Federal Reserve's balance sheet, which signals an eventual turn in the global liquidity environment and a possible correction in rising asset valuations.

This issue of the *Asia Bond Monitor* includes two special discussion boxes. Box 1 discusses the potential benefits of the Bond Connect scheme, a significant effort to link the People's Republic of China's (PRC) bond market to the rest of the world. Box 2 outlines a conceptual solution to cope with longevity risk in Asia.

Local Currency Bond Markets in Emerging East Asia Maintain Strong Growth Momentum

Emerging East Asia's LCY bonds outstanding posted further gains in Q2 2017, climbing to nearly USD11.0 trillion at the end of June. Quarter-on-quarter (q-o-q) growth was 3.3% in Q2 2017, up from 1.1% in the previous quarter. On a year-on-year (y-o-y) basis, growth slowed in Q2 2017 to 10.5% from 13.4% in the first quarter (Q1) of 2017. The region's overall growth was largely driven by the PRC bond market, which is the largest bond market in emerging East Asia.

The region's LCY bond market remains dominated by government bonds, which totaled USD7.2 trillion and accounted for 65.9% of the regional LCY bond market at the end of June. The outstanding amount of LCY corporate bonds reached USD3.7 trillion at the end of June.

As a share of regional GDP, the size of emerging East Asia's LCY bond market inched up to 69.0% in Q2 2017 from 68.5% in Q1 2017. The Republic of Korea and Malaysia have the largest bond markets in the region relative to GDP.

In Q2 2017, total LCY bond issuance in emerging East Asia hit USD1.1 trillion, recording growth of 27.0% q-o-q. On a y-o-y basis, however, total LCY issuance fell 16.6%. Treasuries and other government securities (excluding central bank bonds) accounted for nearly half of the new bond issuance.

Foreign Investor Sentiment Remains Positive

Global growth momentum contributed to the positive investment sentiment toward emerging East Asian bond markets, resulting in increases in the shares of foreign holdings in Q2 2017 in all LCY government bond markets for which data are available.

Compared with the previous quarter, the foreign holdings' share rose by more than 1 percentage point in Indonesia, Malaysia, and Thailand to 39.5%, 27.0%, and 16.2%, respectively, at the end of June. In the PRC, while the foreign holdings' share remains relatively low, it has been on an upward trend since March 2016. Nonresident holdings in the Republic of Korea also inched up to a 10.8% share at the end of March, the latest period for which data are available.

[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.

The shares of foreign holdings in the region's LCY corporate bond markets remain at low levels relative to government bonds. In Indonesia, the foreign share stood at 6.3% of the total market at the end of June. In the PRC, foreign holdings accounted for less than 0.5% of the total corporate stock at the end of June. This share was even smaller in the Republic of Korea at less than 0.1% of the total at the end of March.

All four markets for which data are available—Indonesia, the Republic of Korea, Malaysia, and Thailand—posted positive foreign capital flows into their respective bond markets in Q2 2017, driven by improved investor sentiment.

Local Currency Bond Yields Edge Higher

Government bond yield curves shifted upward in most markets in emerging East Asia between 1 June and 15 August, following a rise in bond yields in major advanced economies. The three exceptions were Indonesia, Thailand, and Viet Nam. In the case of Indonesia and Thailand, strong demand from foreign investors pushed bond yields down, while yields in Viet Nam fell following a cut of 25 basis points in the policy rate by the central bank.

The 2-year versus 10-year yield spread widened in most markets in emerging East Asia between 1 June and 15 August. The exceptions were the Republic of Korea, Thailand, and Viet Nam.

Introduction: Spillovers from Major Advanced Economies Drive Bond Yields Up in Emerging East Asia

On the back of a brightening global outlook, government bond yields in major advanced economies rose between 1 June and 15 August, with the increase extending to emerging East Asia.[2] Yields on 2-year and 10-year local currency (LCY) government bonds edged up in most emerging East Asian economies during the review period, tracking the rising yields in advanced economies (**Table A**). Hong Kong, China witnessed the largest yield increase on both 2-year and 10-year government bonds, reflecting higher yields in the United States (US) as well as stronger domestic growth prospects. The Republic of Korea saw a larger increase in short-term yields than in long-term yields, with a 15 basis points (bps) increase on 2-year government bonds. In the Philippines, the 2-year yield rose only 1 bp and the 10-year yield rose 8 bps. Singapore tracked US yields, while higher yields in Malaysia were largely driven by investor pessimism associated with soft oil prices. In the People's Republic of China (PRC), the yield on 10-year government bonds rose and the yield on 2-year government bonds fell as the People's Bank of China stabilized market liquidity in June via reverse repurchase agreements and lending facilities operations.

While bond yields in emerging East Asia generally trended upward, yields in Indonesia, Thailand, and Viet Nam were the exceptions. In these markets, bond yields have continued to decline since the beginning of 2017. While the declines earlier this year were generally driven by positive investor sentiment, market-specific factors contributed to the discrepancy in bond yield movements between 1 June and 15 August in these three markets compared with other

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	6	6	–	1.4	–
United Kingdom	9	1	(7)	(2.1)	(0.1)
Japan	5	0.3	2	1.3	0.6
Germany	0.2	13	(3)	(3.9)	4.7
Emerging East Asia					
China, People's Rep. of	(16)	7	(11)	4.8	1.8
Hong Kong, China	18	24	–	5.3	(0.4)
Indonesia	(8)	(4)	(12)	1.7	(0.4)
Korea, Rep. of	15	9	9	(0.4)	(1.2)
Malaysia	9	10	(17)	0.5	(0.2)
Philippines	1	8	(10)	1.0	(3.2)
Singapore	4	6	–	1.8	1.4
Thailand	(13)	(19)	5	0.3	2.6
Viet Nam	(41)	(42)	3	3.9	(0.1)
Select European Markets					
Greece	(178)	(47)	(33)	5.9	4.7
Ireland	(2)	(0.8)	(11)	(3.9)	4.7
Italy	(10)	(14)	(34)	3.8	4.7
Portugal	(19)	(9)	(26)	(1.3)	4.7
Spain	(6)	(5)	(8)	(3.7)	4.7

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 1 June 2017 and 15 August 2017.
2. A positive (negative) value for the FX rate indicates the appreciation (depreciation) of the local currency against the United States dollar.
Sources: Bloomberg LP and Institute of International Finance.

[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.

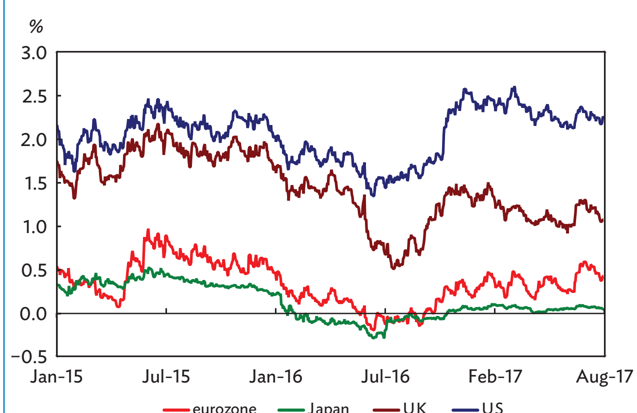
emerging East Asian markets. Yields fell in Indonesia on the back of market optimism and strong capital inflows following a rating upgrade by S&P Global in May. Despite an uptick in inflation in Indonesia during the first half of the year, largely driven by electricity tariff adjustments and seasonal factors like Ramadan and Eid al-Fitr, Bank Indonesia expects inflation to ease by the second half of the year. In Thailand, strong foreign investment pushed down both 2-year and 10-year bond yields. The largest decline was seen in Viet Nam, where the central bank reduced the policy rate by 25 bps on 10 July.

Between 1 June and 15 August, 2-year and 10-year government bond yields climbed in major advanced economies. Overall sentiment remains positive and markets expect global growth to strengthen (**Figure A1**). In its latest July forecast, the International Monetary Fund projects global gross domestic product (GDP) growth to pick up from 3.2% in 2016 to 3.5% in 2017. Growth is also strengthening in developing Asia, as evidenced by the Asian Development Bank upgrading its regional growth forecast for 2017 from 5.7% to 5.9% in July.[3]

The US labor market remains firm and had a relatively low unemployment rate of 4.3% in July and 4.4% in August.[4] Nonfarm payrolls increased by 189,000 in July and 156,000 in August. Job gains averaged 176,000 per month in January–August. Economic activity expanded moderately, driven by rising domestic consumption and business fixed investment. According to the statement of the July meeting of the Federal Open Market Committee, inflation may remain below the target of 2% in the short-term despite the tight labor market.[5] The Federal Reserve believes that US economic expansion is on track and signaled it would start normalizing its balance sheet relatively soon in anticipation of further strengthening of economic activity and the labor market.

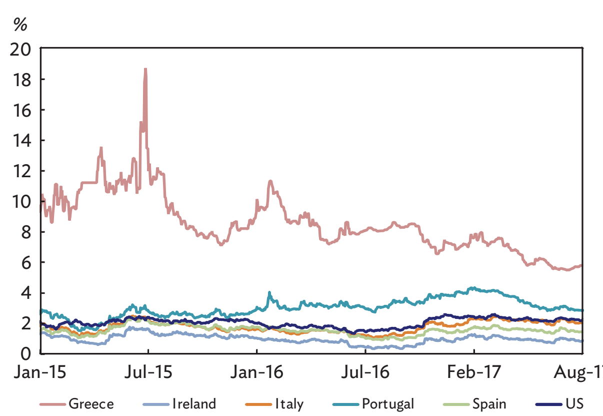
The European Central Bank (ECB) updated its economic forecast on 7 June. The forecast for the eurozone's GDP growth for full-year 2017 was upgraded to 1.9% from 1.8%. The GDP growth forecast for 2018 was raised to 1.8% from 1.7%, and for 2019 it was raised to 1.7% from 1.6%.[6] GDP growth in the eurozone rose to 0.6% quarter-on-quarter in the second quarter of 2017 from 0.5% quarter-on-quarter in the first quarter of 2017.[7] At its latest meeting, the ECB decided to keep interest rates unchanged and confirmed that the current monthly net asset purchases of EUR60 billion would continue until the end of 2017, with a possible extension if necessary.[8] With monetary policy largely accommodative, a pick-up in GDP growth raised forecasts for headline inflation. Overall, improved investment sentiment is driving down bond yields in many European markets (**Figure A2**).

Figure A1: 10-Year Government Bond Yields in Major Advanced Economies (% per annum)



UK = United Kingdom, US = United States.
Source: Bloomberg LP.

Figure A2: 10-Year Government Bond Yields in Select European Markets and the United States (% per annum)



US = United States.
Source: Bloomberg LP.

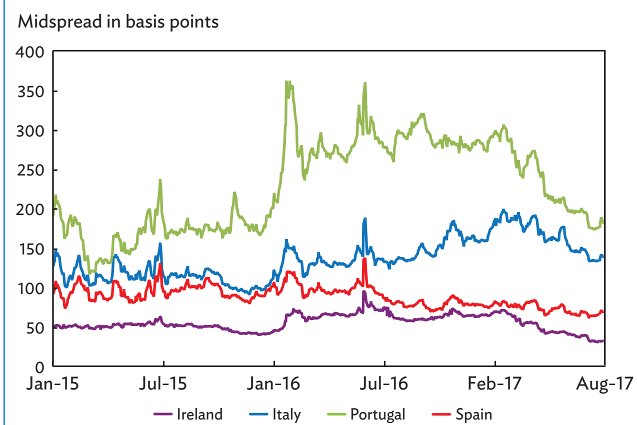
[3] Developing Asia comprises the 45 regional developing member economies of the Asian Development Bank.
[4] Data are from the Government of the United States, Bureau of Labor Statistics. Economic Releases. https://www.bls.gov/news.release/empsit.nr0.htm
[5] Board of Governors of the Federal Reserve System. Press Releases. https://www.federalreserve.gov/newsevents/pressreleases/monetary20170726a.htm
[6] Eurostat. https://www.ecb.europa.eu/pub/pdf/other/ecb.projections201706_eurosystemstaff.en.pdf?744284f3ab1d7bfe11109182def03529
[7] Eurostat. http://ec.europa.eu/eurostat/documents/2995521/8213935/2-07092017-AP-EN.pdf/6fe1f60c-51e2-4b98-9d14-ca6ea5c7e260
[8] Eurostat. https://www.ecb.europa.eu/press/pr/date/2017/html/ecb.mp170720.en.html

The Japanese economy maintained its strong growth momentum, with GDP expanding at an annual rate of 2.5% in the second quarter of 2017 after a 1.2% increase in the previous quarter.[9] At its monetary policy meeting on 20 July, the Bank of Japan (BOJ) confirmed that it expects the economy to continue to expand moderately and upgraded its growth forecast for 2017 to 1.8% from 1.6% and for 2018 to 1.4% from 1.3%. According to the BOJ, although inflation is trending upward, it is still not firm enough. Like the ECB, the BOJ indicated that it will maintain its accommodative, pro-growth monetary policy stance.

The benign global economic outlook has boosted investor sentiment. Credit default swap spreads generally trended down across emerging East Asia (**Figure B**) and in Europe (**Figure C**). Bond market spreads declined for the region as a whole and in individual emerging East Asian markets. However, the Chicago Board Options Exchange's Volatility Index experienced a spike in August due to geopolitical concerns (**Figure D**). Most markets in emerging East Asia seemed unaffected as evidenced by their stripped spreads (**Figure E**). Equity markets posted gains in all emerging East Asian markets except for the Republic of Korea (**Figure F**).

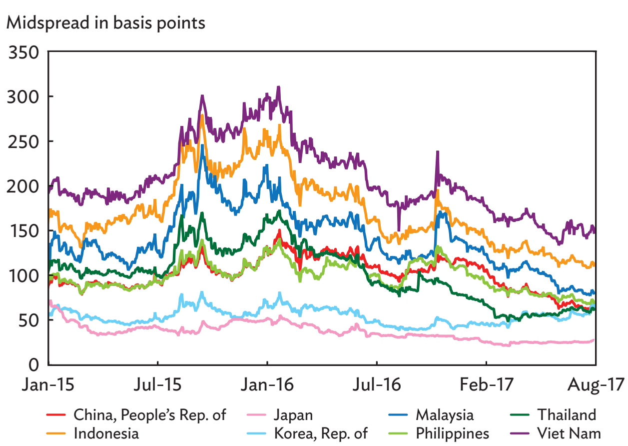
The positive sentiment has encouraged foreign investors to further increase their holdings of LCY government bonds in emerging East Asia. Indonesia, Malaysia, and Thailand each posted an increase of more than 1 percentage point in the share of foreign investor holdings between the end of March and the end of June (**Figure G**). In response to the gradual lifting of restrictions on foreign investor access to the PRC bond market, the foreign holdings' share has inched up in the PRC in recent quarters. In July, the PRC introduced

Figure C: Credit Default Swap Spreads for Select European Markets (senior 5-year)



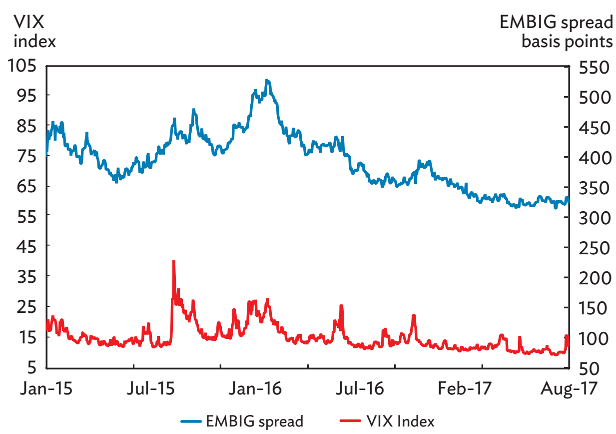
Notes:
1. Based on USD-denominated sovereign bonds.
2. Data as of 15 August 2017.
Source: Bloomberg LP.

Figure B: Credit Default Swap Spreads for Select Asian Markets (senior 5-year)



Notes:
1. Based on USD-denominated sovereign bonds.
2. Data as of 15 August 2017.
Source: Bloomberg LP.

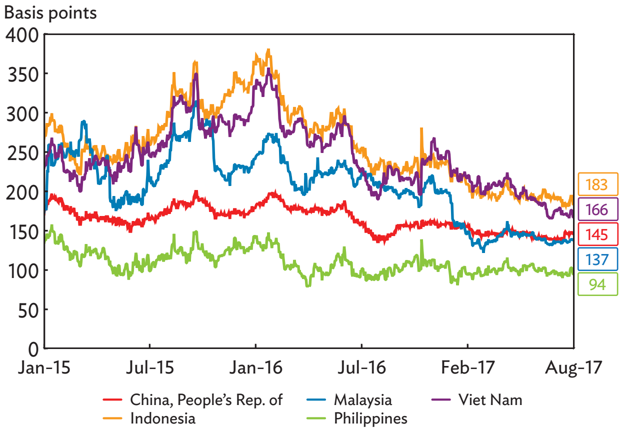
Figure D: United States Equity Volatility and Emerging Market Sovereign Bond Spread



EMBIG = Emerging Markets Bond Index Global, VIX = Chicago Board Options Exchange Volatility Index.
Note: Data as of 15 August 2017.
Source: Bloomberg LP.

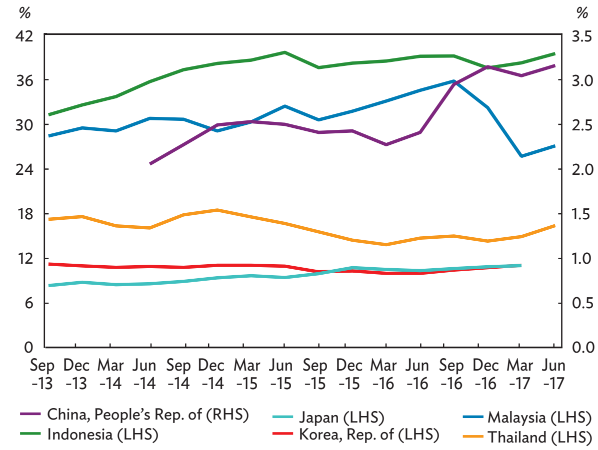
[9] http://www.esri.cao.go.jp/jp/sna/data/data_list/sokuhou/gaiyou/pdf/main_1.pdf

Figure E: JP Morgan Emerging Markets Bond Index Sovereign Stripped Spreads



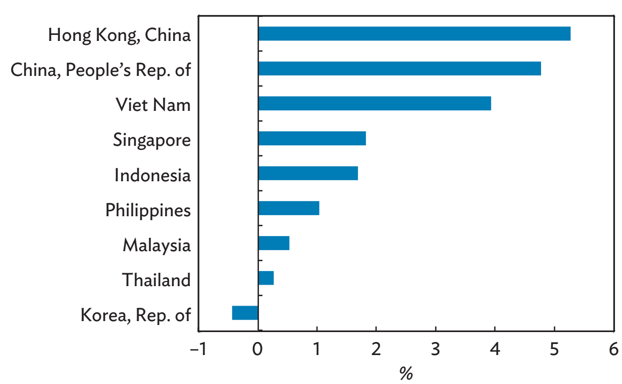
Notes:
1. Based on United States dollar-denominated sovereign bonds.
2. Data as of 15 August 2017.
Source: Bloomberg LP.

Figure G: Foreign Holdings of Local Currency Government Bonds in Select Asian Economies (% of total)



LHS = left-hand side, RHS = right-hand side.
Note: Data as of end-June 2017 except for Japan and the Republic of Korea (end-March 2017).
Source: *AsianBondsOnline*.

Figure F: Changes in Equity Indexes in Emerging East Asia



Note: Changes between 1 June and 15 August.
Source: Bloomberg LP.

Bond Connect to further facilitate foreign investors' entry into the PRC interbank bond market (**Box 1**).

Due to the Federal Reserve's normalization of its monetary policy stance, most emerging East Asian currencies slightly depreciated against the US dollar between 1 June and 15 August (**Figure H**). The exceptions were the Chinese renminbi, Singapore dollar, and Thai baht, which each marginally appreciated during the review period.

At the global level, economic growth is gaining momentum and risks to financial stability are receding. Against the backdrop of a strong and improving macroeconomic outlook, the overall environment for emerging East Asia's LCY bond markets remains benign, with lower credit default swap spreads and more foreign participation. Even so, the markets are subject to some downside risks.

One risk is the normalization of the Federal Reserve's balance sheet, which signals a potential tightening of global liquidity conditions. The Federal Reserve is also raising interest rates in response to improving US economic conditions. While Asian policy makers grapple with the ramifications of rising US interest rates on the stability of their financial systems, they may soon find themselves facing another significant shift in US monetary policy.

In March, the Federal Reserve first indicated that it would start to unwind the more than USD4 trillion of US Treasuries and mortgage-backed securities that it added to its balance sheet in response to the global financial crisis. Over the past several months, the Federal Reserve has been cautiously preparing financial markets for the eventual unwinding of its massive holdings of debt securities. The markets expect the unwinding program to start as soon as September. To minimize the

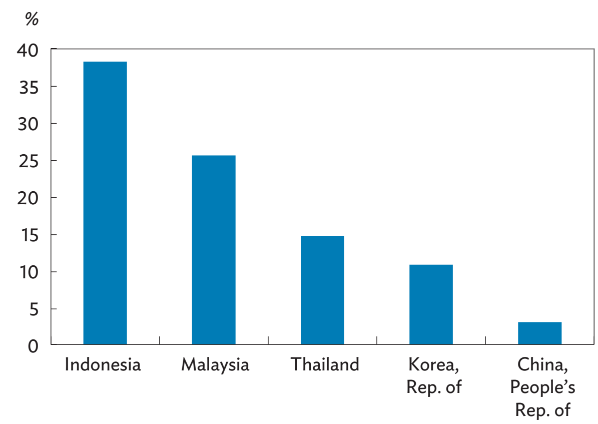
Box 1: Bond Connect—Linking the People's Republic of China's Bond Market to the World

To further open its capital markets, the People's Republic of China (PRC) introduced Bond Connect to allow Chinese and foreign investors access to overseas and domestic bond markets. The Northbound Trading program was launched on 3 July 2017 as the first phase of Bond Connect to enable international investors to participate in the PRC's interbank bond market through an arrangement between Hong Kong, China and the PRC that covers trading, custody, and settlement. Bond Connect seeks to improve the accessibility of the PRC bond market to foreign investors and foster regional financial market integration in emerging East Asia.

The PRC's local currency bond market is the largest among all emerging economies and the fourth-largest in the world, trailing only the United States (US), eurozone, and Japan in terms of bonds outstanding **(Figure B1.1)**. At the end of March 2017, the aggregated debt securities outstanding in the PRC bond market reached USD7.2 trillion. Notwithstanding the PRC bond market's size, a lack of accessibility limits foreign investor participation. At the end of March 2017, the average share of foreign investor holdings in major emerging East Asian LCY government bond markets stood at 22%, while the corresponding figure for the PRC was less than 5% **(Figure B1.2)**.

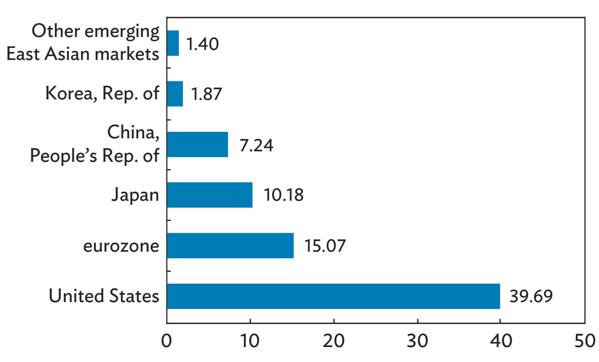
Greater accessibility to the PRC bond market would contribute to regional and global bond market integration by expanding the universe of major investment instruments and enhancing cross-border portfolio diversification and risk-sharing. Furthermore, greater accessibility to the PRC bond market would help satisfy the large and growing demand of global investors for renminbi-denominated assets, especially Treasury bonds. Following the International Monetary Fund's announcement of the inclusion of the renminbi in the Special Drawing Right valuation basket in November 2015, foreign holdings in the PRC bond market increased from USD116.6 billion at the end of December 2015 to USD120.4 billion at the end of March 2017. In addition, among the five economies whose currencies comprise the Special Drawing Right basket, the PRC's Treasury bonds offer the highest yields **(Figure B1.3)**. Thus, better access to the PRC bond market would provide global investors with more attractive investment opportunities.

Figure B1.2: Share of Foreign Holdings in Select Emerging East Asian Local Currency Government Bond Markets



Note: Data as of 31 March 2017.
Source: *AsianBondsOnline*.

Figure B1.1: Local Currency Bonds Outstanding in Select Global Markets



USD = United States dollar.
Notes:
1. Data as of 31 March 2017.
2. "Other emerging East Asian markets" include Hong Kong, China; Indonesia; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
Sources: Securities Industry and Financial Markets Association, European Central Bank, and *AsianBondsOnline*.

The market influence of Northbound Trading might be limited in the short-term.

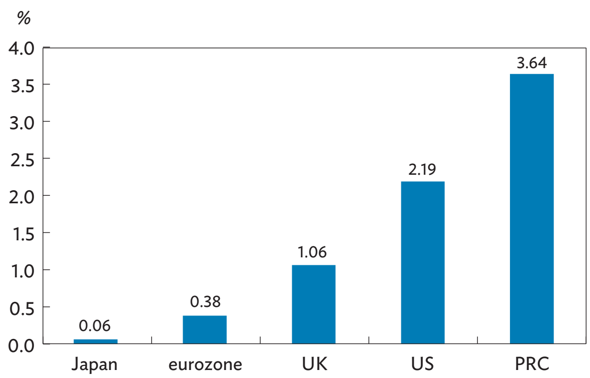
The PRC bond market's degree of openness has evolved significantly during the past decade. However, the marginal contribution of Northbound Trading in attracting foreign investment might be limited in the short-term.

The PRC's initial effort to open its bond market to foreign investors can be traced to August 2010 when three types of foreign institutions—foreign central banks; renminbi-clearing banks in Hong Kong, China and Macau, China; and

continued on next page

Box 1: Bond Connect—Linking the People's Republic of China's Bond Market to the World
continued

Figure B1.3: 10-Year Government Bond Yields of Economies Comprising the Special Drawing Right Basket



PRC = People's Republic of China, UK = United Kingdom, US = United States.
Note: Data refer to 10-year bond yield as of 11 August 2017.
Source: Bloomberg LP.

overseas participating banks for renminbi settlement—were first allowed to trade in the PRC interbank bond market. The purpose was to facilitate renminbi settlement in cross-border trades. The next milestone was to allow Qualified Foreign Institutional Investors and Renminbi Qualified Foreign Institutional Investors to invest in the PRC interbank bond market under a quota ceiling in 2013. Additional investment restrictions on foreign institutions were gradually lifted beginning in the second half of 2015, resulting in the removal of quotas, more types of foreign institutions being allowed to participate, and more instruments (e.g., repo agreements and bond derivative instruments) becoming accessible. In addition, Renminbi Qualified Foreign Institutional Investors were allowed to access the interbank foreign exchange market to hedge exchange rate risks.

Bond Connect supplements these existing measures. While some foreign participants could access the PRC bond market via channels that existed prior to the introduction of Bond Connect, the implementation of Northbound Trading facilitates the entry of a range of new market participants. For example, relatively small financial institutions will find it easier to invest in the PRC bond market given the simplified trading procedures. Furthermore, unlike the previous arrangements, Bond Connect now allows investors to connect directly to the PRC bond market via the Hong Kong Central Money Markets Unit without onshore registration. In other words, Bond Connect lowers the entry barrier for general global investors interested in the PRC bond market.

While the implementation of Northbound Trading increases the accessibility of the PRC bond market for foreign investors, it alone may not lead to a surge in foreign participation. This is because foreign investment also depends on other factors, including exchange rate fluctuations, sovereign credit ratings, and the risk–return profile of the asset set (e.g., bond yield patterns).

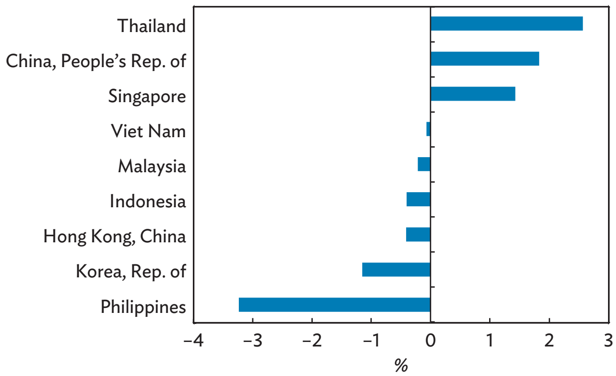
Bond Connect will promote regional bond market integration over the medium-term and long-term.

The impact of Northbound Trading on foreign participation may be limited in the short-term, but the introduction of Bond Connect will benefit regional bond market integration in the medium-term and long-term.

Earlier measures to open capital markets in the PRC include the launching of Shanghai–Hong Kong Stock Connect in November 2014 and Shenzhen–Hong Kong Stock Connect in December 2016. Both measures were aimed at facilitating the participation of foreign investors in the PRC's A-share market and they contributed to the initial inclusion of around 200 PRC stocks in the MSCI Emerging Markets Index beginning in June 2018. The inclusion of these stocks in the benchmark index will help soften investment restrictions, improve information disclosure, and strengthen the overall institutional environment.

The gradual opening of its interbank bond market led to the PRC's inclusion in March 2017 in the Bloomberg Barclays Global Aggregate + China Index and the Citi World Government Bond Index-Extended. As the PRC's bond market opens further, it may become eligible for inclusion in other major international benchmark indexes. In the long-term, these advances will promote financial integration between the PRC and the rest of the world via better information dissemination, strengthened investor protection, improved bond market infrastructure, and more consistent credit ratings.

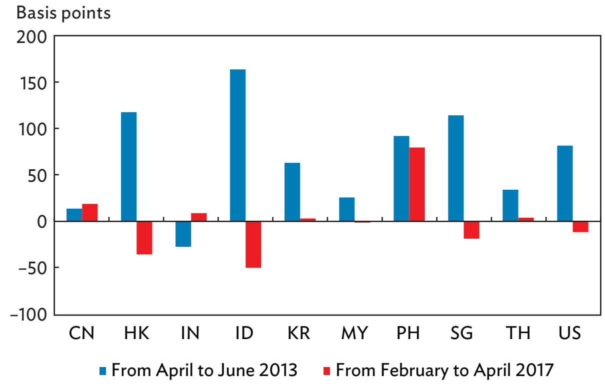
Figure H: Changes in United States Dollar Value per Unit of Local Currency



Notes:
1. Changes between 1 June and 15 August.
2. A positive (negative) value for the foreign exchange rate indicates the appreciation (depreciation) of the local currency against the United States dollar.

Source: Bloomberg LP.

Figure I: Comparison in Yield Changes of 10-Year Sovereign Bonds in Select Emerging Asian Markets and the United States



CN = People's Republic of China; HK = Hong Kong, China; IN = India; ID = Indonesia; KR = Republic of Korea; LCY = local currency; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; US = United States.

Source: Bloomberg LP.

impact on liquidity, the initial unwinding program will take the form of the Federal Reserve not reinvesting some proceeds from its bond holdings, rather than selling the bonds.

During the so-called taper tantrum of May 2013, an unanticipated Federal Reserve announcement on balance sheet normalization destabilized financial markets around the world, including emerging East Asian markets. Mindful of this previous episode, the Federal Reserve has reassured markets by communicating its normalization plans in a clear and transparent way. It is preparing to proceed with normalization cautiously and gradually. The reaction of the markets to the initial announcement in March was noticeably more subdued than during the taper tantrum (**Figure I**).

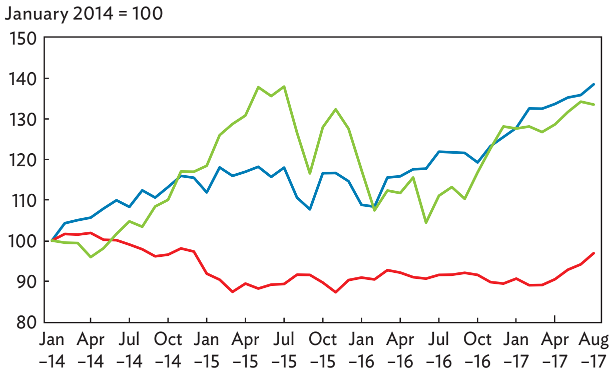
Nevertheless, the Federal Reserve's balance sheet normalization may signal a pronounced shift toward tightening global liquidity conditions, which in turn will affect Asian financial systems in the next few years through at least three channels. First, US monetary policy tightening would increase the rate of return on investments in the US and strengthen the US dollar, leading to capital outflows from emerging Asia.[10] Second, long-term financing costs may rise as US monetary normalization pushes up bond yields in the US with spillover effects in Asia. Third, the leverage buildup in emerging Asia during the recent period of low global interest rates poses risks to the balance sheets of financial institutions and corporations with a high degree of leverage and significant debt exposure.

The risk of a correction in global equity markets also represents risk to emerging Asian financial systems. Both global and regional equities have surged in recent months (**Figures J1, J2**). To some extent, the surge reflects improving fundamentals, especially strengthening global and regional growth prospects. Nevertheless, the magnitude of the equity rally and limited volatility in the markets against a background of policy uncertainty means there is scope for a market correction. The correction would crimp business and consumer confidence, and adversely affect economic growth.

Lastly, a structural risk faced by many economies in the region is population aging. When longevity increases, economies face the challenge of protecting the economic security of their elderly populations. Innovative financial instruments can offer a solution to the longevity risk that increasingly confronts many emerging Asian economies (**Box 2**).

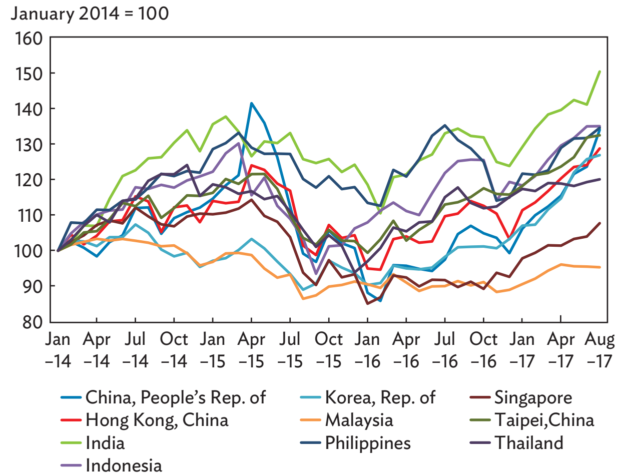
[10] Emerging Asia comprises the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Figure J1: Stock Market Performance in Major Advanced Economies



S&P = Standard and Poor's.
Source: Bloomberg LP, accessed 18 August 2017.

Figure J2: Stock Market Performance in Select Emerging Markets

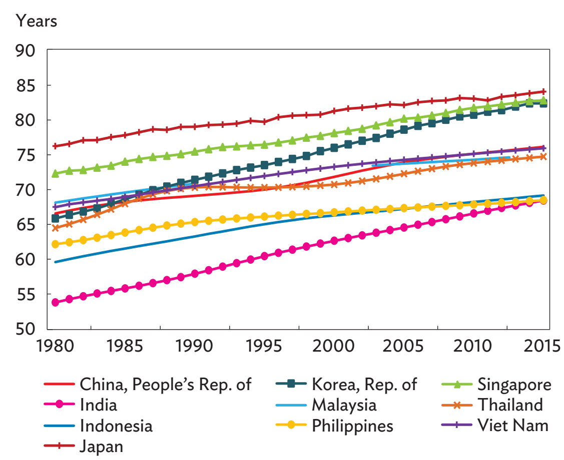


Note: Without dividends and based on local currency.
Source: Haver Analytics, accessed 18 August 2017.

Box 2: Coping with Longevity Risk—A Conceptual Solution

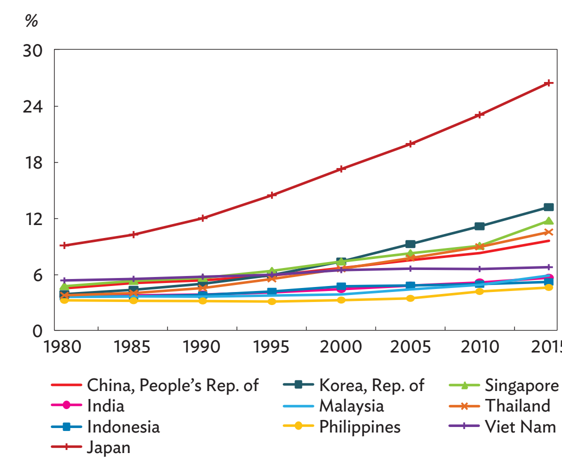
Over the past 50 years, there has been a dramatic increase in longevity across Asia due to increased living standards and advances in medical technology (**Figure B2.1**).[a] Life expectancy will continue to trend upward, although at an unpredictable pace. As individuals live longer, the share of the elderly population (aged 65 years and above) is going to increase in Asian economies (**Figure B2.2**). Furthermore, the elderly are going to spend more years in retirement and

Figure B2.1: Life Expectancy at Birth in Select Asian Economies



Source: Haver Analytics, accessed 16 August 2017.

Figure B2.2: Share of Population Aged 65 Years and Above in Select Asian Economies



Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, DVD Edition.

[a] Asia comprises the People's Republic of China, India, Indonesia, Japan, the Republic of Korea, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

continued on next page

Box 2: Coping with Longevity Risk—A Conceptual Solution *continued*

many of them will be dependent on caregiver services. These individuals will face longevity risk in the sense that they may outlive their financial resources; that is, their post-retirement pension benefits and/or savings may be insufficient to maintain reasonable living standards. Moreover, pensioners may face a reduction in benefits due to the increase in longevity.

As the population ages in an economy, longevity risk affects not only individuals but also institutions, including pension funds, life insurance companies, life annuity providers, and a range of public sector entities. While the demand for managing longevity risk is growing, the high degree of uncertainty makes currently available financial instruments very expensive. New solutions are required for dealing with the present generation of elderly people as well as with future generations. There is clearly a need for more efficient and less expensive solutions than those that currently exist.

A proposed financial solution for dealing with longevity risk

Although there is demand for financial instruments such as longevity bonds and longevity swaps, available instruments are limited and very expensive. The main reason is that suppliers are mainly speculators that provide these instruments at a price high enough to compensate for their risk taking.

Since longevity risk arises when the population on average lives longer than anticipated, parties such as pension funds, insurance companies, and governments will suffer losses from demographic change, while other parties such as pharmaceutical companies and medical equipment firms will enjoy gains. Thus, both parties are exposed to longevity risk, but in opposite directions. Demanders such as pension funds may lose from a faster-than-anticipated increase in longevity while gaining from a slower-than-anticipated increase in longevity. On the other hand, suppliers such as pharmaceutical companies have exactly the opposite payoff pattern.

For example, Hong Kong, China is rapidly aging. As a demander, it is exposed to aggregate longevity risk. A higher-than-expected annual survival rate for the 80-year old population will adversely affect the capital of Hong Kong, China's Mandatory Provident Fund (MPF), which ultimately harms the financial security of the elderly. On the other hand, the Philippines, with a relatively young population, relies on remittances from its workers abroad. Many of these workers specialize in caring for the elderly, including the elderly of Hong Kong, China. An unexpected longer survival rate for the elderly in Hong Kong, China increases the demand for caring services, which increases the demand for and incomes of Filipino caregivers working in Hong Kong, China. Therefore, the Government of the Philippines, as the supplier, can expect more remittances to be sent home, resulting in increased consumption and rising tax revenues. By the same token, the Philippines would suffer from lower-than-expected longevity among residents of Hong Kong, China.

A natural solution to hedge the risk of uncertain longevity is to trade with a counterparty having the opposite risk exposure. If the degree of risk aversion of both markets to their respective longevity exposure were the same, an arrangement could be made between the two counterparties via a swap of benefits. For instance, both parties would agree to an index that measures the survival rate of the 80-year-old cohort in Hong Kong, China as well as a benchmark level. Then, they enter a zero-swap transaction in which one party is compensated by the other party depending on whether the agreed index falls above or below the benchmark level.

Since both parties may have different degrees of risk aversion to their respective longevity exposure, an incentive that serves as an insurance premium could be provided to the supplier to facilitate an agreement. In the hypothetical deal between Hong Kong, China and the Philippines, Hong Kong, China could lower the long-term borrowing cost for the Government of the Philippines, the supplier, who is providing longevity insurance to the demander, the elderly of Hong Kong, China. Assuming that the MPF purchases a 10-year PHP-denominated government bond with a current yield of about 5.0%, the MPF could then offer a rebate of x% to the Government of the Philippines, lowering its cost of borrowing to (5.0–x)%.

During the implementation period, there would be two scenarios. When the survival rate index is higher than the benchmark, the Government of the Philippines will transfer y% of the annual income generated by Filipino caregivers in Hong Kong, China to the MPF. However, when the survival rate index is lower than the benchmark, the MPF will transfer an agreed amount, z, to the Government of the Philippines (**Figure B2.3**). The two parties will negotiate in advance to determine the values of x, y, and z. Given that the present yield on 10-year government bonds in Hong Kong, China is around 1.56%, which is considerably lower than the comparable rate of about 5.0% in the Philippines, this large

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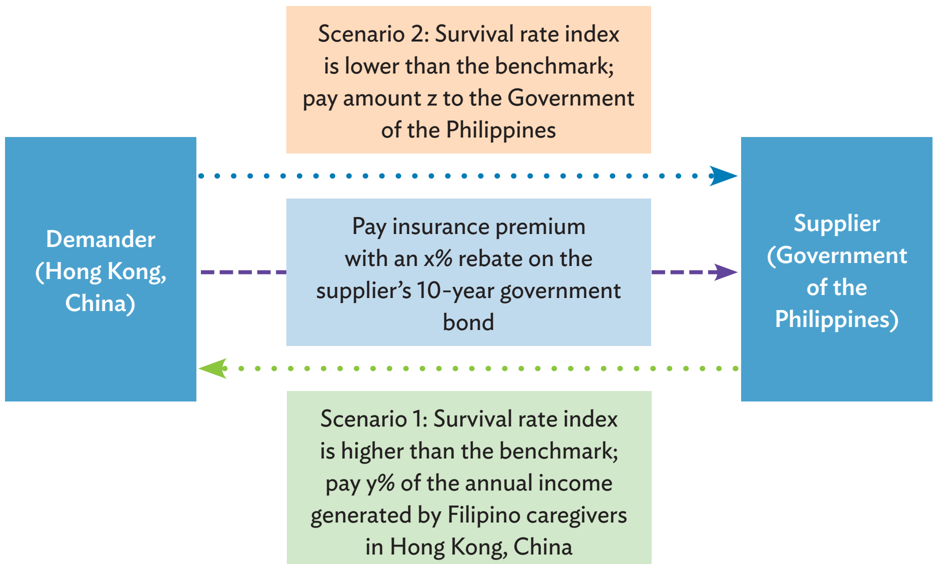
Box 2: Coping with Longevity Risk—A Conceptual Solution *continued*

Figure B2.3: Proposed Solution to Manage Longevity Risk—A Hypothetical Illustration



Source: Authors, based on research materials.

interest rate gap provides enough room for carrying out the envisioned transaction.[b]

The role of multilateral development banks

In the proposed solution, the existence of default risk could hamper a deal between the two parties. An intermediation that facilitates such transactions between the counterparties would help. Multilateral development banks such as the Asian Development Bank and World Bank could act as intermediaries to bring the counterparties together. In this hypothetical deal, the Asian Development Bank could purchase 10-year USD-denominated government bonds on the asset side of its balance sheet and simultaneously open a trust fund account on the liability side of its balance sheet to collect and disburse funds (to and from both sides) based on the predetermined scenarios. Multilateral development banks can thus effectively lower the default risk associated with such a transaction.

[b] While the deal hedges most of the longevity risk, some basis risk arises when the predetermined payments from the Government of the Philippines are insufficient to cover the increased costs from a survival rate that exceeds the benchmark rate in Hong Kong, China. The unhedged part of longevity risk exposure could be transferred, for a fee, to private entities that have more diversified positions and hedging strategies.

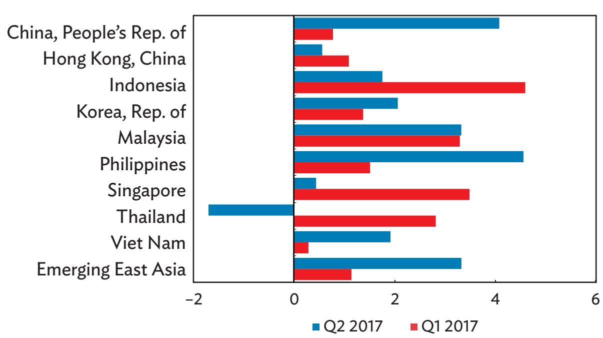
Bond Market Developments in the Second Quarter of 2017

Size and Composition

The second quarter of 2017 saw further expansion in emerging East Asia's local currency bond market, with bonds outstanding hitting nearly USD11.0 trillion.

The local currency (LCY) bond market in emerging East Asia continued to expand in the second quarter (Q2) of 2017.[11] The outstanding size of the region's LCY bond market climbed to nearly USD11.0 trillion at the end of June. Growth rose to 3.3% quarter-on-quarter (q-o-q) in Q2 2017 from 1.1% q-o-q in the prior quarter (**Figure 1a**). Much of the growth was driven by a strong rebound in the People's Republic of China's (PRC) bond market. The q-o-q growth rates in Q2 2017 were positive for all markets except Thailand, with five of the expanding markets posting larger increases than in the previous quarter.

Figure 1a: Growth of Local Currency Bond Markets in the First and Second Quarters of 2017 (q-o-q, %)



q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter.

Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from local currency base and do not include currency effects.
3. Emerging East Asia growth figures are based on 30 June 2017 currency exchange rates and do not include currency effects.
4. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.

Sources: People's Republic of China (*ChinaBond* and *Wind Information*); 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* 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 and Vietnam Bond Market Association).

The PRC's bond market continued to lead the region with outstanding bonds of USD7,658 billion at the end of June. Relative to the region's total LCY bonds outstanding, the PRC's bond market accounted for a 69.9% share at the end of June, up 1 percentage point from a share of 68.9% at the end of March. The PRC's bond market rebounded strongly in Q2 2017, with growth accelerating to 4.1% q-o-q from 0.8% in the first quarter (Q1) of 2017. Growth was supported by gains in government bonds, particularly local government bonds.

Government bonds in the PRC rose 5.8% q-o-q in Q2 2017 from 1.6% q-o-q in Q1 2017. The rise was driven mostly by increases in the PRC's stock of local government bonds, which rose 13.0% q-o-q in Q2 2017 versus 3.6% q-o-q in the previous quarter. The growth in local government bonds outstanding reflects the increased issuance quotas given to local governments in 2017 as they continue to refinance debt. However, tighter liquidity conditions in 2017 reduced this issuance somewhat as outstanding local government bonds grew 50.0% year-on-year (y-o-y) in Q2 2017, down from 93.2% y-o-y in the previous quarter.

The next largest LCY bond market at the end of June was the Republic of Korea's, which had outstanding bonds valued at USD1,869 billion on growth that rose to 2.1% q-o-q in Q2 2017 from 1.4% q-o-q in Q1 2017. Both government and corporate bonds contributed to the growth during the review period. The government's bond issuance plan in Q2 2017 was broadly at par with issuance in the previous quarter. The government continued to frontload bond issuance to boost economic growth and generate employment through public spending. Corporate bonds also picked up during the review period as firms rushed to take advantage of low borrowing costs amid expectations that the Bank of Korea may soon raise its policy rate. In contrast, the stock of central bank bonds declined during the review period due to an increase in maturing bonds.

[11] 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.

At the end of June, Thailand's LCY bond market fell to a size of USD323 billion. It was the sole market in emerging East Asia that posted a q-o-q contraction. Overall, the outstanding size declined 1.7% q-o-q in Q2 2017. Government bonds declined due largely to q-o-q decreases in the stock of government bonds, Treasury bills, and central bank bills during the review period. In April, the Bank of Thailand reduced its issuance of short-dated tenors to help abate capital inflows amid the Thai baht's appreciation. In contrast, the corporate bond segment grew 3.3% q-o-q, buoyed by hefty issuance in Q2 2017.

The LCY bond market in Malaysia expanded to a size of USD290 billion at the end of June, up 3.3% q-o-q in Q2 2017. Growth stemmed from increases in the stock of central government bonds and corporate bonds. On the other hand, the outstanding stock of central bank bonds declined 23.4% q-o-q.

Malaysia continued to have the largest *sukuk* (Islamic bond) market in the region at the end of June, with more than half of its outstanding bonds structured as Islamic debt. Its corporate bond segment is largely dominated by *sukuk* issues, while 43.5% of the government bond segment comprised *sukuk* at the end of June.

In Singapore, the LCY bond market expanded to USD252 billion at the end of June on marginal growth of 0.4% q-o-q, which was solely accounted for by government bonds, particularly bills issued by the Monetary Authority of Singapore. The stock of Singapore Government Securities bills and bonds contracted despite increased issuance due to the high volume of maturation of Singapore Government Securities bills and bonds during the quarter in review. The stock of corporate bonds marginally slipped as redemptions exceeded new issuance.

Hong Kong, China's LCY bond market reached an outstanding size of USD239 billion at the end of June, posting growth of only 0.6% q-o-q that was driven mostly by Exchange Fund Bills, which expanded 0.4% q-o-q. Reduced issuance of Exchange Fund Notes contributed to the slow growth as the government only issued 2-year notes during Q2 2017. Exchange Fund Notes outstanding fell 6.5% q-o-q during the quarter. Increased issuance of Hong Kong Special Administrative Region (HKSAR) bonds, however, led to a 7.5% q-o-q rise in HKSAR bonds outstanding.

At the end of June, Indonesia's LCY bond market reached a size of USD175 billion. Growth was 1.8% q-o-q in Q2 2017, slower compared with the previous quarter. The government tapered its frontloading policy and lowered its issuance plan for Treasury instruments due to improving revenue collection and ample funding from issuances of foreign currency bonds. Central government bonds, which comprise Treasury bills and bonds, drove much of the growth during the quarter. Corporate bonds also contributed to the growth on higher issuance volumes.

On the other hand, further declines in the stock of central bank bills known as Sertifikat Bank Indonesia (SBI) were noted at the end of June following Bank Indonesia's cessation of issuance of conventional SBI at the beginning of 2017. The move was made in line with regulations that require the use of government securities as underlying instruments for monetary operations. The central bank now uses other monetary policy tools such as term deposits and foreign currency exchange bills in managing its monetary operations. However, Bank Indonesia continues to issue shariah-compliant SBI. The issuance volume of shariah-compliant SBI is relatively small compared with conventional SBI, resulting in a decline in outstanding central bank bills.

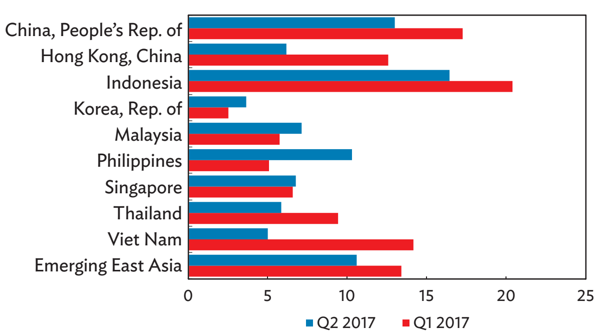
The LCY bond market in the Philippines climbed to a size of USD102 billion at the end of June on overall growth of 4.6% q-o-q. It marked the fastest q-o-q growth rate in emerging East Asia in Q2 2017. Growth came largely from increases in the stock of Treasury bills and bonds as issuance climbed more than 50% from the previous quarter, due largely to an upsized issue of Retail Treasury Bonds (RTBs). Corporate bonds also contributed to the LCY bond market's expansion during the review period, albeit to a lesser extent. Other government bonds declined during Q2 2017 due to redemptions.

Viet Nam's LCY bond market remained the smallest in the region in Q2 2017. Its bond market size climbed to USD45 billion at the end of June, posting growth of 1.9% q-o-q, markedly higher than the 0.3% q-o-q expansion in the previous quarter. Growth in Q2 2017 was solely accounted for by an increase in the stock of Treasury bonds. The stock of other government bonds fell as redemptions exceeded new issuance. In addition, there were no remaining outstanding central bank bills due to the absence of new issuance. Corporate bonds also contracted during the review period due to a lack of issuance. Some corporates in Viet Nam issue bonds via private placement with the details undisclosed. (*AsianBondsOnline* data classifies the bonds of some state-owned entities in Viet Nam as government bonds.)

Overall growth in the region's LCY bond market continued to ease on a y-o-y basis, rising 10.5% y-o-y in Q2 2017 after a 13.4% y-o-y expansion in Q1 2017 (**Figure 1b**). All markets in emerging East Asia posted positive y-o-y growth in Q2 2017. However, five out of nine markets saw their y-o-y growth rates moderate compared with Q1 2017. Indonesia posted the fastest annual growth rate in the region at 16.4% y-o-y, followed by the PRC at 12.9% y-o-y and the Philippines at 10.2% y-o-y. All other markets in the region posted growth rates of 7.1% y-o-y or less.

At the end of June, the stock of LCY government bonds in the region reached USD7,215 billion, with the segment's share of the region's total LCY bond market rising to 65.9% from 64.9% at the end of March (**Table 1**).

Figure 1b: Growth of Local Currency Bond Markets in the First and Second Quarters of 2017 (y-o-y, %)



Q1 = first quarter, Q2 = second quarter, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Growth rates are calculated from local currency base and do not include currency effects.
3. Emerging East Asia growth figures are based on 30 June 2017 currency exchange rates and do not include currency effects.
4. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.

Sources: People's Republic of China (*ChinaBond* and *Wind Information*); 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* 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 and Vietnam Bond Market Association).

The government bond market's growth was faster on a q-o-q basis in Q2 2017 than in Q1 2017, but was slower on a y-o-y basis.

The PRC accounted for the largest LCY government bond market in emerging East Asia at USD5,480 billion. Its share was equivalent to 76.0% of the region's total LCY government bond stock at the end of June. The Republic of Korea's government bond total of USD780 billion followed next, representing a 10.8% share of the region's total. Thailand was third with a government bond market size of USD235 billion. Next was Malaysia's government bond market, which was broadly comparable in size at USD156 billion with the sovereign debt markets of Indonesia and Singapore at about USD150 billion each. At the end of June, the two smallest government bond markets in the region were those of the Philippines and Viet Nam with less than USD100 billion worth of bonds outstanding each.

Emerging East Asia's LCY corporate bond stock totaled USD3,739 billion at the end of June, posting faster gains on both a q-o-q and y-o-y basis. Growth on a q-o-q basis was marginal at 0.7%, due largely to weakness in the PRC's corporate bond segment as continued deleveraging made it expensive and difficult for corporates to obtain funding. Other markets that posted q-o-q contractions in their corporate bond segments were those of Singapore and Viet Nam.

Nonetheless, the PRC's LCY corporate bond market size of USD2,178 billion remained the largest in the region with a 58.3% share of the regional total at the end of June. The Republic of Korea's corporate bond segment was the second-largest in the region at USD1,089 billion, representing a 29.1% share of the total. The remaining 12.6% share of the corporate bond total was accounted for by all other markets in emerging East Asia.

As a share of regional gross domestic product (GDP), emerging East Asia's LCY bond market increased to the equivalent of 69.0% of GDP in Q2 2017 from 68.5% in Q1 2017 (**Table 2**). The share of government bonds to GDP climbed to 45.5% in Q2 2017 from 44.4% in the previous quarter. In contrast, the share of corporate bonds to GDP slipped to 23.6% in Q2 2017 form 24.1% in Q2 2017. The Republic of Korea and Malaysia had the largest bond markets in emerging East Asia as a share of GDP at 127.5% and 96.2%, respectively.

Table 1: Size and Composition of Local Currency Bond Markets

	Q2 2016		Q1 2017		Q2 2017		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	Q2 2016		Q2 2017		Q2 2016		Q2 2017	
							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	6,916	100.0	7,245	100.0	7,658	100.0	8.0	30.6	4.1	12.9	4.9	21.9	5.7	10.7
Government	4,706	68.0	5,098	70.4	5,480	71.6	12.6	40.0	5.8	18.8	9.3	30.6	7.5	16.4
Corporate	2,210	32.0	2,146	29.6	2,178	28.4	(0.6)	14.3	(0.1)	0.5	(3.5)	6.6	1.5	(1.4)
Hong Kong, China														
Total	226	100.0	238	100.0	239	100.0	6.6	15.2	0.6	6.1	6.6	15.1	0.1	5.5
Government	131	57.7	137	57.7	138	57.8	5.8	19.8	0.8	6.3	5.8	19.7	0.3	5.6
Corporate	96	42.3	101	42.3	101	42.2	7.8	9.6	0.2	5.9	7.8	9.5	(0.2)	5.3
Indonesia														
Total	152	100.0	172	100.0	175	100.0	5.2	20.1	1.8	16.4	5.5	21.2	1.6	15.2
Government	131	86.5	148	86.0	150	85.7	5.0	21.3	1.5	15.3	5.3	22.4	1.3	14.1
Corporate	20	13.5	24	14.0	25	14.3	6.4	13.0	3.6	23.1	6.6	14.1	3.4	21.9
Korea, Rep. of														
Total	1,792	100.0	1,873	100.0	1,869	100.0	1.0	5.4	2.1	3.6	0.2	2.1	(0.2)	4.3
Government	741	41.3	780	41.6	780	41.7	1.6	5.9	2.3	4.6	0.9	2.5	(0.01)	5.3
Corporate	1,051	58.7	1,093	58.4	1,089	58.3	0.5	5.1	1.9	2.9	(0.2)	1.7	(0.4)	3.6
Malaysia														
Total	289	100.0	272	100.0	290	100.0	2.0	8.2	3.3	7.1	(1.3)	1.3	6.5	0.5
Government	160	55.4	147	54.0	156	53.8	2.5	5.9	2.9	4.0	(0.8)	(0.8)	6.1	(2.4)
Corporate	129	44.6	125	46.0	134	46.2	1.4	11.0	3.8	10.9	(1.9)	4.0	7.0	4.1
Philippines														
Total	99	100.0	98	100.0	102	100.0	(0.4)	0.9	4.6	10.2	(2.9)	(3.5)	4.0	3.0
Government	82	82.8	80	81.1	83	81.5	(0.3)	(0.4)	5.0	8.5	(2.9)	(4.8)	4.4	1.4
Corporate	17	17.2	19	18.9	19	18.5	(0.6)	7.9	2.7	18.5	(3.1)	3.2	2.2	10.7
Singapore														
Total	241	100.0	247	100.0	252	100.0	0.3	(2.1)	0.4	6.7	0.4	(2.1)	2.0	4.5
Government	135	55.9	147	59.4	150	59.6	(1.1)	(8.0)	0.8	13.7	(1.0)	(7.9)	2.4	11.3
Corporate	106	44.1	100	40.6	102	40.4	2.0	6.5	(0.1)	(2.2)	2.1	6.5	1.4	(4.2)
Thailand														
Total	295	100.0	325	100.0	323	100.0	1.6	8.0	(1.7)	5.8	1.6	3.9	(0.5)	9.5
Government	220	74.4	240	73.9	235	72.6	1.5	5.8	(3.4)	3.2	1.5	1.8	(2.3)	6.8
Corporate	75	25.6	85	26.1	89	27.4	2.0	14.9	3.3	13.5	2.0	10.6	4.5	17.5
Viet Nam														
Total	44	100.0	44	100.0	45	100.0	10.8	0.8	1.9	5.0	10.8	(1.3)	2.0	3.0
Government	42	96.0	42	95.2	43	95.6	11.1	(0.7)	2.3	4.5	11.0	(2.7)	2.4	2.5
Corporate	2	4.0	2	4.8	2	4.4	5.4	58.5	(7.0)	15.5	5.4	55.2	(6.9)	13.3
Emerging East Asia														
Total	10,054	100.0	10,515	100.0	10,953	100.0	5.9	21.8	3.3	10.5	3.6	15.4	4.2	8.9
Government	6,347	63.1	6,819	64.9	7,215	65.9	9.7	29.2	4.7	15.5	7.1	22.2	5.8	13.7
Corporate	3,707	36.9	3,696	35.1	3,739	34.1	0.2	11.0	0.7	2.1	(1.9)	5.3	1.2	0.8
Japan														
Total	10,812	100.0	10,180	100.0	10,144	100.0	0.7	2.6	0.5	2.2	9.9	21.8	(0.4)	(6.2)
Government	10,062	93.1	9,472	93.0	9,445	93.1	0.8	3.1	0.6	2.2	10.0	22.4	(0.3)	(6.1)
Corporate	749	6.9	708	7.0	699	6.9	(0.9)	(3.3)	(0.4)	1.6	8.1	14.8	(1.3)	(6.7)

( ) = negative, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.
2. Corporate bonds include issues by financial institutions.
3. Bloomberg LP end-of-period LCY–USD rates are used.
4. For LCY base, emerging East Asia growth figures are based on 30 June 2017 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 Information*); 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* 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 Vietnam Bond Market Association); and Japan (Japan Securities Dealers Association).

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

	Q2 2016	Q1 2017	Q2 2017
China, People's Rep. of			
Total	64.6	65.4	66.3
Government	43.9	46.0	47.4
Corporate	20.6	19.4	18.9
Hong Kong, China			
Total	72.0	73.2	72.5
Government	41.6	42.2	41.9
Corporate	30.5	31.0	30.6
Indonesia			
Total	16.8	18.0	17.9
Government	14.5	15.5	15.4
Corporate	2.3	2.5	2.6
Korea, Rep. of			
Total	128.8	126.5	127.5
Government	53.2	52.7	53.2
Corporate	75.6	73.8	74.3
Malaysia			
Total	98.1	95.4	96.2
Government	54.3	51.5	51.7
Corporate	43.8	43.9	44.5
Philippines			
Total	33.8	33.4	34.2
Government	28.0	27.1	27.9
Corporate	5.8	6.3	6.3
Singapore			
Total	79.6	83.1	82.7
Government	44.5	49.3	49.3
Corporate	35.1	33.8	33.4
Thailand			
Total	74.1	76.4	74.2
Government	55.1	56.5	53.8
Corporate	18.9	20.0	20.3
Viet Nam			
Total	22.6	21.8	21.8
Government	21.7	20.8	20.8
Corporate	0.9	1.1	1.0
Emerging East Asia			
Total	67.9	68.5	69.0
Government	42.9	44.4	45.5
Corporate	25.0	24.1	23.6
Japan			
Total	209.1	210.8	211.4
Government	194.6	196.1	196.8
Corporate	14.5	14.7	14.6

GDP = gross domestic product, Q1 = first quarter, Q2 = second quarter.
Notes:
1. Data for GDP is from CEIC.
2. For Singapore, corporate bonds outstanding based on *AsianBondsOnline* estimates.
Sources: People's Republic of China (*ChinaBond* and *Wind Information*); 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* 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 Vietnam Bond Market Association); and Japan (Japan Securities Dealers Association).

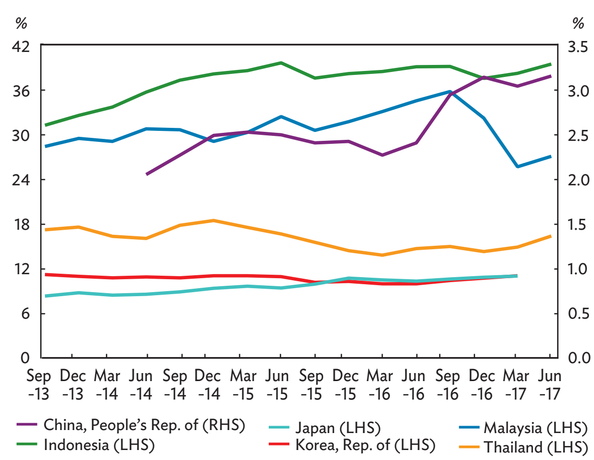
The share of foreign holdings rose in most emerging East Asian LCY government bond markets, buoyed by positive investor sentiment.

As global growth continued to strengthen, investor sentiment toward emerging East Asia's bond market remained bullish, resulting in further gains in the foreign holdings share of LCY government bonds in Q2 2017 in all markets for which data are available (**Figure 2**).

The share of nonresident holdings climbed the fastest in Thailand in Q2 2017, rising 1.5 percentage points to comprise 16.2% of total LCY government bonds at the end of June. While the Bank of Thailand limited the supply of short-dated bills beginning in April, such a move was not effective in curbing foreign fund flows into the Thai bond market. Foreign investors continued to shore up their holdings by shifting to long-dated bonds amid the strong appreciation of the Thai baht.

Malaysia also experienced a notable increase in its foreign holdings share of LCY government bonds in Q2 2017, which gained 1.4 percentage points to reach 27.0% at the end of June. Nonresident investors returned to Malaysia's bond market as the Malaysian ringgit stabilized and measures were put in place to promote onshore liquidity and enhance further development of the financial market.

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



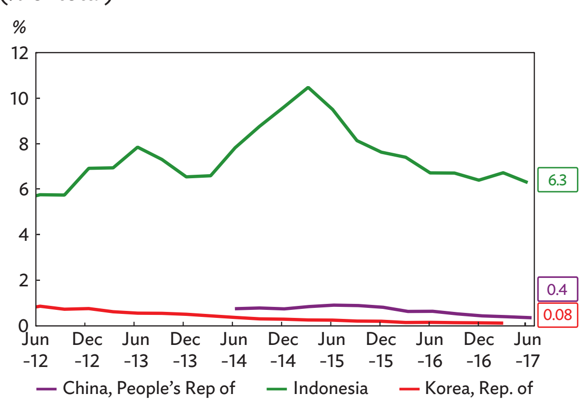
LHS = left-hand side, RHS = right-hand side.
Note: Data as of end-June 2017 except for Japan and the Republic of Korea (end-March 2017).
Source: *AsianBondsOnline*.

In Indonesia, renewed investor optimism following the sovereign rating upgrade by S&P Global in May led investors to increase their holdings of central government bonds. The foreign holdings share rose to nearly 40% of the total stock at the end of June and was little changed in July.

In the PRC, while foreign investors accounted for a small share of the LCY government bond market at the end of June, their share has been on an upward trend since March 2016. Nonresident holdings in the Republic of Korea also inched up to a 10.8% share at the end of March, the latest period for which data are available.

The shares of foreign holdings in the region's LCY corporate bond markets were little changed at the end of June and remained at low levels relative to the foreign holdings of LCY government bonds (**Figure 3**). This may be largely due to the illiquid nature of corporate bonds, given that investors tend to buy and hold until maturity, as well as the additional due diligence needed in evaluating credit risk. In Indonesia, the foreign holdings share of corporate bonds stood at 6.3% of the total at the end of June, down from 6.7% at the end of March. In the PRC, the holdings of foreign investors accounted for less than 0.5% of the total corporate stock at the end of June. The share was even smaller in the Republic of Korea at less than 0.1% at the end of March. The PRC and the Republic of Korea are the two largest corporate bond markets in the region.

Figure 3: Foreign Holdings of Local Currency Corporate Bonds in Select Emerging East Asian Economies (% of total)



Notes:
1. For Indonesia, data as of 22 June 2017 due to week-long holiday in celebration of Eid al-Fitr.
2. For the Republic of Korea, data are as of end-March 2017.
Sources: Based on data from *ChinaBond*, Otoritas Jasa Keuangan, and the Bank of Korea.

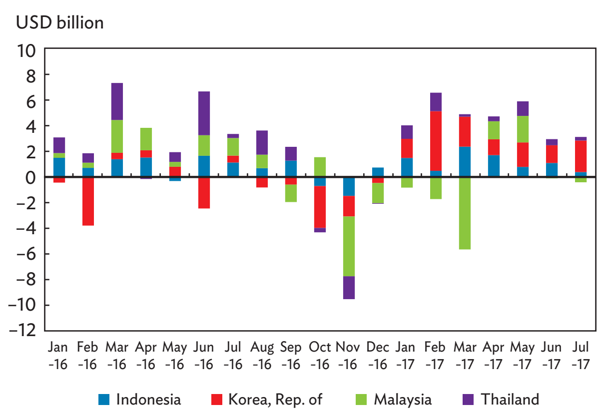
Foreign capital flows into emerging East Asia's LCY bond market were positive in Q2 2017.

All four markets for which data are available posted positive foreign capital flows into their respective bond markets in Q2 2017 (**Figure 4**). The stronger growth outlook in advanced economies improved foreign investor sentiment toward emerging market assets.

Malaysia recorded foreign bond inflows of USD3.4 billion in Q2 2017 as offshore investment poured into its bond market, the first net quarterly inflows since the third quarter of 2016. However, foreign bond flows turned negative in June and July, resulting in year-to-date net foreign capital outflows of USD5.2 billion in the first 7 months of 2017.

While foreign capital flows were positive in the Republic of Korea, Indonesia, and Thailand in Q2 2017, they were down for all three markets compared with Q1 2017. The Republic of Korea recorded the largest net foreign capital inflows as it attracted USD4.5 billion of foreign funds into its bond market in Q2 2017. Although the Republic of Korea's bond market is considered a safe haven, geopolitical concerns and a tightening monetary policy outlook in advanced economies have caused the Korean won to weaken.

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



Notes:
1. The Republic of Korea and Thailand provided data on bond flows. For Indonesia and Malaysia, month-on-month changes in foreign holdings of LCY government bonds were used as a proxy for bond flows.
2. Data provided as of July 2017.
3. Figures were computed based on 31 July 2017 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.

Indonesia also posted positive foreign capital flows into its bond market as yield-hungry investors remained attracted to its bond market. While Indonesian government bond yields have fallen since the start of the year, they are still the highest among all regional peers. Foreign bond inflows in the Indonesian bond market were USD3.6 billion in Q2 2017, down from USD4.3 billion in Q1 2017.

In Thailand, foreign bond inflows into its bond market totaled USD2.0 billion in Q2 2017, a decline from USD2.7 billion recorded in the prior quarter.

Emerging East Asia's total LCY bond issuance rose on a q-o-q basis in Q2 2017, driven by the rebound in issuance in the PRC, while other markets in the region posted mixed movements.

Emerging East Asia's total LCY bond issuance rose 27.0% q-o-q to USD1,088 billion in Q2 2017 from USD852 billion in Q1 2017 (**Table 3**). The accelerated growth was due to the rebound in total issuance in both the government and corporate bond markets following q-o-q contractions in Q1 2017. Total government bond issuance increased 29.9% q-o-q to USD780 billion, while new corporate bond issues rose 20.3% q-o-q to USD309 billion. However, despite a recovery in bond issuance in Q2 2017, it was still 16.6% lower than the total volume issued in the same period in 2016.

The high growth in the region's total LCY bond issuance was led by the jump in issuance in the PRC following three consecutive quarterly contractions. The PRC accounted for 57% of the region's total LCY bond issuance in Q2 2017. Other markets that posted positive q-o-q growth in Q2 2017 are Hong Kong, China; the Republic of Korea; the Philippines; and Singapore. Meanwhile, Indonesia, Malaysia, Thailand, and Viet Nam recorded q-o-q contractions.

Issuance of central government bonds—Treasury bills, Treasury bonds, and other government securities—soared 54.8% q-o-q to reach USD539 billion, accounting for half of total LCY bond issuance in the region. The primary driver of growth was the 73.3% q-o-q jump in the PRC, which accounted for 84% of the region's total issuance of central government bonds, as more local government bank loans were replaced with bonds in line with the PRC's local debt restructuring program. Another notable increase was in the Philippines, where issuance rose 55.0% q-o-q following the sale of PHP181 billion worth of retail Treasury bonds. The markets that posted q-o-q contractions include Indonesia, Malaysia, and Viet Nam. This was mainly a result of a slowdown in issuance in Q2 2017 following high issuance volumes in Q1 2017 as part of either expanded borrowing programs or frontloading policies.

Issuance of central bank bonds, which accounted for 22.1% of the region's total bond issuance, was down 4.6% q-o-q to USD241 billion. The higher issuance volumes in Hong Kong, China and Singapore, which collectively account for 67% of total central bank bond issuance in the region, were offset by the decline in issuance in Thailand. In April, the Bank of Thailand began reducing its issuance of short-term central bank bonds as a tool to manage short-term foreign inflows in an effort to limit speculation of the Thai baht.

The region's issuance of corporate bonds posted strong growth in Q2 2017, rising 20.3% q-o-q to USD309 billion after a 26.4% q-o-q slump in issuance in Q1 2017. Companies in the region took advantage of the current market conditions given expectations of an upward trend in yields as the market anticipates the impact of tighter monetary policy by both the United States (US) Federal Reserve and the European Central Bank. All markets in the region recorded positive q-o-q growth rates except Viet Nam, which rarely has corporate bond issuances. The growth was led by the surge in issuance in the PRC and in the Republic of Korea, which accounted for 54% and 32% of the region's total Q2 2017 corporate bond issuance, respectively.

The PRC remained the largest issuer of LCY bonds in the region with total issuance of USD620 billion, comprising 57% of the regional total. Following a 27.1% q-o-q drop in Q1 2017, a surge in new issuances in both the government and corporate bond markets was seen in Q2 2017. In the government sector, the main driver was the rise in issuance of local government bonds as part of the continued bond swap program with the objective of restructuring local government debt. New issuance of local government bonds in Q2 2017 almost tripled to CNY1.4 trillion from CNY474 billion in the previous quarter. A large portion of local government bank loans needed to be swapped for bonds, especially after tepid issuance in Q1 2017. Issuance of Treasury bonds also rose 75.7% q-o-q to CNY819 billion from CNY466 billion in Q1 2017. Despite unfavorable conditions for onshore

Table 3: Local-Currency–Denominated Bond Issuance (gross)

	Q2 2016		Q1 2017		Q2 2017		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
							Q2 2017		Q2 2017	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of										
Total	894	100.0	391	100.0	620	100.0	56.1	(29.3)	58.5	(30.6)
Government	685	76.6	257	65.8	453	73.0	73.3	(32.6)	76.0	(33.9)
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	685	76.6	257	65.8	453	73.0	73.3	(32.6)	76.0	(33.9)
Corporate	209	23.4	134	34.2	167	27.0	23.0	(18.4)	24.9	(20.0)
Hong Kong, China										
Total	98	100.0	103	100.0	107	100.0	4.0	9.6	3.5	8.9
Government	82	83.7	92	88.8	93	87.5	2.5	14.6	2.0	13.9
Central Bank	80	81.5	91	88.6	92	86.2	1.2	15.9	0.7	15.2
Treasury and Other Govt.	2	2.2	0.2	0.2	1	1.3	494.4	(35.2)	491.7	(35.6)
Corporate	16	16.3	12	11.2	13	12.5	16.0	(16.0)	15.4	(16.5)
Indonesia										
Total	14	100.0	15	100.0	11	100.0	(25.3)	(16.0)	(25.4)	(16.9)
Government	11	81.7	14	88.9	9	77.3	(35.1)	(20.6)	(35.2)	(21.4)
Central Bank	2	16.0	0.3	1.7	0.1	0.7	(68.3)	(96.2)	(68.4)	(96.2)
Treasury and Other Govt.	9	65.7	13	87.2	9	76.5	(34.4)	(2.1)	(34.6)	(3.1)
Corporate	2	18.3	2	11.1	3	22.7	53.6	4.4	53.3	3.3
Korea, Rep. of										
Total	154	100.0	165	100.0	176	100.0	9.2	13.4	6.8	14.1
Government	76	49.0	79	48.1	78	44.1	0.3	2.0	(1.9)	2.7
Central Bank	40	25.9	39	23.8	38	21.8	0.3	(4.4)	(2.0)	(3.8)
Treasury and Other Govt.	36	23.2	40	24.3	39	22.3	0.3	9.2	(1.9)	9.9
Corporate	78	51.0	85	51.9	98	55.9	17.5	24.3	14.9	25.1
Malaysia										
Total	15	100.0	17	100.0	17	100.0	(7.5)	14.1	(4.7)	7.1
Government	7	45.3	9	50.5	7	42.9	(21.5)	8.0	(19.1)	1.3
Central Bank	0.4	2.8	0.2	1.1	0.3	2.1	76.5	(14.3)	81.9	(19.6)
Treasury and Other Govt.	7	42.5	9	49.4	7	40.8	(23.7)	9.4	(21.3)	2.7
Corporate	8	54.7	9	49.5	9	57.1	6.8	19.2	10.1	11.8
Philippines										
Total	4	100.0	6	100.0	9	100.0	46.8	157.9	46.0	141.0
Government	4	96.2	5	83.6	8	88.3	55.0	136.9	54.2	121.4
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	4	96.2	5	83.6	8	88.3	55.0	136.9	54.2	121.4
Corporate	0.1	3.8	1	16.4	1	11.7	4.9	684.0	4.3	632.6
Singapore										
Total	63	100.0	72	100.0	79	100.0	7.6	27.6	9.3	24.9
Government	60	94.6	69	95.9	76	95.7	7.4	29.0	9.1	26.3
Central Bank	52	81.8	64	89.1	70	88.9	7.3	38.6	9.0	35.7
Treasury and Other Govt.	8	12.8	5	6.7	5	6.8	8.8	(32.1)	10.5	(33.5)
Corporate	3	5.4	3	4.1	3	4.3	12.3	2.3	14.0	0.1
Thailand										
Total	74	100.0	76	100.0	67	100.0	(13.0)	(12.2)	(12.0)	(9.1)
Government	63	85.4	66	86.0	54	80.1	(18.9)	(17.5)	(17.9)	(14.6)
Central Bank	54	73.5	53	70.0	40	59.0	(26.7)	(29.5)	(25.8)	(27.0)
Treasury and Other Govt.	9	11.9	12	16.0	14	21.2	15.2	56.4	16.6	61.9
Corporate	11	14.6	11	14.0	13	19.9	23.2	19.2	24.7	23.4

continued on next page

Table 3 *continued*

	Q2 2016		Q1 2017		Q2 2017		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
							Q2 2017		Q2 2017	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	q-o-q	y-o-y	q-o-q	y-o-y
Viet Nam										
Total	7	100.0	6	100.0	2	100.0	(60.8)	(63.9)	(60.8)	(64.6)
Government	7	98.7	6	99.6	2	100.0	(60.7)	(63.4)	(60.6)	(64.1)
Central Bank	1	21.3	3	49.9	0	0.0	(100.0)	(100.0)	(100.0)	(100.0)
Treasury and Other Govt.	5	77.4	3	49.7	2	100.0	(21.2)	(53.3)	(21.1)	(54.2)
Corporate	0.1	1.3	0.02	0.4	0	0.0	(100.0)	(100.0)	(100.0)	(100.0)
Emerging East Asia										
Total	1,323	100.0	852	100.0	1,088	100.0	27.0	(16.6)	27.7	(17.7)
Government	994	75.1	596	70.0	780	71.6	29.9	(20.5)	30.7	(21.5)
Central Bank	230	17.4	252	29.5	241	22.1	(4.6)	4.5	(4.4)	4.7
Treasury and Other Govt.	764	57.8	345	40.4	539	49.5	54.8	(28.1)	56.4	(29.4)
Corporate	329	24.9	256	30.0	309	28.4	20.3	(5.1)	20.6	(6.2)
Japan										
Total	469	100.0	436	100.0	413	100.0	(4.4)	(4.0)	(5.3)	(11.8)
Government	440	94.0	406	93.1	379	91.7	(5.9)	(6.3)	(6.7)	(14.0)
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	440	94.0	406	93.1	379	91.7	(5.9)	(6.3)	(6.7)	(14.0)
Corporate	28	6.0	30	6.9	34	8.3	14.9	32.3	13.8	21.5

( ) = negative, – = not applicable, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Corporate bonds include issues by financial institutions.
2. Bloomberg LP end-of-period LCY–USD rates are used.
3. For LCY base, emerging East Asia growth figures are based on 30 June 2017 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* 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 Vietnam Bond Market Association); and Japan (Japan Securities Dealers Association).

corporate bond issuance due to the government's deleveraging efforts, including raising borrowing costs and other regulatory measures, new corporate issues rose 23.0% q-o-q to reach USD167 billion. This was partly due to the huge amount of outstanding corporate debt expected to mature in 2017, which will drive companies back to the market to meet their refinancing requirements. However, the rebound in aggregate issuance of bonds in the PRC in Q2 2017 was down 29.3% compared to a year earlier.

The Republic of Korea was the second-largest bond issuer in the region, accounting for 16% of the regional total. Total LCY bond issuance grew 9.2% q-o-q to reach USD176 billion at the end of June. The main driver of growth was the rise in issuance of corporate bonds, which was up 17.5% q-o-q to USD98 billion. Meanwhile, the government bond market posted minimal growth of 0.3% q-o-q. Issuance of central government bonds and central bank bonds rose 0.3% q-o-q to USD39 billion and USD38 billion, respectively. The government continued its frontloading policy in Q2 2017, spending a total of 59% of its full-year budget in the first half of 2017. On a y-o-y basis, the Republic of Korea's bond issuance rose 13.4%.

Total bond issuance in Hong Kong, China increased 4.0% q-o-q to USD107 billion, making it the third-largest issuer of bonds in the region. Issuance of government bonds inched up 2.5% q-o-q to USD93 billion as the Hong Kong Monetary Authority issued more HKSAR bonds in Q2 2017 than in the previous quarter. Issuance of central bank bonds, comprising mostly Exchange Fund Bills, was almost at par with the previous quarter at USD92 billion. Issuance of corporate bonds posted robust growth of 16.0% q-o-q to reach USD13 billion. Compared with a year earlier, total bond issuance in Hong Kong, China rose 9.6% y-o-y in Q2 2017.

In Singapore, LCY bond issuance rose 7.6% q-o-q to USD79 billion, led by increased issuance of central bank bills. The Monetary Authority of Singapore's bill issuance expanded 7.3% q-o-q to reach USD70 billion, an indication that the central bank is mopping up excess liquidity in the market. New corporate issues also rose in Q2 2017, increasing 12.3% q-o-q to USD3 billion. On a y-o-y basis, growth in total issuance accelerated to 27.6%, led by higher issuance of central bank bonds.

The Philippines saw the second-fastest q-o-q growth in issuance in the region, rising 46.8% q-o-q and 157.9% y-o-y to USD9 billion. The high growth was primarily driven by the sale of PHP181 billion worth of RTBs. From an initial offer of PHP30 billion, the Bureau of the Treasury increased the issue size to PHP181 billion to accommodate strong demand from the market. Excluding the successful RTB offer, however, issuance of Treasury bonds fell from the previous quarter. The large proceeds from the RTB issuance afforded the Bureau of the Treasury to only partially award most of its scheduled Treasury bond auctions as the market sought higher yields. Meanwhile, almost all auctions of Treasury bills were fully awarded. In total, government bond issuance jumped 55.0% q-o-q to USD8 billion. Total corporate bond issuance in Q2 2017 posted moderate growth of 4.9% q-o-q.

In Malaysia, total bond issuance fell 7.5% q-o-q to USD17 billion as the rise in issuance in corporate bonds was offset by the decline in issuance of government bonds. Issuance of central government bonds, both conventional and Islamic, declined 23.7% q-o-q to USD7 billion due to fewer scheduled auctions than in the previous quarter. New issuance of corporate bonds rose 6.8% q-o-q in Q2 2017 as companies borrowed ahead of an expected rise in yields. Total issuance in Malaysia rose 14.1% y-o-y as both government and corporate bond issuance posted positive growth.

Total LCY bond issuance in Thailand contracted 13.0% q-o-q and 12.2% y-o-y to USD67 billion, driven by the drop in issuance of central bank bills. Foreign inflows into short-term central bank bills peaked in Q1 2017, contributing to the sharp appreciation of the Thai baht. In response, the Bank of Thailand reduced its issuance of central bank bills starting in April in order to manage currency speculation. Issuance of central bank bonds fell 26.7% q-o-q in Q2 2017. Meanwhile, issuance of Treasury and other government bonds rose 15.2% q-o-q in the same period. New corporate issues also posted higher growth of 23.2% q-o-q as companies took advantage of accommodating financial conditions, lower yields, and high levels of market liquidity to raise funds.

In Indonesia, LCY bond issuance declined 25.3% q-o-q and 16.0% y-o-y to USD11 billion in Q2 2017. The lower issuance volume was intentional as the government eased its frontloading policy. The issuances of USD-denominated and JPY-denominated bonds in the first half of 2017 provided the government with enough budgetary funding. On the other hand, new corporate bond issues jumped 53.6% in Q2 2017.

Total LCY bond issuance in Viet Nam fell the most in the region, contracting 60.8% q-o-q and 63.9% q-o-q to USD2 billion. Bond issuance in Viet Nam was tepid in Q2 2017, led by the lack of issuance of central bank bonds and corporate bonds. Moreover, the Ministry of Finance also issued fewer Treasury bonds in Q2 2017.

Cross-border bond issuance in Emerging East Asia continued its steady growth in Q2 2017.

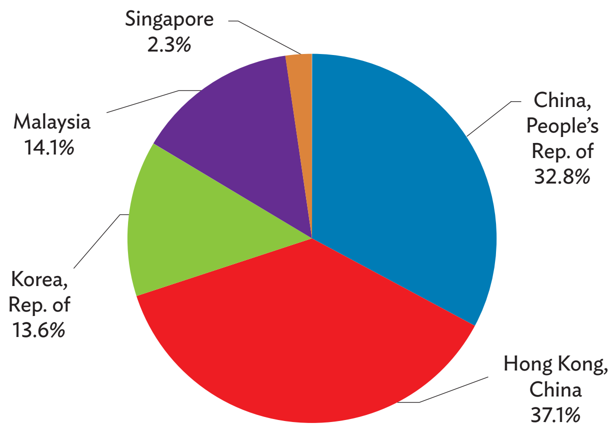
In Q2 2017, total cross-border bond issuance in emerging East Asia increased 7.4% q-o-q and 47.0% y-o-y. The largest share came from Hong Kong, China with intraregional bond issuance reaching USD859 million or 37.1% of the total in Q2 2017 (**Figure 5**).

Four firms in Hong Kong, China issued a total of CNY5.2 billion, with more than half coming from China CITIC Bank International's 3-year bond worth CNY3.0 billion priced at par to yield 4.4%. Meanwhile, two corporations based in Hong Kong, China issued bonds in Singapore dollars amounting to SGD121 million.

The PRC clinched the second spot with a 32.8% share in total intraregional bond issuance in Q2 2017 amounting to USD761 million, comprising notes with maturities of between 3 months and 5 years denominated in Hong Kong dollars and a single issuance in Singapore dollars. The PRC's Huarong Financial was the largest issuer, eclipsing other PRC issuers with SGD600 million worth of 4-year bonds at a coupon rate of 3.2%.

The remaining intraregional issuance in Q2 2017 originated from Malaysia (14.1%), the Republic of Korea (13.6%), and Singapore (2.3%).

Figure 5: Emerging East Asia Intraregional Bond Issuance by Market of Origin in the Second Quarter of 2017



Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Two Malaysian banks issued cross-border bonds worth a combined HKD1,983 million. Malaysia's national mortgage corporation, Cagamas, also issued SGD100 million worth of 1-year bonds with a coupon rate of 1.64%. In the Republic of Korea, three government-related entities issued cross-border bonds totaling USD316 million denominated in Chinese renminbi, Hong Kong dollars, and Indonesian rupiah. In Singapore, Nomura International Funding issued bonds totaling USD53.6 million denominated in both Korean won (KRW50 billion) and Philippine pesos (PHP500 million).

Intraregional issuance in emerging East Asia in Q2 2017 comprised the following currencies: Chinese renminbi which accounted for 35.5% of the total, followed by Hong Kong dollars (30.1%), Singapore dollars (25.7%), Indonesian rupiah (6.4%), Korean won (1.9%), and Philippine pesos (0.4%)

G3 currency bond issuance in Emerging East Asia increased in January–July amid an interest rate environment that remained favorable.

Emerging East Asian economies issued a total of USD193,920 million worth of G3 currency bonds in January–July, registering an increase of 61.8% y-o-y (**Table 4**).[12] The issuance during the first 7 months of 2017 was close to hitting the full-year 2016 total issuance.

G3 currency bond issuance in Q2 2017 was higher at USD88,024 million compared with USD76,405 million in Q1 2017. In July, an additional USD29,492 million of G3 currency bonds was issued.

The favorable interest rate environment continued to be a key driver in the increase of G3 currency bond issuance. Policy directions from developed economies have recently become relatively clearer. Nonetheless, issuers remained on guard about the timing of the expected policy changes.

The US dollar remained the preferred denomination for G3 bond issuance in emerging East Asian markets as evidenced by issuance in January–July. USD-denominated bond issuance rose 71.3% y-o-y to USD176,772 million during the review period, and increased its share of total G3 issuance to 91.2% from 86.1% in January–July 2016. Bond issuances in Japanese yen amounted to USD2,175 million, up 47.2% y-o-y. However, yen issuance continued to comprise the smallest share of total G3 issuance. EUR-denominated bonds amounted to USD14,973 million in January–July, down 1.0% y-o-y.

All markets in emerging East Asia experienced double-digit y-o-y increases in the issuance of G3 currency bonds in January–July except for the following: Thailand's issuance grew more than four-fold, Malaysia's issuance declined, and the Philippines' G3 bond issuance volume was the same as last year.

The PRC's G3 bond issuance reached USD122,068 million in January–July, posting growth of 86.4% y-o-y. The PRC has not issued any JPY-denominated bonds this year, while its USD-denominated issuance amounted to USD111,961 million and its EUR-denominated issuance amounted to USD10,107 million, both of which reflected y-o-y increases. The crackdown on the massive credit growth in the PRC remained the underlying reason for corporates tapping the offshore market. Companies in the PRC face huge debt repayments in 2017, compelling them to raise cash and tap offshore borrowing, which is cheaper

[12] G3 currency bonds are denominated in either euros, Japanese yen, or US dollars.

Table 4: G3 Currency Bond Issuance

2016		
Issuer	**Amount (USD million)**	**Issue Date**
China, People's Rep. of	**120,019**	
China Cinda Asset Management 4.45% Perpetual	3,200	30-Sep-16
Proven Honour Capital 4.125% 2026	2,000	6-May-16
China Minsheng Banking 4.95% Perpetual	1,439	14-Dec-16
Huarong Finance 3.625% 2021	1,350	22-Nov-16
Sinopec 2% 2021	1,300	29-Sep-16
Export–Import Bank of China 2% 2021	1,250	26-Apr-16
Export–Import Bank of China 0.25% 2019	1,209	2-Dec-16
Sinopec 1.75% 2019	1,100	29-Sep-16
Others	107,171	
Hong Kong, China	**29,204**	
China Overseas Finance 0% 2023	1,500	5-Jan-16
CK Hutchison 1.25% 2023	1,420	8-Apr-16
Others	26,284	
Indonesia	**17,888**	
Perusahaan Penerbit SBSN *Sukuk* 4.55% 2026	1,750	29-Mar-16
Indonesia (Sovereign) 2.625% 2023	1,578	14-Jun-16
Indonesia (Sovereign) 3.75% 2028	1,578	14-Jun-16
Indonesia (Sovereign) 5.25% 2047	1,500	8-Dec-16
Indonesia (Sovereign) 4.35 2027	1,250	8-Dec-16
Others	10,233	
Korea, Rep. of	**28,593**	
Korea Development Bank 3% 2026	1,000	13-Jan-16
Korea Eximbank 1.75% 2019	1,000	26-May-16
Korea Eximbank 2.625% 2026	1,000	26-May-16
Others	25,593	
Lao People's Democratic Rep.	**312**	
Malaysia	**6,026**	
Malaysia (Sovereign) *Sukuk* 3.179% 2026	1,000	27-Apr-16
Danga Capital 3.035% 2021	750	1-Mar-16
TNB Global Ventures Capital 3.244% 2026	750	19-Oct-16
Others	3,526	
Philippines	**2,675**	
Philippines (Sovereign) 3.7% 2041	2,000	1-Mar-16
Others	675	
Singapore	**9,636**	
BOC Aviation 3.875% 2026	750	27-Apr-16
DBS Group 3.6% Perpetual	750	7-Sep-16
Others	8,136	
Thailand	**1,225**	
Kasikorn Bank 2.375% 2022	400	6-Oct-16
Others	825	
Emerging East Asia Total	**215,579**	
Memo Items:		
India	**8,354**	
Export–Import Bank of India 3.375% 2026	1,000	5-Aug-16
Others	7,354	
Sri Lanka	**2,916**	

January–July 2017		
Issuer	**Amount (USD million)**	**Issue Date**
China, People's Rep. of	**122,068**	
China Evergrande Group 8.75% 2025	4,680	28-Jun-17
State Grid Overseas Investment 3.50% 2027	2,350	4-May-17
China Zheshang Bank 5.45% 2050	2,175	29-Mar-17
Kaisa Group Holdings 9.38% 2024	2,120	30-Jun-17
CNAC (HK) Synbridge Company 5.00% 2020	2,000	5-May-17
Others	108,742	
Hong Kong, China	**24,375**	
Radiant Access Limited 4.60% Perpetual	1,500	18-May-17
China Cinda Finance 3.65% 2022	1,300	9-Mar-17
Nanyang Commercial Bank 5.00% Perpetual	1,200	2-Jun-17
Hong Kong, China (Sovereign) *Sukuk* 3.13% 2027	1,000	28-Feb-17
Melco Resort Finance 2025 4.88%	1,000	6-Jun-17
CK Hutchison International 4.00% Perpetual	1,000	12-May-17
CK Hutchison International 2.88% 2022	1,000	5-Apr-17
Others	16,375	
Indonesia	**15,101**	
Perusahaan Penerbit SBSN *Sukuk* 4.15% 2027	2,000	29-Mar-17
Perusahaan Listrik Negara 4.13% 2027	1,500	15-May-17
Republic of Indonesia (Sovereign) 2.15% 2024	1,184	18-Jul-17
Others	10,417	
Korea, Rep. of	**18,550**	
Republic of Korea (Sovereign) 2.75% 2027	1,000	19-Jan-17
Export-Import Bank of Korea 0.50% 2022	888	30-May-17
Others	16,662	
Malaysia	**3,183**	
Genting Overseas Holdings Limited Capital 4.25% 2027	1,000	24-Jan-17
CIMB Bank 1.93% 2020	600	15-Mar-17
CIMB Bank 3.26% 2022	500	15-Mar-17
Others	1,083	
Philippines	**2,000**	
Republic of the Philippines (Sovereign) 3.7% 2042	2,000	2-Feb-17
Singapore	**6,996**	
DBS Bank 0.38% 2024	888	23-Jan-17
DBS Group Holdings Ltd 1.71% 2020	750	8-Jun-17
Trafigura Group Pte Ltd 6.875% 2050	600	21-Mar-17
Others	4,758	
Thailand	**1,647**	
PTTEP Treasury Center Company 4.60% Perpetual	500	17-Jul-17
Siam Commercial Bank 3.2% 2022	400	26-Jan-17
Others	747	
Emerging East Asia Total	**193,920**	
Memo Items:		
India	**8,728**	
Vedanta Resources PLC 6.375% 2022	1,000	30-Jan-17
Others	7,728	
Sri Lanka	**3,732**	
Republic of Sri Lanka (Sovereign) 6.20% 2027	1,500	11-May-17
Others	**2,232**	

USD = United States dollar.
Notes:
1. Data exclude certificates of deposits.
2. G3 currency bonds are bonds denominated in either euro, Japanese yen, or US dollar.
3. For 2016 data, end of 2016 LCY–USD rates were used; for January-July data, end of July LCY–USD rates were used.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

than domestic markets where interest rates have risen. Authorities in the PRC have been trying to curb the offshore bond boom; however, it is likely to persist.

China Evergrande had the largest G3 bond sales among all issuers in the PRC. The second-largest property developer in the PRC issued a total USD9,124 million of USD-denominated bonds in January–July, USD6,624 million of which were issued in June in a triple-tranche offering that included an 8-year USD4,680 million bond with a coupon rate of 8.75%. China Evergrande's issuance in June was the largest USD-denominated bond ever sold in Asia.[13] Market analysts perceived the outsized bond sales as intended to cushion against domestic credit tightening. They also warned of the risk of rising borrowing costs in Asia's booming bond markets and that markets may struggle to digest the massive bond supply from the PRC. The property firm plans to use the proceeds to refinance current debt as well as for general corporate purposes. China Evergrande is the most indebted property developer in the PRC and is undergoing major restructuring in an attempt to pare down its debt.

Issuers in Hong Kong, China raised a total USD24,375 million of G3 currency bonds in January–July, largely denominated in US dollars and with the remainder in Japanese yen. Its G3 bond issuance increased 73.6% y-o-y, making it the biggest G3 issuer after the PRC during the review period, accounting for 12.6% of the region's total G3 bond issuance.

In the Republic of Korea, G3 bond issuance climbed 10.8% y-o-y to USD18,550 million in the first 7 months of 2017. A large percentage of the issuance was from government-related entities, which raised a total of USD10,387 million. This was followed by banks, which overtook industry as the second leading sector in terms of G3 issuance in 2016. Total G3 bond issuance from the banking sector increased y-o-y, while issuance declined y-o-y in the industrial sector in January–July. Export–Import Bank of Korea was the highest issuer of G3 currency bonds in the Republic of Korea with a total of USD3,688 million. Of this amount, USD1,888 million was raised in April–July via several bond sales, including a lone bond issuance denominated in euros. The Republic of Korea was the third-largest G3 bond issuer among emerging East Asian economies in January–July.

Total G3 currency bond issuance from members of the Association of Southeast Asian Nations (ASEAN) reached USD28,927 million year-to-date through July, up 22.8% y-o-y. Among ASEAN economies, only Indonesia, Malaysia, the Philippines, Singapore, and Thailand had G3 issuance during the review period. Together, they accounted for 14.9% of the total G3 currency bond issuance in emerging East Asia in January–July, down from a 19.7% share in the same period in 2016.

Indonesia remained the largest source of G3 currency bonds among the ASEAN economies. Its issuance reached USD15,101 million in January–July on growth of 34.7% y-o-y. The increase was supported by G3 issuance from the Government of Indonesia totaling USD4,091 million, which comprised JPY100,000 million, EUR1,000 million, and USD2,000 million. The government issues G3 currency bonds as part of its annual financing and debt instrument diversification plans.

Singapore had the second-largest issuance of G3 currency bonds among ASEAN economies in January–July, amounting to USD6,996 million, up 12.4% y-o-y. The issuance was led by the banking sector with sales of USD4,163 million, or 59.5% of the total, almost equally denominated in euros and US dollars. DBS Group Holdings and DBS Bank were the highest issuers during the period with USD1,250 million and USD1,153 million, respectively, in multiple sales.

The Philippines has had no G3 currency bond issuance since its last sale in February. Total G3 bond issuance from Thailand in January–July increased more than 300% to USD1,647 million, lifted mainly by issuances completed in July totaling USD1,085 million. Most of the issuers were from the industrial sector, led by oil and gas exploration and production company PTTEP Treasury Center, which sold a perpetual bond worth USD500 million and with a coupon rate of 4.6%.

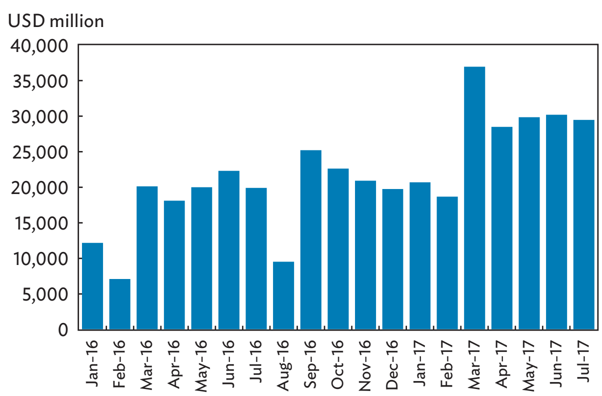
Malaysia was the only market in the region that experienced an annual decline in issuance of G3 currency bonds during the review period. In January–July, issuers

[13] South China Morning Post. 2017. *China Evergrande's US$6.6b Bond Rattles Markets, Prompts Round of Head-Scratching*. 29 June. http://www.scmp.com/business/article/2100620/china-evergrandes-us66b-bond-rattles-markets-prompts-round-head-scratching

from Malaysia raised a total of USD3,183 million, which was down 15.2% y-o-y. The decline may be linked to wariness among potential issuers against the backdrop of negative investor sentiment surrounding the money laundering and embezzlement case of state-owned 1Malaysia Development Berhad, as well as rising risks associated with the upcoming general election that is expected in mid-2018.

A monthly breakdown of the issuance of G3 currency bonds showed a relatively more stable trend in April–July (**Figure 6**). After issuance surged to USD36,992 million in March, issuance from April to July remained in the USD28,000 million–USD30,000 million range. G3 currency bond issuance reached USD27,924 million in April, up 54.2% y-o-y; USD29,890 million in May, up 49.4% y-o-y; USD30,210 million in June, up 35.4% y-o-y; and USD29,492 million in July, up 48.2% y-o-y. The stable trend may be the market's reaction to clearer policy direction in developed economies, indicative of narrowed risk associated with issuing G3 currency bonds. Average monthly issuance in January–July was USD 27,703 million compared with USD17,099 million in the same period in 2016.

Figure 6: G3 Currency Bond Issuance in Emerging East Asia



USD = United States dollar.
Notes:
1. Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; the Lao People's Democratic Republic; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
2. G3 currency bonds are bonds denominated in either euro, Japanese yen, or US dollar.
3. Figures were computed based on 31 July 2017 currency exchange rates and do not include currency effects.

Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Government bond yield curves rose in most markets in emerging East Asia, following a rise in interest rates in most advanced economies, but fell in some markets due to foreign investor demand.

Global economic growth continued to improve in the first half of the year, led primarily by gains in advanced economies. In the US, the labor market continued to strengthen, with the unemployment rate reaching 4.3% in July and 4.4% in August. Nonfarm payrolls added an additional 189,000 jobs in July and 156,000 in August. GDP growth in the US also rebounded to 3.0% y-o-y in Q2 2017 from revised growth of 1.2% in Q1 2017.[14] Personal consumption made a strong showing, growing 3.3% y-o-y in Q2 2017 versus 1.9% in the previous quarter.

Economic developments in the US have allowed the Federal Reserve to remain on track with its monetary policy normalization, raising the key policy rate target in June by 25 basis points to between 1.00% and 1.25%. The Federal Reserve meeting notes indicated that it will begin unwinding its balance sheet in 2017, with some members expressing a preference for providing market participants a specific date for the balance sheet reduction.

Other advanced economies also reported stronger growth prospects. On 8 June, the European Central Bank (ECB) raised its staff projections for GDP growth in 2017 to 1.9% from 1.8%, in 2018 to 1.8% from 1.7%, and in 2019 to 1.7% from 1.6%. Seasonally adjusted GDP growth for Q2 2017 was 2.3% y-o-y, up from 2.0% y-o-y in the prior quarter.[15] In its monetary meeting on 20 July, the ECB noted that the economy continued to expand and that the risks to the growth outlook were roughly balanced.

The Bank of Japan, during its 19 July meeting, noted that the domestic economy continued to operate above output and will continue to do so through 2018. GDP growth in Q2 2017 came in at an annualized 2.5% versus 1.2% in Q1 2017.[16] BOJ also noted that risks to economic growth and inflation remain tilted to the downside.

In most advanced economies, even as economic growth has been on an upward trend, inflation continues to lag. The Federal Reserve noted in its July meeting that

[14] https://www.bea.gov/newsreleases/national/gdp/2017/pdf/gdp2q17_2nd.pdf
[15] http://ec.europa.eu/eurostat/documents/2995521/8213935/2-07092017-AP-EN.pdf/6fe1f60c-51e2-4b98-9d14-ca6ea5c7e260
[16] http://www.esri.cao.go.jp/jp/sna/data/data_list/sokuhou/gaiyou/pdf/main_1.pdf

12-month inflation was still below the 2.0% target. The BOJ and ECB both also noted that inflationary pressures remain low.

One reason for the low inflation in advanced economies is that energy prices have trended downward in 2017. At the start of the year, the price of one barrel of oil was USD52.36 but it had fallen to USD47.57 by 15 August.

Economic growth in advanced economies has helped GDP growth in emerging East Asia. In the PRC, GDP growth in Q2 2017 was 6.9% y-o-y, the same rate as in Q1 2017, despite the government's ongoing deleveraging. Hong Kong, China's GDP growth fell to 3.8% y-o-y in Q2 2017 from 4.3% in Q1 2017, but this was still above trend growth. In Malaysia, GDP growth rose to 5.8% y-o-y in Q2 2017 from 5.6% y-o-y in Q1 2017. GDP growth also accelerated in the Philippines to 6.5% y-o-y in Q2 2017 from 6.4% y-o-y in Q1 2017. In Singapore, GDP growth clocked in at 2.9% y-o-y in Q2 2017 from 2.5% y-o-y in the prior quarter. In Thailand, GDP grew 3.7% y-o-y in Q2 2017 versus 3.3% in Q1 2017. In Viet Nam, GDP grew 5.7% y-o-y in the first half of 2017, up from 5.1% y-o-y in Q1 2017.

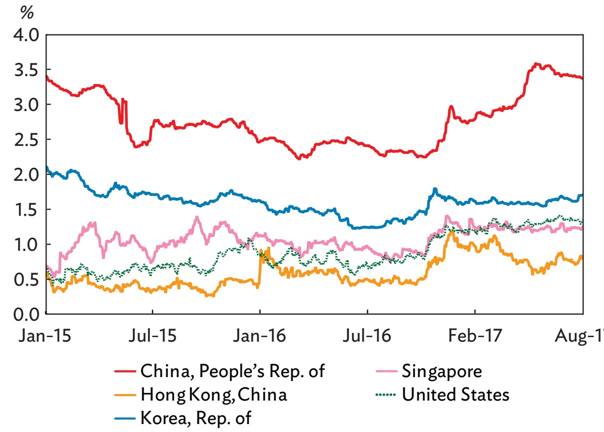
Improving global economic growth has led to increases in the yields of advanced economies, particularly the US, with most emerging East Asian economies following suit. As a result, the 2-year yield trended upward in Hong Kong, China and Singapore, tracking US yield movements (**Figure 7a**).

The 2-year yield trended upward in the PRC due to tightening liquidity as a result of efforts to deleverage its asset markets. The Republic of Korea saw a rise in 2-year yields, tracking the rise in US yields and also on expectations of a wider fiscal deficit resulting from the supplemental budget passed on 22 July.

The 2-year yield trended downward in Indonesia, Thailand, and Viet Nam (**Figure 7b**). Yields in Indonesia and Thailand fell on persistent foreign investor demand. Demand for Indonesian bonds remained strong given high yields and a rating upgrade from S&P Global in May. In Thailand, yields were pushed downward in May and June by deflation.

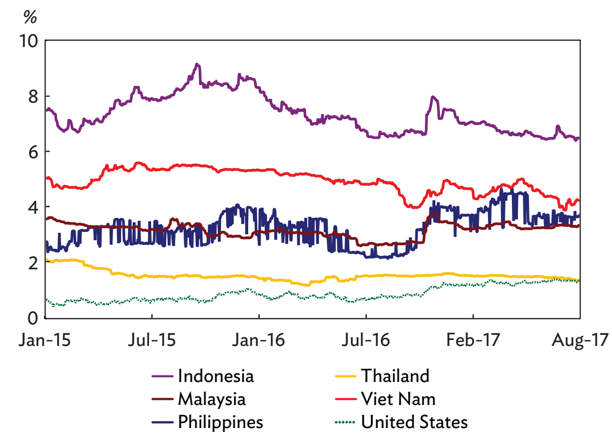
Trends in the 10-year yield were similar to those for the 2-year yield in emerging East Asian bond markets (**Figures 8a, 8b**).

Figure 7a: 2-Year Local Currency Government Bond Yields



Note: Data as of 15 August 2017.
Source: Based on data from Bloomberg LP.

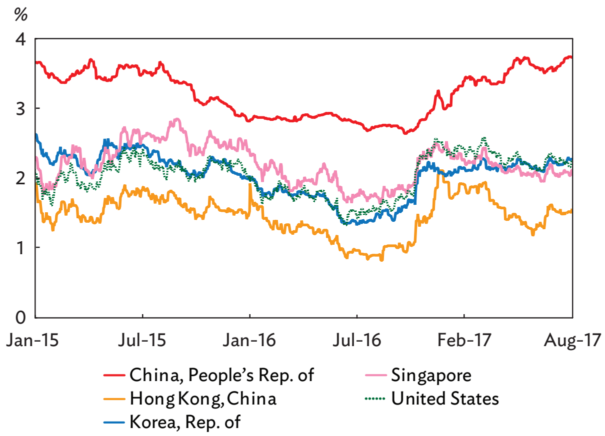
Figure 7b: 2-Year Local Currency Government Bond Yields



Note: Data as of 15 August 2017.
Source: Based on data from Bloomberg LP.

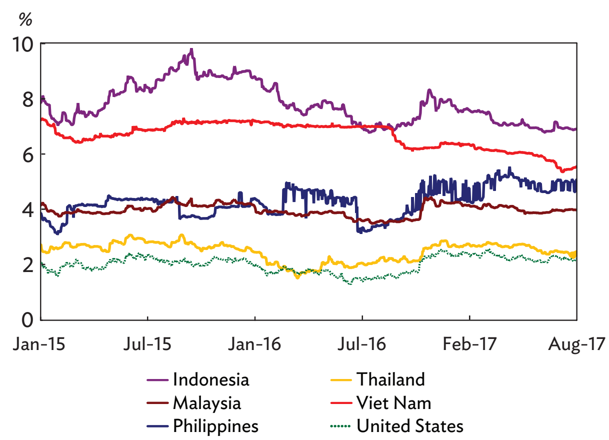
While yield curve movements were generally the same for both 2-year and 10-year yields in most markets, some differences were observed (**Figure 9**). In the PRC, yields at the longer-end of the curve rose between 1 June and 15 August, while yields at the shorter-end fell. The fall at the shorter-end reflected improving liquidity conditions, while the rise at the longer-end reflected renewed market confidence in the PRC's growth prospects. In the Republic of Korea, yields also fell at the very short-end of the curve, while yields rose at the longer-end due to foreign investor demand at the shorter-end.

Figure 8a: 10-Year Local Currency Government Bond Yields



Note: Data as of 15 August 2017.
Source: Based on data from Bloomberg LP.

Figure 8b: 10-Year Local Currency Government Bond Yields



Note: Data as of 15 August 2017.
Source: Based on data from Bloomberg LP.

The yield curve shifted upward for Hong Kong, China and Singapore as these two markets closely track yield movements in the US. Other markets that saw rising yields in line with US yield movements include Malaysia and the Philippines. Only Indonesia, Thailand, and Viet Nam saw a downward shift in their respective yield curves. In the cases of Indonesia and Thailand, the fall in yields was driven by continued demand from foreign investors.

Inflation slowed in July compared to inflation rates in January with some exceptions. Inflation has trended upward in Hong Kong, China; Indonesia; and the Republic of Korea (**Figures 10a, 10b**). Other markets have trended downward or have remained broadly stable.

Central banks in emerging East Asia have kept policy rates steady as economic growth in advanced economies continues as expected and the market assesses potential risks to the growth outlook. The exceptions were Hong Kong, China, which lacks an independent monetary policy, and Viet Nam, which reduced its policy rate to help spur economic growth (**Figures 11a, 11b**).

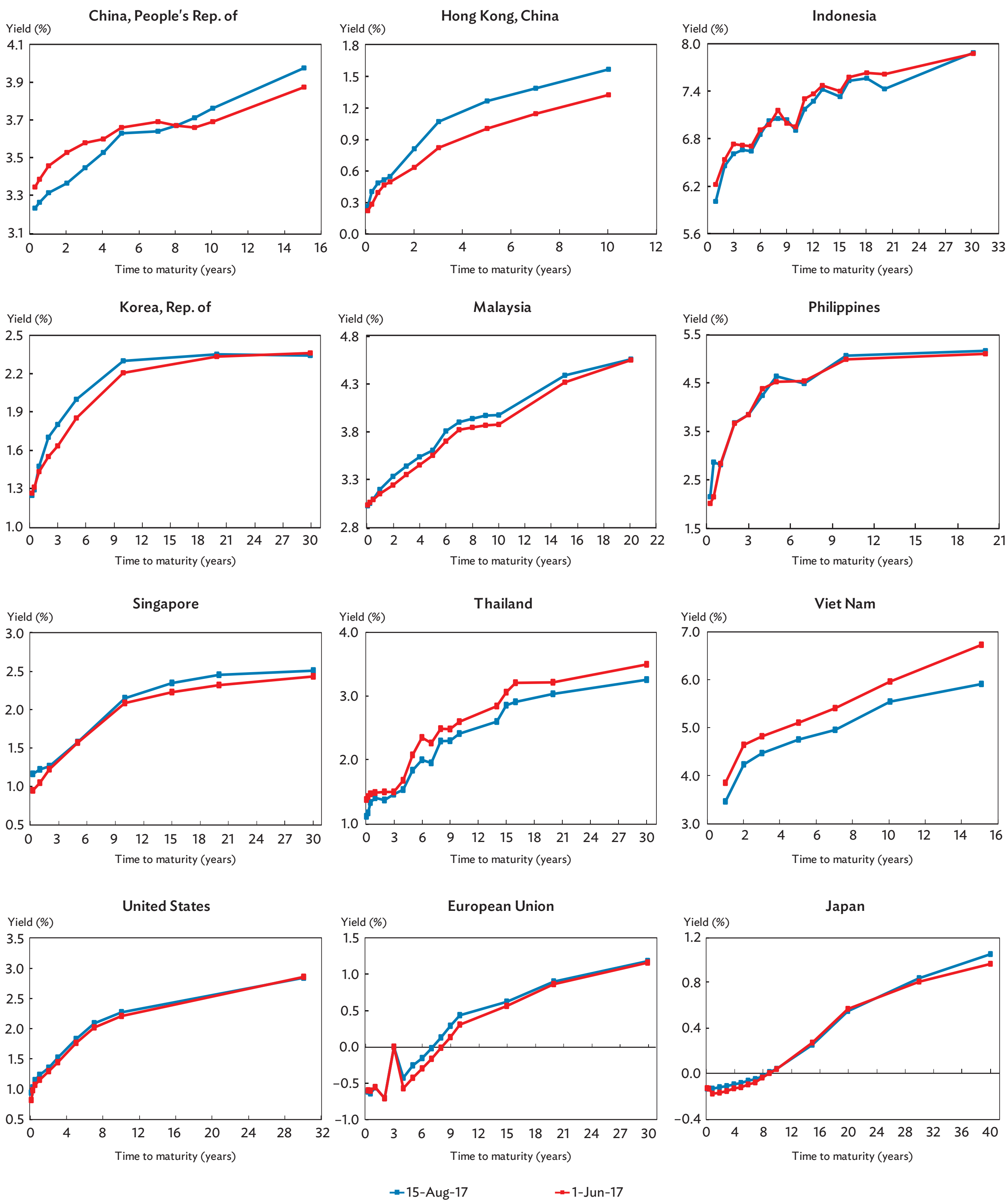
Consistent with the improvements in economic growth, the 2-year versus 10-year yield spread widened for most markets in emerging East Asia between 1 June and 15 August. The exceptions were the Republic of Korea, Thailand, and Viet Nam (**Figure 12**).

The AAA-rated corporate versus government yield spread fell in the PRC and Malaysia, but rose in the Republic of Korea

The spread between AAA-rated corporate yields and government yields narrowed from 1 June to 15 August in the PRC and Malaysia on positive economic growth. However, risk aversion in the Republic of Korea caused the spread to rise during the review period (**Figure 13a**).

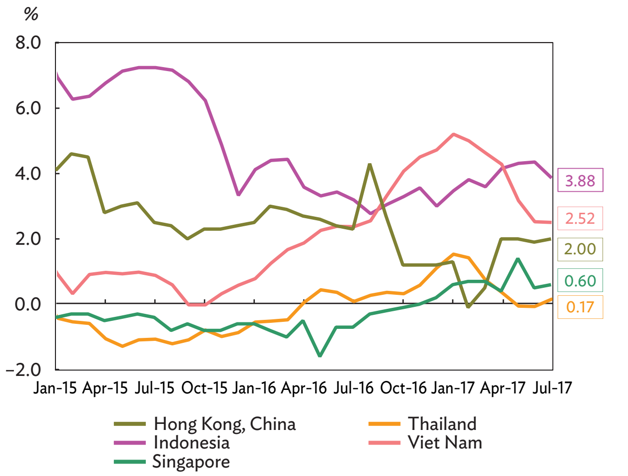
Spreads between AAA-rated corporates and lower-rated corporates also fell between 1 June and 15 August in the PRC on improved growth, while rising in Malaysia and remaining unchanged in the Republic of Korea (**Figure 13b**).

Figure 9: Benchmark Yield Curves—Local Currency Government Bonds



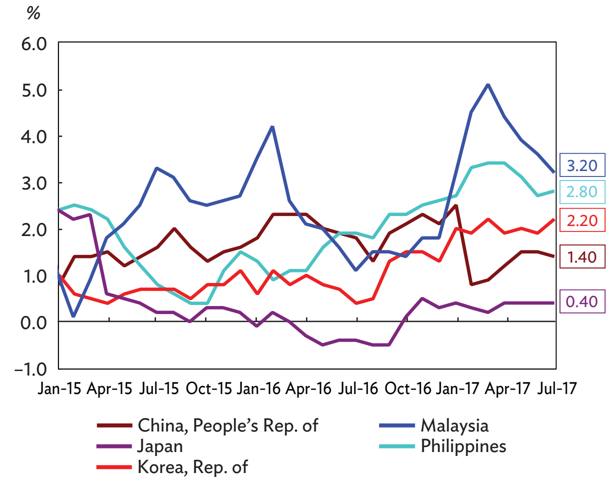
Source: Based on data from Bloomberg LP and Thai Bond Market Association.

Figure 10a: Headline Inflation Rates



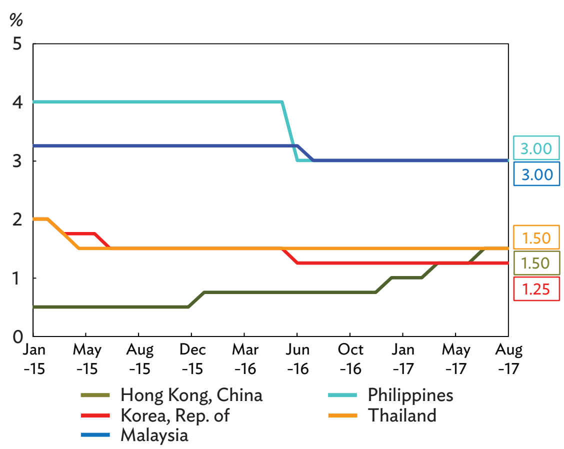
Note: Data as of July 2017.
Source: Based on data from Bloomberg LP.

Figure 10b: Headline Inflation Rates



Note: Data as of July 2017.
Source: Based on data from Bloomberg LP.

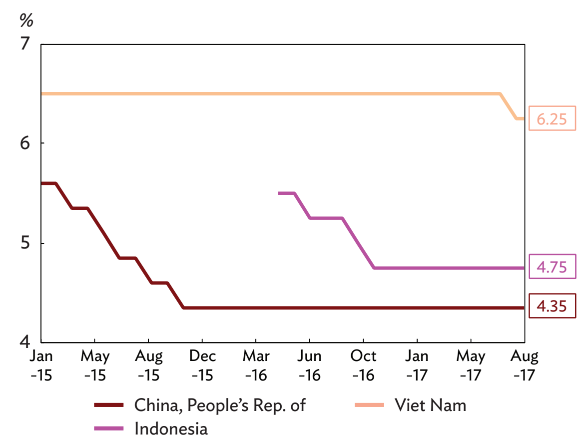
Figure 11a: Policy Rates



Notes:
1. Data as of 15 August 2017.
2. The policy rate of the Philippines was adjusted to 3.0% from 4.0% in June 2016 following the shift in the Bangko Sentral ng Pilipinas' monetary operations to an interest rate corridor system.

Source: Based on data from Bloomberg LP.

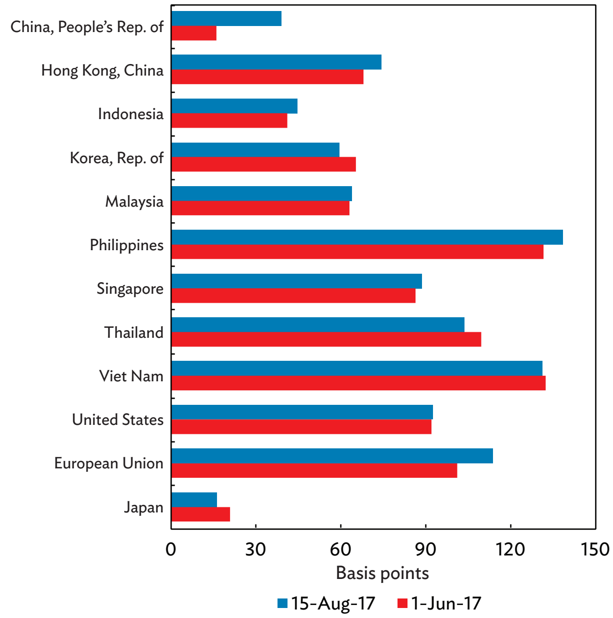
Figure 11b: Policy Rates



Notes:
1. Data as of 15 August 2017.
2. Bank Indonesia shifted its policy rate to the 7-day reverse repurchase rate effective 19 August 2016.

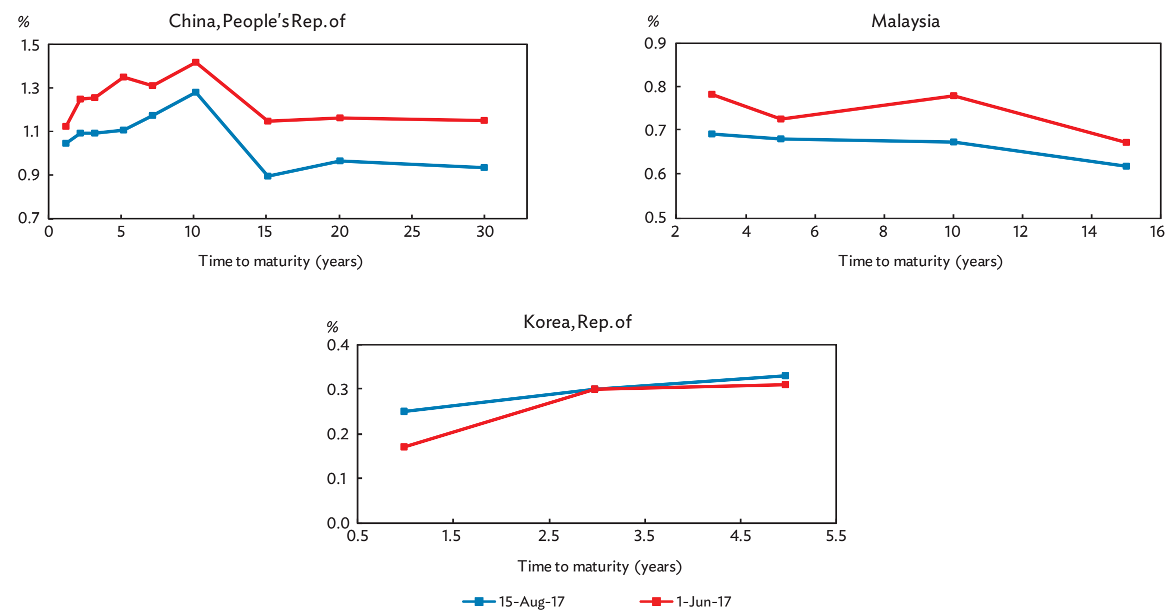
Source: Based on data from Bloomberg LP.

Figure 12: Yield Spreads Between 2-Year and 10-Year Government Bonds



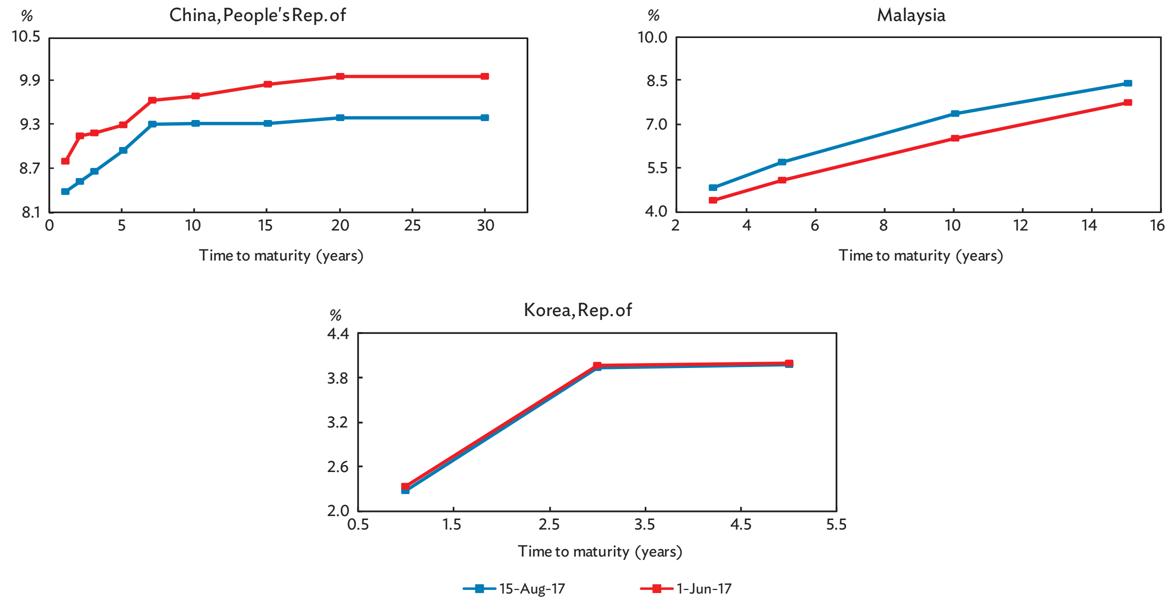
Source: Based on data from Bloomberg LP.

Figure 13a: Credit Spreads—Local Currency Corporates Rated AAA vs. Government Bonds



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 31 May 2017 and 14 August 2017.
Sources: People's Republic of China (*Wind Information*), Republic of Korea (*EDAILY BondWeb*), and Malaysia (Bank Negara Malaysia).

Figure 13b: Credit Spreads—Lower-Rated Local Currency Corporates vs. AAA



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 31 May 2017 and 14 August 2017.

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

Policy and Regulatory Developments

People's Republic of China

Rules Issued for Bond Connect

In June, the People's Republic of China (PRC) issued regulations governing foreign investment in the interbank bond market through Bond Connect, a program that links the PRC's and Hong Kong, China's bond markets. Under the Bond Connect regulations, foreign investors can purchase bonds in the PRC's interbank bond market using either renminbi or a foreign currency. Qualified investors include foreign central banks, sovereign wealth funds, international organizations, investors under the Renminbi Qualified Foreign Institutional Investor program, and financial institutions.

Rules Issued to Distinguish between Ordinary and Professional Investors

In July, the PRC issued regulations that require investors in securities to be classified as either professional or ordinary investors based on asset size, earnings, and investment experience. To be classified as professional, investors must have assets of at least CNY5 million or yearly income of at least CNY500,000. They must also have at least 2 years of investment experience. The rule does not prevent ordinary investors from purchasing riskier products, rather they must be informed about the riskiness of the investment if they seek to purchase assets deemed to be above their risk level.

Hong Kong, China

Hong Kong, China's Renminbi Quota for Institutional Investors Increased

In July, the Hong Kong Monetary Authority announced that the PRC's State Council approved an increase in Hong Kong, China's Renminbi Qualified Foreign Institutional Investor quota from CNY270 billion to CNY500 billion.

Indonesia

Bank Indonesia to Allow Non-Dollar Currency Swaps for Hedging

In July, Bank Indonesia announced that it will allow non-dollar currency swaps for hedging transactions. Initially, the central bank will enter into hedging transactions for Japanese yen swaps, which will be followed by swaps denominated in euros and Chinese renminbi. The move by Bank Indonesia is expected to reduce dependence on the US dollar for trade and finance.

Indonesian Parliament Approves Revision to 2017 State Budget

On 27 July, the Indonesian Parliament approved the government's proposed revision to the 2017 state budget. The revised state budget now estimates marginally lower revenue of IDR1,736.1 trillion and higher spending of IDR2,133.3 trillion. As a result, the budget deficit was projected to reach an equivalent of 2.9% of GDP, up from 2.4% in the original budget. To fund the budget gap, the government will increase its bond issuance in 2017 to IDR467.3 trillion. The underlying macroeconomic assumptions for the revised budget include (i) annual GDP growth of 5.2%, (ii) annual inflation of 4.3%, (iii) an exchange rate of IDR13,400 per USD1, (iv) a 3-month Treasury bill annual rate of 5.2%, and (v) an Indonesian crude oil price of USD48 per barrel.

Bank Indonesia Releases New Regulations for Commercial Paper Issuance

Bank Indonesia released new regulations for the issuance of commercial paper by nonbank corporate entities. The new regulations, which came into effect on 4 September, allow corporates to issue commercial paper with a maturity of 1 year or less, subject to certain requirements. The new rules governing commercial paper issuance require issuing companies to have a healthy financial position for a period of 3 years and an assessment from a rating agency.

Republic of Korea

National Assembly Approves KRW11.2 Trillion Supplementary Budget

In July, the Republic of Korea's National Assembly approved the government's KRW11.2 trillion supplementary budget proposal. The supplementary budget will allocate KRW4.2 trillion to increase hiring in the public sector and provide more regular jobs in small and medium-sized enterprises. Of the total supplementary budget, KRW1.2 trillion will be allotted to programs that expand employment, particularly among the youth and women who want to return to the workforce; KRW2.3 trillion will be spent on policies to support the working class, including an expansion of the number of basic social security beneficiaries; and KRW3.5 trillion will be used to support local governments, particularly education programs.

Financial Services Commission Announces New Mortgage Rules

In August, the Financial Services Commission announced new measures to curb speculative demand in the Republic of Korea's housing market. Measures include tightening the loan-to-value and debt-to-income ratios to 40% each for home buyers in "bubble-prone areas." For multiple homeowners, mortgage borrowing will also be subject to tighter loan-to-value and debt-to-income ratios; the ratios for both will be trimmed by 10 percentage points.

Malaysia

Bank Negara Malaysia Removes Reserve Fund Requirement for Islamic Banks

Bank Negara Malaysia will no longer require Islamic banks to maintain reserve funds effective 3 May. In the past, Islamic banking institutions were required to set aside a percentage of profits into a reserve fund prior to dividend distribution to serve as a buffer to be drawn upon during periods of stress. This prudential tool ensured banks could continue serving as financial intermediaries without disruption. According to the central bank, with the new policy in place, Islamic banks are only required to maintain minimum capital to operate and provide financial services effectively, and also remain to comply with the stringent capital requirements of the Basel III accord.

Bursa Malaysia Launches Leading Entrepreneur Accelerator Platform

Bursa Malaysia launched in July a platform for small and medium-sized enterprises (SMEs), the Leading Entrepreneur Accelerator Platform (LEAP), to serve as avenue to tap the capital market. SMEs can be listed on LEAP to provide them fund-raising through the capital market and at the same time comply with the regulations required of a firm preparing for a formal listing. LEAP is part of a system in which SMEs and start-ups can be listed on the equity crowdfunding platform, then on LEAP, and subsequently on the Ace Market and Main Market. Qualifying for listing on the platform does not require a track record of profits and operating history.

Philippines

Bangko Sentral ng Pilipinas Considers Liberalizing Foreign Exchange Rules

In July, the Bangko Sentral ng Pilipinas announced new reforms aimed at further liberalizing the foreign exchange market, including easing existing rules on foreign currency exchange to make it more attractive for the public to transact through formal platforms such as banks rather than in unregulated platforms like money changers and remittance agents. Current rules are seen by the Bangko Sentral ng Pilipinas as restrictive, difficult, opaque, and shallow, resulting in higher costs of doing business and an expanding black market. The proposed liberalization would make the system more risk-based and transparent.

Department of Finance Outlines the Second Package of the Comprehensive Tax Reform Program

In May, the Department of Finance said it expects to submit the second package of the comprehensive tax reform program to the Philippine Congress by the fourth quarter of 2017. The second package will plug tax holiday loopholes granted by investment promotion agencies such as the Board of Investments and the Philippine Economic Zone Authority. The current tax perks allow companies to shift expenses from projects that are subject to tax holidays in order to maximize profits. The second package is revenue neutral wherein forgone revenue from lowering the corporate income tax rate to 25% from 30% will be offset by eliminating some tax incentives.

Singapore

Monetary Authority of Singapore Offers Grant to Encourage Rated Bond Issuance

On 30 June, the Monetary Authority of Singapore (MAS) launched a Singapore dollar credit rating grant to promote the issuance of rated bonds in the LCY bond market. MAS noted that only about half of the current outstanding corporate SGD-denominated bonds are rated. The SGD400,000 grant per issuer will be available to qualified foreign and domestic issuers for a 5-year period and will be used to cover all expenses related to obtaining credit ratings from an international credit rating agency.

Thailand

Bank of Thailand Reduces Issuance of Short-Term Bills

In April, the BOT decided to scale back the issuance of bills with 3-month and 6-month maturities by THB80 billion. The new measure was made to curb the rapid appreciation of the Thai baht.

Bank of Thailand Eases Regulations on Foreign Exchange

On 5 June, the BOT relaxed its foreign exchange regulations to enhance the ease of doing business through a reduction in compliance costs. Starting in the fourth quarter of 2017, Thai investors with assets above THB50 million will be allowed to directly invest a maximum of USD1 million in securities abroad each year. The reform aims to give the private sector flexibility in conducting foreign exchange transactions and hedging based on internal risk management and control policies within the framework set by BOT. The loosening of foreign exchange rules will (i) streamline the process, reduce required documents, and encourage the use of electronic forms; (ii) enhance flexibility in foreign exchange risk management; (iii) allow more alternatives in foreign exchange services, especially in retail cross-border transactions; and (iv) allow more investment options for investors and companies based in Thailand. Given the continued appreciation of the Thai baht, the BOT reform will not only improve the ease of doing business, but also address currency speculation by improving the process of capital outflows.

Viet Nam

State Treasury to Issue VND45 Trillion of Government Bonds in the Third Quarter of 2017

In July, the State Treasury announced its bond issuance plan for the third quarter of 2017 valued at VND45 trillion. Of this amount, VND18 trillion is expected to be raised from the issuance of 5-year bonds and VND3 trillion from 7-year bonds. Bond sales amounting to VND6 trillion each are targeted from the issuance of 10-, 15-, 20-, and 30-year bonds.

Viet Nam Launches Derivatives Market

In August, a derivatives market was officially launched in Viet Nam, marking an important milestone in the development of its securities market. Three types of derivatives instruments will be offered: (i) futures contract for the VN30 Index, (ii) futures contract for the HNX30 Index, and (iii) futures contract for 5-year government bonds. The futures contract for the VN30 Index was the first derivatives product to be launched.

Market Summaries

People's Republic of China

Yield Movements

In the second quarter (Q2) of 2017, the yield curve of the People's Republic of China (PRC) experienced unusual movements. Between 1 June and 15 August, the PRC's yield curve rose at the longer-end and declined at the shorter-end (**Figure 1**). Yields rose between 5 basis points (bps) and 10 bps for tenors of 9 years or longer. In contrast, yields for tenors of 3 years or less fell between 11–16 bps during the review period, while tenors between 4 years and 7 years fell 3–7 bps.

The yield movements during the review period reflect a correction of the inverted yield curve that occurred in May. On 24 May, the 5-year yield had risen to 3.75%, while the 7-year, 8-year, and 9-year tenors had fallen to 3.74%, 3.73%, and 3.74%, respectively. Tenors of less than 5 years experienced a rapid rise in yields in May.

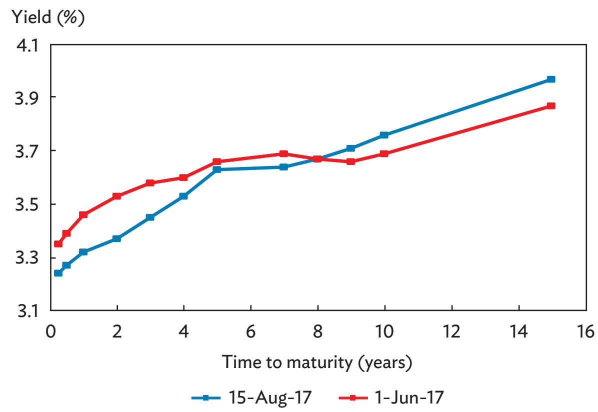
The yield curve's inversion reflected the tightening liquidity situation in the PRC driven by deleveraging. In Q1 2017, the PRC raised rates on its open market operations to reduce demand for credit. The tight liquidity situation particularly affected shorter-term yields as borrowing costs were pushed up.

Concerns that the PRC's economy would slow down, partly as a result of deleveraging, also caused some yields to decline at the longer-end of the curve during the period. However, concerns regarding the health of the domestic economy abated when the PRC reported real gross domestic product growth of 6.9% year-on-year (y-o-y) in Q2 2017, the same pace as in Q1 2017.

Industrial production growth in the first half of 2017 was better than the same period in 2016. While industrial production growth fell to 6.4% y-o-y in July from 7.6% y-o-y in June, growth rates were still better compared with year ago levels.

The improved growth prospects helped restore market confidence in the PRC's economy, causing interest rates to rise at the longer-end of the curve. Furthermore,

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



Source: Based on data from Bloomberg LP.

the People's Bank of China (PBOC) helped ease the liquidity situation by injecting a net CNY220 billion into the financial system on 23 July through open market operations. Market participants, however, believe this does not change the PBOC's stance toward deleveraging. Rather, it is viewed as part of efforts to manage financial conditions to prevent a cash crunch as the PBOC continues guarding against credit risk. The easing of financial conditions helped pushed down rates at the shorter-end and increase them at the longer-end of the curve as expectations of better growth led to the yield curve shift seen between 1 June and 15 August.

Inflation eased slightly to 1.4% y-o-y in July from 1.5% y-o-y in June.

Size and Composition

LCY bonds outstanding expanded 4.1% quarter-on quarter (q-o-q) and 12.9% y-o-y in Q2 2017 to reach CNY51.9 trillion at the end of June. The pace of growth quickened from Q1 2017's 0.8% q-o-q (**Table 1**).

Government bonds. Growth in the PRC's bond market was driven by increases in the government bond

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

	Outstanding Amount (billion)						Growth Rates (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	CNY	USD	CNY	USD	CNY	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**45,980**	**6,916**	**49,895**	**7,245**	**51,931**	**7,658**	**8.0**	**30.6**	**4.1**	**12.9**
Government	31,286	4,706	35,113	5,098	37,159	5,480	12.6	40.0	5.8	18.8
Treasury Bonds	18,955	2,851	22,510	3,268	24,405	3,599	19.5	68.0	8.42	28.7
Central Bank Bonds	428	64	0	0	0	0	0.0	0.0	(100.0)	(100.0)
Policy Bank Bonds	11,902	1,790	12,604	1,830	12,755	1,881	3.4	11.9	1.2	7.2
Corporate	14,694	2,210	14,782	2,146	14,771	2,178	(0.6)	14.3	(0.1)	0.5
Policy Bank Bonds										
China Development Bank	6,976	1,049	7,185	1,043	7,183	1,059	2.3	6.7	(0.03)	3.0
Export–Import Bank of China	1,988	299	2,190	318	2,217	327	3.9	10.6	1.2	11.5
Agricultural Devt. Bank of China	2,939	442	3,229	469	3,355	495	5.8	28.0	3.9	14.1

( ) = negative, CNY = Chinese yuan, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, 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–USD rates are used.
4. Growth rates are calculated from an LCY base and do not include currency effects.
Sources: *ChinaBond*, *Wind Info*, and Bloomberg LP.

segment. Government bonds outstanding increased 5.8% q-o-q in Q2 2017, up from 1.6% q-o-q growth in the previous quarter, mainly led by local government bonds outstanding, which grew 13.0% q-o-q in Q2 2017 versus 3.6% q-o-q in Q1 2017.

Despite ongoing deleveraging in the PRC, local governments continued to issue bonds to refinance debt and obtain additional funding. In addition, the central government increased the local government bond quota limit for 2017 to CNY18.8 trillion. However, the pace of growth in Q2 2017 was down on a y-o-y basis, rising 50.0% y-o-y versus 93.2% y-o-y in Q2 2016.

There were no central bank bonds outstanding in Q2 2017 as the PBOC no longer issues such bonds.

Corporate bonds. Corporate bonds outstanding continued to decline in Q2 2017, albeit at a slower pace, falling 0.1% q-o-q in Q2 2017 to CNY14.8 trillion, following a 1.2% q-o-q decline in Q1 2017, as the ongoing deleveraging in the PRC led to reduced corporate demand for funding. The biggest decline came from commercial paper, which fell 13.3% q-o-q as rising rates, particularly for shorter-dated tenors, made companies reluctant to issue funds with short maturities (**Table 2**). State-owned enterprise bonds also fell in Q2 2017, declining 4.3% q-o-q, followed by medium-term notes, which dropped 0.8% q-o-q.

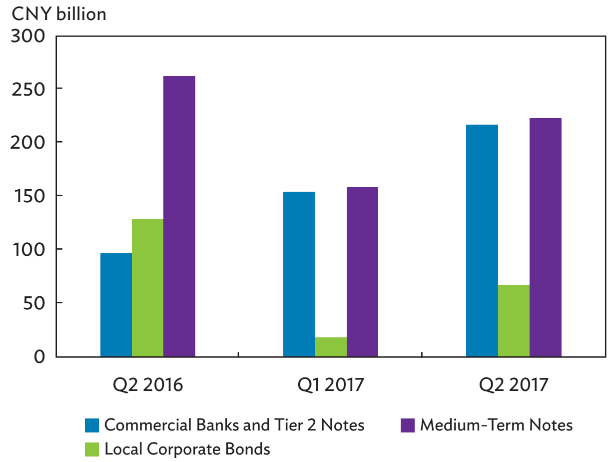
Issuance has recovered somewhat in 2017, rising 23.0% q-o-q in Q2 2017 due to the refinancing of maturing corporate bonds; outstanding corporate bonds

Table 2: Corporate Bonds Outstanding in Key Categories

	Amount (CNY billion)			Growth Rate (%)			
				Q2 2016		Q2 2017	
	Q2 2016	Q1 2017	Q2 2017	q-o-q	y-o-y	q-o-q	y-o-y
Commercial Bank Bonds and Tier 2 Notes	2,271	2,534	2,713	1.0	29.9	7.1	19.5
SOE Bonds	575	542	519	1.0	(6.1)	(4.3)	(9.7)
Local Corporate Bonds	2,787	2,912	2,932	1.0	13.5	0.7	5.2
Commercial Paper	2,652	1,912	1,657	0.9	15.0	(13.3)	(37.5)
Medium-Term Notes	4,559	4,701	4,662	1.0	9.8	(0.8)	2.3

( ) = negative, CNY = Chinese yuan, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, SOE = state-owned enterprise, y-o-y = year-on-year.
Sources: *ChinaBond* and *Wind Info*.

Figure 2: Corporate Bond Issuance in Key Sectors



CNY = Chinese yuan, Q1 = first quarter, Q2 = second quarter.
Sources: *ChinaBond* and *Wind Info*.

fell only 0.1% q-o-q. However, on a y-o-y basis corporate bond issuances fell 18.4% in Q2 2017. The q-o-q rise in issuance was mostly in the form of medium-term notes and issuances by financial institutions (**Figure 2**).

The PRC's corporate bond market is dominated by a few big issuers (**Table 3**). At the end of June, the top 30 corporate bond issuers accounted for CNY5.9 trillion worth of corporate bonds outstanding, or about 40.3% of the total market. Of the top 30, the 10 largest issuers accounted for CNY3.8 trillion.

The top 30 issuer includes 14 banks, which continue to dominate the list as they generate funding in order to beef up their capital bases and liquidity, and lengthen their maturity profiles.

Table 4 lists the largest corporate bond issuances in Q2 2017. All of the companies on the list are financial institutions, except for one firm engaged in asset management.

Investor Profile

Treasury bonds and policy bank bonds. The share of Treasury bonds, including policy bank bonds, held by banks declined to 67.3% of the total at the end of June from 69.9% in June 2016 (**Figure 3**). Fund institutions' share rose to 14.8% from 12.3% during the review period.

Corporate bonds. Funds institutions' share of total corporate bonds outstanding rose to 47.5% at the end of June from 41.8% a year earlier due to increased demand for yield (**Figure 4**). In addition, the share of banks' holdings of corporate bonds fell to 15.9% from 19.5% during the review period.

Figure 5 presents investor profiles across different corporate bond categories at the end of June. Funds institutions remain the dominant buyers of both local corporate bonds and medium-term notes, while banks and funds institutions were the dominant holders of commercial bank bonds.

Liquidity

The volume of interest rate swaps rose 6.0% q-o-q due to volatile interest rate movements in Q2 2017. The 7-day repurchase interest rate remained the most used interest rate swap, comprising an 88.6% share of the total interest rate swap volume during the quarter (**Table 5**).

There was an uptick in turnover volume in Q2 2017 for government bonds, owing to the fall in interest rates at the longer-end of the curve (**Figure 6**).

Policy, Institutional, and Regulatory Developments

Rules Issued for Bond Connect

In June, the PRC issued regulations governing foreign investment in the interbank bond market through Bond Connect, a program that links the PRC's and Hong Kong, China's bond markets. Under the Bond Connect regulations, foreign investors can purchase bonds in the PRC's interbank bond market using either renminbi or a foreign currency. Qualified investors include foreign central banks, sovereign wealth funds, international organizations, investors under the Renminbi Qualified Foreign Institutional Investor program, and financial institutions.

Table 3: Top 30 Issuers of Local Currency 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 (USD billion)			
1.	China Railway	1,436.5	211.85	Yes	No	Transportation
2.	State Grid Corporation of China	420.8	62.06	Yes	No	Public Utilities
3.	China National Petroleum	315.0	46.45	Yes	No	Energy
4.	Agricultural Bank of China	278.0	41.00	Yes	Yes	Banking
5.	Industrial and Commercial Bank of China	268.0	39.52	Yes	Yes	Banking
6.	Bank of China	258.9	38.18	Yes	Yes	Banking
7.	Bank of Communications	245.0	36.13	Yes	Yes	Banking
8.	China Construction Bank	212.0	31.26	Yes	Yes	Banking
9.	Shanghai Pudong Development Bank	191.6	28.26	No	Yes	Banking
10.	Industrial Bank	185.0	27.28	No	Yes	Banking
11.	China CITIC Bank	157.5	23.23	No	Yes	Banking
12.	China Minsheng Banking	155.1	22.87	No	Yes	Banking
13.	China Everbright Bank	154.9	22.84	Yes	Yes	Banking
14.	State Power Investment	139.1	20.52	Yes	Yes	Energy
15.	Bank of Beijing	137.9	20.34	Yes	Yes	Banking
16.	PetroChina	135.0	19.91	Yes	Yes	Energy
17.	Central Huijin Investment	109.0	16.07	Yes	Yes	Asset Management
18.	Huaxia Bank	108.4	15.99	Yes	Yes	Banking
19.	China Huarong Asset Management	106.0	15.63	Yes	Yes	Asset Management
20.	Shenhua Group	96.5	14.23	Yes	Yes	Mining
21.	Dalian Wanda Commercial Properties	93.0	13.71	No	Yes	Real Estate
22.	China Cinda Asset Management	91.0	13.42	Yes	Yes	Asset Management
23.	China Three Gorges	90.0	13.27	Yes	Yes	Public Utilities
24.	Tianjin Infrastructure Construction and Investment Group	87.3	12.87	Yes	No	Construction
25.	China Guangfa Bank	86.5	12.76	Yes	Yes	Banking
26.	Haitong Securities	81.2	11.98	No	Yes	Brokerage
27.	Guotai Junan Securities	79.0	11.65	No	Yes	Brokerage
28.	Lu'An Mining Industry Group	77.6	11.44	Yes	No	Mining
29.	China Merchants Bank	77.0	11.36	Yes	Yes	Banking
30.	Datong Coal Mine Group	76.8	11.33	Yes	No	Mining
Total Top 30 LCY Corporate Issuers		**5,949.62**	**877.41**			
Total LCY Corporate Bonds		**14,771.24**	**2,178.36**			
Top 30 as % of Total LCY Corporate Bonds		**40.3%**	**40.3%**			

CNY = Chinese yuan, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
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 LP data.

Table 4: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

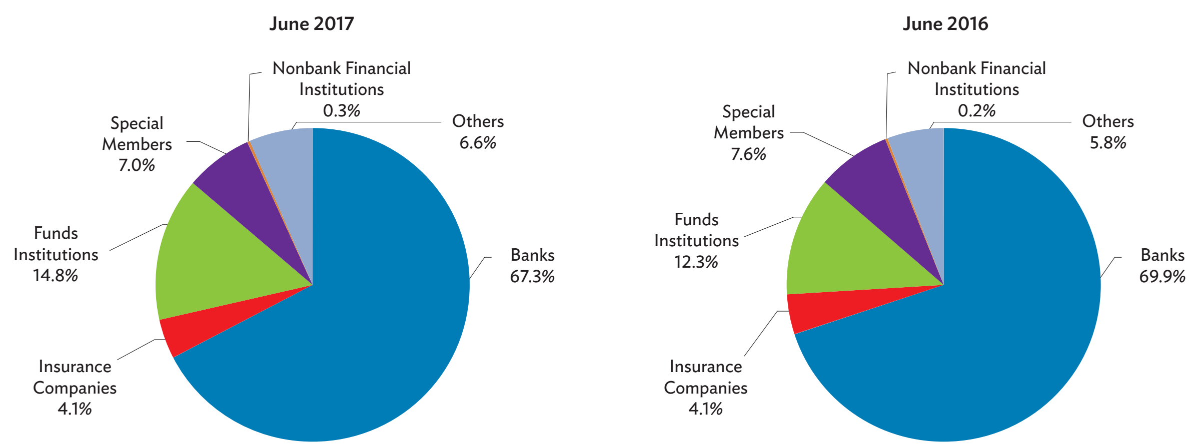
Corporate Issuers	Coupon Rate (%)	Issued Amount (CNY billion)
China CITIC Bank		
3-year bond	4.20	50.0
Bank of Communications		
10-year bond	4.50	30.0
Huaxia Bank		
10-year bond	4.80	30.0
China Cinda Asset Management		
3-year bond	4.30	2.0
5-year bond	4.40	4.0
10-year bond	4.75	24.0
Shanghai Pudong Development Bank		
3-year bond	4.20	22.0

CNY = Chinese yuan.
Source: Based on data from Bloomberg LP.

Rules Issued to Distinguish between Ordinary and Professional Investors

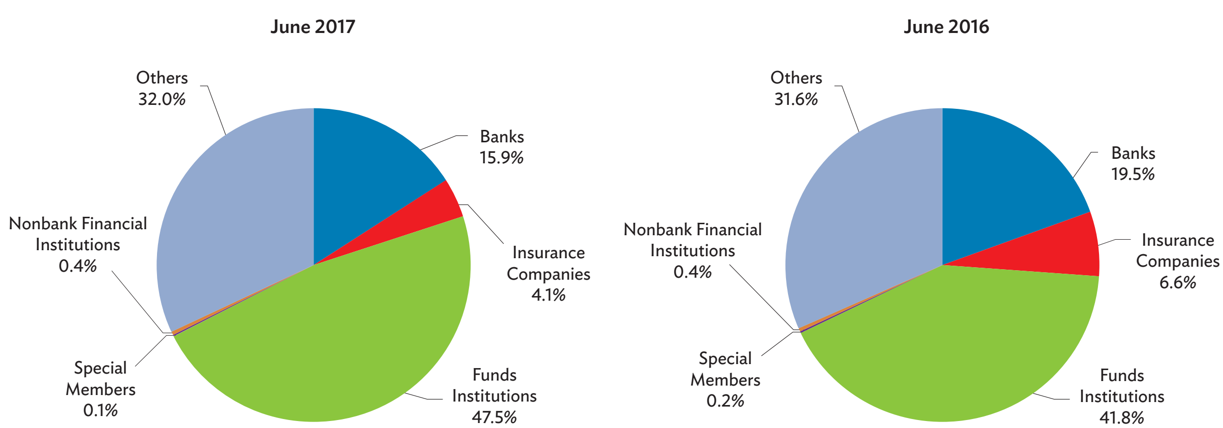
In July, the PRC issued regulations that require investors in securities to be classified as either professional or ordinary investors based on asset size, earnings, and investment experience. To be classified as professional, investors must have assets of at least CNY5 million or yearly income of at least CNY500,000. They must also have at least 2 years of investment experience. The rule does not prevent ordinary investors from purchasing riskier products, rather they must be informed about the riskiness of the investment if they seek to purchase assets deemed to be above their risk level

Figure 3: Local Currency Treasury Bonds and Policy Bank Bonds Investor Profile



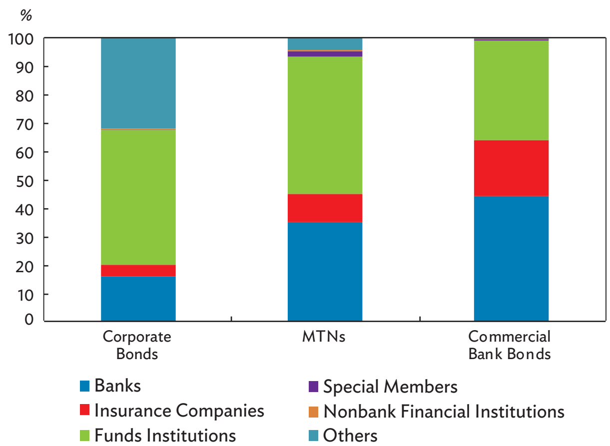
Source: *ChinaBond*.

Figure 4: Local Currency Corporate Bonds Investor Profile



Source: *ChinaBond*.

Figure 5: Investor Profile across Bond Categories



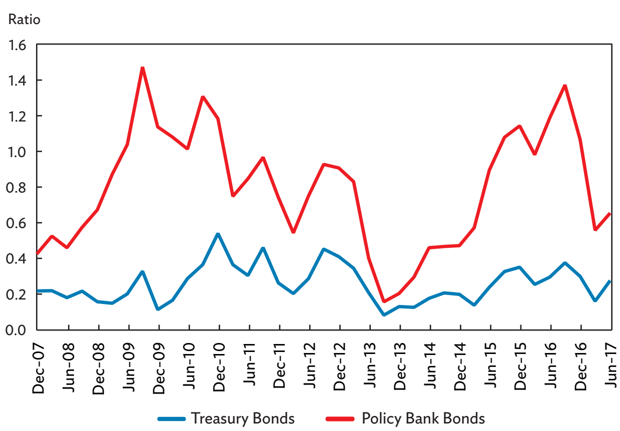
MTNs = medium-term notes.
Note: Data as of end-June 2017.
Source: *ChinaBond*.

Table 5: Notional Values of the People's Republic of China's Interest Rate Swap Market in the Second Quarter of 2017

Interest Rate Swap Benchmarks	Notional Amount (CNY billion)	Share of Total Notional Amount (%)	Growth Rate (%)
	Q2 2017		q-o-q
7-Day Repo Rate	2,519.4	88.59	5.01
Overnight SHIBOR	8.7	0.31	(51.26)
3-Month SHIBOR	312.8	11.00	18.57
1-Year Term Deposit Rate	1.2	0.04	(7.69)
1-Year Lending Rate	0.6	0.02	(7.54)
3-Year Lending Rate	1.2	0.04	100.00
Total	**2,844.0**	**100.00**	**6.00**

( ) = negative, CNY = Chinese yuan, q-o-q = quarter-on-quarter, Q1 = first quarter, Repo = repurchase, SHIBOR = Shanghai Interbank Offered Rate.
Note: Growth rate computed based on notional amounts.
Sources: *AsianBondsOnline* and *ChinaMoney*.

Figure 6: Turnover Ratios for Government Bonds



Source: *ChinaBond*.

Hong Kong, China

Yield Movements

The local currency (LCY) government bond yield curve of Hong Kong, China rose for all tenors between 1 June and 15 August (**Figure 1**). The yield curve also steepened, with longer-dated tenors rising at a much faster pace than yields with tenors of 1 year or less. Yields rose between 18 basis points (bps) and 26 bps for tenors longer than 1 year and between 4 bps and 12 bps for tenors of 1 year or less. As a result, the 2-year versus 10-year yield spread rose 6 bps from 68 bps to 75 bps between 1 June and 15 August.

The rise in Hong Kong, China's government bond yields tracked United States (US) interest rate movements due to the pegging of the Hong Kong dollar to the US dollar. On average, the US yield curve shifted upward by 7 bps from 1 June to 15 August, excluding the yield for the 30-year tenor, which fell 1 bp.

Better economic growth in Hong Kong, China also helped push yields up. Hong Kong, China's gross domestic product (GDP) rose 3.8% year-on-year (y-o-y) in the second quarter (Q2) of 2017 after a 4.3% y-o-y rise in the previous quarter. On a seasonally adjusted and quarter-on-quarter (q-o-q) basis, GDP growth accelerated to 1.0% in Q2 2017 from 0.7% in the first quarter (Q1) of 2017.

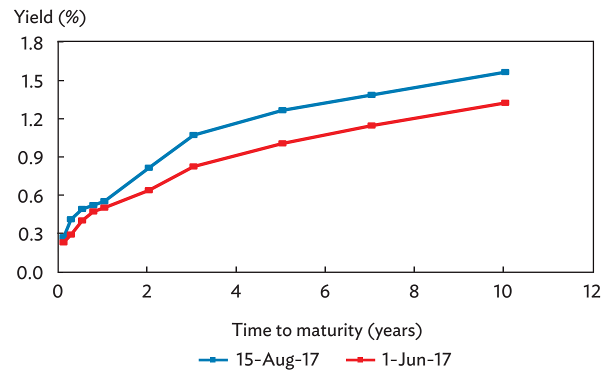
Hong Kong, China's GDP growth in Q2 2017 was driven by gains in domestic consumption, investment, and trade. Domestic consumption rose 5.3% y-o-y and investment rose 8.0%. Exports of goods also rose 5.6% y-o-y. Much of the growth in trade was due to demand from Asia, while trade demand from the US showed modest gains.

Hong Kong, China's inflation rate was also relatively stable at 2.0% y-o-y in July compared with 1.9% y-o-y in June.

Size and Composition

The outstanding LCY bonds of Hong Kong, China grew at a slower pace of 0.6% q-o-q in Q2 2017 versus 1.1% q-o-q in Q1 2017 to reach a total of HKD1,862 billion at the end of June (**Table 1**). On a y-o-y basis, LCY bonds rose 6.1%.

Figure 1: Hong Kong, China's Benchmark Yield Curve—Exchange Fund Bills and Notes



Source: Based on data from Bloomberg LP.

The growth in government bonds came mostly from Exchange Fund Bills (EFBs) and Hong Kong Special Administrative Region (HKSAR) bonds. EFBs grew 0.4% q-o-q and 7.4% y-o-y in Q2 2017, while HKSAR bonds grew 7.5% q-o-q and 10.2% y-o-y.

Exchange Fund Notes (EFNs) fell 6.5% q-o-q and 19.5% y-o-y as Hong Kong, China sought to align the EFB and EFN market with the HKSAR bond market by replacing longer-dated EFNs with HKSAR bond issuances. Currently, only 2-year HKSAR bonds are being issued.

The large rise in HKSAR bonds was due to increased issuances under both the Institutional and Retail Issuance Programmes. A total of HKD7.7 billion worth of HKSAR bonds was issued under the Institutional Bond Issuance Programme, including a HKD4.0 billion 3-year bond, a HKD2.5 billion 5-year bond, and a HKD 1.2 billion 10-year bond. Under the Retail Bond Issuance, a HKD3.0 billion 3-year bond was issued.

The amount of corporate bonds outstanding rose 0.2% q-o-q and 5.9% y-o-y in Q2 2017. Hong Kong, China's top 30 nonbank issuers had outstanding LCY bonds amounting to HKD141 billion at the end of June, comprising 18.0% of total corporate bonds outstanding. A majority of the top 30 issuers comprised the financing vehicles of large Hong Kong, China companies (**Table 2**).

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	HKD	USD	HKD	USD	HKD	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**1,755**	**226**	**1,851.90**	**238**	**1,862**	**239**	**6.6**	**15.2**	**0.6**	**6.1**
Government	1,013	131	1,068	137	1,076	138	5.8	19.8	0.8	6.3
Exchange Fund Bills	859	111	919	118	923	118	7.3	24.6	0.4	7.4
Exchange Fund Notes	53	7	46	6	43	6	(5.3)	(16.3)	(6.5)	(19.5)
HKSAR Bonds	101	13	103	13	111	14	0.0	8.5	7.5	10.2
Corporate	742	96	784	101	786	101	7.8	9.6	0.2	5.9

( ) = negative, HKD = Hong Kong dollar, HKSAR = Hong Kong Special Administrative Region, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–USD 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.

The Hong Kong Mortgage Corporation remained the top issuer with outstanding bonds of HKD26.3 billion, followed by Sun Hung Kai Properties (Capital Market) with HKD10.1 billion of bonds outstanding and MTR Corporation (C.I.) with HKD8.9 billion. Among the top 30 nonbank issuers at the end of June, six were state-owned companies and eight were Hong Kong Exchange-listed firms.

Among the top five nonbank issuances in Q2 2017, the majority came from real estate-related entities, with the exception of MTR Corporation and Future Days. The remaining companies on the list are CK Property Finance (MTN), Sun Hung Kai Properties, and Swire Pacific MTN (**Table 3**).

Policy, Institutional, and Regulatory Developments

Hong Kong, China's Renminbi Quota for Institutional Investors Increased

In July, the Hong Kong Monetary Authority announced that the People's Republic of China's State Council approved an increase in Hong Kong, China's Renminbi Qualified Foreign Institutional Investor quota from CNY270 billion to CNY500 billion.

Table 2: Top 30 Nonbank Corporate Issuers in Hong Kong, China

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (HKD billion)	LCY Bonds (USD billion)			
1.	The Hong Kong Mortgage Corporation	26.26	3.36	Yes	No	Finance
2.	Sun Hung Kai Properties (Capital Market)	10.11	1.29	No	No	Real Estate
3.	MTR Corporation (C.I.)	8.92	1.14	Yes	Yes	Transportation
4.	Swire Pacific	8.92	1.14	No	Yes	Diversified
5.	CLP Power Hong Kong Financing	7.81	1.00	No	No	Finance
6.	HKCG (Finance)	7.80	1.00	No	No	Finance
7.	The Link Finance (Cayman) 2009	7.79	1.00	No	No	Finance
8.	Hongkong Electric Finance	7.69	0.99	No	No	Finance
9.	NWD (MTN)	7.35	0.94	No	Yes	Finance
10.	Wharf Finance	5.73	0.73	No	No	Finance
11.	Swire Properties MTN Financing	5.70	0.73	No	No	Finance
12.	Vanke Real Estate (Hong Kong)	3.65	0.47	No	No	Real Estate
13.	Kowloon-Canton Railway	3.40	0.44	Yes	No	Transportation
14.	Urban Renewal Authority	2.80	0.36	Yes	No	Real Estate
15.	Cathay Pacific MTN Financing	2.37	0.30	No	Yes	Finance
16.	Leading Affluence	2.30	0.29	No	No	Real Estate
17.	Tencent Holdings	2.20	0.28	No	Yes	Comunications
18.	Bohai International Capital	2.00	0.26	No	No	Iron and Steel
19.	China Energy Reserve and Chemicals Group Overseas	2.00	0.26	No	No	Oil
20.	Wheelock Finance	2.00	0.26	No	No	Finance
21.	Emperor International Holdings	1.90	0.24	No	Yes	Real Estate
22.	CK Property Finance (MTN)	1.85	0.24	No	No	Finance
23.	Hong Kong Science and Technology Parks	1.71	0.22	Yes	No	Real Estate
24.	Cheung Kong Finance (MTN)	1.50	0.19	No	No	Finance
25.	Airport Authority Hong Kong	1.45	0.19	Yes	No	Transportation
26.	Hysan (MTN)	1.40	0.18	No	Yes	Real Estate
27.	Wharf Finance (No. 1)	1.33	0.17	No	No	Finance
28.	Henderson Land MTN	1.19	0.15	No	No	Finance
29.	Dragon Drays	1.00	0.13	No	No	Diversified
30.	K. Wah International Financial Services	1.00	0.13	No	Yes	Finance
Total Top 30 Nonbank LCY Corporate Issuers		**141.10**	**18.07**			
Total LCY Corporate Bonds		**785.97**	**100.67**			
Top 30 as % of Total LCY Corporate Bonds		**17.95%**	**17.95%**			

LCY = local currency.
Notes:
1. Data as of end-June 2017.
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 Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (HKD billion)
MTR Corporation		
5-year bond	1.88	0.80
10-year bond	2.95	0.63
CK Property Finance (MTN)		
10-year bond	3.00	1.10
Sun Hung Kai Properties		
10-year bond	2.68	0.46
10-year bond	2.70	0.51
Future Days		
10-year bond	3.30	0.70
Swire Pacific MTN		
10-year bond	2.70	0.30

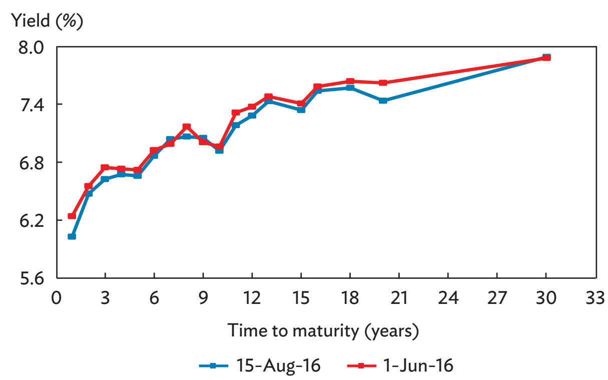
HKD = Hong Kong dollar.
Source: Central Moneymarkets Unit, Hong Kong Monetary Authority.

Indonesia

Yield Movements

Local currency (LCY) government bond yields declined for most tenors in Indonesia between 1 June and 15 August (**Figure 1**). Bond yields fell across the curve—except for the 7-, 9-, and 30-year maturities—by an average of 9 basis points (bps). Yield dropped the most at the very short-end of the curve, shedding 21 bps for the 1-year tenor. Bond yield also declined 19 bps for the 20-year tenor during the review period. The spread between the 2-year and 10-year maturities rose from 41 bps on 1 June to 45 bps on 15 August.

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



Source: Based on data from Bloomberg LP.

Bonds yields initially fell in June before rising in July amid concerns of a wider budget deficit equivalent to 2.9% of gross domestic product (GDP) in the revised state budget for 2017. Yields fell again after the Ministry of Finance indicated that the budget deficit may only reach the equivalent of 2.7% of GDP.

Overall, renewed investor optimism in Indonesia's bond market drove yields lower during the review period, buoyed by the sovereign rating upgrade from S&P Global in May. As a result, foreign investors continued to increase their holdings of Indonesian government bonds. At the end of June, the foreign holdings' share climbed to 39.5% of the total central government bond stock, where it remained little changed in July at 39.4%.

The uptick in inflation since the start of the year has not deterred nonresident investors from chasing Indonesian government bonds. While overall yields have declined since the start of the year, government bond yields are high relative to other markets in emerging East Asia. Consumer price inflation exceeded 4.0% year-on-year (y-o-y) in each of April, May, and June, before easing to 3.9% y-o-y in July. The uptick in inflation stemmed largely from electricity tariff adjustments and the timing of Muslim religious celebrations, when demand for goods and services normally increases.

The y-o-y inflation remained within Bank Indonesia's target range of 3.0%–5.0% in January–July, allowing the central to hold its policy rate steady in the first 7 months of the year. Subsequently, on 21–22 August, the Board of Governors of Bank Indonesia decided to cut by 25 bps each the 7-day reverse repurchase rate to 4.50%, the deposit facility rate to 3.75%, and the lending facility rate to 5.25%. In its assessment, Bank Indonesia noted that inflation remained low and the current account deficit was manageable, providing some space for easing its monetary policy. The rate cut is expected to promote credit growth, strengthen financial stability, and boost economic growth.

Real GDP growth reached 5.0% y-o-y in the second quarter (Q2) of 2017, the same pace of growth as in the previous quarter. Domestic consumption remained the largest driver of growth, gaining 5.0% y-o-y. Gross domestic fixed capital formation also supported growth, rising 5.4% y-o-y in Q2 2017. In contrast, government consumption remained weak due to delayed spending, contracting 1.9% y-o-y during the quarter in review. By type of industry, the manufacturing industry was the major contributor to GDP growth in Q2 2017. It was followed by construction, information and communication, and wholesale and retail trade. On a nonseasonally adjusted quarter-on-quarter (q-o-q) basis, Indonesia's GDP growth stood at 4.0%. Bank Indonesia expects the economy to grow between 5.0% and 5.4% in full-year 2017.

Size and Composition

The size of the LCY bond market in Indonesia climbed to IDR2,331.2 trillion (USD175 billion) at the end of June. Growth moderated to 1.8% q-o-q and 16.4% y-o-y

(**Table 1**), driven largely by central government bonds, which comprise Treasury bills and bonds issued by the Ministry of Finance. Corporate bonds also helped boost growth due to hefty issuance volume during the quarter.

Indonesia's LCY bond market is largely dominated by government bonds, accounting for 85.7% of the aggregate bond stock at the end of June. The remaining share comprised corporate bonds. LCY bonds in Indonesia are mostly conventional in nature, with *sukuk* (Islamic bonds) accounting for only a 13.7% share of the total bond stock at the end of June. However, the overall share of *sukuk* in Q2 2017 reflected an increase of 0.7 percentage points from a 13.0% share in the previous quarter.

Government bonds. At the end of June, total LCY government bonds outstanding stood at IDR1,998.7 trillion, rising 1.5% q-o-q and 15.3% y-o-y. Growth stemmed solely from increases in the stock of central government bonds as the outstanding stock of central bank bills, or Sertifikat Bank Indonesia (SBI), declined during the quarter in review.

Central government bonds. The outstanding amount of central government bonds reached IDR1,952.2 trillion at the end of June. Growth rates slowed in Q2 2017 to 3.2% q-o-q and 18.5% y-o-y from Q1 2017. In Q2 2017, the government tapered its frontloading issuance plan and reduced government securities issuance targets. The government initially planned to issue 64.4% of government securities (including foreign currency bonds) in the first semester; the share was lowered to 57.4%. The targeted LCY government securities share for the first semester was also reduced from 46.9% to 42.7%. However, government securities issuance in the first semester slightly exceeded the revised targets, with all government securities comprising 57.7% of total issuance in the first half of the year and LCY government securities accounting for 43.1%.

New LCY issuance of central government bonds totaled IDR115.8 trillion in Q2 2017, lower on both a q-o-q and y-o-y basis. The government failed to meet its target amount in six out of 12 scheduled auctions held during the quarter. Most of the partially awarded auctions during Q2 2017 were for Islamic debt securities. However, there was no pressure for the government to raise more funds immediately due to improving revenue collection and the prefunding of its budget requirements through a USD-denominated issuance in December 2016 and the issuance of USD- and JPY-denominated bonds in the first half of the year.Subsequently, in July, the government raised additional funds through a dual-currency issuance of EUR- and USD-denominated sovereign bonds.

Central bank bills. The outstanding amount of central bank bills declined to IDR46.5 trillion at the end of June on contractions of 41.2% q-o-q and 46.0% y-o-y. Beginning this year, Bank Indonesia ceased issuing

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	IDR	USD	IDR	USD	IDR	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**2,003,006**	**152**	**2,290,966**	**172**	**2,331,240**	**175**	**5.2**	**20.1**	**1.8**	**16.4**
Government	1,732,935	131	1,970,089	148	1,998,689	150	5.0	21.3	1.5	15.3
Central Govt. Bonds	1,646,846	125	1,891,043	142	1,952,234	146	4.6	21.4	3.2	18.5
of which: *Sukuk*	218,948	17	274,492	21	297,424	22	7.2	40.2	8.4	35.8
Central Bank Bills	86,089	7	79,047	6	46,455	3	15.4	18.3	(41.2)	(46.0)
of which: *Sukuk*	7,470	0.6	12,273	0.9	9,421	0.7	6.1	(11.7)	(23.2)	26.1
Corporate	270,071	20	320,877	24	332,550	25	6.4	13.0	3.6	23.1
of which: *Sukuk*	9,561	0.7	11,834	0.9	13,385	1.0	3.7	20.4	13.1	40.0

( ) = negative, IDR = Indonesian rupiah, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–USD rates are used.
3. Growth rates are calculated from an LCY base and do not include currency effects.
4. The total stock of nontradable bonds as of end-June stood at IDR232.6 trillion.
Sources: Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; Indonesia Stock Exchange; and Bloomberg LP.

conventional SBI and limited its issuance of central bank bills to shariah-compliant SBI, resulting in a significant decline in the outstanding stock of such instruments. Bank Indonesia shifted to using term deposits and foreign exchange bills in lieu of SBI for its monetary operations. In Q2 2017, new issuance of shariah-compliant SBI reached IDR1.1 trillion, resulting in double-digit declines on both a q-o-q and y-o-y basis. One auction was conducted for each month during the quarter, with issuance of 9-month and 1-year shariah-compliant SBIs.

Corporate bonds. Total LCY corporate bonds rose 3.6% q-o-q and 23.1% y-o-y to reach IDR332.6 trillion at the end of June. A total of 109 firms comprised Indonesia's corporate bond market in Q2 2017. Relative to its peers in emerging East Asia, Indonesia's LCY corporate bond market ranks as the third smallest in terms of bonds outstanding. While its government bond market segment is more developed, the corporate bond segment lags behind. Most corporates still prefer to secure bank loans instead of raising capital through the sale of bonds.

Bond issued by financial institutions accounted for the largest share of total corporate bonds at 64.4% at the end of June. The next largest share was for firms from the infrastructure, utilities, and transportation sector, representing 17.2% of the total, and the property and real estate sector at a 6.9% share. All other industry sub-groups had a share of 2.8% or less.

The 30 largest corporate bonds issuers had aggregate outstanding bonds of IDR245.2 trillion at the end of June, or the equivalent of 73.7% of the total market (**Table 2**). The top-30 list comprised mostly financial institutions. Other firms on the list came from capital-intensive industries including telecommunications, property and real estate, and petroleum and natural gas.

The three largest corporate bond issuers have remained the same since the end of December. State-owned lender Indonesia Eximbank retained the top spot at the end of June with outstanding LCY bonds valued at IDR33.7 trillion, accounting for about 10% of the total corporate bond stock. The second spot was held by another state-owned lender, Bank Rakyat Indonesia, with bonds valued at IDR19.0 trillion. Telecommunications firm Indosat was third with outstanding bonds of IDR15.4 trillion. Bank Rakyat Indonesia and Indosat both issued new bonds during the quarter.

In Q2 2017, total corporate bond issuance reached IDR34.4 trillion, up 53.6% q-o-q and 4.4% y-o-y. There was a notable increase in corporate bond issuance in Q2 2017, with 18 firms tapping the bond market versus 13 in Q1 2017. New corporate bond series totaled 46 issues in Q2 2017, up from 34 bond series in the previous quarter.

The largest new corporate debt issues during the quarter are presented in **Table 3**. Leading the list in Q2 2017 was Bank Mandiri's multitranche issuance in June amounting to IDR6.0 trillion. Bank Mandiri's issuance included a 3-year zero-coupon bond, which marked the first issuance by an Indonesian bank of such a bond. Second on the list of new corporate debt in Q2 2017 was Bank Rakyat Indonesia's multitranche issuance in April valued at IDR5.1 trillion. Federal International Finance raised a total of IDR3.5 trillion from a dual-tranche issue in May, and Semen Indonesia raised IDR3.0 trillion from a single-tranche 3-year bond in June. Telecommunications firm Indosat issued a total of IDR3.0 trillion from the sale of multitranche conventional bonds and *sukuk* in May.

Foreign currency bonds. In June, the government raised JPY100 billion from a triple-tranche bond sale. The sale comprised a JPY40 billion 3-year bond with a coupon rate of 0.65%, a JPY50 billion 5-year bond with a coupon rate of 0.89%, and a JPY10 billion 7-year bond with a coupon rate of 1.04%. The bonds were offered via public offering, representing the first bond sale by Indonesia through this method. The bond sale was well received by investors, including asset management and pension funds, among others.

In July, the government raised EUR1.0 billion with the sale of a 7-year bond priced to yield 2.178% and carrying a coupon rate of 2.15%. The bond was well-received with total orders reaching EUR4.3 billion. Also, the government raised a total of USD2.0 billion from a dual-tranche sale comprising a USD1.0 billion 10-year bond priced to yield 3.9% with a coupon rate of 3.85% and a USD1.0 billion 30-year bond priced to yield 4.8% with a coupon rate of 4.75%. The orderbook totaled USD4.0 billion and USD3.2 billion for the 10-year and 30-year bonds, respectively. The latest issuance was part of the government's funding plan for 2017.

Table 2: Top 30 Issuers of Local Currency Corporate Bonds in Indonesia

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (IDR billion)	LCY Bonds (USD billion)			
1.	Indonesia Eximbank	33,684	2.52	Yes	No	Banking
2.	Bank Rakyat Indonesia	19,025	1.43	Yes	Yes	Banking
3.	Indosat	15,351	1.15	No	Yes	Telecommunications
4.	Bank Tabungan Negara	12,950	0.97	Yes	Yes	Banking
5.	Bank Pan Indonesia	12,085	0.91	No	Yes	Banking
6.	Bank Mandiri	11,000	0.82	Yes	Yes	Banking
7.	Federal International Finance	10,780	0.81	No	No	Finance
8.	PLN	10,683	0.80	Yes	No	Energy
9.	Adira Dinamika Multifinance	10,602	0.79	No	Yes	Finance
10.	Telekomunikasi Indonesia	8,995	0.67	Yes	Yes	Telecommunications
11.	Astra Sedaya Finance	8,215	0.62	No	No	Finance
12.	Bank Maybank Indonesia	7,320	0.55	No	Yes	Banking
13.	Sarana Multigriya Finansial	6,714	0.50	Yes	No	Finance
14.	Perum Pegadaian	6,592	0.49	Yes	No	Finance
15.	Waskita Karya	6,557	0.49	Yes	Yes	Building Construction
16.	Medco-Energi International	6,434	0.48	No	Yes	Petroleum and Natural Gas
17.	Bank CIMB Niaga	6,230	0.47	No	Yes	Banking
18.	Sarana Multi Infrastruktur	5,900	0.44	Yes	No	Finance
19.	Bank Permata	5,810	0.44	No	Yes	Banking
20.	Toyota Astra Financial Services	4,864	0.36	No	No	Finance
21.	Indofood Sukses Makmur	4,000	0.30	No	Yes	Food and Beverages
22.	Surya Artha Nusantara Finance	3,862	0.29	No	No	Finance
23.	Agung Podomoro Land	3,700	0.28	No	Yes	Property and Real Estate
24.	Mandiri Tunas Finance	3,675	0.28	No	No	Finance
25.	Hutama Karya	3,583	0.27	Yes	No	Non-Building Construction
26.	Permodalan Nasional Madani	3,433	0.26	Yes	No	Finance
27.	BFI Finance Indonesia	3,350	0.25	No	Yes	Finance
28.	Bumi Serpong Damai	3,315	0.25	No	Yes	Property and Real Estate
29.	Bank Bukopin	3,305	0.25	No	Yes	Banking
30.	Maybank Indonesia Finance	3,225	0.24	No	No	Finance
Total Top 30 LCY Corporate Issuers		**245,239**	**18.37**			
Total LCY Corporate Bonds		**332,550**	**24.91**			
Top 30 as % of Total LCY Corporate Bonds		**73.7%**	**73.7%**			

IDR = Indonesian rupiah, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
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.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (IDR billion)
Bank Mandiri		
3-year bond	7.80	1,000
5-year bond	8.00	1,000
7-year bond	8.50	3,000
10-year bond	8.65	1,000
Bank Rakyat Indonesia		
370-day bond	7.20	1,131
3-year bond	8.10	1,744
5-year bond	8.30	925
10-year bond	8.80	1,301
Federal international Finance		
370-day bond	7.35	1,424
3-year bond	8.45	2,076
Semen Indonesia		
3-year bond	8.60	3,000
Indosat		
370-day bond	7.00	844
370-day *sukuk ijarah*	7.00	17
3-year bond	8.15	628
5-year bond	8.55	312
5-year *sukuk ijarah*	8.55	160
7-year bond	8.90	378
7-year *sukuk ijarah*	8.90	60
10-year bond	9.25	538
10-year *sukuk ijarah*	9.25	63

IDR = Indonesian rupiah.
Notes:
1. Bank Mandiri's 3-year bond is a zero-coupon bond. The figure indicated under the coupon rate refers to yield at issuance.
2. *Sukuk ijarah* are Islamic bonds backed by a lease agreement.
Source: Indonesia Stock Exchange.

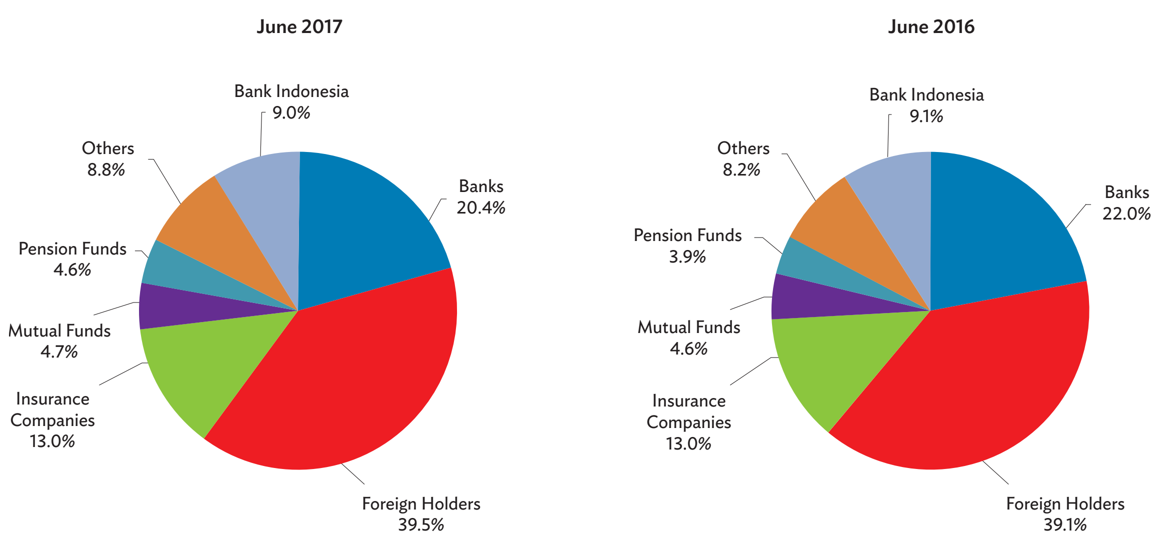
Investor Profiles

Central government bonds. Nonresident investors shored up their holdings of Indonesian LCY government bonds following the rating upgrade from S&P Global. Foreign investors' holdings of LCY bonds climbed to a share of 39.5% at the end of June, up from 38.2% at the end of March and 39.1% from the same period a year earlier (**Figure 2**). While bond yields for all tenors fell an average of 90 bps between 1 January and 15 August, investors remained attracted to Indonesian government bonds, which command the highest yields in emerging East Asia.

At the end of June, foreign holdings of LCY government bonds reached IDR770.6 trillion, up from IDR723.2 trillion at the end of March and IDR644.0 trillion at the end of June 2016. Nonresidents continued to comprise the largest investor group in Indonesia's LCY government bond market in Q2 2017.

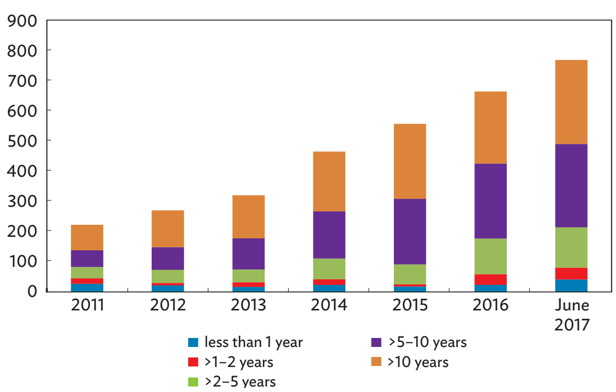
While a large share of foreign ownership in Indonesia's bond market poses the risk of destabilizing capital flight, most foreign investors in Indonesian LCY government bonds are considered high-quality, long-term investors. Foreign investors include nonresident banks, fund and asset managers, securities houses, insurance institutions, and pension funds. At the end of June, 36.2% of nonresident holdings were invested in bonds with maturities of over 10 years, and 35.9% were placed in maturities of more than 5 years to 10 years (**Figure 3**).

Figure 2: Local Currency Central Government Bonds Investor Profile



Source: Directorate General of Budget Financing and Risk Management, Ministry of Finance.

Figure 3: Foreign Holdings of Local Currency Central Government Bonds by Maturity



IDR = Indonesian rupiah.
Source: Directorate General of Budget Financing and Risk Management, Ministry of Finance.

Nonresident holdings of government bonds with maturities of 1 year or less accounted for only 5.4% of total foreign holdings.

On the other hand, banking institutions, which account for the largest investor group among domestic investors, continued to see their holdings' share of LCY government bonds decline. At the end of June, banks' holdings of LCY government bonds accounted for an equivalent of 20.4% of the total market, declining from 26.2% at the end of March and 22.0% at the end of June 2016.

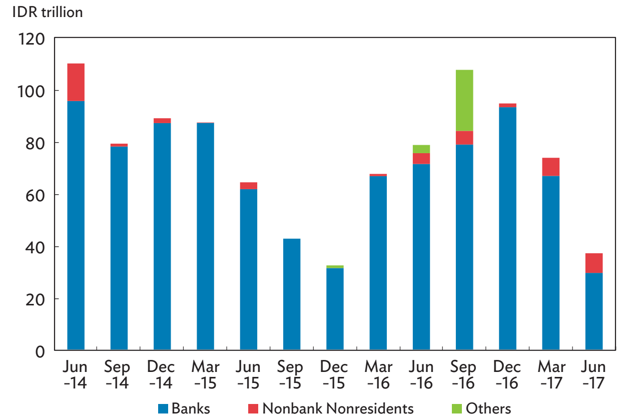
Pension funds raised their holdings of LCY government bonds to a share of 4.6% at the end of June. The shares of bond holdings of insurance, mutual funds, and Bank Indonesia were broadly unchanged from June 2016.

Central bank bills. At the end of June, SBI were largely held by banking institutions. Bank holdings of SBI accounted for 79.6% of central bank bills outstanding, a decline from a 90.6% share at the end of March (**Figure 4**). On the other hand, nonbank nonresident investors increased their holdings to a 20.4% share from 9.4% at the end of March.

Ratings Update

On 19 July, Fitch Ratings (Fitch) affirmed Indonesia's long-term foreign currency and LCY issuer default ratings at BBB–. The ratings were given a positive outlook.

Figure 4: Local Currency Central Bank Bills Investor Profile



IDR = Indonesian rupiah.
Notes:
1. In September and December 2015, nonbank nonresidents had no holdings of Sertifikat Bank Indonesia.
2. In March 2016, nonbank nonresidents held IDR0.9 trillion of Sertifikat Bank Indonesia.
Source: Bank Indonesia.

In its assessment, Fitch took note of Indonesia's low government debt burden, favorable growth outlook, and limited sovereign exposure to banking sector risks. Fitch also cited its concern over Indonesia's external exposure and some structural factors that need improvement.

Policy, Institutional, and Regulatory Developments

Bank Indonesia to Allow Non-Dollar Currency Swaps for Hedging

In July, Bank Indonesia announced that it will allow non-dollar currency swaps for hedging transactions. Initially, the central bank will enter into hedging transactions for Japanese yen swaps, which will be followed by swaps denominated in euros and Chinese renminbi. The move by Bank Indonesia is expected to reduce dependence on the US dollar for trade and finance.

Indonesian Parliament Approves Revision to 2017 State Budget

On 27 July, the Indonesian Parliament approved the government's proposed revision to the 2017 state budget. The revised state budget now estimates marginally lower revenue of IDR1,736.1 trillion and higher spending of

IDR2,133.3 trillion. As a result, the budget deficit was projected to reach an equivalent of 2.9% of GDP, up from 2.4% in the original budget. To fund the budget gap, the government will increase its bond issuance in 2017 to IDR467.3 trillion. The underlying macroeconomic assumptions for the revised budget include (i) annual GDP growth of 5.2%, (ii) annual inflation of 4.3%, (iii) an exchange rate of IDR13,400 per USD1, (iv) a 3-month Treasury bill annual rate of 5.2%, and (v) an Indonesian crude oil price of USD48 per barrel.

Bank Indonesia Releases New Regulations for Commercial Paper Issuance

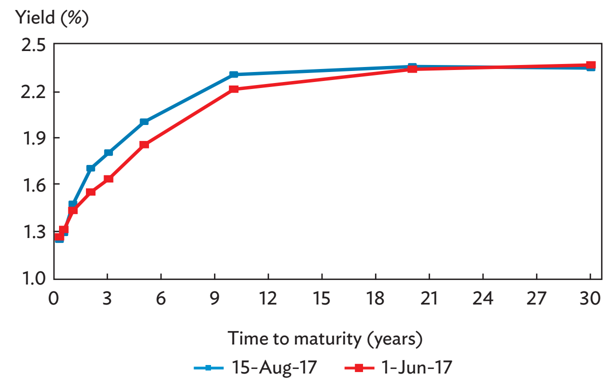
Bank Indonesia released new regulations for the issuance of commercial paper by nonbank corporate entities. The new regulations, which came into effect on 4 September, allow corporates to issue commercial paper with a maturity of 1 year or less, subject to certain requirements. The new rules governing commercial paper issuance require issuing companies to have a healthy financial position for a period of 3 years and an assessment from a rating agency.

Republic of Korea

Yield Movements

Between 1 June and 15 August, local currency (LCY) government bond yields in the Republic of Korea rose for most tenors (**Figure 1**). The increase was most pronounced in the belly of the curve, where medium-term tenors of 2, 3, and 5 years rose 15 basis points (bps) on average. The yield for the 10-year bond also advanced, rising 9 bps, and yields for the 1-year and 20-year tenors rose 4 bps and 2 bps, respectively. Meanwhile, yields for the 3-month, 6-month, and 30-year tenors declined an average of 2 bps. The spread between the 2-year and 10-year yields narrowed to 60 bps on 15 August from 65 bps on 1 June.

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



Source: Based on data from Bloomberg LP.

The rise in yields, particularly for medium-term tenors, reflected uncertainty over the timing of anticipated monetary tightening policies both domestically and in major developed markets, as well as the implementation of economic and fiscal policies by the new administration in the Republic of Korea.

Yields rose in June after the United States (US) Federal Reserve raised the target range on its key policy rate. Other international factors contributing to the increase in yields during the review period included speculation that the Federal Reserve's balance sheet reduction would commence earlier than expected, the European Central Bank hinting at an eventual tapering of its quantitative monetary easing policy, and increased geopolitical concerns.

On the domestic front, continued economic growth and the release of the new administration's economic policies have put upward pressure on yields, as have increased expectations of a tightening stance by the Bank of Korea and the predicted expansion of the supply of government bonds to fund planned increases in fiscal spending over the next 5 years. In July, the Republic of Korea's Parliament approved a KRW11.2 trillion supplementary budget for 2017; at the same time, the Ministry of Finance stated that no additional bonds would be issued to fund the budget. The market is also monitoring the submission of the 2018 budget proposal in September.

Yield movements for short-term tenors reflected foreign bond investment flows. Foreign investors have been actively participating in the arbitrage trading of short-term LCY bonds, taking advantage of the continued strengthening of the Korean won. Year-to-date, the domestic currency has appreciated 6.2% against the US dollar. Despite episodes of foreign selling that led to the rise in short-term yields, demand for LCY bonds remained strong overall during the review period, resulting in only small yield movements at the short-end of the curve.

In line with expectations of improved economic growth, the Bank of Korea in July raised its 2017 gross domestic product (GDP) growth forecast to 2.8% from April's projection of 2.6%. The 2018 GDP forecast of 2.9% growth was maintained. According to the Bank of Korea, domestic growth will continue to be supported by investments, as exports are expected to be below the July forecast mainly due to slowdown in service exports. Meanwhile, consumption is expected to continue to recover. Monthly inflation is expected to stay close to the 2.0% y-o-y target level, with full-year 2017 inflation expected to be near the 1.9% projection made in July. Given stable inflation and the continued economic recovery, the Bank of Korea maintained its base rate at 1.25% in its 13 July and 31 August Monetary Policy Board meetings. However, the central bank noted volatility in financial markets brought about by increased geopolitical concerns. Moving forward, the Bank of Korea will continue to monitor the paces of monetary policy normalization and trade conditions with major countries, trend in domestic household debt, and geopolitical developments.

The Republic of Korea's GDP growth eased to 2.7% year-on-year (y-o-y) in the second quarter (Q2) of 2017 from 2.9% y-o-y in the first quarter (Q1) of 2017. The slower growth was driven by a smaller increase in gross fixed capital formation, led by slowing growth in construction investment. Exports also posted no growth in Q2 2017 following a 3.9% y-o-y increase in the previous quarter. On a quarter-on-quarter (q-o-q) basis, the Republic of Korea's economic growth slowed to 0.6% q-o-q in Q2 2017 from 1.1% q-o-q in Q1 2017.

Consumer price inflation in the Republic of Korea remained within the central bank's 2.0% target level in Q2 2017, averaging 1.9% y-o-y. Inflation picked up in July to 2.2% y-o-y due to a rise in food and utilities prices.

Size and Composition

The Republic of Korea's LCY bond market expanded 2.1% q-o-q to KRW2,138 trillion (USD1,869 billion) at the end of June, driven by growth in both the government and corporate sectors (**Table 1**). Corporate bonds accounted for a majority of bonds outstanding, totaling KRW1,246 trillion. Government bonds summed to KRW892 trillion. On a y-o-y basis, the LCY bond market expanded 3.6%.

Government bonds. LCY government bonds outstanding rose 2.3% q-o-q to KRW892 trillion at the end of June. The increase was primarily driven by the 3.6% q-o-q rise in the outstanding stock of central government bonds. Issuance of Korea Treasury Bonds rose in Q2 2017 from the previous quarter in line with the government's continued frontloading policy to prop up the economy. The government has spent 59% of its full-year budget in the first half of 2017. Meanwhile, the outstanding stocks of central bank bonds and other government bonds were almost unchanged from Q1 2017 at KRW175 trillion and KRW165 trillion, respectively.

Government bond issuance in Q2 2017 amounted to KRW89 trillion, which was almost at par with Q1 2017. The increase in issuance of Korea Treasury Bonds was capped by the decline in issuance of other government bonds, particularly Korea Development Bank bonds.

Corporate bonds. LCY corporate bonds outstanding expanded 1.9% q-o-q to KRW1,246 trillion at the end of June. The top 30 LCY corporate bond issuers in the Republic of Korea continued to comprise the majority of total LCY corporate bonds outstanding, with a share of 64.5% and aggregate bonds of KRW804 trillion at the end of June (**Table 2**). Financial companies involved in securities trading, investments, and banking continued to account for a majority of the top 30 largest debt issuers, with total bonds outstanding worth KRW474 trillion. Korea Housing Finance Corporation remained the largest issuer with outstanding bonds valued at KRW116 trillion.

Corporate bond issuance in Q2 2017 was the highest it has been since Q2 2015, surging 17.5% q-o-q to KRW112 trillion as companies took advantage of relatively low interest rates in anticipation of an upward trend in

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	KRW	USD	KRW	USD	KRW	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**2,064,024**	**1,792**	**2,094,915**	**1,873**	**2,138,183**	**1,869**	**1.0**	**5.4**	**2.1**	**3.6**
Government	853,009	741	872,215	780	892,171	780	1.6	5.9	2.3	4.6
Central Government Bonds	516,517	448	533,303	477	552,288	483	3.1	10.7	3.6	6.9
Central Bank Bonds	181,420	158	174,860	156	174,810	153	0.02	(3.7)	(0.03)	(3.6)
Others	155,072	135	164,052	147	165,073	144	(1.3)	3.0	0.6	6.4
Corporate	1,211,015	1,051	1,222,700	1,093	1,246,012	1,089	0.5	5.1	1.9	2.9

( ) = negative, KRW = Korean won, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–USD rates are used.
3. Growth rates are calculated from local currency (LCY) base and do not include currency effects.
4. "Others" comprise Korea Development Bank Bonds, National Housing Bonds, and Seoul Metro Bonds.
5. Corporate bonds include equity-linked securities and derivatives-linked securities.
Sources: The Bank of Korea and *EDAILY BondWeb*.

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

	Issuers	Outstanding Amount		State-Owned	Listed on		Type of Industry
		LCY Bonds (KRW billion)	LCY Bonds (USD billion)		KOSPI	KOSDAQ	
1.	Korea Housing Finance Corporation	115,881	101.3	Yes	No	No	Housing Finance
2.	NH Investment & Securities	65,449	57.2	Yes	Yes	No	Securities
3.	Mirae Asset Daewoo Co.	58,547	51.2	No	Yes	No	Securities
4.	Korea Investment and Securities	52,721	46.1	No	No	No	Securities
5.	Korea Land & Housing Corporation	43,096	37.7	Yes	No	No	Real Estate
6.	Industrial Bank of Korea	36,849	32.2	Yes	Yes	No	Banking
7.	Hana Financial Investment	36,407	31.8	No	No	No	Securities
8.	Mirae Asset Securities	32,765	28.6	No	Yes	No	Securities
9.	KB Securities	29,059	25.4	No	No	No	Securities
10.	Korea Deposit Insurance Corporation	26,190	22.9	Yes	No	No	Insurance
11.	Korea Electric Power Corporation	22,890	20.0	Yes	Yes	No	Electricity, Energy, and Power
12.	Samsung Securities	22,389	19.6	No	Yes	No	Securities
13.	Shinhan Bank	21,522	18.8	No	No	No	Banking
14.	Korea Expressway	20,830	18.2	Yes	No	No	Transport Infrastructure
15.	Korea Rail Network Authority	19,970	17.5	Yes	No	No	Transport Infrastructure
16.	Kookmin Bank	19,396	17.0	No	No	No	Banking
17.	Woori Bank	19,245	16.8	Yes	Yes	No	Banking
18.	Daishin Securities	17,338	15.2	No	Yes	No	Securities
19.	The Export-Import Bank of Korea	14,990	13.1	Yes	No	No	Banking
20.	Korea Gas Corporation	13,969	12.2	Yes	Yes	No	Gas Utility
21.	KEB Hana Bank	13,120	11.5	No	No	No	Banking
22.	NongHyup Bank	12,660	11.1	Yes	No	No	Banking
23.	Small & Medium Business Corporation	12,330	10.8	Yes	No	No	SME Development
24.	Shinhan Card	12,070	10.5	No	No	No	Credit Card
25.	Korea Student Aid Foundation	11,750	10.3	Yes	No	No	Student Loan
26.	Hyundai Capital Services	11,584	10.1	No	No	No	Consumer Finance
27.	Standard Charted Bank Korea	10,830	9.5	No	No	No	Banking
28.	Shinyoung Securities	10,330	9.0	No	Yes	No	Securities
29.	Korea Railroad Corporation	10,070	8.8	Yes	No	No	Transport Infrastructure
30.	NongHyup	9,610	8.4	Yes	No	No	Financial
Total Top 30 LCY Corporate Issuers		**803,858**	**703**				
Total LCY Corporate Bonds		**1,246,012**	**1,089**				
Top 30 as % of Total LCY Corporate Bonds		**64.5%**	**64.5%**				

KOSDAQ = Korean Securities Dealers Automated Quotations, KOSPI = Korea Composite Stock Price Index, KRW = Korean won, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
3. Corporate bonds include equity-linked securities and derivatives-linked securities.
Sources: *AsianBondsOnline* calculations based on Bloomberg LP and *EDAILY BondWeb* data.

yields. **Table 3** lists notable corporate bond issuances in Q2 2017. The KRW1,285 billion convertible bond issued by Daewoo Shipbuilding and Marine Engineering was the largest issuance in Q2 2017 with 30-year tenor and a coupon rate of 1.0%. The bond sale was part of its rescue package plan with existing creditors as the convertible bond was sold to one of its creditors, the Export–Import Bank of Korea. Other notable bond issuances in the quarter were from banks, insurance companies, and heavy industries.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (KRW billion)
Daewoo Shipbuilding and Marine Engineering		
30-year bond	1.00	1,285
Woori Bank		
3-year bond	1.95	880
3-year bond	1.90	370
Shinhan Bank		
2-year bond	1.73	300
2-year bond	1.73	300
3-year bond	1.88	330
Doosan Heavy Industries		
5-year bond	1.00	500
Hanwha Life Insurance		
30-year bond	4.58	500
Nonghyup Bank		
3-year bond	1.88	500
LG Chem		
5-year bond	2.28	400

KRW = Korean won.
Source: Based on data from Bloomberg LP.

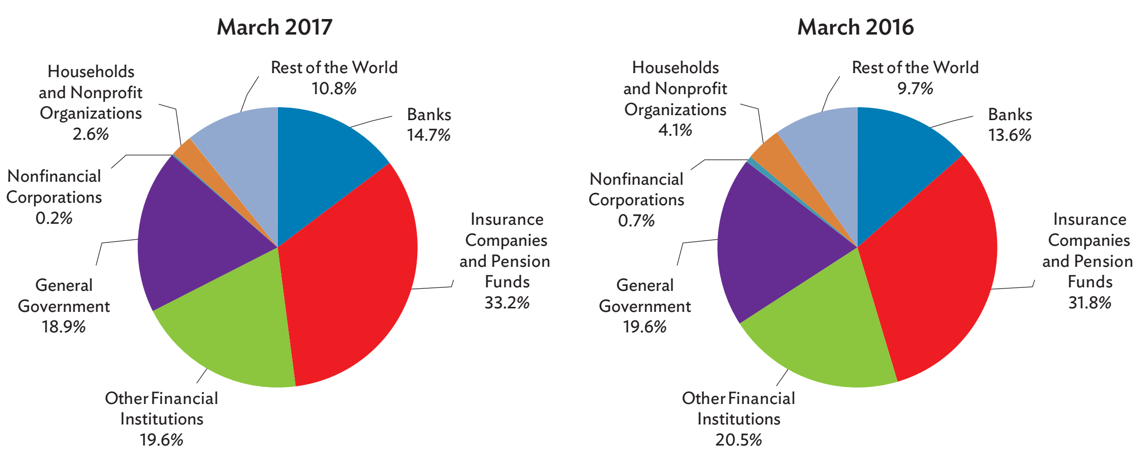
Investor Profile

Insurance companies and pension funds remained the largest investor group in the LCY government bond market at the end of March with an aggregate share of 33.2%, up from 31.8% in March 2016 (**Figure 2**). Other financial institutions accounted for the next largest holdings with a share of 19.6%, slightly down from 20.5% a year earlier. The share of general government also fell to 18.9% at the end of March from 19.6% a year earlier. The shares of banks and foreign investors inched up during the review period to 14.7% and 10.8%, respectively.

Insurance companies and pension funds continued to account for the largest share of holdings in the Republic of Korea's LCY corporate bond market at 38.5% at the end of March, up slightly from 38.1% in March 2016 (**Figure 3**). The share of other financial institutions rose to 33.4% from 31.8% during the review period, while the share of foreign investors in the Republic of Korea's LCY corporate bond market remained negligible.

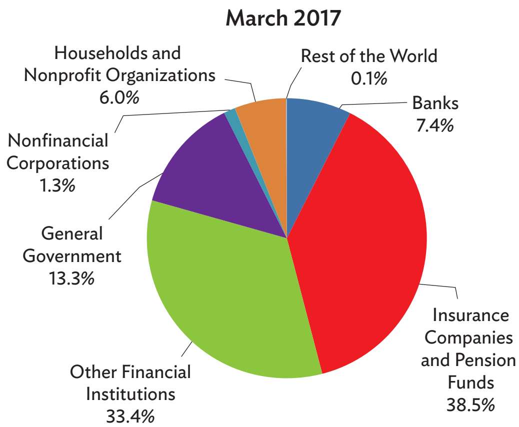
Net foreign investments in the Republic of Korea's local currency bond market remained strong in Q2 2017 (**Figure 4**). Net foreign investments amounted to KRW1,375 billion in April and rose to KRW2,136 billion in May. In June, net foreign investments eased to KRW1,551 billion, partly due to a large foreign institutional

Figure 2: Local Currency Government Bonds Investor Profile



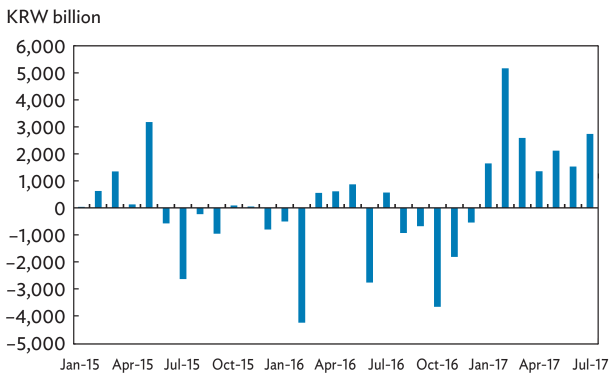
Sources: *AsianBondsOnline* and the Bank of Korea.

Figure 3: Local Currency Corporate Bonds Investor Profile



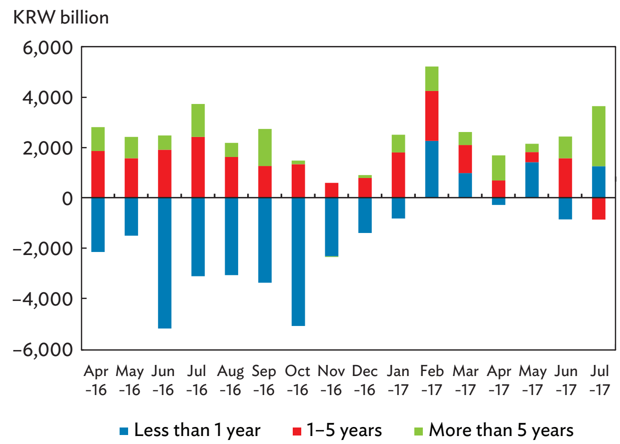
Sources: *AsianBondsOnline* and the Bank of Korea.

Figure 4: Net Foreign Investment in Local Currency Bonds in the Republic of Korea



KRW = Korean won.
Source: Financial Supervisory Service.

Figure 5: Net Foreign Investment in Local Currency Bonds in the Republic of Korea, by Tenor



KRW = Korean won.
Source: Financial Supervisory Service.

fund selling its short-term holdings as part of its portfolio adjustment.[17] Foreign investors increased their holdings in July with net investments jumping to KRW2,755 billion.

There was a notable drop in volatility in net foreign investments in 2017 compared with 2016, particularly for bonds with tenors of less than 1 year (**Figure 5**). Foreign demand for bonds with tenors longer than 5 years was also more stable in 2017, with net foreign investments reaching a high of KRW2,394 billion in July.

Ratings Update

In August, S&P Global affirmed its AA long-term and A-1+ short-term sovereign credit ratings for the Republic of Korea. S&P Global also maintained a stable outlook on the long-term rating, citing the Republic of Korea's steady economic growth, favorable policy environment, sound fiscal position, and net external creditor position

[17] Reuters. 2017. *Franklin Templeton Trims Korea Treasury Bonds as Part of Portfolio Adjustment*. 29 June. http://www.reuters.com/article/us-southkorea-economy-bonds-idUSKBN19K053

as reasons for its decision. S&P Global noted the recent heightened geopolitical tension with the Democratic People's Republic of Korea, but believes a conflict is unlikely. The rating agency also noted concern over high levels of household debt, while recognizing the government's efforts to address it.

Policy, Institutional, and Regulatory Developments

National Assembly Approves KRW11.2 Trillion Supplementary Budget

In July, the Republic of Korea's National Assembly approved the government's KRW11.2 trillion supplementary budget proposal. The supplementary budget will allocate KRW4.2 trillion to increase hiring in the public sector and provide more regular jobs in small and medium-sized enterprises. Of the total supplementary budget, KRW1.2 trillion will be allotted to programs that expand employment, particularly among the youth and women who want to return to the workforce; KRW2.3 trillion will be spent on policies to support the working class, including an expansion of the number of basic social security beneficiaries; and KRW3.5 trillion will be used to support local governments, particularly education programs.

Financial Services Commission Announces New Mortgage Rules

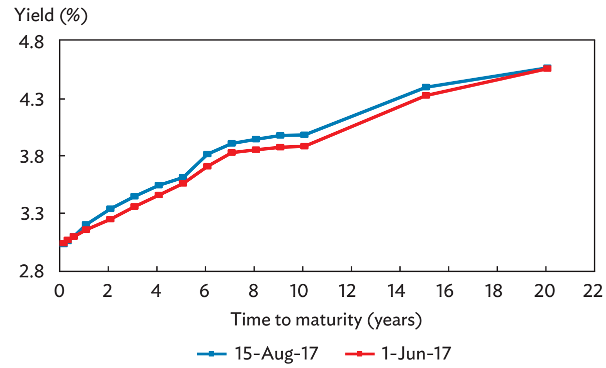
In August, the Financial Services Commission announced new measures to curb speculative demand in the Republic of Korea's housing market. Measures include tightening the loan-to-value and debt-to-income ratios to 40% each for home buyers in "bubble-prone areas." For multiple homeowners, mortgage borrowing will also be subject to tighter loan-to-value and debt-to-income ratios; the ratios for both will be trimmed by 10 percentage points.

Malaysia

Yield Movements

Between 1 June and 15 August, bond yields for local currency (LCY) government bonds in Malaysia increased for all tenors except the 1-month and 3-month tenors, whose yields fell by 1 basis point (bp) each, and the 6-month tenor, whose yield was practically unchanged (**Figure 1**). Among the tenors that saw yield advances, the biggest was for 6-year government bonds, which posted an 11-bps increase, while 20-year tenors had the smallest increase of 1 bp. In the belly of the curve (2-year to 9-year maturities), bond yields increased by an average of 9 bps, and at the long-end of the curve (10-year to 15-year maturities), yields also increased 9 bps on average. The yield spread between the 2-year and 10-year tenors widened by 1 bp during the review period from 63 bps to 64 bps.

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



Source: Based on data from Bloomberg LP.

Yield movements in Malaysia's LCY government bond market between 1 June and 15 August were range-bound, with increases mainly reflective of the cautious stance of investors ahead of the United States (US) Federal Reserve's balance sheet reduction program and further interest rate hikes as recent US data suggest economic growth is gaining momentum. In addition, the European Central Bank is considering a policy shift away from its asset purchase program as the eurozone's recovery gains traction. The bond yield increases may also have taken their cue from the upward movement of US Treasury yields. Selling pressures due to profit-taking could have also lifted yields, but the market's anchor on onshore support tempered additional surges. On the domestic front, controversies surrounding the unresolved issues of state-owned 1Malaysia Development Berhad and the political and economic challenges of the upcoming general election also contributed to the increase in yields.

Bank Negara Malaysia (BNM) kept its overnight policy rate unchanged at 3.00% during its monetary policy meeting on 13 July. Inflation is expected to further moderate in the second half of 2017 as an effect of waning global cost factors. Current macroeconomic developments also supported the policy decision. The Malaysian economy expanded faster than expected in the second quarter (Q2) of 2017, underpinned by strong domestic demand and exports, and is projected to post higher growth in 2017. Favorable global prospects will bolster external demand, translating into stronger exports. The Malaysian ringgit continued to gain strength against the US dollar, while the BNM deemed that liquidity remains sufficient in the banking system, backed by strong buffers.

Consumer price inflation in Malaysia continued its downtrend in July, falling to 3.2% year-on-year (y-o-y) from 3.6% y-o-y in June, 3.9% y-o-y in May, and 4.4% y-o-y in April. The moderation was connected to tepid global oil prices, which translated into lower transportation costs. While transport costs registered the fastest growth among all components of the Consumer Price Index in July, they also exhibited the fastest pace of moderation. Inflation in transport costs peaked at 23.0% y-o-y in March, declining to 7.7% y-o-y in July. Inflation for January–July averaged 4.0% and is expected to remain modest for the rest of the year. Core inflation, which excludes most volatile fresh food items and administered prices of goods and services, rose slightly to 2.6% y-o-y in July from 2.5% y-o-y in June. BNM noted that price pressures are expected to be contained despite robust domestic demand.

The Malaysian ringgit continued to advance against the US dollar, appreciating 4.4% year-to-date through 15 August. The ringgit's appreciation was supported by several factors, including the revival of foreign investors' buying interest in local bond and equity markets; a solid external position backed by high international reserves and exports; efforts by the BNM to improve liquidity, trading activities, and infrastructure in the financial market; and strong economic growth prospects. In addition, low inflation in the US dampened expectations of a faster pace of Federal Reserve rate hike, leading to the broad weakness of the US dollar against most Asian currencies year-to-date through 15 August.

Malaysia's gross domestic product (GDP) growth sustained its upward momentum in Q2 2017, expanding 5.8% y-o-y, up from 5.6% y-o-y in the first quarter (Q1) 2017. It was the fastest growth rate recorded since Q1 2015. Domestic demand underpinned the strong growth, particularly private consumption expenditure, which grew 7.1% y-o-y in Q2 2017. Government expenditure, export, and import growth rates eased in Q2 2017 from Q1 2017. Growth in gross capital formation also moderated due to a contraction of public sector investment. On the production side, the services sector and the manufacturing sector expanded while the agriculture sector's growth slowed. On a quarter-on-quarter (q-o-q) and seasonally adjusted basis, GDP expanded 1.3% in Q2 2017. Malaysia's economy registered average annual growth of 5.7% in the first half of 2017.

Size and Composition

Total LCY bonds outstanding in Malaysia reached MYR1,246 billion (USD290 billion) at the end of June, an expansion of 3.3% q-o-q and 7.1% y-o-y (**Table 1**). Compared with the preceding quarter, growth was unchanged on a q-o-q basis but was faster on a y-o-y basis. *Sukuk* (Islamic bonds) continued to have a larger share in comparison with conventional bonds, amounting to MYR716.3 billion, or 57.5% of the total. The *sukuk* market expanded 4.0% q-o-q and 12.8% y-o-y in Q2 2017.

Government bonds. The size of the LCY government bond market continued to expand in Q2 2017, growing 2.9% q-o-q and 4.0% y-o-y. The growth rates were faster compared with those in the previous quarter. Central government bonds, which largely comprise Malaysian Government Securities (MGS) and Government Investment Issues (GII), continue to dominate the market with a total of MYR634 billion at the end of June on an increase of 3.5% q-o-q. Central bank bills outstanding continued to decline in Q2 2017, dropping 23.4% q-o-q, as securities matured and new issuance was low. Meanwhile, Sukuk Perumahan Kerajaan were unchanged at MYR28 billion at the end of June. Total government

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	MYR	USD	MYR	USD	MYR	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**1,163**	**289**	**1,206**	**272**	**1,246**	**290**	**2.0**	**8.2**	**3.3**	**7.1**
Government	644	160	651	147	670	156	2.5	5.9	2.9	4.0
Central Government Bonds	600	149	613	138	634	148	3.8	7.9	3.5	5.6
of which: *Sukuk*	232	57	252	57	263	61	3.9	10.8	4.6	13.6
Central Bank Bills	15	4	10	2	7	2	(29.1)	(34.5)	(23.4)	(51.8)
of which: *Sukuk*	0	0	0	0	0	0	–	(100.0)	–	–
Sukuk Perumahan Kerajaan	28	7	28	6	28	7	0.0	1.8	0.0	0.0
Corporate	519	129	555	125	576	134	1.4	11.0	3.8	10.9
of which: *Sukuk*	375	93	409	92	425	99	2.5	11.2	4.0	13.3

( ) = negative, – = not available, MYR = Malaysian ringgit, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–USD rates are used.
3. Growth rates are calculated from local currency base and do not include currency effects.
4. Sukuk Perumahan Kerajaan are Islamic bonds issued by the Government of Malaysia to refinance funding for housing loans to government employees and to extend new housing loans.

Sources: Bank Negara Malaysia Fully Automated System for Issuing/Tendering (FAST) and Bloomberg LP.

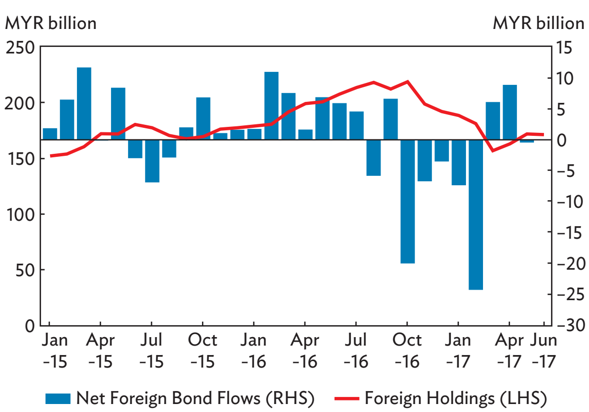
sukuk reached MYR291 billion at the end of June and comprised 43.5% of the total government bond stock.

Issuance of LCY government bonds during Q2 2017 declined 21.5% q-o-q to MYR30.5 billion from MYR38.9 billion in Q1 2017. Lower issuance volumes were recorded across all components of government bonds in Q2 2017: MGS issuance fell 16.7% q-o-q, GII dropped 6.5% q-o-q, and Treasury bills declined 73.3% q-o-q. MGS and GII together accounted for 88.5% of total government bond issuance during the quarter. On an annual basis, securities issued by the government were up 8.0% in Q2 2017.

Auctions for government bonds were met with strong demand, although longer-dated government bonds, particularly 20-year maturities, garnered softer interest from investors, reflecting concern over monetary policies in the US and eurozone. Government bonds were supported by onshore money and a stable Malaysian ringgit.

Foreign holdings of LCY government bonds increased 9.2% q-o-q at the end of June, supported by growth in holdings across all components of the government bond market (**Figure 2**). Foreign holdings at the end of June were up 15.5% q-o-q for Treasury bills, 10.1% q-o-q for MGS, and 2.4% q-o-q for GII. During Q2 2017, net foreign bond inflows into Malaysia's LCY government bond market reached MYR14.4 billion, a turnaround from the MYR35.0 billion of net outflows in Q1 2017. On a monthly basis, net inflows of MYR6.0 billion were recorded in April following 5 consecutive months of net outflows that were triggered by the uncertain policy direction in the US and the BNM's barring of offshore trading of the Malaysian ringgit. May saw increased net inflows of MYR8.8 billion, the bulk of which were in the form of foreign investor purchases of MGS. In June, however, net foreign outflows of MYR0.5 billion were observed in the LCY government bond market, mainly due to a decrease in foreign holdings of MGS. The reduction was attributed to the market's reaction to the US interest rate hike in June as well as due to profit-taking and the holiday-shortened trading month. The plan of the Federal Reserve to pare its balance sheet and possible monetary tightening among other major central banks could tighten global liquidity, resulting in a shift of investments to safe havens.

Figure 2: Foreign Holdings and Capital Flows of Local Currency Government Bonds in Malaysia



LHS = left-hand side, MYR = Malaysian ringgit, RHS = right-hand side.
Notes:
1. Figures exclude foreign holdings of Bank Negara Malaysia bills.
2. Month-on-month changes in foreign holdings of local currency government bonds were used as a proxy for bond flows.
Source: Bank Negara Malaysia Monthly Statistical Bulletin.

Corporate bonds. LCY corporate bond outstanding increased 3.8% q-o-q and 10.9% y-o-y in Q2 2017, registering a total of MYR576 billion at the end of June. The Q2 2017 expansion in the corporate segment was faster than that in the government bond market on both a q-o-q and y-o-y basis, as well as compared with the q-o-q and y-o-y expansions in Q1 2017. *Sukuk* totaled MYR425 billion at the end of June, comprising 73.7% of LCY corporate bonds outstanding.

Outstanding bonds from the top 30 corporate issuers amounted to MYR325.6 billion, or 56.5% of the total corporate debt stock, at the end of June (**Table 2**). The finance sector led the group with a combined amount of MYR153.2 billion from 12 firms, followed by the transport, storage, and communications sector with total outstanding bonds of MYR64 billion. Danainfra Nasional stayed on top of the list with MYR36.9 billion of bonds outstanding in Q2 2017, up MYR4.5 billion from Q1 2017.

Corporate bond issuance in Q2 2017 increased 6.8% q-o-q and 19.2% y-o-y to MYR40.6 billion. The q-o-q growth in Q2 2017 was slower compared with growth in Q1 2017, which was driven by a sharp rebound in issuance. Corporate issuance in Q2 2017 largely comprised commercial paper and medium-term notes amounting to MYR13.6 billion and MYR26.1 billion, respectively. The positive momentum in corporate bond issuance reflected an environment that is conducive to raising capital as interest rates remained favorable despite the Federal Reserve hinting at further tightening within the year. With ample liquidity in the market, firms

Table 2: Top 30 Issuers of Local Currency Corporate Bonds in Malaysia

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (MYR billion)	LCY Bonds (USD billion)			
1.	Danainfra Nasional	36.9	8.6	Yes	No	Finance
2.	Project Lebuhraya Usahasama	30.4	7.1	No	No	Transport, Storage, and Communications
3.	Cagamas	27.8	6.5	Yes	No	Finance
4.	Prasarana	18.7	4.4	Yes	No	Transport, Storage, and Communications
5.	Khazanah	18.0	4.2	Yes	No	Finance
6.	Perbadanan Tabung Pendidikan Tinggi Nasional	16.7	3.9	Yes	No	Finance
7.	Maybank	15.6	3.6	No	Yes	Banking
8.	Pengurusan Air	14.4	3.4	Yes	No	Energy, Gas, and Water
9.	CIMB Bank	12.5	2.9	Yes	No	Finance
10.	Sarawak Energy	9.5	2.2	Yes	No	Energy, Gas, and Water
11.	Public Bank	9.4	2.2	No	No	Banking
12.	Lembaga Pembiayaan Perumahan Sektor Awam	9.3	2.2	Yes	No	Property and Real Estate
13.	Jimah East Power	9.0	2.1	Yes	No	Energy, Gas, and Water
14.	GOVCO Holdings	7.6	1.8	Yes	No	Finance
15.	Bank Pembangunan Malaysia	7.4	1.7	Yes	No	Banking
16.	YTL Power International	7.3	1.7	No	Yes	Energy, Gas, and Water
17.	Rantau Abang Capital	7.0	1.6	Yes	No	Finance
18.	Sarawak Hidro	6.5	1.5	Yes	No	Energy, Gas, and Water
19.	ValueCap	6.0	1.4	Yes	No	Finance
20.	CIMB Group Holdings	5.7	1.3	Yes	No	Finance
21.	Aman Sukuk	5.6	1.3	Yes	No	Construction
22.	Putrajaya Holdings	5.5	1.3	Yes	No	Property and Real Estate
23.	Turus Pesawat	5.3	1.2	Yes	No	Transport, Storage, and Communications
24.	1Malaysia Development Berhad	5.0	1.2	Yes	No	Finance
25.	Celcom Networks	5.0	1.2	No	No	Transport, Storage, and Communications
26.	Danga Capital	5.0	1.2	Yes	No	Finance
27.	GENM Capital	5.0	1.2	No	No	Finance
28.	Jambatan Kedua	4.6	1.1	Yes	No	Transport, Storage, and Communications
29.	AmBank	4.5	1.0	No	No	Banking
30.	Manjung Island Energy	4.5	1.0	No	No	Energy, Gas, and Water
Total Top 30 LCY Corporate Issuers		**325.6**	**75.8**			
Total LCY Corporate Bonds		**576.2**	**134.2**			
Top 30 as % of Total LCY Corporate Bonds		**56.5%**	**56.5%**			

LCY = local currency, MYR = Malaysian ringgit, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
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.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (MYR million)
Danainfra Nasional		
5-year bond	4.06	750
7-year bond	4.27	700
10-year bond	4.37	500
15-year bond	4.89	700
20-year bond	5.10	350
25-year bond	5.20	780
30-year bond	5.25	720
Lembaga Pembiayaan Perumahan Sektor Awam		
5-year bond	4.17	800
7-year bond	4.39	500
10-year bond	4.58	450
15-year bond	4.94	700
20-year bond	5.07	300
30-year bond	5.22	500
YTL Power International		
10-year bond	5.05	2,500
Pengurusan Air		
3-year bond	3.96	700
5-year bond	4.06	900
7-year bond	4.27	500
Public Bank		
10-year bond	4.85	2,000

MYR = Malaysian ringgit.
Source: Bank Negara Malaysia Bond Info Hub.

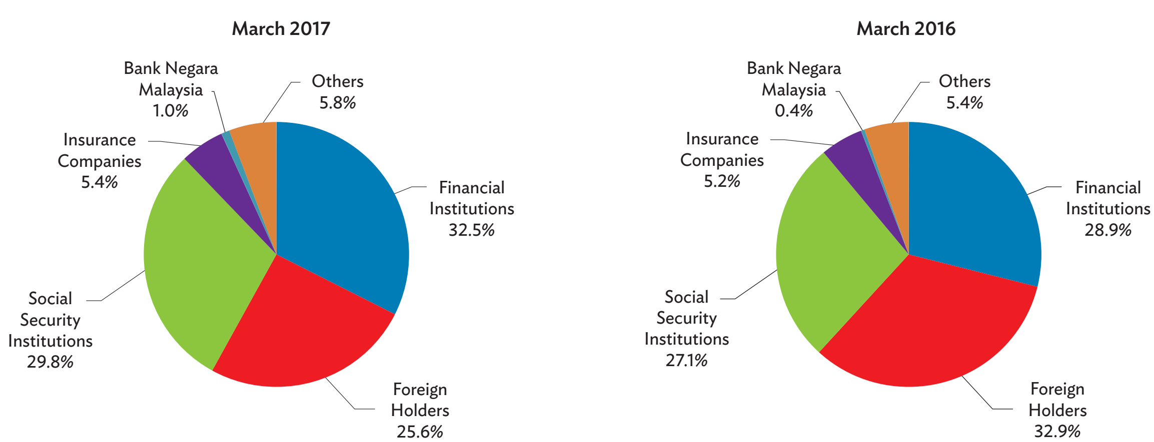
may continue raising funds, especially for infrastructure projects such as high-speed rail.

Danainfra Nasional dominated bond issuance in the corporate sector in Q2 2017, raising a total of MYR4,500 billion from a multitranche sale of 5-year through 30-year maturities (**Table 3**). Property firm Lembaga Pembiayaan Perumahan Sektor Awam raised MYR3,250 billion from a multitranche bond issuance and YTL Power International issued a 10-year bond worth MYR2,500 that fetched a coupon rate of 5.05%.

Investor Profile

The investor profile for LCY government bonds had several changes at the end of March compared with a year earlier (**Figure 3**). The share of foreign holders fell from 32.9% in March 2016 to 25.6% in March 2017, and no longer comprised the largest share in the market. The decline was due to the sell-off of government bond holdings by foreign investors, which began in the last quarter of 2016 and continued into Q1 2017, that was triggered by negative market sentiments due to uncertain policy directions in the US and was exacerbated by the BNM clamping down on offshore trading of the Malaysian ringgit in order to temper its volatility. The market share of foreign holders was surpassed by financial institutions

Figure 3: Local Currency Government Bonds Investor Profile



Note: "Others" include statutory bodies, nominees and trustee companies, and cooperatives and unclassified items.
Source: Bank Negara Malaysia.

and social security institutions during the review period, whose holdings accounted for 32.5% and 29.8% of the total LCY government bond market, respectively, at the end of March. The shares of insurance companies and other holders' share increased to 5.4% and 5.8% from 5.2% and 5.4%, respectively, while the BNM's holdings of government bonds climbed to 1.0% at the end of March from 0.4% a year earlier, which remained the smallest share among all LCY government bondholders.

In the LCY corporate bond market, life insurance companies had the largest share of holdings at the end of June (**Figure 4**). Life insurance companies increased their share of LCY corporate bonds outstanding to 40.0% from 38.5% a year earlier, while domestic commercial and Islamic banks experienced a marginal decrease to 38.9% from 39.0% during the review period. The Employees Provident Fund, foreign commercial and Islamic banks, and investment banks all saw decreases in their respective shares of LCY corporate bonds outstanding, while general insurance companies' share was steady at 2.3%.

Ratings Update

On 22 June, S&P Global affirmed Malaysia's foreign currency sovereign rating at A– for long-term and A-2 for short-term debt, and its local currency sovereign rating at A for long-term and A-1 for short-term debt. S&P Global cited Malaysia's sound growth prospects, solid external position, and flexible monetary policy in its affirmation. S&P Global maintained a stable outlook for Malaysia's sovereign ratings but warned of the challenges involving alleged corruption in 1Malaysia Development Berhard, as well as the political risk linked to the upcoming election.

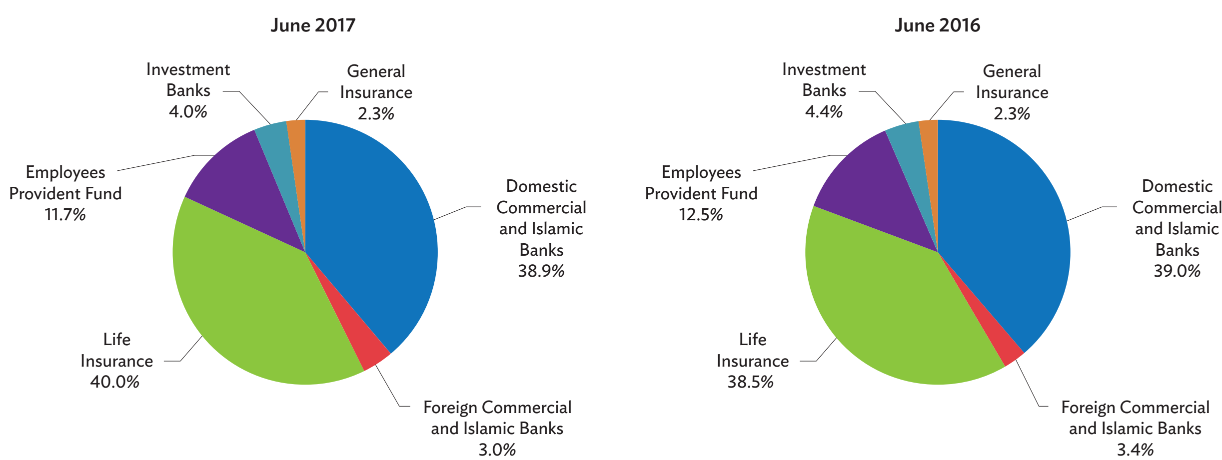
On 17 August, Fitch Ratings (Fitch) affirmed Malaysia's long-term foreign currency and LCY issuer default ratings at A–, with a stable outlook for both, on account of a resilient economic expansion despite lower oil prices and volatile capital flows, continued account surpluses, and a solid external position. However, the ratings agency cited lingering risks, which include sizeable contingent liabilities resulting from the 1Malaysia Development Berhad embezzlement charges that could worsen public finances, and rising political risk in the run-up to Malaysia's upcoming general election in mid-2018.

Policy, Institutional, and Regulatory Developments

Bank Negara Malaysia Removes Reserve Fund Requirement for Islamic Banks

BNM will no longer require Islamic banks to maintain reserve funds effective 3 May. In the past, Islamic banking institutions were required to set aside a percentage of

Figure 4: Local Currency Corporate Bonds Investor Profile



Note: The Employees Provident Fund's bond holdings data are as of end-December 2016.
Sources: Bank Negara Malaysia and the Employees Provident Fund.

profits into a reserve fund prior to dividend distribution to serve as a buffer to be drawn upon during periods of stress. This prudential tool ensured banks could continue serving as financial intermediaries without disruption. According to the central bank, with the new policy in place, Islamic banks are only required to maintain minimum capital to operate and provide financial services effectively, and also remain to comply with the stringent capital requirements of the Basel III accord.

Bursa Malaysia Launches Leading Entrepreneur Accelerator Platform

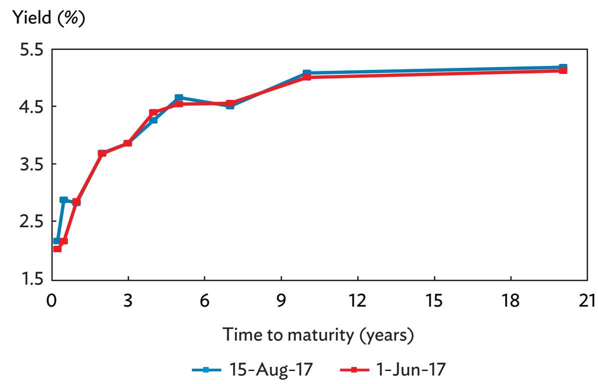
Bursa Malaysia launched in July a platform for small and medium-sized enterprises (SMEs), the Leading Entrepreneur Accelerator Platform (LEAP), to serve as avenue to tap the capital market. SMEs can be listed on LEAP to provide them fund-raising through the capital market and at the same time comply with the regulations required of a firm preparing for a formal listing. LEAP is part of a system in which SMEs and start-ups can be listed on the equity crowdfunding platform, then on LEAP, and subsequently on the Ace Market and Main Market. Qualifying for listing on the platform does not require a track record of profits and operating history.

Philippines

Yield Movements

Between 1 June and 15 August, local currency (LCY) government bond yields in the Philippines rose for most tenors, particularly the 3-month, 6-month, 2-year, 5-year, 10-year, and 20-year maturities (**Figure 1**). The largest yield increase was seen for 6-month government bonds at 71 basis points (bps), while the smallest increase was 1 bp for the 2-year tenor. Yields fell for 1-year, 4-year, and 7-year government bonds, with 4-year maturities experiencing the largest drop of 14 bps. The yield for the 3-year tenor was practically unchanged. During the review period, the yield spread between the 2-year and 10-year maturities widened 7 bps from 132 bps to 139 bps.

Figure 1: Philippines' Benchmark Yield Curve—Local Currency Government Bonds



Source: Based on data from Bloomberg LP.

The advance in yields for most tenors reflected the market's reaction to the United States (US) Federal Reserve's plan that it would soon start the process of balance sheet normalization, whereby it will reduce its holdings of US Treasury bonds and mortgage-backed securities, as well as on account of upbeat economic data reports. Softer US consumer price inflation, however, may have capped a further rise in yields as the Federal Reserve's decision on another rate hike, which greatly affects yield movements, may be delayed as prices are not accelerating as expected. The European Central Bank's statement on adjusting the parameters of its policy instruments may also have contributed to the rise in yields. On the domestic front, the Government of the Philippines incurred a budget deficit of PHP154.5 billion in the first half of 2017, 28.0% higher than in the same period a year earlier. Revenue projections from the tax reform package were reduced as some revenue-generating measures were watered down by the Philippine Congress. With more spending in the pipeline, the government may need to borrow more to fund the gap, likely pulling up government bond yields.

Consumer price inflation in the Philippines climbed to 2.8% year-on-year (y-o-y) in July from a revised 2.7% y-o-y in June. Nonfood inflation increased to 2.4% y-o-y in July from 1.9% y-o-y in June, lifted by higher prices in the transport sector due to upward adjustments in railway transport fare and domestic petrol prices. Higher prices were also observed for housing rentals, utilities, education, and miscellaneous services. On the other hand, price increases for food and nonalcoholic beverages slowed to 3.3% y-o-y in July from 3.5% y-o-y in the previous month. March and April posted the highest inflation rates of the year through July at 3.4% y-o-y in each month. Average inflation for the first 7 months of 2017 was 3.1%, well within the government's target range of 2.0%–4.0% for 2017. Core inflation, which excludes selected volatile food and energy items, decelerated to its slowest pace since January at 2.1% y-o-y in July.

The Bangko Sentral ng Pilipinas (BSP) maintained its overnight reverse repurchase rate at 3.00% and the interest rates on its overnight lending and deposit facilities at 3.50% and 2.50%, respectively, during its monetary policy meeting on 10 August. Despite inflation remaining relatively high in recent months, the BSP stated that inflation continues to be manageable. According to the central bank's latest baseline forecasts, average inflation will remain within the target range of 2.0%–4.0% in 2017. Inflationary pressures arising from the impact of the proposed tax reform program are expected to be lessened by social safety nets. The central bank's decision to keep the policy rate unchanged allows it to properly assess global developments, such as the normalization of US monetary policy, and to calibrate its policy tools accordingly.

The Philippine peso continued to underperform against the US dollar. On 15 August, the Philippine peso traded at PHP51.41 to the US dollar, losing 3.5% since the start of the year. It reached an 11-year low in August, making it the worst performing currency in emerging East Asia in 2017. The Philippine peso is being weighed down by the current account deficit and negative sentiments over political concerns and the security situation in the southern Philippines. The BSP, however, dismissed worries surrounding the current account deficit as the central bank said that the deficit is underlain by capital goods imports that will eventually improve the economy's productive capacity. The central bank also said that the depreciation of the peso is consistent with government efforts to spur economic growth and it is prepared to use its foreign reserves to temper the volatility of the currency.

The Philippine economy expanded 6.5% y-o-y in the second quarter (Q2) of 2017 following a period of moderation in the preceding 2 quarters. The growth was much slower than the 7.1% y-o-y growth in Q2 2016, which was driven by election-related expenditures. On the expenditure side, GDP growth was helped by government spending, which accelerated to 7.1% y-o-y in Q2 2017 from only 0.1% y-o-y in the first quarter (Q1) of 2017. Household expenditure, export, and import growth rates in Q2 2017 were broadly at par with Q1 2017, while capital formation growth decelerated. On the production side, the primary sector registered faster growth of 6.3% y-o-y in Q2 2017, indicating continued recovery from El Niño. Industrial sector growth accelerated in Q2 2017, while services sector growth slowed even as it remained to be the main driver of growth. GDP performance in Q2 2017 put the Philippines' growth momentum back on track. The economy is highly likely to reach the lower bound of the government's full-year GDP growth target of 6.5%–7.5%. The Philippines remains one of the best performing economies in emerging East Asia.

Size and Composition

The size of the Philippines' LCY bond market reached PHP5,168 billion (USD102 billion) at the end of June, up from PHP 4,943 billion at the end of March (**Table 1**). The bond market registered faster growth of 4.6% quarter-on-quarter (q-o-q) and 10.2% y-o-y in Q2 2017, compared with 1.5% q-o-q and 5.0% y-o-y in the preceding quarter. The market expansion was lifted by advances in both the LCY government and corporate bond segments.

Government bonds. Total LCY government bonds outstanding amounted to PHP4,211 billion at the end of June, posting growth of 5.0% q-o-q and 8.5% y-o-y. Strong growth rates were seen in Treasury bonds, which increased 5.1% q-o-q and 9.3% y-o-y, and in Treasury bills, which increased 11.1% q-o-q and 10.4% y-o-y. The expansion in the size of the government bond market was sustained by increased issuance, particularly the issuance of Retail Treasury Bonds (RTBs) in April. On the other hand, the outstanding bonds of government-owned or -controlled corporations continued to decline due to the maturing bonds and the absence of new issuance. As of the end of June, government bonds comprised 81.5% of the total LCY bond market.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	PHP	USD	PHP	USD	PHP	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**4,688**	**99**	**4,943**	**98**	**5,168**	**102**	**(0.4)**	**0.9**	**4.6**	**10.2**
Government	3,880	82	4,011	80	4,211	83	(0.3)	(0.4)	5.0	8.5
Treasury Bills	288	6	286	6	318	6	3.2	4.6	11.1	10.4
Treasury Bonds	3,517	75	3,656	73	3,842	76	(0.6)	(0.7)	5.1	9.3
Others	76	2	69	1	51	1	0.0	(5.6)	(27.0)	(33.1)
Corporate	808	17	932	19	957	19	(0.6)	7.9	2.7	18.5

( ) = negative, LCY = local currency, PHP = Philippine peso, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY–USD rates are used.
3. Growth rates are calculated from an LCY base and do not include currency effects.
4. "Others" comprise bonds issued by government agencies, entities, and corporations for which repayment is guaranteed by the Government of the Philippines. This includes bonds issued by Power Sector Assets and Liabilities Management (PSALM) and the National Food Authority, among others.
5. Peso Global Bonds (PHP-denominated bonds payable in US dollars) are not included.
Sources: Bloomberg LP and Bureau of the Treasury.

Total government issuance of LCY bonds amounted to PHP415 billion in Q2 2017, up from PHP268 billion in the preceding quarter. The sharp increase of 55.0% q-o-q was mainly due to the issuance of PHP181 billion worth of RTBs in April. The RTB offer was met with strong demand, prompting the Bureau of the Treasury (BTr) to increase its initial offer size of PHP30 billion to accommodate investor appetite. The 3-year security has a coupon rate of 4.25%. Excluding RTBs, the issuance of Treasury bonds fell short of the PHP90 billion quarterly target as the BTr raised only PHP64.8 billion during Q2 2017 as opposed to reaching the target in Q1 2017. Most Treasury bond auctions were partially awarded due to high rates demanded by market participants amid pronouncements by major central banks of rake hikes. Moreover, the BTr is awash with cash from its RTB sale, allowing it to reject some bids.

In contrast, auctions of Treasury bills were successful, raising PHP89.2 billion of the PHP90 billion target in Q2 2017.[18] Market participants preferred shorter-dated securities as they wait on the sidelines in anticipation of the Federal Reserve's balance sheet reduction and future rate hikes, as well as the direction of monetary policy of central banks in other advanced economies.

The Department of Finance is considering the possibility of issuing PHP30 billion worth of "patriotic bonds" for the rehabilitation of Marawi City in the southern Philippines. The department is considering a 20-year maturity for the bond issuance. However, bond traders think it is unlikely to attract buying interest from the market as investors prefer shorter-term bonds of about 3–8 years. On the other hand, an RTB-style issuance with a maturity of 5–7 years would likely garner sufficient interest. The BSP said that the market has enough liquidity to cover the issuance if pursued.

Corporate bonds. Total LCY corporate bonds outstanding grew 2.7% q-o-q and 18.5% y-o-y in Q2 2017 versus growth of 4.6% q-o-q and 14.6% y-o-y in Q1 2017. In annual terms, the growth rate of corporate bonds exceeded that of government bonds. On a quarterly basis, however, the corporate bond market lagged behind the government bond market's expansion. Corporate bonds outstanding rose to PHP957 billion in Q2 2017 from PHP932 billion in Q1 2017, comprising 18.5% of the total LCY bond market at the end of June.

Outstanding corporate bonds in the property sector surpassed that of the banking sector in Q2 2017 with totals of PHP261.5 billion and PHP256.8 billion, respectively, at the end of June (**Figure 2**). The property sector's share of the total corporate bond stock increased to 27.3% at the end of June from 24.4% at the end of June 2016, and the banking sector's share decreased to 26.8% from 28.3% in the same period.

Aggregate LCY bonds outstanding for the top 30 corporate issuers reached PHP818.1 billion at the end of June, up 3.2% from PHP793.0 at the end of March (**Table 2**). While more banks were included among the top 30 issuers in Q2 2017 than in the previous quarter, property firms led the group in cumulative bonds outstanding. Property giants Ayala Land and SM Prime had the most bonds outstanding at PHP87.3 billion and PHP73.8 billion, respectively.

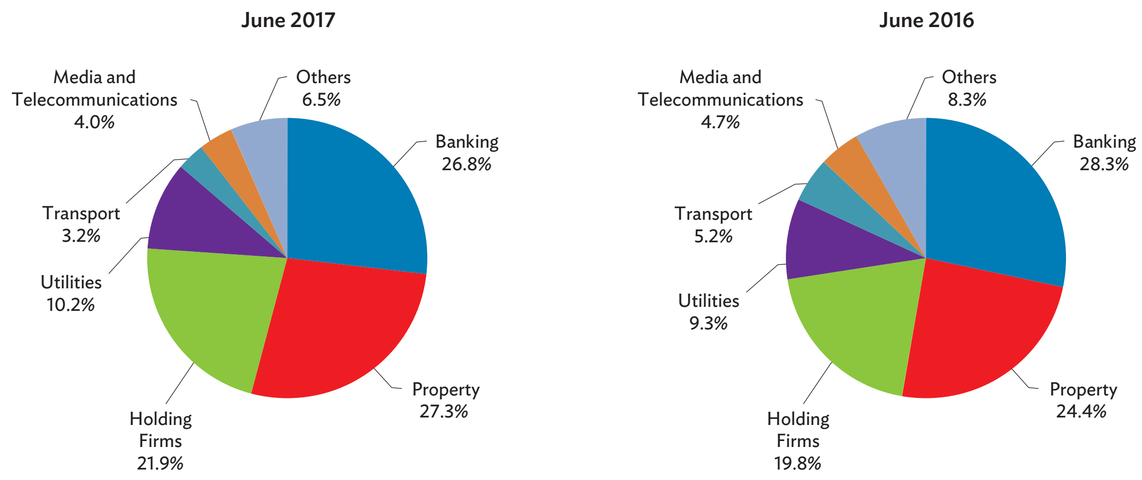
LCY bond issuance from the corporate sector increased 4.9% q-o-q to PHP54.9 billion in Q2 2017, in contrast to the 27.2% q-o-q drop in Q1 2017, which was mainly traced to high base effects. Companies are timing their entry into the market while rates are still favorable as the Federal Reserve monetary policy tightening could shift capital away from emerging markets and drive up funding costs.

Market participants see the corporate bond market remaining vibrant even if the government shifts its project financing to appropriation from public–private partnerships. Should government spending, particularly huge infrastructure projects, gain further traction, it would spur economic activity and provide more opportunities for firms to expand. Market participants see investor appetite remaining strong in the LCY corporate bond market due to ample liquidity and that the yield spread of corporate bonds over government bonds will continue to attract investors.

Bond issuance in Q2 2017 came from property firms, banks, and holding firms. Property firms led all other types of issuers during the quarter, with total issuance of PHP27 billion, followed by banks at PHP18 billion

[18] This does not include special bills.

Figure 2: Local Currency Corporate Bonds Outstanding by Sector



Source: Based on data from Bloomberg LP.

and a single holding firm with PHP10 billion. Growth in property bonds outstanding is attributed to the optimistic outlook for the property sector, which is supported by low mortgage rates, strong dollar remittances from overseas Filipinos, and the expanding business process outsourcing industry.

SM Prime, the Philippines' largest property firm, had the largest issuance during the quarter, raising PHP20 billion from the sale of a 7-year bond carrying a coupon rate of 5.17% (**Table 3**). Another property firm, Ayala Land, sold a 5-year PHP10 billion bond with a 5.19% coupon rate.

Investor Profile

The profile of investors in the LCY government bond market in Q2 2017 was little changed from a year earlier (**Figure 3**). Banks and investment houses remained the largest holder of government bonds, with a share of 40.2% of the total market at the end of June, up from 36.4% at the end of June 2016. The group's nominal holdings were up 20.1% y-o-y. Contractual savings institutions and tax-exempt institutions comprised the second-largest share at 31.3% at the end of June on an increase in nominal holdings of 10.4% y-o-y. The share of BTr-managed funds; brokers, custodians, and depositories; and government-owned or –controlled corporations and local government units decreased to 12.1%, 6.9%, and 0.5%, respectively, at the end of June from a year earlier, while other investor share increased to 8.8%.

Ratings Update

On 6 July, Japan Credit Rating Agency affirmed the Philippines' foreign currency and LCY long-term issuer ratings at BBB+ and maintained a stable outlook for both ratings. The rating agency stated that the affirmation reflected the economy's robust expansion, which is supported by strong domestic demand, a sound external position given by declining external debt and an accumulation of foreign exchange reserves, and a continued reduction of the government's debt burden. Challenges flagged by rating agency include improving the economy's infrastructure to enhance the investment environment in order to attract and sustain foreign direct investments, and restoring stability in the southern Philippines.

Table 2: Top 30 Issuers of Local Currency Corporate Bonds in the Philippines

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (PHP billion)	LCY Bonds (USD billion)			
1.	Ayala Land	87.3	1.7	No	Yes	Property
2.	SM Prime	73.8	1.5	No	Yes	Property
3.	Metrobank	55.4	1.1	No	Yes	Banking
4.	SM Investments	47.3	0.9	No	Yes	Holding Firms
5.	Ayala Corporation	40.0	0.8	No	Yes	Holding Firms
6.	BDO Unibank	37.5	0.7	No	Yes	Banking
7.	Philippine National Bank	35.1	0.7	No	Yes	Banking
8.	San Miguel Brewery	34.8	0.7	No	No	Brewery
9.	San Miguel	30.0	0.6	No	Yes	Holding Firms
10.	JG Summit Holdings	30.0	0.6	No	Yes	Holding Firms
11.	Filinvest Land	29.0	0.6	No	Yes	Property
12.	Aboitiz Equity Ventures	24.0	0.5	No	Yes	Holding Firms
13.	Meralco	23.5	0.5	No	Yes	Electricity, Energy, and Power
14.	East West Bank	23.1	0.5	No	Yes	Banking
15.	Security Bank	23.0	0.5	No	Yes	Banking
16.	GT Capital	22.0	0.4	No	Yes	Holding Firms
17.	Petron	18.6	0.4	No	Yes	Electricity, Energy, and Power
18.	Rizal Commercial Banking Corporation	18.3	0.4	No	Yes	Banking
19.	Globe Telecom	17.0	0.3	No	Yes	Telecommunications
20.	Maynilad Water Services	15.9	0.3	No	No	Water
21.	China Bank	15.9	0.3	No	Yes	Banking
22.	MCE Leisure (Philippines)	15.0	0.3	No	No	Casinos & Gaming
23.	Philippine Long Distance Telephone Company	15.0	0.3	No	Yes	Telecommunications
24.	SMC Global Power Holdings	15.0	0.3	No	No	Electricity, Energy, and Power
25.	Union Bank of the Philippines	14.0	0.3	No	Yes	Banking
26.	Megaworld	12.0	0.2	No	Yes	Property
27.	Robinsons Land	12.0	0.2	No	Yes	Property
28.	NLEX Corporation	11.9	0.2	No	No	Transport
29.	MTD Manila Expressways	11.5	0.2	No	No	Transport
30	Vista Land and Lifescapes	10.2	0.2	No	Yes	Property
Total Top 30 LCY Corporate Issuers		**818.1**	**16.2**			
Total LCY Corporate Bonds		**957.4**	**19.0**			
Top 30 as % of Total LCY Corporate Bonds		**85.4%**	**85.4%**			

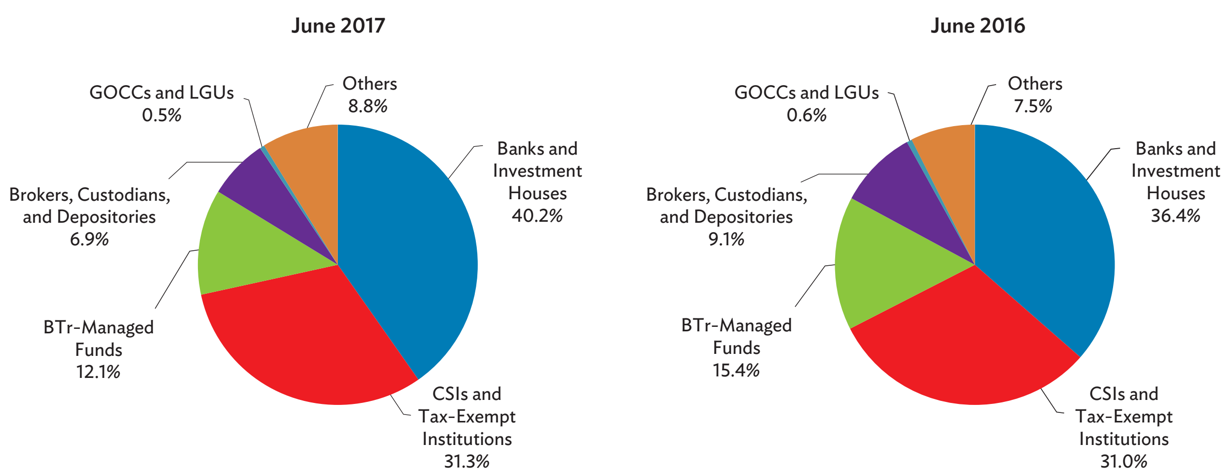
LCY = local currency, PHP = Philippine peso, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (PHP billion)
SM Prime		
7-year bond	5.17	20.00
San Miguel		
5-year bond	5.19	10.00
Ayala Land		
10-year bond	5.26	7.00
China Bank		
5-year bond	3.65	6.35

PHP = Philippine peso.
Source: Bloomberg LP.

Figure 3: Local Currency Government Bonds Investor Profile



BTr = Bureau of the Treasury, CSIs = contractual savings institutions, GOCCs = government-owned or -controlled corporations, LGUs = local government units.
Source: Bureau of the Treasury.

Policy, Institutional, and Regulatory Developments

Bangko Sentral ng Pilipinas Considers Liberalizing Foreign Exchange Rules

In July, the BSP announced new reforms aimed at further liberalizing the foreign exchange market, including easing existing rules on foreign currency exchange to make it more attractive for the public to transact through formal platforms such as banks rather than in unregulated platforms like money changers and remittance agents. Current rules are seen by the BSP as restrictive, difficult, opaque, and shallow, resulting in higher costs of doing business and an expanding black market. The proposed liberalization would make the system more risk-based and transparent.

Department of Finance Outlines the Second Package of the Comprehensive Tax Reform Program

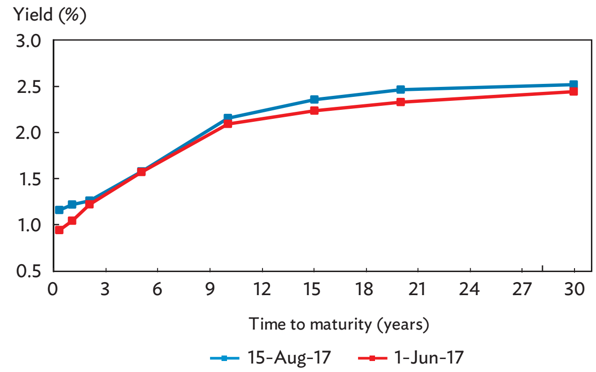
In May, the Department of Finance said it expects to submit the second package of the comprehensive tax reform program to the Philippine Congress by the fourth quarter of 2017. The second package will plug tax holiday loopholes granted by investment promotion agencies such as the Board of Investments and the Philippine Economic Zone Authority. The current tax perks allow companies to shift expenses from projects that are subject to tax holidays in order to maximize profits. The second package is revenue neutral wherein forgone revenue from lowering the corporate income tax rate to 25% from 30% will be offset by eliminating some tax incentives.

Singapore

Singapore's local currency (LCY) government bond yields rose for all tenors between 1 June and 15 August. Singapore Government Securities (SGS) bills with tenors of 1 year and below rose an average of 19 basis points (bps), while bonds with maturities of 2 years to 5 years rose an average of 2 bps. Long-term SGS bonds with maturities of 10 years to 30 years rose an average of 10 bps. The 2-year and 10-year yield spread widened to 89 bps on 15 August from 87 bps on 1 June.

The rise in bond market yields in Singapore mostly followed the rise in United States (US) bond yields. As Singapore is considered a safe haven, the positive global growth outlook combined with the improved performance of Singapore's economy may have led to the uptick in bond yields.

Figure 1: Singapore's Benchmark Yield Curve—Local Currency Government Bonds



Source: Based on data from Bloomberg LP.

Since its last meeting on 13 April, Monetary Authority of Singapore (MAS) maintained a neutral policy stance by keeping the rate of appreciation of the Singapore dollar nominal effective exchange rate policy band at zero, while also leaving the range of the policy band width and the level at which it is centered unchanged. This is deemed appropriate to provide continued support to Singapore's reviving economy. As of 15 August, the Singapore dollar had appreciated 5.8% year-to-date against the US dollar.

Singapore's gross domestic product (GDP) in the second quarter (Q2) of 2017 rose 2.9% year-on-year (y-o-y) after growing 2.5% y-o-y in the first quarter (Q1) of 2017. The strong performance of the manufacturing sector in the first half of 2017 provided a tailwind as evidenced by 8.1% y-o-y growth in Q2 2017 and a gain of 8.5% y-o-y in Q1 2017. The services-producing industries also added support, expanding 2.4% y-o-y in Q2 2017, up from 1.4% y-o-y growth in Q1 2017. With stronger-than-expected GDP growth in Q2 2017, Singapore's Ministry of Trade and Industry revised its 2017 GDP growth forecast upward to a range of 2%–3% from 1%–3%.

Singapore's domestic inflation remained modest in July, rising 0.6% y-o-y after increasing 0.5% y-o-y in June. The small increase in Singapore's inflation is more a result of rising energy-related and administrative costs rather than demand-driven price pressures. For the first 7 months of 2017, inflation averaged 0.7% y-o-y and is projected to hover between 0.5% and 1.5% in full-year 2017, reversing the deflation of 0.5% recorded in 2016. MAS core inflation measure, which excludes private transportation and accommodation costs, is expected to average around 1%–2% compared with last year's core inflation of 0.9%.

Size and Composition

Singapore's LCY bonds outstanding rose to SGD347 billion (USD252 billion) at the end of June on an increase of 0.4% quarter-on-quarter (q-o-q) and 6.7% y-o-y (**Table 1**). The increase mainly came from a rise in the outstanding stock of LCY government bonds, particularly central bank bills.

Government bonds. In Q2 2017, the outstanding stock of LCY government bonds rose 0.8% q-o-q and 13.7% y-o-y to reach SGD207 billion at the end of June. The gains came from the increase in MAS bills, which rose 7.2% q-o-q and 30.2% y-o-y, while SGS bills and bonds shed 3.9% q-o-q but rose 2.7% y-o-y

A total of SGD7.4 billion was raised from SGS bills and bonds issued in Q2 2017, while SGD12.0 billion was redeemed, resulting in a net decrease of SGD4.6 billion at the end of Q2 2017. Meanwhile, new issuance of MAS bills rose 7.3% q-o-q and 38.6% y-o-y to SGD96.6 billion in Q2 2017, likely a result from the monetary operations of MAS to mop up excess liquidity.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	SGD	USD	SGD	USD	SGD	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**325**	**241**	**345**	**247**	**347**	**252**	**0.3**	**(2.1)**	**0.4**	**6.7**
Government	182	135	205	147	207	150	(1.1)	(8.0)	0.8	13.7
SGS Bills and Bonds	109	81	117	84	112	82	(0.5)	3.7	(3.9)	2.7
MAS Bills	73	54	88	63	94	69	(1.9)	(21.3)	7.2	30.2
Corporate	143	106	140	100	140	102	2.0	6.5	(0.1)	(2.2)

( ) = negative, LCY = local currency, MAS = Monetary Authority of Singapore, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, SGD = Singapore dollar, SGS = Singapore Government Securities, USD = United States dollar, 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. SGS bills and bonds do not include the special issue of Singapore Government Securities held by the Singapore Central Provident Fund.
3. Bloomberg LP end-of-period LCY–USD rates are used.
4. Growth rates are calculated from an LCY base and do not include currency effects.
Sources: Bloomberg LP, Monetary Authority of Singapore, and Singapore Government Securities.

Corporate bonds. Based on *AsianBondsOnline* estimates, total outstanding LCY corporate bonds declined 0.1% q-o-q and 2.2% y-o-y in Q2 2017 to fall to SGD140 billion at the end of June.

About half of Singapore's outstanding LCY corporate bonds originated from the 30 largest LCY corporate bond issuers, who had a combined LCY bond stock of SGD70.5 billion at the end of June (**Table 2**). Singapore's Housing and Development Board led the top 30 list again with total bonds outstanding worth SGD23.0 billion, followed by United Overseas Bank with SGD4.6 billion and Temasek Financial I with SGD3.6 billion.

Of the top 30 largest LCY corporate bond issuers in Singapore, six were state-owned agencies and half were listed companies. The corporate entities are made up of a diverse group with business stakes in the banking, consumer goods, diversified holdings, education, finance, marine services, real estate, transport, telecommunications, and utilities sectors.

In Q2 2017, an estimated amount of SGD4.7 billion worth of bonds was issued by 25 firms, led by the sale of a SGD700 billion perpetual bond priced at par to yield 3.95% by Mapletree Treasury Services and another SGD700 billion bond with an 8-year tenor and a 3.04% coupon rate sold by Singapore Airlines (**Table 3**). The amount of newly issued bonds in Q2 2017 reflected growth of 12.3% q-o-q and 2.3% y-o-y.

Policy, Institutional, and Regulatory Developments

Monetary Authority of Singapore Offers Grant to Encourage Rated Bond Issuance

On 30 June, MAS launched a Singapore dollar credit rating grant to promote the issuance of rated bonds in the LCY bond market. MAS noted that only about half of the current outstanding corporate SGD-denominated bonds are rated. The SGD400,000 grant per issuer will be available to qualified foreign and domestic issuers for a 5-year period and will be used to cover all expenses related to obtaining credit ratings from an international credit rating agency.

Monetary Authority of Singapore and Bank of Thailand Sign Agreement for FinTech Cooperation

On 11 July, MAS and the Bank of Thailand signed a FinTech Cooperation Agreement to develop deeper financial cooperation between the two economies. The agreement will enable the sharing of information on trends and regulatory experience, and the referral of FinTech companies to each side. Along with the agreement signing, the existing Memorandum of Understanding on banking supervision between the two parties was also updated.

Table 2: Top 30 Issuers of Local Currency Corporate Bonds in Singapore

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (SGD billion)	LCY Bonds (USD billion)			
1.	Housing & Development Board	23.0	16.7	Yes	No	Real Estate
2.	United Overseas Bank	4.6	3.3	No	Yes	Banking
3.	Temasek Financial I	3.6	2.6	Yes	No	Finance
4.	Land Transport Authority	3.5	2.5	Yes	No	Transportation
5.	FCL Treasury	2.9	2.1	No	No	Finance
6.	Capitaland	2.8	2.0	No	Yes	Real Estate
7.	Mapletree Treasury Services	2.5	1.8	No	No	Finance
8.	Singapore Airlines	2.1	1.5	No	Yes	Transportation
9.	SP Powerassets	1.9	1.4	No	No	Utilities
10.	Olam International	1.7	1.3	No	Yes	Consumer Goods
11.	Keppel Corporation	1.7	1.2	No	Yes	Diversified
12.	DBS Group Holdings	1.5	1.1	No	Yes	Banking
13.	Oversea-Chinese Banking Corporation	1.5	1.1	No	Yes	Banking
14.	Public Utilities Board	1.4	1.0	Yes	No	Utilities
15.	DBS Bank	1.3	1.0	No	Yes	Banking
16.	National University of Singapore	1.3	0.9	No	No	Education
17.	GLL IHT	1.2	0.9	No	No	Real Estate
18.	City Developments Limited	1.2	0.9	No	Yes	Real Estate
19.	Hyflux	1.2	0.8	No	Yes	Utilities
20.	Capitaland Treasury	1.1	0.8	No	No	Finance
21.	CMT MTN	1.1	0.8	No	No	Finance
22.	Sembcorp Industries	1.0	0.7	No	Yes	Shipbuilding
23.	Ascendas REIT	1.0	0.7	No	Yes	Finance
24.	Sembcorp Financial Services	1.0	0.7	No	No	Engineering
25.	Singtel Group Treasury	0.9	0.7	No	No	Finance
26.	Neptune Orient Lines	0.9	0.6	No	Yes	Transportation
27.	SMRT Capital	0.8	0.5	No	No	Transportation
28.	Starhub	0.7	0.5	Yes	Yes	Telecommunications
29.	PSA Corporation	0.7	0.5	Yes	No	Marine Services
30.	Ezion Holdings	0.7	0.5	No	Yes	Marine Services
Total Top 30 LCY Corporate Issuers		**70.5**	**51.2**			
Total LCY Corporate Bonds		**140.0**	**101.8**			
Top 30 as % of Total LCY Corporate Bonds		**50.3%**	**50.3%**			

LCY = local currency, SGD = Singapore dollar, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
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 LP data.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (SGD million)
Mapletree Treasury Services		
Perpetual bond	3.95	700
Singapore Airlines		
8-year bond	3.04	700
Housing and Development Board		
10-year bond	2.35	500
RCS Trust		
6-year bond	2.60	300
National University of Singapore		
5-year bond	1.86	250

SGD = Singapore dollar.
Source: Bloomberg LP.

Thailand

Yield Movements

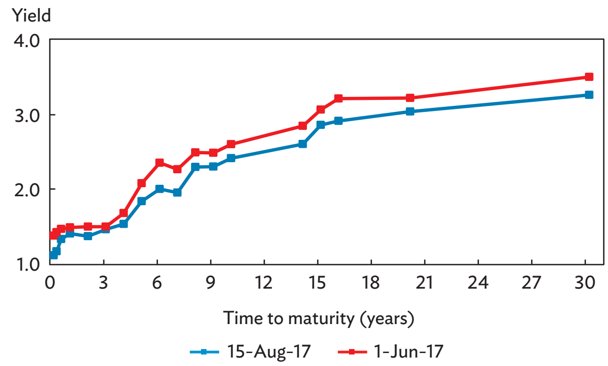
Yields for all tenors of Thailand's local currency (LCY) government bonds fell between 1 June and 15 August (**Figure 1**). Yields for securities with maturities of less than 1 year fell on average 22 basis points (bps), while yields for bonds with 1-year to 3-year maturities fell an average of 8 bps. For bonds with 4-year to 30-year tenors, yields fell an average of 23 bps. The yield spread between 2-year and 10-year bonds narrowed to 104 bps on 15 August from 110 bps on 1 June.

Low inflation this year has contributed to the overall decline in yields during the review period. Consumer price inflation eased to 0.4% year-on-year (y-o-y) in April, before turning negative in May and June. Subsequently in July, inflation inched up to 0.2% y-o-y. With inflation remaining below the Bank of Thailand's (BOT) target range of between 1.0%– 4.0% for 2017, the BOT has held its policy rate unchanged in January to August at 1.50%. The rate has stayed at this level since April 2015.

The strong appreciation of the Thai baht since the start of the year has helped attract foreign funds into the Thai bond market, further pushing yields down. At the end of June, the share of foreign holdings rose to 16.2% from 14.7% at the end of March. To limit speculation on the Thai baht, the BOT began tightening its issuance of short-term bills in April, particularly those with 3-month and 6-month maturities. In June, the BOT further relaxed its foreign exchange regulations, which allowed qualified Thai investors to directly invest a maximum of USD1 million per year in securities abroad, thereby lessening the upward pressure on the Thai baht.

Thailand's gross domestic product (GDP) accelerated in the second quarter (Q2) of 2017, rising 3.7% y-o-y after an expansion of 3.3% y-o-y in the first quarter (Q1) of 2017. GDP growth was supported by the strong performance in exports of goods and services, and the rise in domestic demand backed by continued growth in private and public consumption, and private investment. On the production side, the agricultural sector rebounded in Q2 2017. GDP growth for full-year 2017 is expected to come in at 3.5%–4.0%

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



Sources: Based on data from Bloomberg LP and Thai Bond Market Association.

Size and Composition

Thailand's LCY bond market fell to a size of THB10,973 billion (USD323 billion) at the end of June from THB11,163 billion at the end of March, reflecting a decline of 1.7% quarter-on-quarter (q-o-q). On a y-o-y basis, Thailand's LCY bond market expanded 5.8% in Q2 2017 (**Table 1**).

Government bonds. The outstanding stock of LCY government bonds declined 3.4% q-o-q to THB7,964 billion at the end of June from THB8,249 billion at the end of March. Government bonds and Treasury bills, and central bank bonds led the decline, falling to THB4,103 billion and THB3,080 billion on contractions of 2.4% q-o-q and 6.1% q-o-q, respectively. State-owned enterprise and other bonds rose 1.9% q-o-q to reach THB781 billion at the end of June.

In an effort to rein in investor speculation on the Thai baht, the BOT in Q2 2017 decreased new issuance of its short-term bills. As a result, new issuance of central bank bills declined to THB1,199 billion, lower by 30.5% q-o-q and 32.5% y-o-y in Q2 2017. On the other hand, new issuance of central bank bonds totaled THB146.1 billion.

In the same period, the issuance of central government bonds and other government bonds increased by

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	THB	USD	THB	USD	THB	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**10,372**	**295**	**11,163**	**325**	**10,973**	**323**	**1.6**	**8.0**	**(1.7)**	**5.8**
Government	7,720	220	8,249	240	7,964	235	1.5	5.8	(3.4)	3.2
Government Bonds and Treasury Bills	3,884	111	4,203	122	4,103	121	(2.0)	7.8	(2.4)	5.6
Central Bank Bonds	3,030	86	3,279	95	3,080	91	5.6	4.1	(6.1)	1.7
State-Owned Enterprise and Other Bonds	807	23	766	22	781	23	4.3	2.5	1.9	(3.2)
Corporate	2,652	75	2,914	85	3,009	89	2.0	14.9	3.3	13.5

( ) = negative, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, THB = Thai baht, USD = United States dollar, y-o-y = year-on-year.
Notes:
1. Calculated using data from national sources.
2. Bloomberg LP end-of-period LCY–USD rates are used.
3. Growth rates are calculated from an LCY base and do not include currency effects.
4. ADB calculations used to estimate data for Q2 2017.
Sources: Bank of Thailand and Bloomberg LP.

15.2% q-o-q and 56.4% y-o-y, totaling THB483 billion. The combined total of newly issued bonds by the government amounted to THB1,828 billion in Q2 2017.

Corporate bonds. The outstanding stock of LCY corporate bonds in Thailand rose to THB3,009 billion at the end of June from THB2,914 billion at the end of March. Corporate debt issuance in Q2 2017 rose 23.2% q-o-q and 19.2% y-o-y, reaching THB453 billion from THB368 billion in Q1 2017.

At the end of June, Thailand's top 30 LCY corporate bond issuers continued to dominate the LCY corporate bond market with a combined outstanding bond stock of THB1,690.1 billion, or 56.2% of the total market (**Table 2**). Most of the top issuers are privately listed firms. Among the top issuers, five firms have outstanding LCY bond stocks exceeding THB100 billion: CP All (THB181.1 billion), Siam Cement (THB166.5 billion), PTT (THB134.8 billion), Berli Jucker (THB122.0 billion), and Bank of Ayudhya (THB109.9 billion).

Of the THB453 billion worth of newly issued LCY bonds in Q2 2017, the single largest issuance was the THB25 billion 4-year bond sold with a coupon rate of 3.25% by Siam Cement, the biggest private and listed cement and building materials company in Thailand. The next biggest was the 10.5-year THB17 billion bond with a coupon rate of 3.90% from Thailand's fifth-largest bank, Bank of Ayudhya, which is also known as Krungsri. True Move H Universal was the third largest issuer in Q2 2017 with a multitranche bond issuance worth THB13 billion. Other notable corporate bond issuances in the LCY bond market in Q2 2017 are listed in **Table 3**.

Investor Profile

Insurance companies (29.2%) and contractual savings funds (25.2%) together continue to hold more than 50% of Thailand's LCY government bonds at the end of June (**Figure 2**). They were followed by commercial banks and foreign residents, whose shares increased to 15.4% and 16.2%, respectively, at the end of June from 15.1% and 14.5% a year earlier. These four groups cumulatively accounted for an 86.0% share of the total market, up from an 84.7% share at the end of June 2016.

In each of the first 7 months of 2017, Thailand recorded positive net foreign flows into its LCY bond market (**Figure 3**). A total of THB89.4 billion was recorded in Q1 2017, while Q2 2017 saw positive net inflows of THB66.2 billion. The positive net inflows into the LCY bond market in 2017 have been attributed to positive investor sentiment over Thailand's economy due to a sustained recovery supported by robust domestic demand, a strong export sector, and a high current account surplus.

Table 2: Top 30 Issuers of Local Currency Corporate Bonds in Thailand

Issuers		Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (THB billion)	LCY Bonds (USD billion)			
1.	CP All	181.1	5.3	No	Yes	Commerce
2.	Siam Cement	166.5	4.9	Yes	Yes	Construction Materials
3.	PTT	134.8	4.0	Yes	Yes	Energy and Utilities
4.	Berli Jucker	122.0	3.6	No	Yes	Food and Beverage
5.	Bank of Ayudhya	109.9	3.2	No	Yes	Banking
6.	Charoen Pokphand Foods	95.0	2.8	No	Yes	Food and Beverage
7.	True Move H Universal Communication	68.2	2.0	No	No	Communications
8.	Thai Airways International	66.1	1.9	Yes	Yes	Transportation and Logistics
9.	Tisco Bank	54.2	1.6	No	No	Banking
10.	Indorama Ventures	49.4	1.5	No	Yes	Petrochemicals and Chemicals
11.	Banpu	47.3	1.4	No	Yes	Energy and Utilities
12.	Krungthai Card	44.3	1.3	Yes	Yes	Banking
13.	Toyota Leasing Thailand	42.5	1.3	No	No	Finance and Securities
14.	Land & Houses	39.3	1.2	No	Yes	Property and Construction
15.	Mitr Phol Sugar	35.8	1.1	No	No	Food and Beverage
16.	Thai Union Group	33.8	1.0	No	Yes	Food and Beverage
17.	Thanachart Bank	32.5	1.0	No	No	Banking
18.	PTT Exploration and Production Company	32.1	0.9	Yes	Yes	Energy and Utilities
19.	TPI Polene	32.0	0.9	No	Yes	Property and Construction
20.	True Corp	31.6	0.9	No	Yes	Communications
21.	Advanced Wireless	31.2	0.9	No	Yes	Communications
22.	Bangkok Dusit Medical Services	29.6	0.9	No	Yes	Medical
23.	CPF Thailand	29.0	0.9	No	Yes	Food and Beverage
24.	CH. Karnchang	28.5	0.8	No	Yes	Property and Construction
25.	Kasikorn Bank	28.0	0.8	No	Yes	Banking
26.	Quality Houses	26.5	0.8	No	Yes	Property and Construction
27.	Minor International	25.8	0.8	No	Yes	Food and Beverage
28.	DTAC Trinet	25.5	0.8	No	Yes	Communications
29.	ICBC Thai Leasing	24.4	0.7	No	No	Finance and Securities
30.	Thaioil	23.5	0.7	Yes	Yes	Energy and Utilities
Total Top 30 LCY Corporate Issuers		**1,690.1**	**49.8**			
Total LCY Corporate Bonds		**3,009.2**	**88.7**			
Top 30 as % of Total LCY Corporate Bonds		**56.2%**	**56.2%**			

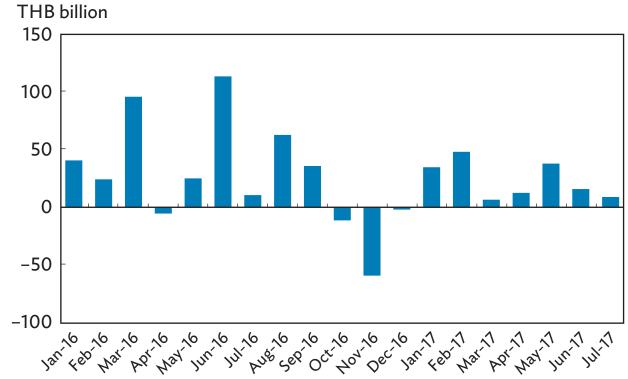
LCY = local currency, THB = Thai baht, USD = United States dollar.
Notes:
1. Data as of end-June 2017.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2017

Corporate Issuers	Coupon Rate (%)	Issued Amount (THB million)
Siam Cement		
4-year bond	3.25	25,000
Bank of Ayudhya		
10.5-year bond	3.90	17,007
True Move H Universal Communication		
5-year bond	4.50	6,258
7-year bond	5.00	2,790
10-year bond	5.50	1,376
12-year bond	5.75	2,576
Siam City Cement		
3-year bond	2.49	1,000
7-year bond	3.65	2,500
10-year bond	4.08	5,000
12-year bond	4.26	4,500
Amata B.Grimm Power		
3-year bond	2.68	1,800
4-year bond	3.00	600
5-year bond	3.25	1,500
6-year bond	3.58	900
7-year bond	3.76	900
9-year bond	4.01	1,000
10-year bond	4.17	1,500
11-year bond	4.33	800
12-year bond	4.35	1,000
13-year bond	4.48	600
15-year bond	4.79	900

THB = Thai baht.
Source: Bloomberg LP.

Figure 3: Foreign Investor Net Trading of Local Currency Bonds in Thailand



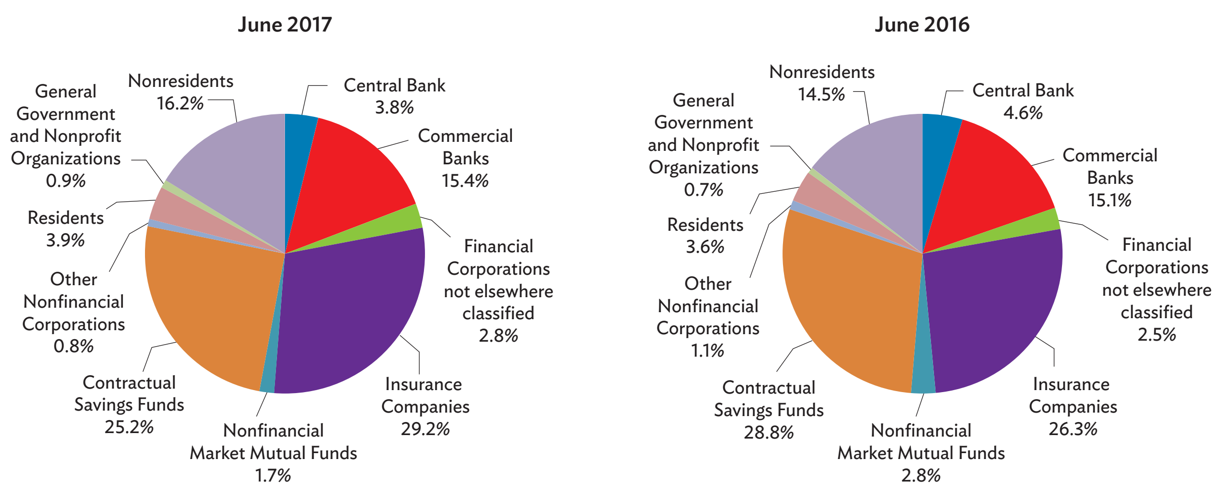
THB = Thai baht.
Source: Thai Bond Market Association.

Policy, Institutional, and Regulatory Developments

Bank of Thailand Reduces Issuance of Short-Term Bills

In April, the BOT decided to scale back the issuance of bills with 3-month and 6-month maturities by THB80 billion. The new measure was made to curb the rapid appreciation of the Thai baht.

Figure 2: Local Currency Government Bonds Investor Profile



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

Bank of Thailand Eases Regulations on Foreign Exchange

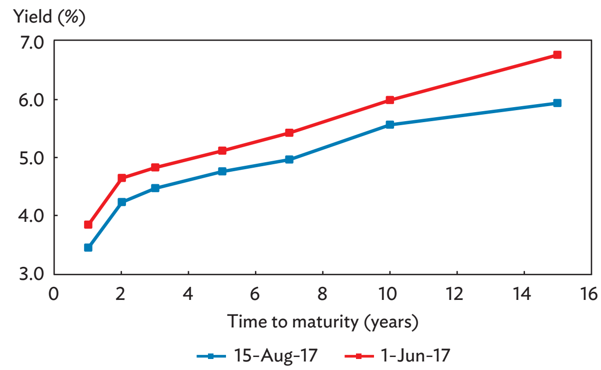
On 5 June, the BOT relaxed its foreign exchange regulations to enhance the ease of doing business through a reduction in compliance costs. Starting in the fourth quarter of 2017, Thai investors with assets above THB50 million will be allowed to directly invest a maximum of USD1 million in securities abroad each year. The reform aims to give the private sector flexibility in conducting foreign exchange transactions and hedging based on internal risk management and control policies within the framework set by BOT. The loosening of foreign exchange rules will (i) streamline the process, reduce required documents, and encourage the use of electronic forms; (ii) enhance flexibility in foreign exchange risk management; (iii) allow more alternatives in foreign exchange services, especially in retail cross-border transactions; and (iv) allow more investment options for investors and companies based in Thailand. Given the continued appreciation of the Thai baht, the BOT reform will not only improve the ease of doing business, but also address currency speculation by improving the process of capital outflows.

Viet Nam

Yield Movements

Between 1 June and 15 August, local currency (LCY) government bond yields in Viet Nam fell for all tenors, resulting in the entire yield curve shifting downward (**Figure 1**). Yields declined by an average of 40 basis points (bps) for the 1-year through 10-year tenors. Yield fell the most for the 15-year maturity, which shed 82 bps and led to the overall flattening of the yield curve. The spread between the 2-year and 10-year maturities narrowed to 131 bps on 15 August from 133 bps on 1 June.

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



Source: Based on data from Bloomberg LP.

The overall decline in yields was driven by a policy rate cut in July and relatively tame inflation during the review period. Consumer price inflation has been subdued in recent months on the back of softer food prices. The year-on-year (y-o-y) inflation rate eased to 4.3% in April and 3.2% in May, before it further declined to 2.5% in June and July.

Macroeconomic conditions have been stable, allowing the central bank to lower policy rates. On 10 July, the State Bank of Vietnam lowered by 25 bps the refinancing rate to 6.25% and the discount rate to 4.25%. The rate cut is expected to help spur economic growth. The government's 2017 gross domestic product (GDP) growth target is set at 6.7%.

Real GDP growth in Viet Nam climbed to 5.7% y-o-y in the first half of 2017 from 5.5% y-o-y in the same 6-month period a year earlier. However, economic growth for the first half of the year fell short of the government's full-year target. The agriculture, forestry, and fishery sector rebounded, expanding 2.7% y-o-y in the first half of 2017 after contracting 0.2% y-o-y in the same period a year earlier. Services-producing industries also expanded 6.9% y-o-y during the first 6 months of the year.

Size and Composition

Viet Nam's LCY bond market expanded in the second quarter (Q2) of 2017 to reach a size of VND1,019.6 trillion (USD45 billion) at the end of June (**Table 1**). Overall growth accelerated to 1.9% quarter-on-quarter (q-o-q) in Q2 2017 from a marginal gain of 0.3% q-o-q in the first

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2016		Q1 2017		Q2 2017		Q2 2016		Q2 2017	
	VND	USD	VND	USD	VND	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	971,464	44	1,000,756	44	1,019,554	45	10.8	0.8	1.9	5.0
Government	932,672	42	952,610	42	974,757	43	11.1	(0.7)	2.3	4.5
Treasury Bonds	718,709	32	747,887	33	780,707	34	14.2	31.6	4.4	8.6
Central Bank Bonds	9,999	0.4	0	0	0	0	103.9	(95.0)	–	(100.0)
State-Owned Enterprise and Municipal Bonds	203,963	9	204,722	9	194,050	9	(0.8)	5.9	(5.2)	(4.9)
Corporate	38,792	2	48,146	2	44,797	2	5.4	58.5	(7.0)	15.5

( ) = negative, LCY = local currency, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, USD = United States dollar, VND = Vietnamese dong, y-o-y = year-on-year.
Notes:
1. Bloomberg LP end-of-period LCY–USD rates are used.
2. Growth rates are calculated from an LCY base and do not include currency effects.
Sources: Bloomberg LP and Vietnam Bond Market Association.

quarter (Q1) of 2017. On a y-o-y basis, however, growth moderated to 5.0% in Q2 2017 from 14.2% in Q1 2017. Growth stemmed mainly from increases in the stock of government bonds, particularly Treasury instruments issued by the State Treasury. Viet Nam's LCY bond market remained the smallest in emerging East Asia.

Government bonds. The outstanding size of the LCY government bond market climbed to VND974.8 trillion at the end of June on modest growth of 2.3% q-o-q and 4.5% y-o-y. Growth was solely accounted for by Treasury bonds, which gained 4.4% q-o-q and 8.6% y-o-y in Q2 2017. At the end of June, all short-dated instruments—Treasury bills and State Bank of Vietnam bills—have matured. There was no new issuance of Treasury bills and State Bank of Vietnam bills during the quarter. The government has focused its issuance plan on medium- and longer-dated tenors—particularly bonds with maturities of 5 years and above—to extend its maturity profile and spread out debt repayments. The stock of state-owned enterprise bonds also declined as redemption exceeded new issuance.

In Q2 2017, new issues of government bonds contracted on both a q-o-q and y-o-y basis. The bulk of new issuance (96.7%) was accounted for by new Treasury bond issues. However, the issuance of Treasury bonds during the quarter fell short of a planned target of VND65 trillion. In the third quarter of 2017, the government expects to raise VND45 trillion from the sale of Treasury bonds with maturities of between 5 years and 30 years.

Corporate bonds. The outstanding size of the LCY corporate bond market contracted to VND44.8 trillion at the end of June on a 7.0% q-o-q decline. On a y-o-y basis, growth moderated to 15.5% in Q2 2017 from 30.9% in Q1 2017. At the end of June, the entire corporate bond segment of Viet Nam comprised 27 firms (**Table 2**). (*AsianBondsOnline* classifies some state-owned entities as part of the government bond segment.)

Masan Consumer Holdings remained the largest corporate bond issuer in Viet Nam at the end of June. Its outstanding bonds valued at VND11.1 trillion accounted for 24.8% of the total corporate bond stock. In the second spot was Vingroup JSC, a real estate firm with outstanding bonds amounting to VND7.0 trillion. The third-largest corporate bond issuer was Asia Commercial Joint Stock with outstanding bonds of VND4.6 trillion.

Ratings Update

On 18 May, Fitch Ratings (Fitch) affirmed Viet Nam's long-term foreign currency and LCY issuer default ratings at BB−. Fitch also revised the outlook on both ratings to positive from stable. Fitch cited Viet Nam's strong growth performance and prospects, current account surpluses, manageable debt service costs, and sustained foreign direct investment inflows as the drivers behind the rating affirmation. The revision to the outlook was underpinned by Viet Nam's policy initiatives geared toward maintaining macroeconomic stability.

Policy, Institutional, and Regulatory Developments

State Treasury to Issue VND45 Trillion of Government Bonds in the Third Quarter of 2017

In July, the State Treasury announced its bond issuance plan for the third quarter of 2017 valued at VND45 trillion. Of this amount, VND18 trillion is expected to be raised from the issuance of 5-year bonds and VND3 trillion from 7-year bonds. Bond sales amounting to VND6 trillion each are targeted from the issuance of 10-, 15-, 20-, and 30-year bonds.

Viet Nam Launches Derivatives Market

In August, a derivatives market was officially launched in Viet Nam, marking an important milestone in the development of its securities market. Three types of derivatives instruments will be offered: (i) futures contract for the VN30 Index, (ii) futures contract for the HNX30 Index, and (iii) futures contract for 5-year government bonds. The futures contract for the VN30 Index was the first derivatives product to be launched.

Table 2: Corporate Issuers of Local Currency Corporate Bonds in Viet Nam

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (VND billion)	LCY Bonds (USD billion)			
1.	Masan Consumer Holdings	11,100	0.49	No	No	Diversified Operations
2.	Vingroup JSC	7,000	0.31	No	Yes	Real Estate
3.	Asia Commercial Joint Stock	4,600	0.20	No	No	Finance
4.	Hoang Anh Gia Lai	4,000	0.18	No	Yes	Real Estate
5.	Techcom Bank	3,000	0.13	No	No	Banking
6.	No Va Land Investment Group	2,150	0.09	No	Yes	Real Estate
7.	Vietcombank	2,000	0.09	Yes	Yes	Banking
8.	Vietnam Electrical Equipment	1,800	0.08	No	Yes	Manufacturing
9.	Agro Nutrition International	1,300	0.06	No	No	Agriculture
10.	Ho Chi Minh City Infrastructure	1,033	0.05	No	Yes	Infrastructure
11.	DIC Corporation	1,000	0.04	Yes	No	Chemicals
12.	Saigon-Hanoi Securities Corporation	950	0.04	No	Yes	Finance
13.	Sai Gon Thuong Tin Real Estate	600	0.03	No	Yes	Real Estate
14.	Khang Dien House Trading and Investment	534	0.02	No	Yes	Building and Construction
15.	Hoangquan	500	0.02	No	Yes	Real Estate
16.	Tasco Corporation	500	0.02	No	Yes	Engineering and Construction
17.	Vietinbank Securities	500	0.02	Yes	Yes	Finance
18.	An Phat Plastic & Green Environment	450	0.02	No	Yes	Industrial
19.	Sotrans Corporation	400	0.02	No	No	Logistics
20.	Vietnam Investment Construction and Trading	350	0.02	No	Yes	Building and Construction
21.	Hung Vuong Corporation	300	0.01	No	Yes	Food
22	Ha Do Corporation	200	0.01	No	Yes	Construction
23.	Saigon Securities	200	0.01	No	Yes	Finance
24.	Son Ha International	110	0.005	No	Yes	Building and Construction
25.	Dongnai Plastic	100	0.004	No	Yes	Industrial
26.	Fecon	70	0.003	No	Yes	Engineering and Construction
27.	Construction Joint Stock Company No. 3	50	0.002	No	Yes	Real Estate
Total LCY Corporate Issuers		**44,797**	**1.97**			

LCY = local currency, USD = United States dollar, VND = Vietnamese dong.
Notes:
1. Data as of end-June 2017.
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 LP and Vietnam Bond Market Association data.

Asia Bond Monitor
September 2017

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 and the People's Republic of China; Hong Kong, China; and the Republic of Korea.

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ASIAN DEVELOPMENT BANK
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org