ASIA BOND MONITOR
SEPTEMBER 2019

ASIAN DEVELOPMENT BANK

ADB

The Asia Bond Monitor (ABM) is part of the Asian Bond Markets Initiative, an ASEAN+3 initiative supported by the Asian Development Bank. This report is part of the implementation of a technical assistance project funded by the Investment Climate Facilitation Fund of the Government of Japan under the Regional Cooperation and Integration Financing Partnership Facility.

This edition of the ABM was prepared by a team from the Economic Research and Regional Cooperation Department headed by Yasuyuki Sawada and supervised by Director of Macroeconomics Research Division Abdul Abiad. The production of the ABM was led by Donghyun Park and supported by Shu Tian and the *AsianBondsOnline* team. The *AsianBondsOnline* team members include Marie Anne Cagas, Angelica Andrea Cruz, Debbie Gundaya, Russ Jason Lo, Patrick Vincent Lubenia, and Roselyn Regalado. Cynthia Castillejos-Petalcorin provided operational support, Kevin Donahue provided editorial assistance, Principe Nicdao did the typesetting and layout, and Carlo Monteverde and Erickson Mercado provided website support. Contributions from Facundo Abraham, Juan J. Cortina, and Sergio L. Schmukler of the World Bank; Nicholas J. McBride of the Office of General Counsel; Irfan Qureshi and Mai Lin Villaruel of the Economic Research and Regional Cooperation Department are gratefully acknowledged.

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 6545
E-mail: asianbonds_feedback@adb.org

Download the ABM at
http://asianbondsonline.adb.org/documents/abm_sep_2019.pdf

ASIA BOND MONITOR

SEPTEMBER 2019

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

Printed in the Philippines.

ISBN 978-92-9261-734-9 (print), 978-92-9261-735-6 (electronic)
ISSN 2219-1518 (print), 2219-1526 (electronic)
Publication Stock No. TCS190436-2
DOI: http://dx.doi.org/10.22617/TCS190436-2

Note:
ADB recognizes “Hong Kong” and “Hongkong” as Hong Kong, China; “China” as the People’s Republic of China; “Korea” as the Republic of Korea; “Siam” as Thailand; “Vietnam” as Viet Nam; “Hanoi” as Ha Noi; and “Saigon” as Ho Chi Minh City.

Cover design by Erickson Mercado.

Contents

Emerging East Asian Local Currency Bond Markets: A Regional Update

Emerging East Asian Local Currency Bond Markets: A Regional Update

Highlights

Key Trends

- Local currency government bond yields edged lower in most emerging East Asian markets between 1 June and 15 August amid a weakening global growth outlook, easing monetary stances, and heightened investor risk aversion.[1]
- The trade dispute between the People's Republic of China (PRC) and the United States (US) continued to weigh on global growth. In response, many central banks in advanced economies and the region eased their respective monetary policy stance.
- Equity markets declined, risk premiums widened, and regional currencies weakened vis-à-vis the US dollar during the review period, as slowing global growth and looming uncertainties soured investor sentiment.
- The size of emerging East Asia's local currency bond market reached USD15.3 trillion at the end of June, posting quarter-on-quarter growth of 3.5% and year-on-year growth of 14.2%.
- In August, Advanced Bank of Asia, a Cambodia-based bank, marked the third company to list its bonds on the Cambodia Securities Exchange. The 3-year bonds had an issuance size of KHR84.8 billion and carried a coupon rate of 7.75%.

Risks to Financial Stability

- The persistence of PRC–US trade tensions remains the biggest threat to the region's economic outlook and financial stability.
- Other downside risks include a faster-than-expected slowdown in the PRC economy, a budding trade conflict between Japan and the Republic of Korea, and global investors' risk aversion toward emerging markets.

[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.

Executive Summary

Bond Yields Decline in Emerging East Asia amid Uncertain Growth Prospects

Between 1 June and 15 August, local currency (LCY) government bond yields trended lower for most markets in emerging East Asia on account of dim global growth prospects, easing monetary policy stances, and investor flight for safe-haven assets.[1]

Downside risks are weighing on the region's economic prospects as the global growth outlook is expected to further weaken. Among headwinds, the largest risk stems from the persistent and intensifying trade tensions between the People's Republic of China (PRC) and the United States (US). Emerging East Asia is also sensitive to both a faster-than-expected economic slowdown in the PRC and a possible recession in the US. In addition, the regional trade environment faces challenges from rising tensions between Japan and the Republic of Korea.

Foreign Investor Sentiment Remains Positive in Regional Bond Markets

At the end of June, foreign investor holdings were mostly stable in emerging East Asian LCY bond markets on positive sentiment as the US Federal Reserve signaled a possible policy rate cut, which was subsequently announced on 31 July. The foreign holdings' share inched up in the PRC's LCY bond market on expectations the government will provide additional stimulus measures to prop up the economy. Indonesia also saw an increase in its foreign holdings' share on account of a ratings upgrade from S&P Global Ratings. In the Republic of Korea, Malaysia, and the Philippines, foreign holdings declined on a variety of domestic factors.

Local Currency Bonds Outstanding in Emerging East Asia Reach USD15.3 Trillion at the End of June

The amount of LCY bonds outstanding in emerging East Asia rose to USD15.3 trillion at the end of June, posting quarter-on-quarter (q-o-q) growth of 3.5% and year-on-year (y-o-y) growth of 14.2% in the second quarter (Q2) of 2019.

The PRC accounted for the largest share of the region's aggregate bond stock at the end of June with a 75.3% share of the total, followed by the Republic of Korea at 13.2%. The total bond stock of member economies of the Association of Southeast Asian Nations accounted for a 9.8% share of emerging East Asia's LCY bond total.[2]

The region's government bond stock reached USD9.4 trillion at the end of June on growth of 3.7% q-o-q and 13.6% y-o-y in Q2 2019, while the corporate bond stock rose to USD5.8 trillion on growth of 3.3% q-o-q and 15.0% y-o-y during the same period.

Emerging East Asia's LCY bonds outstanding as a share of regional gross domestic product climbed to 82.7% at the end of June from 81.4% at the end of March. On an individual economy basis, the Republic of Korea and Malaysia had the highest share of LCY bonds to gross domestic product in the region.

The region's total LCY bond issuance was USD1.6 trillion in Q2 2019, which represented growth of 12.2% q-o-q amid a recovery in corporate bond issuance and modest growth in government bond issuance. On a y-o-y basis, however, issuance growth moderated in Q2 2019 to 16.4% from 39.4% in the previous quarter.

[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.
[2] LCY bond statistics for the Association of Southeast Asian Nations include the markets of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

In August, the region saw the third company to have its bonds listed on the Cambodia Securities Exchange via the bond listing of Advanced Bank of Asia. The issuance comprised an KHR84.8 billion bond with a maturity of 3 years and an annual coupon rate of 7.75%.

The September issue of the *Asia Bond Monitor* features three special topic boxes. Box 1 analyzes the impact of US monetary policy uncertainty on emerging market currencies. Box 2 discusses the importance of domestic capital markets as a long-term financing source for corporates in emerging markets. Box 3 focuses on reform of the widely used benchmark rate in financial markets, the London Interbank Offered Rate (LIBOR), and discusses the challenges of transitioning to alternative benchmark interest rates.

Box 1: Impact of United States Monetary Policy Uncertainty on Emerging Asian Exchange Rates

Using a news-based index as a measure of US monetary policy uncertainty, this discussion box examines how US monetary policy uncertainty impacts the exchange rates of 10 Asian economies. Findings indicate that while the exchange rates of these economies are not systematically affected by US monetary policy uncertainty, exchange rate volatility increases in some economies amid greater uncertainty in US monetary policy. With increased uncertainty over the path of US interest rates comes a greater variety of opinions among market participants about exchange rate behavior, leading to more diverse trading, and thus, more volatile exchange rates.

Box 2: The Growing Importance of Domestic Capital Markets

This box examines the growth of domestic capital market financing vis-à-vis international market financing by firms in East Asia between 1990 and 2016. It finds that contrary to predictions, domestic capital market financing in East Asia has grown faster than international capital market financing since the 1990s, particularly since the global financial crisis. Based on the experiences of individual East Asian economies, the box highlights the benefits of developing domestic capital markets and draws lessons that can be applied to other emerging markets.

Box 3: Moving On from the London Interbank Offered Rate

This box provides an overview of the global regulatory effort to transition away from LIBOR, the widely used benchmark rate in global financial markets. Issues surrounding LIBOR have undermined its credibility and sustainability, resulting in concerted action among financial regulators to identify alternative risk-free rates (RFRs). This box summarizes the actions taken by the Financial Stability Board and the working groups established to review and reform benchmarks rates, and ultimately coordinate the worldwide transition to the use of alternative RFRs. The box also discusses the transitional challenges facing the global financial system in switching from LIBOR to alternative RFRs.

Introduction: Bond Yields Trend Downward amid Growth Moderation and Risk-Off Sentiment

Yields on 2-year and 10-year local currency (LCY) government bonds in emerging East Asia were down between 1 June and 15 August.[1] The same was true for major advanced economies as well as select European markets. The surge in bond markets resulted from dim global growth prospects, softening monetary stances, and investors' preference for safer assets (**Table A**). Notably, in most markets across the region the overall decline in yields was more pronounced for 10-year bonds than 2-year bonds. This pattern implies a flattening of the yield curve, a potential signal of a gloomy economic outlook.

During the review period, the largest decline in yields was observed in the Philippines, with the 2-year yield falling 167 basis points (bps) and the 10-year yield falling 119 bps, mainly driven by domestic factors, including subdued inflation and two 25-bps policy rate cuts by the Bangko Sentral ng Pilipinas on 9 May and 8 August.

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	(43)	(60)	–	3.5	–
United Kingdom	(15)	(48)	4	(1.3)	(4.3)
Japan	(11)	(14)	1	(1.5)	2.0
Germany	(26)	(51)	(1)	(2.7)	(0.6)
Emerging East Asia					
China, People's Rep. of	(11)	(28)	(5)	(2.9)	(1.8)
Hong Kong, China	(6)	(8)	–	(5.2)	(0.04)
Indonesia	(18)	(47)	(16)	0.8	(0.04)
Korea, Rep. of	(41)	(44)	(4)	(5.1)	(2.0)
Malaysia	(19)	(48)	(14)	(3.1)	(0.1)
Philippines	(167)	(119)	(9)	(1.8)	(0.8)
Singapore	(28)	(44)	–	0.3	(1.0)
Thailand	(46)	(95)	(6)	(1.0)	2.2
Viet Nam	(48)	(40)	(23)	2.0	0.9
Select European Markets					
Greece	(42)	(97)	(9)	(3.8)	(0.6)
Ireland	(20)	(55)	2	(6.3)	(0.6)
Italy	(65)	(124)	(13)	1.1	(0.6)
Portugal	(20)	(70)	(13)	(6.5)	(0.6)
Spain	(19)	(68)	(9)	(5.4)	(0.6)

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 1 June 2019 and 15 August 2019.
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.

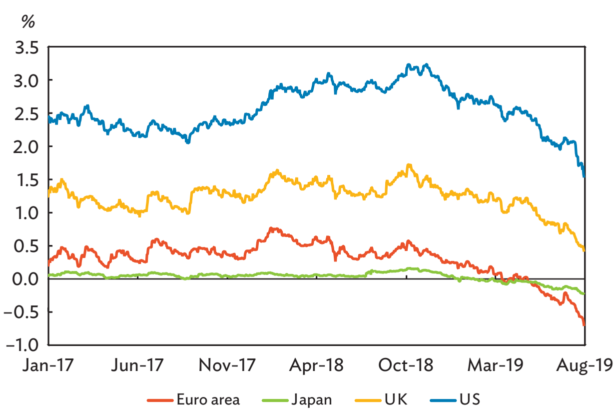
[1] Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Yields in other emerging East Asian markets fell to varying degrees amid uncertainties over economic prospects. Several central banks in the region have cut policy rates by 25 bps since the beginning of the year. The Bank of Thailand and the Bank of Korea each lowered their policy rate by 25 bps between 1 June and 15 August, while Bank Negara Malaysia reduced its policy rate by 25 bps on 7 May and Bank Indonesia cut rates by 25 bps in both July and August. In addition to rate adjustments, domestic factors also contributed to the decline in yields. The Indonesian bond market benefited from a credit rating upgrade by Standard and Poor's Global (S&P) from BBB– to BBB. In Hong Kong, China, the yield declined less than in other regional markets as political uncertainties raised costs for Hong Kong dollar funding.

Investor concerns over the uncertain economic outlook pushed up demand for safe-haven assets, especially the long-term Treasury bonds of major advanced economies. The yields on 2-year and 10-year government bonds of major advanced economies have dipped significantly since the middle of July, pushing 10-year government bond yields in Japan and the euro area into negative territory for the first time since 2016 (**Figure A**).

Amid persistent global trade tensions and uncertainties surrounding the global economic outlook, major central banks softened their monetary stances to support growth. The United States (US) Federal Reserve on 31 July reduced its federal funds target rate range by 25 bps to 2.00%–2.25%, the first rate cut since the end of the global financial crisis. The Federal Reserve also ended its balance sheet normalization at the beginning of August, rather than the end of September as previously announced. Recent economic data indicate that the US economy continues to expand, albeit with some weakness. Gross domestic product (GDP) growth stood at 2.0% year-on-year (y-o-y) in the second quarter (Q2) of 2019, lower than the 3.1% y-o-y reported in the first quarter of 2019. On the other hand, the labor market remains robust, with the unemployment rate steady at 3.7% in July and August, its lowest level since 1969. Despite the relative robust growth compared with other major advanced economies, strong household spending, and low unemployment, the Federal Reserve noted subdued inflation, weakening business investment, and rising economic uncertainties. The Federal Reserve slightly upgraded its full-year 2020 US GDP growth forecast to 2.0% from 1.9% in March. In June, the Federal Reserve lowered its inflation forecasts for 2019 and 2020 to 1.5% and 1.9%, respectively, from its March forecasts of 1.8% and 2.0%.

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



UK = United Kingdom, US = United States.
Note: Data as of 15 August 2019.
Source: Bloomberg LP.

In September, the European Central Bank (ECB) cut the deposit facility rate by 10 bps to −0.50% and held unchanged the refinancing operations and marginal lending facility rates. The ECB also announced it would resume bond purchases at a monthly pace of EUR20 billion, effective 1 November. The euro area's GDP growth moderated to 1.2% y-o-y in Q2 2019 from 1.3% y-o-y in Q1 2019. Inflation in the euro area has also trended downward, declining to 1.0% y-o-y in July from 1.3% y-o-y in June. (Inflation remained at 1.0% y-o-y in August.)

The ECB, in September, downgraded its annual GDP growth forecasts for 2019 and 2020 to 1.1% and 1.2%, respectively, from previous forecasts of 1.2% and 1.4% made in June. The forecast for annual GDP growth in 2021 was left unchanged at 1.4%. Full-year inflation forecasts for 2019, 2020, 2021 were also revised down to 1.2%, 1.0%, and 1.5%, respectively, from 1.3%, 1.4%, and 1.6%.

The Bank of Japan (BOJ) kept its monetary policy unchanged at its July meeting. At the same time, the BOJ signaled its readiness for additional stimulus to ensure inflation targets are met amid uncertainties arising from the planned consumption tax hike in October and the global economic slowdown. The BOJ downgraded its GDP forecasts for 2019 and 2021 in July to 0.7% and 1.1%, respectively, from 0.8% and 1.2% in April. Its growth forecast for 2020 remained unchanged.

Economic Outlook

Global economic growth is moderating amid lingering trade tensions, financial instability in some emerging markets, and other downside risks. In particular, the persistence and intensification of the People's Republic of China (PRC)–US trade tensions, which show no signs of a long-lasting settlement, is casting a long shadow over global economic prospects.

According to the International Monetary Fund's *World Economic Outlook Update, July 2019*, the global economy is projected to expand 3.2% in 2019 and 3.5% in 2020, down from growth of 3.8% in 2017 and 3.6% in 2018. Furthermore, the International Monetary Fund downgraded its forecasts for 2019 and 2020 by 0.1 percentage points each compared to its April forecasts.

GDP performance in major economies and weakening inflationary pressures around the world both point to softer-than-expected global growth momentum. Sluggish investment by firms and consumer durable spending by households in both advanced economies and emerging markets suggest a deterioration of business and consumer confidence at the global level.

Another major drag on global GDP growth is tepid trade growth. World trade volume expanded by a robust 5.5% in 2017, but growth slowed to 3.7% in 2018 and is projected to slow further to 2.5% in 2019. However, it is expected to bounce back somewhat in 2020 and grow by 3.7%. Advanced economies' GDP expanded 2.4% in 2017 and 2.2% in 2018, but their growth is projected to slow to 1.9% in 2019 and further to 1.7% in 2020.

Growth momentum has been somewhat stronger in emerging markets and developing economies, which expanded 4.8% in 2017 before slowing to 4.5% growth in 2018. Growth is expected to slow further to 4.1% in 2019 before picking up to 4.7% in 2020. According to the *World Economic Outlook Update, July 2019*, consumer price inflation in advanced economies will decline from 2.0% in 2018 to 1.6% in 2019 and rebound to 2.0% in 2020. In emerging markets and developing economies, the corresponding figures for the 3 years are 4.8%, 4.8%, and 4.7%.

In tandem with slowing global growth momentum, developing Asia's growth is projected to moderate.[2] According to the Asian Development Bank's *Asian Development Outlook 2019 Supplement* released in July, the region's economy expanded 5.9% in 2018 and is forecast to grow 5.7% in 2019 and 5.6% in 2020. If the high-income newly industrialized economies are excluded, the corresponding figures are even stronger at 6.4%, 6.1%, and 6.1%. Emerging East Asian economies are growing at a somewhat slower but still healthy pace. Despite the ongoing trade tensions with the US, the PRC grew 6.6% in 2018 and is projected to grow by 6.3% in 2019 and 6.1% in 2020. The 2018, 2019, and 2020 actual and projected figures for the 10 members of the Association of Southeast Asian Nations are 5.1%, 4.8%, and 4.9%, respectively. The Republic of Korea is forecast to grow 2.4% in 2019 and 2.5% in 2020, down from 2.7% in 2018. The 2018, 2019, and 2020 figures for Hong Kong, China are 3.0%, 2.5%, and 2.5%, respectively.

Overall, while the regional economy is also somewhat slowing amid a global slowdown, growth remains rock-solid and the region continues to outperform the rest of the world. Furthermore, the *Asian Development Outlook Supplement 2019* forecasts the region's consumer price inflation to remain subdued, albeit rising modestly from 2.4% in 2018 to 2.6% in both 2019 and 2020.

Global investors' risk appetite soured over the weakening global economic outlook and persistent trade tensions. Between 1 June and August 15, nearly all equity markets in the region slid (**Figure B**). Relatively larger declines were seen in Hong Kong, China, which fell 5.2% as a result of political uncertainties, and the Republic of Korea, which fell 5.1% due to the outbreak of a trade conflict with Japan and the ongoing PRC–US trade dispute.

Bucking this trend, the equity markets of Indonesia, Singapore, and Viet Nam all gained during the review period. Viet Nam's equity market benefited from its possible inclusion in MSCI equity indices by 2020, and Indonesia's was boosted by a sovereign rating upgrade from BBB– to BBB by S&P.

Emerging East Asian currencies largely echoed the trend in the region's equity markets amid risk-off sentiment.

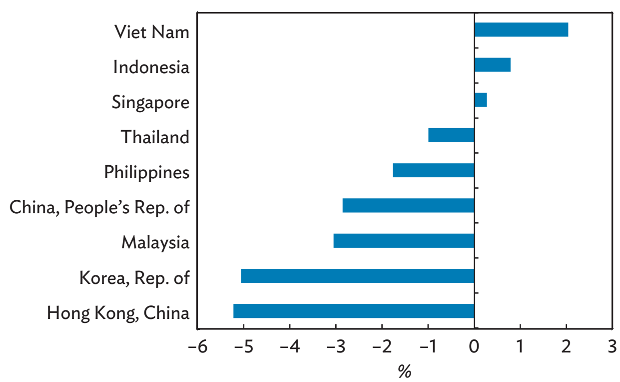
[2] Developing Asia comprises the 46 regional developing member economies of the Asian Development Bank. https://www.adb.org/sites/default/files/publication/513146/ado-supplement-july-2019.pdf.

Between 1 June and 15 August, all regional currencies declined except for those of Thailand and Viet Nam (**Figure C**). The Thai baht gained 2.2% on the back of a strong current account surplus and the Vietnamese dong appreciated 0.9% due to a robust economic outlook. On the other hand, the Republic of Korea and the PRC both experienced currency depreciation of around 2% amid trade disputes with major trading partners and slowing economic growth.

In line with souring risk appetite, risk premiums rose, as reflected in sentiment indicators. Credit default swap spreads in the region rose sharply from the end of July, reversing the earlier downward trend that began in June, when markets benefited from an expected Federal Reserve rate cut. Investor sentiment deteriorated with the reescalation of PRC–US trade tensions in early August. Credit default swap spreads, the Emerging Markets Bond Index Global spread, the Chicago Board Options Exchange Volatility Index, and the stripped spreads of the JP Morgan Emerging Markets Bond Index all surged sharply in early August (**Figures D, E, F**). Such a pattern indicated investor concerns over the impact of persistent PRC–US trade tensions on global economic growth. While shifting investor sentiment and differences in opinion can facilitate trading, it can also exert pressure on asset prices and push them away from fundamentals. Therefore, clear communication from central banks to guide investor expectations can help smooth price dynamics in financial markets. Evidence shows that uncertainty over the direction of the Federal Reserve's monetary policy can increase volatility in the exchange rates of Asian economies (**Box 1**).

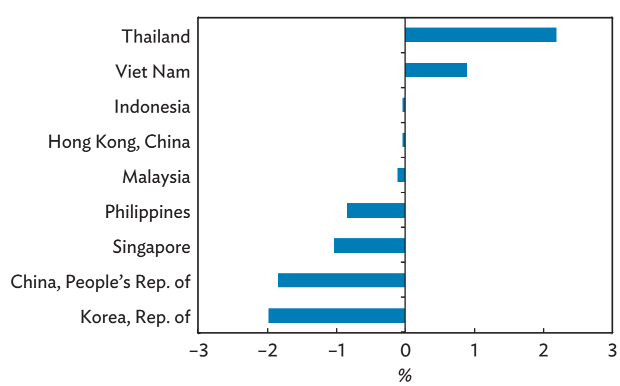
Nevertheless, foreign holdings of LCY government bonds in emerging East Asia were largely stable during the review period as lower global interest rates pushed investors into emerging markets (**Figure G**). Indonesia experienced an increase in foreign holdings in June following the S&P credit rating upgrade. Foreign holdings in the PRC's LCY bond market continued to increase

Figure B: Changes in Equity Indexes in Emerging East Asia



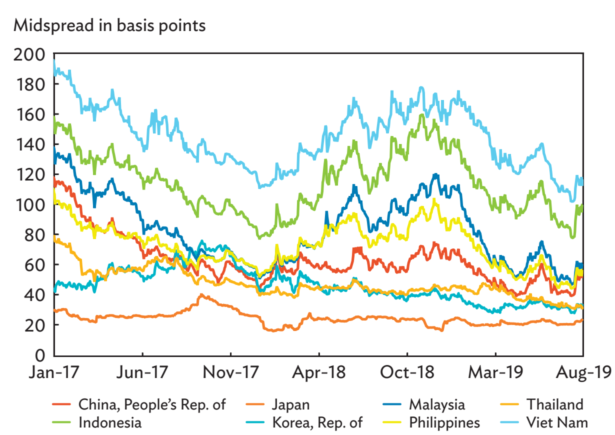
Note: Changes between 1 June 2019 and 15 August 2019.
Source: Bloomberg LP.

Figure C: Changes in Month-End Spot Exchange Rates vs. the United States Dollar



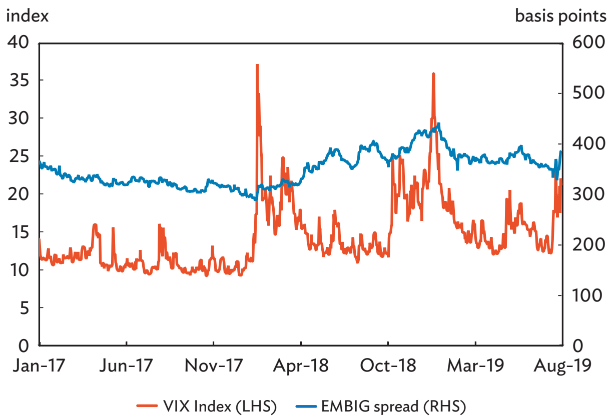
Notes:
1. Changes between 1 June 2019 and 15 August 2019.
2. A positive (negative) value for the foreign exchange rate indicates the appreciation (depreciation) of the local currency against the United States dollar.
Source: Bloomberg LP.

Figure D: Credit Default Swap Spreads in Select Asian Markets (senior 5-year)



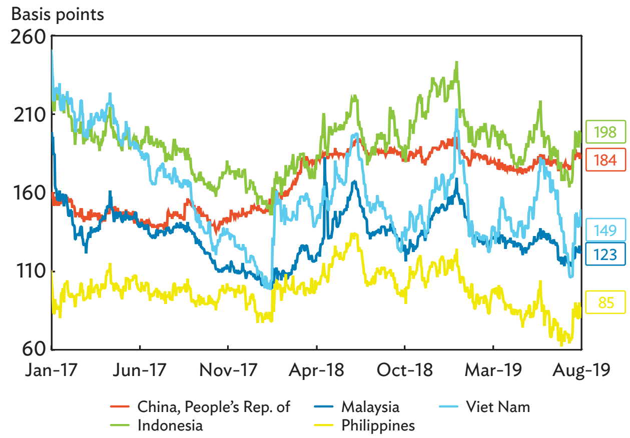
Notes:
1. Based on United States dollar-denominated sovereign bonds.
2. Data as of 15 August 2019.
Source: Bloomberg LP.

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



EMBIG = Emerging Markets Bond Index Global, LHS = left-hand side, RHS = right-hand side, VIX = Chicago Board Options Exchange Volatility Index.
Note: Data as of 15 August 2019.
Source: Bloomberg LP.

Figure F: 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 2019.
Source: Bloomberg LP.

Box 1: Impact of United States Monetary Policy Uncertainty on Asian Exchange Rates

Concerted interest rate hikes by the United States (US) Federal Reserve contributed to a general strengthening of the US dollar in 2018. As a result, vulnerable economies such as Argentina and Turkey suffered a sharp depreciation of their currency, triggering concerns about broader financial instability in emerging markets. The sharp depreciations underlined the sizable impact of US monetary policy on exchange rates in emerging markets.

US monetary policy is likely to ease further in 2019, the details of which will be the subject of a lot of uncertainty. The Federal Reserve is widely expected to take a more cautious and gradual approach to monetary policy normalization considering slowing growth momentum. Adding to the uncertainty about the future path of US interest rates, the Federal Reserve reduced interest rates at the Federal Open Market Committee meeting of July 2019, citing less benign global economic conditions. This was a sharp deviation from the interest rate forecast at the beginning of the year.

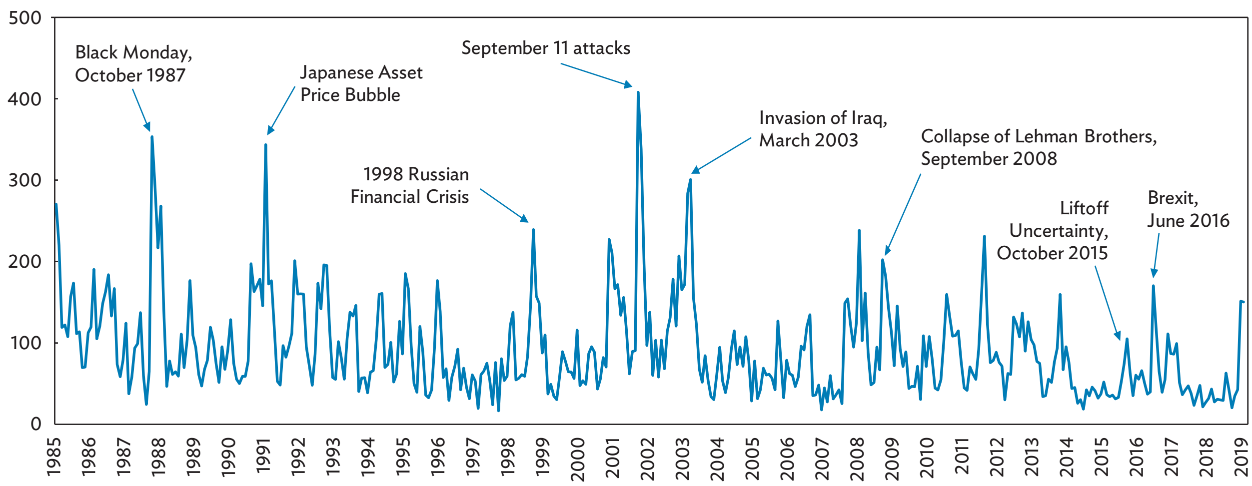
Since the interest rate is an important price that influences key economic variables, uncertainty about its trajectory matters a lot. For example, heightened uncertainty about future interest rates may discourage firms from making large-scale investments and cause households to postpone purchases of nondurable goods. In Asia, uncertainty about US interest rates can create ambiguity about the relative attractiveness of US assets compared to those of Asian economies. This can influence investor sentiment and behavior, thereby affecting capital flows and exchange rates. Recent research suggests that searching for relevant text in newspaper articles can deliver useful information on uncertainty about monetary policy. In this context, Baker, Bloom, and Davis (2016) constructed a news-based index of monetary policy uncertainty that captures the degree of uncertainty in the public's perception of the Federal Reserve's actions and their effects. Their study associates large spikes in monetary policy uncertainty with major news events, including Black Monday in October 1987, the September 11 attacks in 2001, the March 2003 invasion of Iraq, the collapse of Lehman Brothers in September 2008, Brexit, US elections in November 2016, and other major events. The monetary policy uncertainty index currently remains elevated, most likely reflecting the uncertain effects of global trade tensions and the global growth slowdown on the Federal Reserve's policy calculus (**Figure B1.1**). In simpler terms, recent values of the index suggest that the public remains unclear about the exact trajectory of US monetary policy.

Park et al. (2019) examine the effect of US monetary policy uncertainty on both the level and volatility of changes in the exchange rates of 10 Asian economies between February 2006 and January 2019. The 10 economies are the People's Republic of China; India; Indonesia; Japan;

continued on next page

Box 1: Impact of United States Monetary Policy Uncertainty on Asian Exchange Rates *continued*

Figure B1.1: Monetary Policy Uncertainty



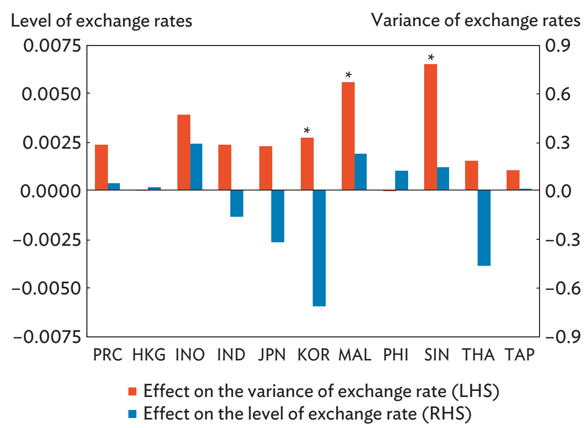
Note: The figure plots data on monetary policy uncertainty based on Baker, Bloom, and Davis (2016).
Sources: ADB estimates; Economic Policy Uncertainty. www.policyuncertainty.com (accessed 1 March 2019).

the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand. The analysis disentangles actual monetary policy decisions from news that captures the public's perception of monetary policy uncertainty.

Figure B1.2 summarizes the key empirical results. The first set of results suggests that monetary policy uncertainty does not seem to have any systematic effect on the level of exchange rates. One possible explanation is that the central banks of Asian economies attempt to smooth out fluctuations in their exchange rates. Another is that news about monetary policy uncertainty is fully absorbed by market participants. In addition, the news-based measure of monetary policy uncertainty may fail to fully capture the pure unsystematic portion of monetary policy. Finally, and intuitively, there is no reason why a lack of clarity about US interest rates should systematically strengthen or weaken the US dollar against other currencies.

On the other hand, the empirical results indicate that greater uncertainty about US monetary policy significantly

Figure B1.2: The Effect of Monetary Policy Uncertainty on the Level and Variance of Exchange Rates



PRC = People's Republic of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KOR = Republic of Korea; LHS = left-hand side; MAL = Malaysia; PHI = Philippines; RHS = right-hand side; SIN = Singapore; THA = Thailand; and TAP = Taipei,China.
Note: * denotes statistical significance.
Source: Park et al. (2019).

continued on next page

Box 1: Impact of United States Monetary Policy Uncertainty on Asian Exchange Rates *continued*

increases the volatility of US dollar exchange rates in some Asian economies. These outcomes vary in both magnitude and direction across economies. It seems that an increase in uncertainty about the path of US interest rates leads to greater diversity of beliefs about exchange rate behavior among market participants. More diverse beliefs mean more diverse trading and, hence, more volatile exchange rates.

While the above arguments can explain the currency movements of economies with more flexible exchange rate agreements, it is worthwhile to take a closer look at monetary policy arrangements in the region since these may exacerbate or mitigate the effect of US interest rate uncertainty. For example, the Monetary Authority of Singapore manages policy by targeting the exchange rate, allowing the Singapore dollar to appreciate or depreciate depending on economic factors such as global inflation and domestic price pressures.

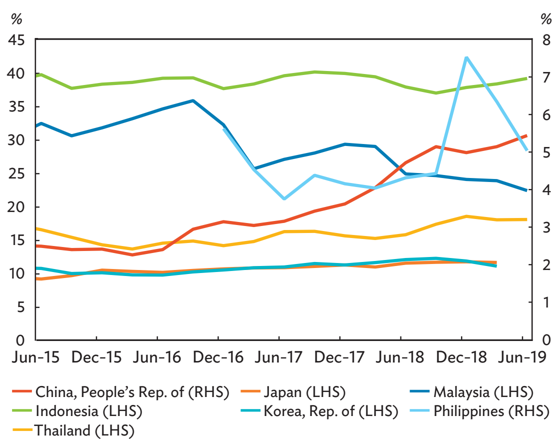
These monetary policy objectives are borne out by the empirical results, which indicate that Singapore's US dollar exchange rate varies significantly in response to US interest rate uncertainty. On the other hand, the Hong Kong Monetary Authority acts to maintain the stability of the Hong Kong dollar, as is evident in the negligible change in the value of the Hong Kong dollar vis-à-vis the US dollar during the review period.

References

Park, D., I. Qureshi, S. Tian, and M. L. Villaruel. 2019. *Impact of US Monetary Policy Uncertainty on Asian Exchange Rates*. Manila: Asian Development Bank.

Baker, S.R., N. Bloom, and S.J. Davis. 2016. Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics*. 131 (4). pp. 1593–636.

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

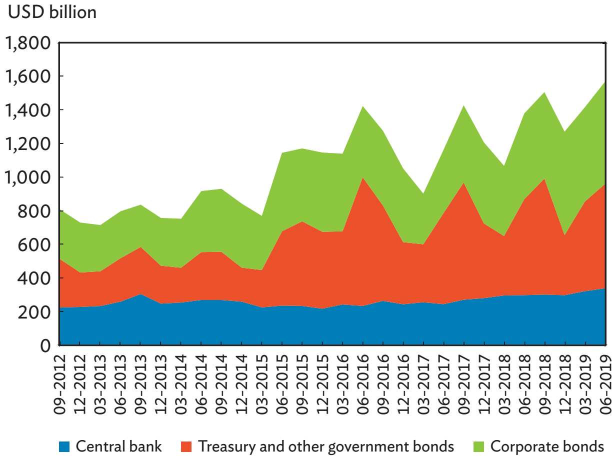


LHS = left-hand side, RHS = right-hand side.
Note: Data as of end-June 2019 except for Japan and the Republic of Korea (end-March 2019).
Source: *AsianBondsOnline*.

moderately on expectations of potential policy easing in response to the slowing economy. On the other hand, Malaysia experienced net outflows as foreign holdings dropped 1.5 percentage points on the back of speculation that Malaysian bonds might be removed from FTSE bond indices. The falling price of oil, a major Malaysian export, also reduced investor demand for Malaysian bonds. The Philippines posted a 1.3-percentage point decline in foreign holdings as foreign investors sold to take profits.

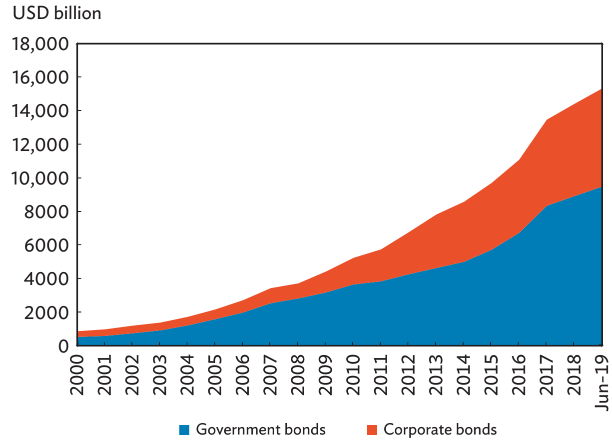
Overall, emerging East Asian LCY bond markets continued to develop despite dim global economic growth prospects and uneasy investor sentiment. New bond issuance grew 12.2% quarter-on-quarter and 16.4% y-o-y to total USD1.6 trillion in Q2 2019, while the LCY bond market's size expanded 3.5% quarter-on-quarter and 14.2% y-o-y to reach USD15.3 trillion at the end of June (**Figures H, I**). The steady growth of bond markets and, more broadly, capital markets in emerging East Asia is a welcome development (**Box 2**). The bond market serves as a stable source of financing, including long-term financing, for both public and private sector participants. However, the global bond market faces a new challenge as the benchmark London Interbank Offered Rate, or LIBOR, is subject to a crisis of trust as governments and the market work to identify potential alternatives (**Box 3**).

Figure H: Local Currency Bond Issuance in Emerging East Asia (gross)



USD = United States dollar.
Source: *AsianBondsOnline*.

Figure I: Size of Local Currency Bond Market in Emerging East Asia



USD = United States dollar.
Source: *AsianBondsOnline*.

Box 2: The Growing Importance of Domestic Capital Markets

Firms from emerging economies have significantly increased the amount of financing raised in capital markets in recent decades (**Figure B2.1**). As a result of financial liberalization and deeper globalization since the 1990s, international issuance activity has been an important driver of this trend (Gozzi, Levine, and Schmukler 2010). The low interest rates in advanced economies that followed the global financial crisis led to a boom in international bond issuances by emerging market firms (Bruno and Shin 2017).

The wider use of international capital markets by emerging market firms could have occurred at the expense of domestic markets: for example, if firms from emerging markets were conducting their investing and capital-raising activities directly in international markets, which are already well established. A new paper (Abraham, Cortina, and Schmukler 2019) examines whether this is the case by studying the performance of domestic capital markets in East Asia since in the 1990s. Focusing on East Asia is important because the region accounts for the bulk (about 70%) of the capital-raising activity in emerging economies. Furthermore, following the 1997–1998 Asian financial crisis, regional policymakers implemented several policies to develop domestic capital markets.

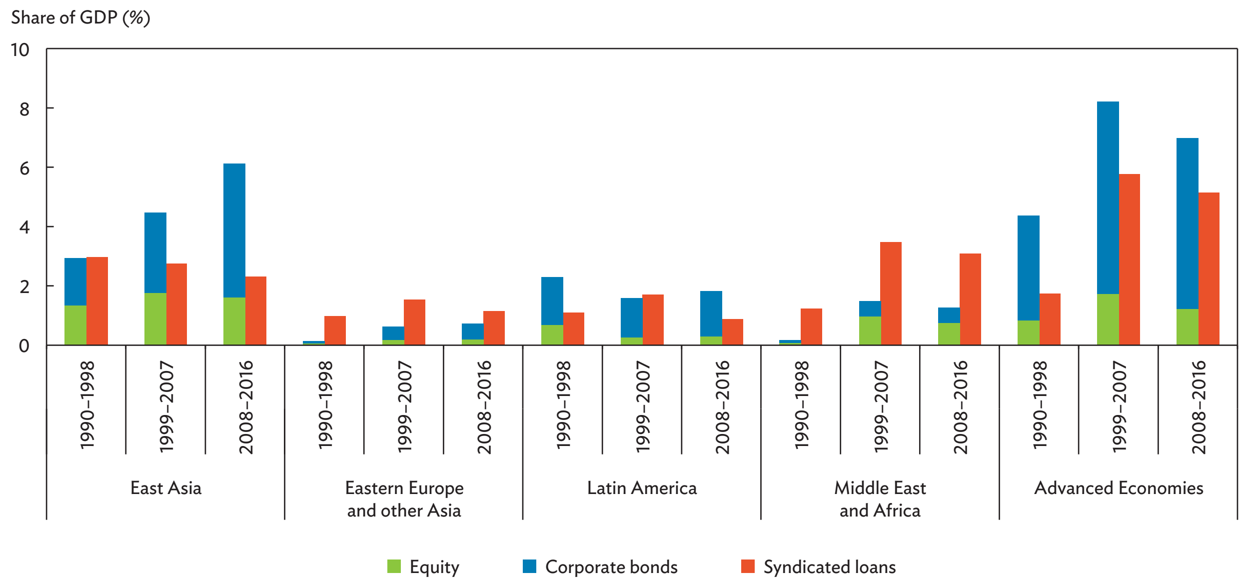
Contrary to predictions, the use of domestic capital markets by firms in East Asia has grown significantly faster than firms' activity in international markets since the 1990s, particularly since the global financial crisis. The share of equity raised domestically per year in the median East Asian economy increased from 85% to 97% between 1990–1999 and 2008–2016; that of domestic bonds rose from 36% to 80% during the review period (**Figure B2.2**).

Not only are domestic capital markets very active, but they also provide firms with several benefits. First, as domestic markets develop, more and smaller firms gain access to equity and corporate bond financing. Driven by the increased participation of firms in domestic markets, the average number of firms issuing equities and bonds per year in the median East Asian economy more than tripled between 1990–1998 and 2008–2016 (**Figure B2.3**). Because domestic markets serve relatively smaller firms than international ones, the size of the typical capital market issuer in East Asia declined 38% during the review period. Despite this decrease in size, issuers in East Asia are primarily still very large corporations.

continued on next page

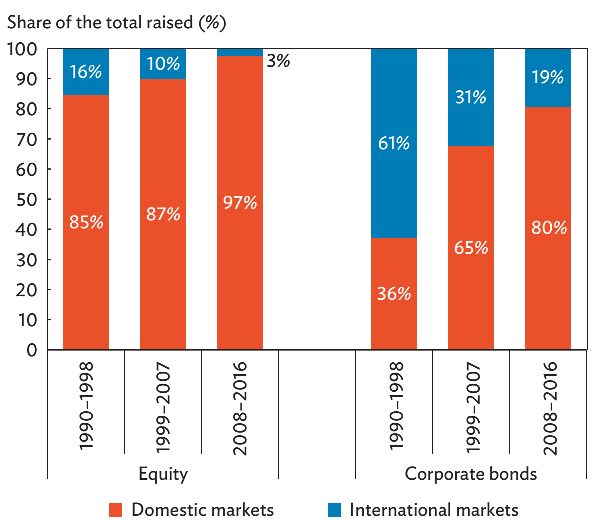
Box 2: The Growing Importance of Domestic Capital Markets *continued*

Figure B2.1: Growth in Capital Market Financing, Median Economy per Region and Period



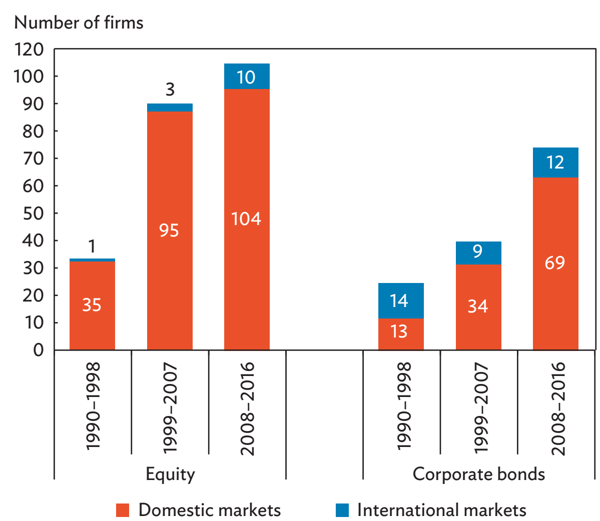
GDP = gross domestic product.
Source: Abraham, Cortina, and Schmukler (2019).

Figure B2.2: Share of Domestic and International Issuances, Median East Asian Economy



Source: Abraham, Cortina, and Schmukler (2019).

Figure B2.3: Average Number of Issuing Firms per Year, Median East Asian Economy



Source: Abraham, Cortina, and Schmukler (2019).

continued on next page

Box 2: The Growing Importance of Domestic Capital Markets *continued*

Second, domestic capital markets help diversify financing sources for the largest issuers. Whereas the relatively smaller issuers rely almost exclusively on domestic capital markets, the largest firms raise funds in both domestic and international markets. Different markets act as a "spare tire," allowing firms to mitigate negative shocks in one market by raising more funds in another. For example, when international debt markets collapsed during the global financial crisis, firms in East Asia moved from international to domestic bond markets. This spare tire function was not present during the 1997–1998 Asian financial crisis when domestic capital markets were less developed (**Figure B2.4**).

Third, we also observe a high correlation between the currency denomination of bonds and the market of issuance. This evidence implies a shift toward local currency financing in East Asia. This shift could mitigate, at least in part, existing concerns that the corporate sectors of emerging economies are more exposed to currency risk (Chui, Fender, and Sushko 2014; International Monetary Fund 2015).

Even in an increasingly globalized world, domestic capital markets can play an important role in emerging economies. Therefore, it could be worthwhile to replicate the experiences of East Asia in other emerging economies where the relative importance of domestic capital markets is currently much lower. Successfully achieving this goal would require a better understanding of which specific policy reforms helped jump-start this process in East Asia. Another important issue that is relevant for East Asia is how to extend access to capital markets to small- and medium-sized enterprises. Even in well-developed capital markets, as is the case in East Asia, issuing firms are generally confined to relatively large corporations.

References

Abraham, F., J. J. Cortina, and S. L. Schmukler. 2019. The Rise of Domestic Capital Markets for Corporate Financing. *World Bank Policy Research Working Paper*. No. 8844. Washington, DC: World Bank.

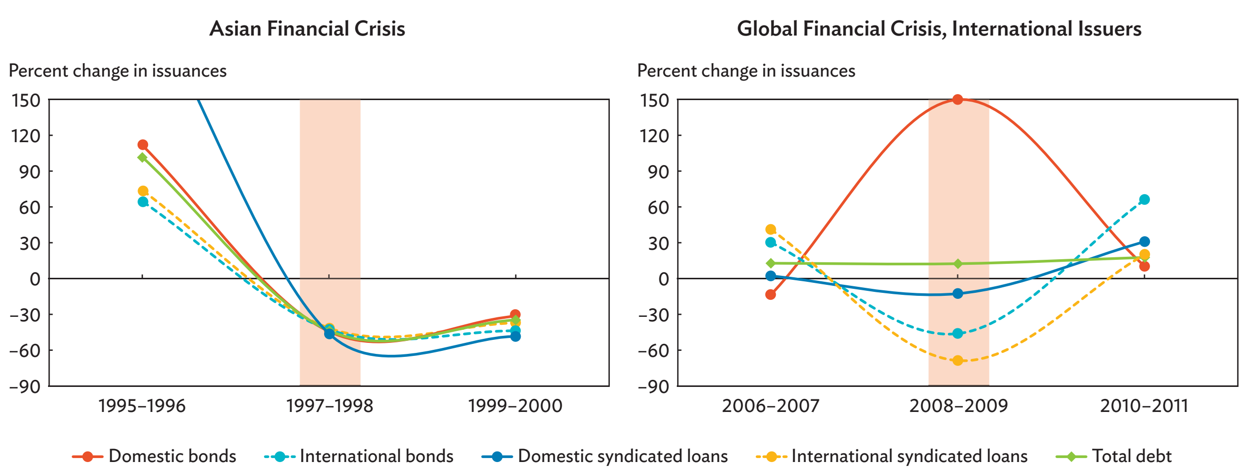
Bruno, V., and H. S. Shin. 2017. Global Dollar Credit and Carry Trades: A Firm-level Analysis. *Review of Financial Studies*. 30 (3): 703–49.

Chui, M., I. Fender, and V. Sushko. 2014. Risks Related to EME Corporate Balance Sheets: The Role of Leverage and Currency Mismatch. *BIS Quarterly Review September*. Basel: Bank for International Settlements.

Gozzi, J. C., R. Levine, and S. L. Schmukler. 2010. Patterns of International Capital Raisings. *Journal of International Economics*. 8 (1): 45–57.

International Monetary Fund. 2015. Corporate Leverage in Emerging Markets—A Concern? In *IMF Global Financial Stability Report October 2015—Vulnerabilities, Legacies, and Policy Challenges: Risks Rotating to Emerging Markets*, pp. 83–114.

Figure B2.4: Issuance Activity in East Asia around Crises, Percent Change in the Number of Issuances

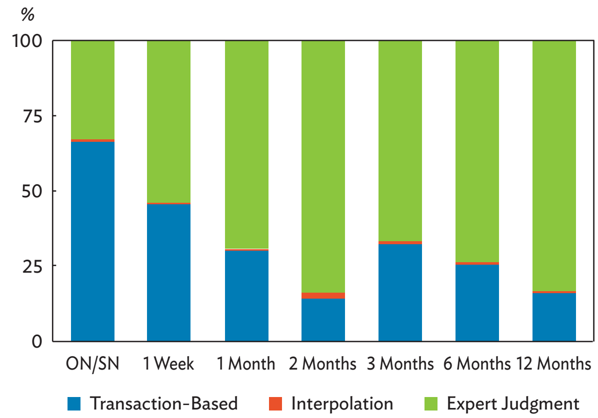


Note: International issuers are those that issued international debt at least once before 2008.
Source: Abraham, Cortina, and Schmukler (2019).

Box 3: Moving On from the London Interbank Offered Rate

The London Interbank Offered Rate (LIBOR) is often referred to as the world's most important number, providing a reference rate for pricing financial contracts worth the equivalent of hundreds of trillions of dollars, serving as a benchmark for measuring performance, and being hardwired into many financial activities such as risk valuation and liquidity management.[a] However, its central role may soon be coming to an end. Since the revelation of its widespread manipulation by panel banks in 2012,[b] and fundamental changes in the wholesale funding of banks following the financial crisis of 2008,[c] LIBOR is now viewed as an unsustainable piece of financial infrastructure giving rise to systemic risks.[d] Regulators globally have responded by making concerted efforts to transition financial markets away from its use and replace LIBOR with more robust risk-free rates (RFRs) and other interbank offered rates. As a first step toward building awareness of these developments, this box discussion seeks to provide the global context for the regulatory push to transition away from LIBOR.

Figure B3: US Dollar LIBOR Submissions, Q1 2018



LIBOR = London Interbank Offered Rate, ON/SN = overnight/spot next, Q1 = first quarter, US = United States.
Source: https://www.theice.com/publicdocs/ICE_Libor_Quarterly_Volume_Report_Q1_2018.pdf.

LIBOR is the rate at which banks do not lend to each other[e]

While LIBOR has undergone many reforms to improve its representativeness and credibility in recent times, an inherent flaw with data sufficiency remains—the underlying interbank lending activity it seeks to measure is insufficient to support its calculation as a dynamic reference rate on a daily basis, with most LIBOR submissions now based on expert judgment and not actual transactions.[f] This flaw is illustrated in **Figure B3**.

[I]f an active market does not exist, how can even the best benchmark measure it?

— Andrew Bailey,
chief executive officer, Financial Conduct Authority,
27 July 2017

This structural weakness exacerbates potential conflicts of interest for panel banks in making submissions; concerned about litigation risks, panel banks have become increasingly less willing to make submissions.[g] Consequently, there is a real risk that a lack of submissions will cause the discontinuation of LIBOR or its regulator, the Financial Conduct Authority (FCA), to determine that LIBOR is no longer representative of its underlying market. With the FCA having recently agreed with panel banks that they will continue to voluntarily make LIBOR submissions until the end of 2021, and giving no assurance it will use its regulatory

[a] LIBOR is the average rate at which banks active in the London interbank market would be charged to borrow from other leading banks on an unsecured basis. LIBOR is currently published for five currencies—euro, Japanese yen, pound sterling, Swiss franc, and United States dollar—across seven maturities, based on the daily submissions of 11–16 contributing banks for each currency. Until very recently, for every business day, each contributor bank submitted its response to the following question:

"At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 a.m.?"

Once submissions are received, the top and bottom 25% of submissions are removed, and the remaining submissions are averaged to determine the LIBOR. From 1 April 2019, each contributor bank now bases their submissions on eligible transactions, to the extent available using a waterfall methodology of priority: transaction-based, transaction-derived, expert judgment.

[b] Over USD9 billion in fines were paid by global banks involved in the LIBOR scandal.

[c] In response to the global financial crisis, changes were made to market structure and to regulatory capital and liquidity requirements. Banks' appetite for short-term funding was also affected, having contributed to interbank lending no longer being sufficiently active to support LIBOR.

[d] D. Ramsden. 2019. *Last Orders: Calling Time on LIBOR*. London: Bank of England.

[e] LIBOR has been referred to as "the rate at which banks do not lend to each other," reportedly before a Treasury Select Committee by Willem Buiter, a former member of the Bank of England's Monetary Policy Committee, and by Mervyn King, the former Governor of the Bank of England.

[f] For example, the *Wheatley Review of LIBOR: Final Report*, released in September 2012, contained a number of recommendations to reform LIBOR that were subsequently adopted, including the regulation of administration of, and submissions to, LIBOR.

[g] LIBOR calculations based on survey methodology introduce potential conflicts of interest with signaling the creditworthiness of a panel bank and with its proprietary trading positions. Various reference rates employ similar methodologies in their calculations, including Hong Kong Interbank Offered Rate, Mumbai Interbank Offered Rate, Tokyo Interbank Offered Rate, and Singapore Interbank Offered Rate.

continued on next page

Box 3: Moving On from the London Interbank Offered Rate *continued*

powers to compel panel banks to do so beyond then, implementing alternative reference rates is taking on greater urgency.[h]

The global regulatory push toward alternatives

The G20 asked the Financial Stability Board (FSB) to review and reform major interest rate benchmarks in 2013, which in turn established working groups to do so. The Official Sector Steering Group was established by the FSB to oversee efforts to implement financial benchmark reforms and internationally coordinate the transition to the use of alternative RFRs. The steering group is co-chaired by Andrew Bailey, chief executive officer of the FCA, together with John Williams, president of the Federal Reserve Bank of New York. The FSB also established the Market Participants Group to propose alternatives to existing reference rates.

To help organize the transition, authorities in the jurisdictions of the major currencies for which LIBOR is produced also established a series of working groups, which include subgroups involving both market participants and authorities, to implement the FSB's recommendations to strengthen existing interbank offered rates and develop alternative RFRs. These working groups consist of the United States (US) Alternative References Rates Committee, the Working Group on Sterling Risk-Free Reference Rates, the Working Group on Risk-Free Reference Rates for the Euro Area, the National Working Group on Swiss Franc Reference Rates, and the Japanese Study Group on Risk-Free Reference Rates. Many other jurisdictions whose currencies are not used to calculate LIBOR have similarly established working groups to enhance the representativeness and credibility of their own benchmark interest rates and their consistency with international standards, including Australia; Hong Kong, China; the Republic of Korea; and Singapore.

Guidance for reforming interbank offered rates can be found in the International Organization of Securities Commissions Principles for Financial Benchmarks published in 2013. These principles are considered international best practice and are often used by working groups to assess the governance, quality of design, methodology, and accountability of benchmark interest rates and in recommending alternative RFRs.[i] While these principles provide a common framework, the application and implementation of the FSB recommendations (and similar reforms) often differs in approach between jurisdictions. Most noticeably, some recommended RFRs are secured (e.g., the Secured Overnight Financing Rate recommended by the US Alternative References Rates Committee as their preferred RFR), while others are unsecured (e.g., the reformed Sterling Overnight Index Average recommended by the Working Group on Sterling Risk-Free Reference Rates as their preferred RFR). Furthermore, in the United Kingdom and the US there is a clear regulatory desire to replace LIBOR, while regulators in the European Union are more willing to reform interbank offered rates, where their current intention is to replace the Euro Overnight Index Average with the Euro Short-Term rate, and define fallbacks for the Euro Interbank Offered Rate rather than replacing it. These working groups have undertaken extensive consultations and published numerous papers and guidance on different aspects of the transition. They have also sought to caution market participants on the risks of LIBOR discontinuance.

> ***The discontinuance of LIBOR should not be considered a remote probability "black swan" event. Firms should treat it is as something that will happen and which they must be prepared for.***
>
> *— Andrew Bailey,*
> *chief executive officer, Financial Conduct Authority,*
> *12 July 2018*

Transition challenges

In each jurisdiction for which LIBOR is published, alternative RFRs have been recommended that are robust, credible, based on very liquid underlying markets, and do not require submissions based on expert judgement for their calculation. But having identified appropriate RFRs, the transition toward their use is far more complicated. Given how pervasive the use of LIBOR is in financial markets, the adoption of

[h] All 20 panels have agreed to support LIBOR, ensuring the sustainability of the rate until 2021. A. Bailey. 2017. *The Future of LIBOR*. London; FCA. 2017. Statement on LIBOR Panels. 24 November 2017. London.

[i] The International Organization of Securities Commissions Principles for Financial Benchmarks set out 19 principles for the operation of financial benchmarks and are broadly divided into four categories: governance, quality of the benchmark, quality of the methodology, and accountability.

continued on next page

Box 3: Moving On from the London Interbank Offered Rate *continued*

alternative RFRs involves many challenges including their broad acceptance by diverse participants, across a massive product range, in multiple markets. This is a paradigm shift for financial markets that has been likened to surgery on the pumping heart of the financial system.[j]

These challenges begin with recommended alternative RFRs containing different economic characteristics than LIBOR. Being fully transaction-based, mostly from overnight funding operations, they are nearly risk-free (most significantly without a premium for credit risk) and backward-looking overnight rates. Attempts are being made to derive forward-looking term rates from alternative RFRs. But as they do not yet exist and may not exist for some time, what then for cash products that prefer the certainty of known interest amounts in advance for budgeting, cash flow, and risk management purposes? In switching from LIBOR to an alternative RFR, how do you minimize any value transfer? Will adjustment payments or spreads need to be made? Existing contracts often provide for an interruption to LIBOR but not its discontinuance, so contract amendments will almost certainly be necessary to make such a switch, but how best to manage doing so?

Table B3: Summary of Alternative Robust Risk-Free Rates

Jurisdiction	Working Group	Alternative RFR	Rate Administrator	Characteristics		
				Secured vs. Unsecured	Anticipated Publication Date	Description
United Kingdom	Working Group on Sterling Risk-Free Reference Rates	Reformed Sterling Overnight Index Average (SONIA)	Bank of England	Unsecured	Currently being published	Unsecured rate that covers overnight wholesale deposit transactions
United States	Alternative Reference Rates Committee	Secured Overnight Financing Rate (SOFR)	Federal Reserve Bank of New York	Secured	Currently being published	Secured rate that covers multiple overnight repo market segments
Europe	Working Group on Sterling Risk-Free Reference Rates for the Euro Area	European Short-Term Euro Rate (€STER)	European Central Bank	Unsecured	October 2019	Unsecured rate that captures overnight wholesale deposit transactions
Switzerland	The National Working Group on CHF Reference Rates	Swiss Average Rate Overnight (SARON)	SIX Swiss Exchange	Secured	Currently being published	Schedule rate that reflects interest paid on interbank overnight repo
Japan	Study Group on Risk-Free Reference Rates	Tokyo Overnight Average Rate (TONA)	Bank of Japan	Unsecured	Currently being published	Unsecured rate that captures overnight call rate text market

CHF = Swiss franc, RFR = risk-free rate.
Source: International Swaps and Derivatives Association. 2018. *IBOR Global Benchmark Survey Transition Roadmap 2018*. https://www.isda.org/a/g2hEE/IBOR-Global-Transition-Roadmap-2018.pdf.

[j] A. Schrimpf and V. Sushko. 2019. *BIS Quarterly Review March*. Basel: Bank for International Settlements.

Risks to Emerging East Asian Bond Markets

Downside risks continue to outweigh upside risks, which means that global growth in 2019 and 2020 may turn out to be weaker than expected. While a number of factors impinge on the region's short-term growth outlook, quite clearly none looms anywhere nearly as large as global trade tensions. In particular, the persistence and intensification of the trade conflict between the PRC and the US poses by far the most significant threat to emerging East Asia's economic growth and financial stability. In fact, the simmering trade conflict between the world's two biggest economies poses a threat not only to the PRC and the region but to the world at large. The conflict adversely affects the world's two most systemically important economies and casts a long, dark shadow of uncertainty over the global economic outlook. Since most emerging East Asian economies have close trade, investment, and other economic linkages with both giants, they are likely to be hit hard if the trade row deepens further.

The PRC–US trade conflict shows no signs of ending any time soon; to the contrary, it has intensified in recent months. The most recent developments have added to the concerns of global investors, and further dented global business sentiment. At the G20 meeting in Osaka on 29 June, the two sides made some concessions and formally agreed to restart talks, raising hopes of an easing of tensions. Specifically, the US agreed to no new tariffs and the relaxation of restrictions on Chinese telecommunications giant Huawei, while the PRC promised unspecified purchases of US farm products. However, any hopes of an easing of tensions were dashed on 1 August, when US President Donald Trump announced that new tariffs of 10% on USD300 billion of Chinese imports would take effect in the last 4 months of 2019. The new tariffs mean that almost all US imports from the PRC would be subject to US tariffs by the end of the year. In response, on 5 August, the PRC halted purchases of US farm products. On the same day, the Chinese renminbi fell below the significant exchange rate of CNY7.00–USD1.00, and the US formally accused the PRC of manipulating its currency. On 23 August, the PRC retaliated to the new US tariffs announced on 1 August by imposing additional tariffs of between 5% and 10% on USD75 billion worth of US products. Separately, the PRC announced plans to reimpose a 25% tariff on US automobiles and a 5% tariff on US auto parts. In response, President Trump announced that the US planned to raise existing tariffs on USD250 billion of Chinese imports from 25% to 30%. He also announced that the new tariffs will now be 15% instead of the previously announced 10%, and ordered US companies to look for alternatives to the PRC. In short, the PRC–US trade conflict seems to be getting worse rather than better.

Many economies around the world, including larger ones such as Japan and Germany, are suffering visibly from the impact of the PRC–US dispute. Japan's exports fell for an eighth consecutive month in July, declining 1.6% on a y-o-y basis. Furthermore, according to a Reuters Tankan survey, business confidence among Japanese manufacturers turned negative in August for the first time since April 2013, reflecting the darkening mood in the heavily export-dependent Japanese economy. Exports to the PRC, Japan's largest trading partner, fell 9.3% y-o-y in July, the fifth consecutive month of contraction. Exports to Asia, which comprise more than half of Japan's total exports, shrank 8.3% y-o-y in July.

On 19 August, Deutsche Bundesbank, Germany's central bank, warned that Europe's largest economy could be heading into a recession. Germany depends heavily on exports to the US, the PRC, and elsewhere for growth, and its world-class, export-oriented manufacturing sector has kept the economy humming in recent years. However, the current gloomy global trade environment is turning what was once a source of strength for the economy into a source of weakness. Deutsche Bundesbank indicated that German GDP, which shrank by 0.1% quarter-on-quarter in Q2 2019, may shrink again in the third quarter of 2019, which would push the economy into a technical recession (GDP decline in two consecutive quarters).

The weakness of large economies such as Japan and Germany, in turn, contributes to the further weakening of the world economy. However, the bigger risk to global growth is the adverse effect of the PRC–US trade conflict on the growth momentum of the two protagonists, which are also the world's only two economic superpowers. Although the US economy is less affected by the conflict than its Chinese counterpart, there are some concerns that a recession may be on the horizon. The US manufacturing sector is already technically in a recession, having contracted in the first two quarters of 2019. One particularly ominous sign is the inversion of the yield curve—i.e., short-term interest rates exceeding long-term interest rates—in mid-August. Every US recession in the last 60 years has been preceded by an inverted yield curve. At the same time, given moderating-but-still-healthy GDP growth and the robust labor market, it may be premature to predict a recession.

A sharp growth moderation in the PRC will pose a bigger risk to emerging East Asia than a US recession would. Among the two economic giants, the PRC is expected to suffer greater fallout from its trade dispute with the US. Official data indicate that the PRC economy expanded 6.2% y-o-y in Q2 2019, which would mark the slowest y-o-y expansion in at least 27 years. The PRC–US trade conflict has a significant negative impact on the PRC's growth but is by no means the only driver of the slowdown. A large number of domestic factors are also at play. In particular, in recent years the government has embarked on concerted and forceful efforts to rein in the rapid buildup of debt. Specifically, the authorities have tightened regulations in the financial system, encouraged banks to scale back their lending, and clamped down on unregulated lending in the shadow banking sector. Although such deleveraging efforts are required to improve the quality of debt and thus protect financial stability in the medium-term, they will adversely affect investment and growth in the short-term, as these measures make it more difficult for companies, especially more efficient private sector companies, to borrow from banks and obtain financing. In 2018, defaults by Chinese companies hit a record high and the number of defaults is likely to increase this year. While there is no cause for undue concern, a sharper-than-expected slowdown in the PRC due to a combination of external and domestic factors cannot be ruled out. Such a slowdown, in turn, would have large spillovers in the region and beyond.

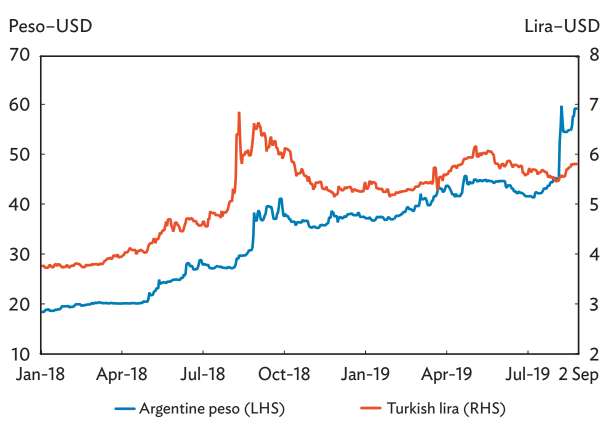
Regional trade conflict poses a new risk to emerging East Asia. In the face of rising global protectionism, it is in the best interest of emerging East Asian economies to strengthen domestic demand and pursue closer regional economic integration. Perhaps the biggest risk from the current wave of global protectionism is the weakening of the General Agreement on Tariffs and Trade–World Trade Organization multilateral trading system that helped foster the explosive growth of world trade in the postwar period. The weakening of the World Trade Organization system may encourage individual economies to pursue protectionist policies to achieve a wide range of objectives. That is, instead of complying with multilateral rules of the game, economies may arbitrarily use trade policy against each other.

The nascent trade conflict between Japan and the Republic of Korea is a case in point. Against a backdrop of deep-seated historical issues between the two economies, on 4 July, Japan announced that it would tighten control over three chemicals—fluorinated polyimides, photoresists, and hydrogen fluoride. These chemicals are vital for producing semiconductors, which is the Republic of Korea's top export, accounting for about 20% of the economy's total exports. The new restrictions require Japanese companies to obtain a license for exporting the chemicals to the Republic of Korea, while processing the license could take up to 3 months. In addition to the export controls, which were implemented based on national security grounds, Japan announced that it would remove the Republic of Korea from its white list of preferred trade partners on 2 August. The removal came into effect on 28 August. On 12 August, the Republic of Korea responded by announcing that it planned to remove Japan from its own white list of preferred trade partners in September. There has also been a mass boycott of Japanese beer, automobiles, clothing, and other goods by Korean consumers, in addition to a sharp drop in the number of Korean tourists visiting Japan. While the boycott is an unofficial civil movement, it is exacerbating the bilateral conflict, and has already had a tangible effect on Japanese exports to the Republic of Korea, which fell 9.3% y-o-y in July.

At this point, the Japan–Republic of Korea trade conflict, like the PRC–US trade conflict, is not giving much cause for optimism for an early resolution. To the contrary, there are worrying signs that it is spilling over into nontrade areas, and thus widening into a broader conflict. For example, on 22 August, the Republic of Korea withdrew from its intelligence-sharing agreement with Japan, which was a key element of security cooperation between the two governments. Annual bilateral trade between Japan and the Republic of Korea, which are Asia's second- and fourth-largest economies, respectively, amounted to almost USD80 billion in 2018. Therefore, the conflict is bound to have significant adverse economic effects for the two export-dependent economies at a time when both are already under pressure from the PRC–US conflict. That is, the bilateral conflict is likely to exacerbate what is already a gloomy external environment for exports, the main engine of growth for both economies. The weakness of the two regional heavyweights will also have negative spillover effects for smaller regional economies. Finally, given the central role of Japan and the Republic of Korea in global supply chains of high-tech information technology and electronics products, the dispute may even have global ramifications. Potential disruptions to the production of semiconductors is a particular concern in light of the global importance of the Republic of Korea as a semiconductor producer, and the fact that semiconductors are a vital input in virtually all electronic devices.

Financial turbulence in vulnerable emerging markets continues to pose a risk to regional and global financial stability. The Turkish lira and Argentine peso depreciated sharply during 2018 before strengthening toward the end of the year. However, since the beginning of 2019, both currencies have weakened on country-specific factors (**Figure J**). In this context, the most notable development was the 30% depreciation of the Argentine peso to a record low on 12 August. The plunge was triggered by the unexpectedly poor showing of the current government in an election primary, which was won by the center-left opposition. The result raised the prospect of a return to power of the former government that put into effect the populist policies that lie at the root of Argentina's current macroeconomic problems. Investors were spooked by the increased likelihood of a populist government, which would increase the chances that Argentina would default on its debt. The markets remain unconvinced despite

Figure J: Argentine Peso and Turkish Lira vs. the US Dollar



LHS = left-hand side, RHS = right-hand side, US = United States, USD = United States dollar.
Note: Local currency unit relative to the US dollar. Data are from 1 January 2018 to 2 September 2019.
Source: Bloomberg LP.

assurances of no-default from the opposition candidate. The government announced plans to restructure the country's huge debts on 28 August and imposed capital controls on 2 September. The effect of the drastic measures on the markets remains to be seen. Although the Turkish lira has not depreciated as sharply as the Argentine peso, the Turkish currency remains vulnerable to external shocks. Perceptions of easy monetary policy, combined with domestic and external political tensions, are fueling investor concerns. The risk from vulnerable emerging markets is that they may give rise to a financial crisis, which could lead to broader risk aversion toward all emerging markets. Although the strong fundamentals of emerging East Asian economies would likely limit such negative spillovers, they would not be completely immune to the loss of risk appetite among global investors.

One significant bright spot for emerging East Asian markets is the decline in US interest rates. One major contributing factor to the financial instability of vulnerable emerging markets in 2018 was the concerted interest rate hikes by the Federal Reserve. The consequent tightening of global liquidity conditions destabilized some emerging markets, especially vulnerable economies with sizable macroeconomic imbalances, such as Argentina and Turkey. However, there has been no further interest rates hikes by the Federal Reserve so far this year. To the contrary, and in line with recent market expectations, the Federal Reserve clearly signaled its intent to prioritize growth by cutting the federal funds rate, its key benchmark rate, from 2.25%–2.50% to 2.00%–2.25% on 31 July. The rate cut was the first in more than a decade and the first since the end of the global financial crisis. Although the US economy is not suffering from a recession or high unemployment, which is when the Federal Reserve typically eases monetary policy, there are growing concerns over the less-benign global economic outlook. Furthermore, inflation in the US is running below the Federal Reserve's target of 2.0%, which gives the Federal Reserve more room to cut rates. The shift of US monetary policy toward a decidedly more accommodative stance will help ease global liquidity conditions, which will likely benefit financial markets in emerging East Asia and elsewhere.

To sum up, downside risks dominate upside risks in the current global financial and economic environment. Against a backdrop of moderating global growth momentum, a number of factors pose a significant threat to global growth and financial stability. Most worryingly, the trade conflict between the PRC and US seems to have intensified in recent months. The escalation of protectionist measures in August bode ill for a fundamental settlement or even serious dialogue for such a settlement. Emerging East Asian economies have close trade and other economic linkages with both giants. As such, they stand to suffer sizable negative spillovers from an intensification of the dispute, especially if it leads to sharper-than-expected growth moderation in the PRC. Regional trade conflicts, most notably between Japan and the Republic of Korea, are exacerbating the deterioration of the trade environment. Yet another risk, albeit a modest one, includes spillovers from vulnerable emerging markets outside the region. The Federal Reserve's interest rate cuts will provide some respite for regional financial markets, but this is at best a modest silver lining in a large dark cloud.

Bond Market Developments in the Second Quarter of 2019

Size and Composition

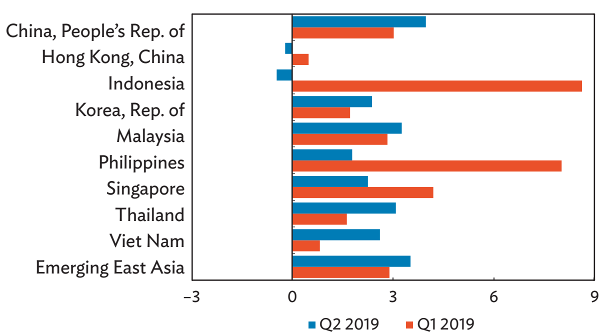
The outstanding amount of emerging East Asia's local currency bonds climbed to USD15.3 trillion at the end of June.

Emerging East Asia's local currency (LCY) bond market expanded in size to reach USD15.3 trillion at the end of June.[3] The region's bond market saw growth of 3.5% quarter-on-quarter (q-o-q) in the second quarter (Q2) of 2019, up from 2.9% q-o-q in the first quarter (Q1) (**Figure 1a**). Except for Indonesia and Hong Kong, China, all markets in emerging East Asia posted positive q-o-q growth in Q2 2019. The fastest growth rates were noted in the People's Republic of China (PRC), Malaysia, and Thailand. Compared with Q1 2019, the q-o-q growth rate accelerated in five out of nine emerging East Asian markets, including the PRC, the Republic of Korea, Malaysia, Thailand, and Viet Nam.

On a year-on-year (y-o-y) basis, growth in emerging East Asia's LCY bond market climbed to 14.2% in Q2 2019 from 14.0% in Q1 2019 (**Figure 1b**). All nine bond markets in the region posted positive y-o-y expansions in Q2 2019, with the fastest growth seen in Indonesia and the Philippines, albeit from a low base in both cases. The PRC emerged as the third-fastest growing bond market on a y-o-y basis. Compared with the previous quarter, annual bond market growth moderated in Q2 2019 in Hong Kong, China; Indonesia; the Philippines; and Thailand.

The PRC bond market remained the largest in the region in terms of size with an outstanding bond stock of

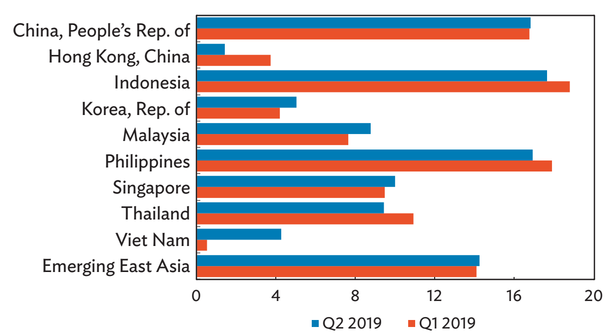
Figure 1a: Growth of Local Currency Bond Markets in the First and Second Quarters of 2019 (q-o-q, %)



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 2019 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 (*CEIC*); 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).

Figure 1b: Growth of Local Currency Bond Markets in the First and Second Quarters of 2019 (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 2019 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 (*CEIC*); 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).

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

USD11.5 trillion at the end of June, which represented a 75.3% share of emerging East Asia's bond total, the same as at the end of March. Growth in the PRC's bond market climbed to 4.0% q-o-q in Q2 2019 from 3.0% q-o-q in Q1 2019 on accelerated increases in both the stock of government and corporate bonds.

While all government bond categories in the PRC showed growth in Q2 2019, the fastest growth came from local government bonds, which expanded 5.4% q-o-q. The outstanding amount of local government bonds expanded after the Ministry of Finance issued directives in April for local governments to accelerate issuance and utilize special bonds to support economic growth and finance development projects. For full-year 2019, the local government bond allocation quota was set at CNY3.08 trillion, which the government has targeted to be reached by September. As a result, local government bond issuance has been very active in the first half of the year. Treasury and other government bonds and policy bank bonds also contributed to the overall growth in government bonds.

While corporate bond market growth eased to 3.6% q-o-q in Q2 2019 from 4.1% q-o-q in the prior quarter, the overall stock of corporate bonds expanded substantially. Growth was driven by increases in financial bonds as financial firms beefed up their funding and capital. Local corporate bonds outstanding also rose during the quarter. On an annual basis, the PRC's bond market maintained its pace of growth at 16.7% for the second quarter in a row.

The Republic of Korea, which is home to the second largest LCY bond market in the region, had LCY outstanding bonds totaling USD2.0 trillion at the end of June. However, its share of the regional total continued to decline, slipping to 13.2% at the end of Q2 2019 from 13.3% in the prior quarter and from 14.4% in the same period a year earlier. Overall bond market growth rose to 2.4% q-o-q in Q2 2019 from 1.7% q-o-q in Q1 2019, buoyed by the corporate bond segment and, to a lesser extent, government bonds. Growth in government bonds moderated to 1.7% q-o-q in Q2 2019 from 1.9% q-o-q in the prior quarter on a contraction in the stock of other government bonds and marginal growth in central bank bonds. The stock of central government bonds, on the other hand, expanded 2.7% q-o-q, as the government continued its frontloading policy to boost government spending in an effort to spur a slowing economy. Corporate bonds climbed 2.9% q-o-q, lifted by increased issuance during the quarter. On a y-o-y basis, the Republic of Korea's LCY bond market grew 5.0% in Q2 2019, mainly driven by the corporate bond market.

The LCY bonds outstanding of Hong Kong, China declined to USD250.4 billion on negative growth of 0.2% q-o-q in Q2 2019. This was a reversal from the 0.5% q-o-q hike posted in Q1 2019. Growth in the government bond segment rebounded to 0.2% q-o-q after falling 0.6% q-o-q in Q1 2019. While the stock of Exchange Fund Bills rose 0.6% q-o-q in Q2 2019, overall government bond market growth was capped by declines in the stock of Exchange Fund Notes and Hong Kong Special Administrative Region Bonds as maturities exceeded issuance. The corporate bond segment contracted 0.9% q-o-q, reversing the 2.2% q-o-q gain in the prior quarter, on a decline in issuance volume during the quarter. On a y-o-y basis, bond market growth in Hong Kong, China eased to 1.4%.

The outstanding LCY bond total of member economies of the Association of Southeast Asian Nations (ASEAN) reached USD1.5 trillion at the end of June.[4] Growth in ASEAN bond markets moderated to 2.3% q-o-q in Q2 2019 from 4.0% q-o-q in Q1 2019. Government bonds outstanding reached USD1,025.5 billion at the end of June, accounting for a 68.2% share of the ASEAN bond total. Corporate bonds tallied USD477.8 billion and accounted for the remaining 31.8%. Among ASEAN members, the largest LCY bond markets in terms of bonds outstanding were those of Thailand, Malaysia, and Singapore.

Thailand's LCY bond market reached a size of USD424.9 billion at the end of June, as growth accelerated to 3.1% q-o-q in Q2 2019 from 1.6% q-o-q in the prior quarter. Both government and corporate bonds contributed to overall growth during the review period. Government bonds expanded 2.3% q-o-q, up from 1.4% q-o-q in Q1 2019, driven by increases in the stock of central bank bonds and state-owned enterprise and other bonds. On the other hand, the stock of Treasury bills and bonds declined 0.4% q-o-q. Corporate bonds also posted robust growth in Q2 2019, accelerating to 5.1% q-o-q from 2.3% q-o-q in Q1 2019, on active issuance by corporates. On a y-o-y basis, growth in the LCY bond market in

[4] LCY bond statistics for ASEAN include the markets of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

Thailand moderated to 9.4% in Q2 2019 from 10.9% in the prior quarter.

The LCY bond market of Malaysia reached a size of USD360.1 billion at the end of June as growth climbed to 3.3% q-o-q from 2.9% q-o-q in Q1 2019. The corporate bond market drove most of the growth during the review period; government bonds also contributed, albeit to a lesser degree. While positive, the q-o-q growth in government bonds eased to 1.8% in Q2 2019 from 3.6% in the prior quarter. Growth was solely driven by the increase in the stock of central government bonds, comprising Malaysian Government Securities and Government Investment Issues. The stock of central bank bills fell by nearly half as issuance plummeted in Q2 2019. Corporate bond market growth was robust, rising 5.0% q-o-q on hefty issuance volume during the quarter. On an annual basis, Malaysia's LCY bond market growth picked up to 8.7% y-o-y in Q2 2019 from 7.6% y-o-y in Q1 2019.

Malaysia remained home to the largest *sukuk* (Islamic bond) market in the region at the end of June, with about 61.7% of its LCY bond market structured following Islamic principles. *Sukuk* comprised a 46.6% share of Malaysia's total government bond stock and a much larger 78.2% share of its corporate bond total.

The outstanding amount of Singapore's LCY bonds reached USD317.2 billion at the end of June, with growth slowing to 2.3% q-o-q in Q2 2019 from 4.2% q-o-q in Q1 2019. Government bond market growth decelerated to 2.7% q-o-q from 4.5% q-o-q on higher volume of maturities for Singapore Government Securities despite increased issuance during the quarter. Growth in the corporate bond segment also eased to 1.7% q-o-q in Q2 2019 from 3.7% in Q1 2019. On an annual basis, bond market growth in Singapore inched up to 9.9% y-o-y in Q2 2019 from 9.4% y-o-y in Q1 2019.

Indonesia's LCY bonds outstanding at the end of June totaled USD217.3 billion, as growth contracted 0.5% q-o-q in Q2 2019 after a robust 8.7% q-o-q expansion in Q1 2019. The overall contraction in Indonesia's bond market stemmed from a decline in the stocks of both government and corporate bonds. Government bonds fell as marginal growth in Treasury bills and bonds was more than offset by the decline in central bank bonds. In addition to fewer auctions being scheduled during the quarter due to holidays for the Muslim celebration of Eid al-Fitr, four auctions fell short of their respective target in May. However, the government was not compelled to accept higher bids as its issuance plan remained on track given its frontloading issuance policy and tapping of the foreign bond market to complement LCY bond issuance. The stock of central bank bills declined on reduced issuance volume, while the stock of corporate bonds contracted on account of a high volume of maturities during the quarter. On a y-o-y basis, growth in the Indonesian LCY bond market slipped to 17.6% in Q2 2019 from 18.7% in Q1 2019.

The outstanding amount of LCY bonds in the Philippines leveled off at USD130.7 billion at the end of June, with growth decelerating to 1.8% q-o-q from 8.0% q-o-q in Q1 2019. Government bonds remained the driver of growth, albeit through a slower expansion of 1.7% q-o-q in Q2 2019 versus 8.8% q-o-q in Q1 2019. The government lowered its issuance volume in Q2 2019 due to a sound cash position resulting from underspending and strong issuance in the prior quarter due to auction taps and the success of Retail Treasury Bond issuance. The corporate bond segment also registered slower q-o-q growth of 2.3% in Q2 2019, down from 5.4% q-o-q in Q1 2019, as maturities capped issuance, which more than doubled during the quarter. On a y-o-y basis, growth in the Philippine bond market eased to 16.8% in Q2 2019 from 17.8% in Q1 2019.

Viet Nam's LCY bond market, with outstanding bonds of USD52.9 billion at the end of June, remained the smallest in the region. Growth in the bond market jumped slightly to 2.6% q-o-q in Q2 2019 from 0.8% q-o-q in the preceding quarter. The government bond segment was the sole driver of growth, expanding 3.2% q-o-q, buoyed by expansions in the stock of Treasury bonds and central bank bills. Central bank bills surged more than six-fold as the State Bank of Vietnam resumed issuance in March due to ample liquidity in the market. In contrast, a contraction of 3.4% q-o-q was observed in the corporate bond segment during the review period. Annual bond market growth in Viet Nam accelerated to 4.2% y-o-y in Q2 2019 from 0.5% y-o-y in the previous quarter.

Emerging East Asia's LCY bond market remained dominated by government bonds, which represented a 61.8% share of the total bond stock at the end of June. The region's government bond market reached a size of USD9.4 trillion on growth of 3.7% q-o-q and 13.6% y-o-y in Q2 2019 (**Table 1**). The largest government bond markets were those of the PRC and the Republic of Korea,

Table 1: Size and Composition of Local Currency Bond Markets

	Q2 2018		Q1 2019		Q2 2019		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
							Q2 2018		Q2 2019		Q2 2018		Q2 2019	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	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	10,228	100.0	11,325	100.0	11,512	100.0	3.9	15.4	4.0	16.7	(1.5)	18.2	1.7	12.6
Government	6,663	65.1	7,309	64.5	7,447	64.7	4.4	16.0	4.2	15.9	(1.1)	18.8	1.9	11.8
Corporate	3,565	34.9	4,015	35.5	4,065	35.3	3.1	14.2	3.6	18.3	(2.2)	17.0	1.2	14.0
Hong Kong, China														
Total	246	100.0	250	100.0	250	100.0	2.1	3.6	(0.2)	1.4	2.1	3.1	0.3	1.8
Government	148	60.1	148	59.2	149	59.5	0.8	7.6	0.2	0.5	0.9	7.1	0.7	0.9
Corporate	98	39.9	102	40.8	101	40.5	3.9	(2.0)	(0.9)	2.7	4.0	(2.4)	(0.4)	3.2
Indonesia														
Total	182	100.0	217	100.0	217	100.0	0.5	12.0	(0.5)	17.6	(3.7)	4.3	0.4	19.3
Government	154	84.6	187	86.2	188	86.4	0.5	10.5	(0.3)	20.1	(3.7)	2.9	0.6	21.8
Corporate	28	15.4	30	13.8	30	13.6	0.5	21.0	(1.6)	3.7	(3.7)	12.8	(0.8)	5.2
Korea, Rep. of														
Total	1,993	100.0	2,006	100.0	2,019	100.0	1.6	3.9	2.4	5.0	(3.1)	6.6	0.6	1.3
Government	841	42.2	820	40.9	820	40.6	2.4	5.1	1.7	1.0	(2.3)	7.8	(0.1)	(2.5)
Corporate	1,152	57.8	1,186	59.1	1,200	59.4	1.0	3.0	2.9	7.9	(3.7)	5.8	1.1	4.2
Malaysia														
Total	339	100.0	353	100.0	360	100.0	2.2	9.9	3.3	8.7	(2.2)	16.8	2.0	6.2
Government	179	52.8	188	53.1	189	52.4	2.5	7.9	1.8	7.8	(1.9)	14.7	0.5	5.4
Corporate	160	47.2	165	46.9	172	47.6	1.9	12.2	5.0	9.7	(2.5)	19.3	3.7	7.2
Philippines														
Total	108	100.0	125	100.0	131	100.0	2.6	11.1	1.8	16.8	0.4	5.0	4.3	21.6
Government	86	80.0	99	79.0	103	78.9	2.5	9.0	1.7	15.2	0.3	3.1	4.2	19.9
Corporate	22	20.0	26	21.0	28	21.1	3.2	20.0	2.3	23.3	0.9	13.5	4.8	28.3
Singapore														
Total	287	100.0	310	100.0	317	100.0	1.8	11.8	2.3	9.9	(2.0)	12.9	2.5	10.7
Government	174	60.7	188	60.9	194	61.1	3.0	14.7	2.7	10.7	(0.8)	15.9	2.9	11.4
Corporate	113	39.3	121	39.1	123	38.9	(0.1)	7.6	1.7	8.8	(3.8)	8.6	1.9	9.5
Thailand														
Total	361	100.0	399	100.0	425	100.0	4.4	8.6	3.1	9.4	17.8	29.8	6.6	17.8
Government	261	72.4	287	72.0	304	71.5	5.3	8.4	2.3	7.9	15.6	25.6	5.8	16.2
Corporate	99	27.6	111	28.0	121	28.5	2.4	9.1	5.1	13.2	23.9	42.3	8.7	21.9
Viet Nam														
Total	52	100.0	52	100.0	53	100.0	(1.0)	14.7	2.6	4.2	(1.7)	13.6	2.1	2.6
Government	48	92.6	47	90.9	48	91.4	(2.1)	12.2	3.2	2.9	(2.7)	11.2	2.7	1.3
Corporate	4	7.4	5	9.1	5	8.6	14.7	58.2	(3.4)	21.0	14.0	56.8	(3.9)	19.1
Emerging East Asia														
Total	13,794	100.0	15,035	100.0	15,285	100.0	3.4	12.8	3.5	14.2	(1.3)	15.8	1.7	10.8
Government	8,553	62.0	9,273	61.7	9,441	61.8	3.9	14.0	3.7	13.6	(0.8)	16.9	1.8	10.4
Corporate	5,241	38.0	5,762	38.3	5,844	38.2	2.5	11.0	3.3	15.0	(2.1)	14.1	1.4	11.5
Japan														
Total	10,443	100.0	10,597	100.0	10,948	100.0	0.3	1.5	0.5	2.1	(3.7)	3.0	3.3	4.8
Government	9,752	93.4	9,881	93.2	10,191	93.1	0.4	1.8	0.3	1.8	(3.7)	3.3	3.1	4.5
Corporate	691	6.6	717	6.8	757	6.9	(0.3)	(2.6)	2.8	6.7	(4.4)	(1.1)	5.6	9.6

( ) = 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 2019 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 (*CEIC*); 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).

accounting for shares of 78.9% and 8.7% of the regional government bond total, respectively. All of the region's government bond markets except for Indonesia posted positive q-o-q growth in Q2 2019.

At the end of June, ASEAN member economies accounted for a 10.9% share of emerging East Asia's government bond total. The largest government bond markets among ASEAN members were those of Thailand (USD303.8 billion), Singapore (USD193.9 billion), and Malaysia (USD188.5 billion). Next was Indonesia, whose government bonds outstanding of USD187.8 billion were broadly comparable with the more developed markets of Malaysia and Singapore, and even exceeded the government bond stock of Hong Kong, China. The Philippines and Viet Nam continued to have the smallest government bond markets in the region.

The region's total LCY corporate bond stock stood at USD5.8 trillion at the end of June, accounting for a 38.2% share of the regional bond total. The aggregate stock of corporate bonds in emerging East Asia grew 3.3% q-o-q and 15.0% y-o-y in Q2 2019. Corporates from the PRC and the Republic of Korea dominated the regional corporate bond total, representing a combined share of 90.1% at the end of June. Positive q-o-q growth was noted in six out of the nine corporate bond markets in emerging East Asia. Those that saw q-o-q contractions were the markets of Hong Kong, China; Indonesia; and Viet Nam.

The share of ASEAN member economies in the regional corporate total was 8.2% at the end of June, with the largest corporate bond markets being Malaysia, Singapore, and Thailand.

Measured as a share of regional gross domestic product (GDP), the size of LCY bond market in emerging East Asia climbed to 82.7% at the end of June from 81.4% at the end of March (**Table 2**). The GDP share was lifted by the accelerated increase in the amount of LCY bonds outstanding in Q2 2019, while regional GDP was capped by economic slowdowns in the PRC and the Republic of Korea. The GDP share of government bonds inched up to 51.1% and of corporate bonds to 31.6% in Q2 2019 from 50.2% and 31.2%, respectively, in Q1 2019. On an individual economy basis, the Republic of Korea continued to have the largest outstanding bonds-to-GDP share at 127.8% at the end of June, followed by Malaysia at 106.9% and Singapore at 86.7%.

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

	Q2 2018	Q1 2019	Q2 2019
China, People's Rep. of			
Total	78.8	83.0	84.6
Government	51.3	53.6	54.7
Corporate	27.5	29.4	29.9
Hong Kong, China			
Total	69.8	68.3	67.6
Government	41.9	40.5	40.2
Corporate	27.9	27.8	27.4
Indonesia			
Total	18.4	20.4	20.0
Government	15.6	17.6	17.2
Corporate	2.8	2.8	2.7
Korea, Rep. of			
Total	124.4	125.5	127.8
Government	52.5	51.3	51.9
Corporate	71.9	74.2	75.9
Malaysia			
Total	102.9	104.7	106.9
Government	54.3	55.6	55.9
Corporate	48.6	49.1	50.9
Philippines			
Total	34.7	37.2	37.3
Government	27.7	29.4	29.4
Corporate	6.9	7.8	7.9
Singapore			
Total	81.3	84.8	86.7
Government	49.4	51.7	53.0
Corporate	32.0	33.2	33.7
Thailand			
Total	74.9	76.8	78.4
Government	54.2	55.3	56.0
Corporate	20.6	21.5	22.4
Viet Nam			
Total	22.7	21.3	21.4
Government	21.0	19.4	19.6
Corporate	1.7	1.9	1.8
Emerging East Asia			
Total	78.3	81.4	82.7
Government	48.5	50.2	51.1
Corporate	29.7	31.2	31.6
Japan			
Total	210.5	213.5	213.7
Government	196.6	199.0	198.9
Corporate	13.9	14.4	14.8

GDP = gross domestic product, Q1 = first quarter, Q2 = second quarter.
Notes:
1. Data for GDP is from CEIC.
2. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.

Sources: People's Republic of China (*CEIC*); 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).

Foreign Investor Holdings

Movements in the share of foreign investor holdings in emerging East Asia were largely stable at the end of June.

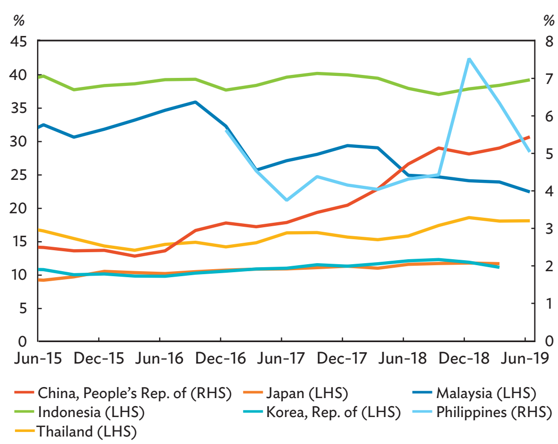
Foreign investor holdings in emerging East Asia's LCY government bond markets were mostly stable in June, following uncertainty earlier in the quarter amid the ongoing PRC–US trade dispute (**Figure 2**).

One exception was Malaysia, where the foreign holdings share in the LCY bond market fell to 22.3% at the end of June from 23.8% at the end of March. The decline was due to investor reaction to news reports that Malaysian bonds would be removed from FTSE bond indices and that Norway's sovereign wealth fund would drop Malaysia's bonds from its fixed-income portfolio. Lower oil prices also generated investor concerns given the importance of oil to the Malaysian economy.

The Philippines experienced a decline in its foreign holdings share to 5.0% at the end of June from 6.3% at the end of March as investors took profits amid declining bond yields driven by slowing inflation.

The foreign holdings share slightly rose to 5.4% in the PRC at the end of June from 5.1% at the end of March due to expected easing measures to prop up the economy.

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 2019 except for Japan and the Republic of Korea (end-March 2019).
Source: *AsianBondsOnline*.

In Indonesia, nonresident holdings rose from 38.3% to 39.1% as foreign investors shored up their holdings, fueled by a ratings upgrade from S&P at the end of May and expectations of a policy rate cut.

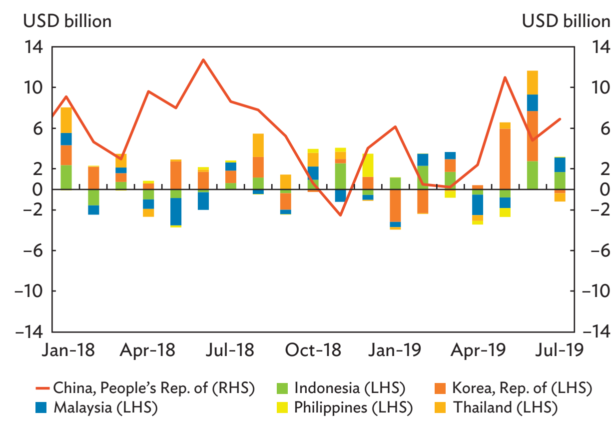
Foreign Bond Flows

Net outflows from the region's bond market were recorded in May over risk aversion arising from the PRC–US trade tensions.

On a net regional basis, foreign investors continued to be buyers of emerging East Asian LCY bonds during the April–July period, with the exception of Malaysia and the Philippines (**Figure 3**).

The largest net inflows during April–July were observed in the PRC and the Republic of Korea. In the PRC, foreign investors continued to invest in government bonds as interest rates declined further amid a slowing economy and on expectations of additional easing measures. In the Republic of Korea, rising bond prices were also driven by expectations of further easing given the slowdown in the domestic economy.

Figure 3: Foreign Bond Flows in Select Emerging East Asian Economies



LHS = left-hand side, RHS = right-hand side, USD = United States dollar.
Notes:
1. The Republic of Korea and Thailand provided data on bond flows. For the People's Republic of China, Indonesia, Malaysia, and the Philippines, month-on-month changes in foreign holdings of local currency government bonds were used as a proxy for bond flows.
2. Data as of end-July 2019.
3. Figures were computed based on 31 July 2019 exchange rates to avoid currency effects.

Sources: People's Republic of China (Bloomberg LP); Indonesia (Directorate General of Budget Financing and Risk Management, Ministry of Finance); Republic of Korea (Financial Supervisory Service); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); and Thailand (Thai Bond Market Association).

On a monthly basis, net outflows were noted in April and May for most emerging East Asian economies, with the exception of the PRC and the Republic of Korea, amid heightened risk aversion due to the resurgence of the PRC–United States (US) trade dispute. The largest outflows occurred in Malaysia, triggered by news that Malaysia would be excluded from global bond indices. Outflows in the Philippines were also noted due to profit-taking amid the continued decline in interest rates.

Investor sentiment recovered in June, fueled by expectations of US monetary policy easing. Outflows, however, were noted in July in the Republic of Korea over investor concerns regarding the trade dispute with Japan, and in Thailand as the central bank sought to limit the baht's appreciation.

Issuance

LCY bond issuance in emerging East Asia totaled USD1.6 trillion in Q2 2019.

Aggregate LCY bond issuance in emerging East Asia rose 12.2% q-o-q to reach USD1,570.2 billion in Q2 2019, surpassing the 10.0% q-o-q growth posted in Q1 2019 (**Table 3**). Growth in regional issuance during the quarter was mainly driven by the PRC, whose issuance of government bonds increased 24.7% q-o-q and where corporate debt issuance rebounded from negative growth in the previous quarter. On a q-o-q basis, the majority of markets saw moderate-to-accelerated issuance growth. Hong Kong, China; Indonesia; and the Philippines each experienced contractions in issuance during the quarter. On an annual basis, the region's issuance growth eased to 16.4% in Q2 2019 from 39.4% in Q1 2019 on weaker issuance in both the government and corporate bond sectors.

Issuance of LCY government bonds in emerging East Asia reached USD959.1 billion in Q2 2019, with growth slowing to 13.4% q-o-q from 28.7% q-o-q in Q1 2019. The growth stemmed primarily from accelerated issuance in the PRC, as the government endeavored to boost economic growth with debt-financed infrastructure spending through the use of special bonds. In addition, local governments are seeking to complete their issuance targets by the end of September. Government bond issuance in Viet Nam increased 309.0% q-o-q from a low base in the previous quarter. In Hong Kong, China; the Republic of Korea; Singapore; and Thailand, government bond issuance grew more modestly, posting q-o-q gains of 2.6%, 1.1%, 4.0%, and 4.1%, respectively. Due to frontloading measures taken during Q1 2019, growth in Q2 2019 government bond issuance declined in Indonesia and the Philippines.

By type of government bond, Treasury and other government bond issuance in emerging East Asia rose 18.7% q-o-q in Q2 2019, while central bank bonds increased 4.7% q-o-q. On a y-o-y basis, government bond issuance increased 12.5% in Q2 2019, which was weaker compared with growth of 37.3% y-o-y in Q1 2019. Government bonds comprised 61.1% of the total issuance in emerging East Asia in Q2 2019.

The region's LCY corporate bond issuance rose 10.4% q-o-q to USD611.0 billion in Q2 2019, rebounding from a 10.1% q-o-q decline in Q1 2019. Except for Hong Kong, China and Viet Nam, corporate debt issuance surged in emerging East Asia during the quarter as companies in the region took advantage of declining interest rates. The Philippines recorded the highest growth rate, with corporate bond issuance rising 114.4% q-o-q, followed by Malaysia with 68.3% q-o-q growth. Indonesia, the Republic of Korea, and Thailand also saw accelerated q-o-q growth in corporate debt issuance during the quarter, with increases of 30.9%, 28.2%, and 11.6%, respectively. Growth rates in both the PRC (6.2% q-o-q) and Singapore (4.0% q-o-q) were more moderate. On an annual basis, emerging East Asia's corporate bond issuance grew 23.1% y-o-y in Q2 2019.

The PRC continued to be the largest issuer of LCY bonds in the region, with total issuance of USD982.1 billion in Q2 2019, comprising 62.5% of the regional total. Total issuance grew 15.6% q-o-q, up from 11.6% q-o-q in Q1 2019. The growth in government sector issuance was driven solely by Treasury and other government bond issuance, which grew 24.7% q-o-q. Issuance growth was weaker compared to the previous quarter's 44.5% q-o-q rise. Local government bond issuance was maintained to meet infrastructure spending targets, while Treasury bond issuance grew significantly in Q2 2019, rising 159.9% q-o-q. In June, local governments in the PRC issued USD104.3 billion of debt intended for infrastructure projects in an effort to prop up economic growth that slowed to 6.2% y-o-y in Q2 2019.[5] Meanwhile, corporate bond issuance rebounded in Q2 2019 as

[5] K. Yao and S. Qui. 2019. China Boosts Local Government Bond Issuance to $104 Billion in June to Spur Economy. *Reuters*. 16 July. https://www.reuters.com/article/us-china-economy-spending/china-boosts-local-government-bond-issuance-to-104-billion-in-june-to-spur-economy-idUSKCN1UB02K.

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

	Q2 2018		Q1 2019		Q2 2019		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
							Q2 2019		Q2 2019	
	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	849	100.0	869	100.0	982	100.0	15.6	20.0	13.0	15.7
Government	489	57.6	443	50.9	540	54.9	24.7	14.4	21.9	10.3
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	489	57.6	443	50.9	540	54.9	24.7	14.4	21.9	10.3
Corporate	360	42.4	426	49.1	442	45.1	6.2	27.5	3.8	22.9
Hong Kong, China										
Total	116	100.0	117	100.0	117	100.0	(1.2)	0.2	(0.7)	0.6
Government	103	89.3	104	88.2	107	91.7	2.6	2.8	3.1	3.3
Central Bank	103	88.6	103	88.0	106	90.8	1.9	2.7	2.4	3.1
Treasury and Other Govt.	0.8	0.7	0.3	0.2	1	0.9	281.0	23.1	282.9	23.6
Corporate	12	10.7	14	11.8	10	8.3	(30.0)	(22.1)	(29.7)	(21.7)
Indonesia										
Total	8	100.0	26	100.0	17	100.0	(36.8)	108.6	(36.2)	111.6
Government	6	74.7	25	94.2	15	87.9	(41.0)	145.6	(40.5)	149.2
Central Bank	0.2	2.1	7	28.3	4	24.8	(44.6)	2,316.6	(44.2)	2,351.5
Treasury and Other Govt.	6	72.5	17	65.9	11	63.2	(39.4)	81.7	(38.9)	84.3
Corporate	2	25.3	2	5.8	2	12.1	30.9	(0.6)	32.0	0.9
Korea, Rep. of										
Total	198	100.0	163	100.0	187	100.0	16.5	(2.3)	14.5	(5.7)
Government	84	42.5	71	43.4	70	37.7	1.1	(13.2)	(0.6)	(16.2)
Central Bank	40	20.4	32	19.6	32	17.1	1.8	(18.3)	0.1	(21.1)
Treasury and Other Govt.	44	22.0	39	23.9	38	20.6	0.6	(8.4)	(1.1)	(11.6)
Corporate	114	57.5	92	56.6	116	62.3	28.2	5.8	26.1	2.1
Malaysia										
Total	22	100.0	25	100.0	27	100.0	9.8	24.5	8.5	21.7
Government	13	56.1	15	58.5	10	36.4	(31.7)	(19.2)	(32.5)	(21.0)
Central Bank	5	20.9	5	19.2	2	7.2	(58.6)	(56.8)	(59.1)	(57.8)
Treasury and Other Govt.	8	35.2	10	39.3	8	29.2	(18.5)	3.1	(19.5)	0.8
Corporate	10	43.9	10	41.5	17	63.6	68.3	80.5	66.3	76.4
Philippines										
Total	8	100.0	14	100.0	9	100.0	(40.2)	3.5	(38.7)	7.7
Government	7	88.7	13	92.0	6	71.2	(53.7)	(16.9)	(52.6)	(13.6)
Central Bank	0	0.0	0	0.0	0	0.0	–	–	–	–
Treasury and Other Govt.	7	88.7	13	92.0	6	71.2	(53.7)	(16.9)	(52.6)	(13.6)
Corporate	0.9	11.3	1	8.0	2	28.8	114.4	163.3	119.6	174.0
Singapore										
Total	103	100.0	112	100.0	116	100.0	4.0	12.2	4.2	13.0
Government	101	98.3	108	96.7	113	96.7	4.0	10.4	4.2	11.2
Central Bank	93	90.2	103	92.0	104	89.7	1.5	11.6	1.7	12.4
Treasury and Other Govt.	8	8.1	5	4.8	8	7.0	52.8	(2.7)	53.1	(2.0)
Corporate	2	1.7	4	3.3	4	3.3	4.0	114.8	4.2	116.3
Thailand										
Total	66	100.0	85	100.0	93	100.0	5.4	30.6	9.0	40.6
Government	55	83.1	70	82.7	76	81.7	4.1	28.3	7.7	38.2
Central Bank	45	68.4	65	76.6	65	70.4	(3.1)	34.4	0.3	44.7
Treasury and Other Govt.	10	14.7	5	6.1	10	11.3	94.3	(0.1)	101.0	7.6
Corporate	11	16.9	15	17.3	17	18.3	11.6	41.7	15.4	52.5

continued on next page

Table 3 *continued*

	Q2 2018		Q1 2019		Q2 2019		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
							Q2 2019		Q2 2019	
	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	11	100.0	6	100.0	23	100.0	295.1	123.8	293.2	120.3
Government	10	94.9	6	96.6	23	100.0	309.0	135.7	307.1	132.1
Central Bank	9	80.8	3	43.4	22	94.0	756.2	160.4	752.1	156.3
Treasury and Other Govt.	1	14.1	3	53.2	1	6.0	(55.5)	(5.1)	(55.7)	(6.6)
Corporate	0.5	5.1	0.2	3.4	0	0.0	(100.0)	(100.0)	(100.0)	(100.0)
Emerging East Asia										
Total	1,380	100.0	1,417	100.0	1,570	100.0	12.2	16.4	10.8	13.7
Government	868	62.9	853	60.2	959	61.1	13.4	12.5	12.4	10.5
Central Bank	294	21.3	318	22.4	335	21.4	4.7	12.8	5.5	13.9
Treasury and Other Govt.	574	41.6	536	37.8	624	39.7	18.7	12.3	16.5	8.7
Corporate	512	37.1	564	39.8	611	38.9	10.4	23.1	8.4	19.3
Japan										
Total	399	100.0	385	100.0	367	100.0	(7.3)	(10.7)	(4.8)	(8.2)
Government	364	91.1	362	94.1	324	88.3	(13.0)	(13.5)	(10.6)	(11.1)
Central Bank	5	1.2	0	0.0	0	0.0	–	(100.0)	–	(100.0)
Treasury and Other Govt.	359	89.9	362	94.1	324	88.3	(13.0)	(12.3)	(10.6)	(9.9)
Corporate	35	8.9	23	5.9	43	11.7	82.8	18.2	87.9	21.3

( ) = 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 2019 currency exchange rates and do not include currency effects.
Sources: People's Republic of China (*CEIC*); 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).

companies took advantage of lower interest rates, rising 6.2% q-o-q to reverse the 9.7% decline in the previous quarter.

The Republic of Korea, the second-largest issuer in the region, issued a total of USD186.5 billion in LCY bonds in Q2 2019, comprising 11.9% of the regional total during the quarter. The Republic of Korea's issuance rose 16.5% q-o-q in Q2 2019, recovering from an 8.6% q-o-q contraction in Q1 2019. Issuance of government bonds gained 1.1% q-o-q to USD70.4 billion, down from a 20.7% q-o-q increase in Q1 2019, as the government tapered its frontloading policy for 2019. Central bank bond issuance increased 1.8% q-o-q, while Treasury and other government bond issuance rose 0.6% q-o-q in Q2 2019. Strong growth in corporate bond issuance compensated for weak growth in the government bond sector during the quarter. Corporate bond issuance rebounded, with the 28.2% q-o-q rise in Q2 2019 reversing the 23.0% q-o-q drop in Q1 2019, as companies locked in low interest rates. Corporate bond issuance accounted for 62.3% of the Republic of Korea's total issuance in Q2 2019, up from 56.6% in Q1 2019.

In Hong Kong, China, total issuance contracted 1.2% q-o-q to USD116.6 billion in Q2 2019, driven by a significant drop in corporate bond issuance. Government bond issuance rose 2.6% q-o-q to USD106.9 billion, reversing the 2.4% q-o-q drop in Q1 2019. Issuance of Exchange Fund Bills and Notes by the Hong Kong Monetary Authority increased 1.9% q-o-q, while issuance of Hong Kong Special Administrative Region Bonds jumped 281.0%, as the government reopened 3-year, 5-year, and 10-year bonds worth a total of USD1.0 billion during the quarter. The growth in government bond issuance in Q2 2019 was more than offset by a contraction in corporate bond issuance. Despite favorable interest rates, the political unrest that unfolded during the quarter heightened uncertainties in the economy already weakened by the continuing trade dispute between the

PRC and the US. Corporate bond issuance dropped 30.0% q-o-q to USD9.7 billion as weak market sentiment dampened the demand for corporate debt.

The aggregate LCY bond issuance of ASEAN member economies reached USD285.0 billion in Q2 2019, accounting for 18.2% of the aggregate issuance in emerging East Asian economies. Four of the six markets posted positive q-o-q growth in total issuance, with Viet Nam registering the highest q-o-q growth rate from a low base in the previous quarter. Indonesia and the Philippines saw a decline in issuance during Q2 2019, driven by weaker issuance of government bonds. Total LCY bond issuance among ASEAN economies in Q2 2019 comprised 85.0% government bonds and 15.0% corporate bonds.

Growth in total issuance in Indonesia dropped 36.8% q-o-q to USD16.9 billion in Q2 2019, reversing the 141.1% q-o-q growth in the previous quarter. Government bond issuance dropped 41.0% q-o-q, as the government tapered its frontloading policy in Q2 2019. Central bank bond issuance declined 44.6% q-o-q, dragged down by lower issuance volumes of Sertifikat Bank Indonesia and Sukuk Bank Indonesia during the quarter. Likewise, Treasury bonds and other government issuance dropped 39.4% q-o-q in Q2 2019, as fewer auctions were held due to the long holiday in celebration of Eid al-Fitr. Government bonds accounted for 87.9% of total issuance in Q2 2019. Corporate bond issuance rose 30.9% q-o-q in Q2 2019, easing from 61.8% q-o-q growth in Q1 2019. On a y-o-y basis, total LCY bond issuance in Indonesia rose 108.6% in Q2 2019.

Malaysia's LCY bond issuance accelerated in Q2 2019, reaching USD27.4 billion on growth of 9.8% q-o-q and 24.5% y-o-y, driven by growth in the corporate sector. The growth in total issuance was significantly stronger than the 0.7% q-o-q and 2.9% y-o-y posted in Q1 2019. Government issuance declined 31.7% q-o-q, as both central bank and Treasury bond issuance contracted during the quarter. In contrast, corporate debt issuance surged 68.3% q-o-q in Q2 2019, buoyed by the low-interest-rate environment following Bank Negara Malaysia's decision to cut its key interest rate by 25 basis points (bps) in early May. Corporate bonds comprised 63.6% of Malaysia's total issuance in Q2 2019, up from 41.5% in the previous quarter.

In the Philippines, total bond issuance contracted 40.2% q-o-q to USD8.6 billion in Q2 2019. Issuance of government bonds fell 53.7% q-o-q to USD6.1 billion in Q2 2019, driven by a decline in issuance of Treasury bonds and other government bonds. The large drop was due to a high base in the previous quarter, which stemmed from a large issuance of Retail Treasury Bonds. In contrast, issuance of corporate bonds more than doubled in Q2 2019 from the previous quarter, with total issuance amounting to USD2.5 billion as companies took advantage of lower interest rates following the Bangko Sentral ng Pilipinas' decision to reduce the benchmark interest rate by 25 bps in early May.

Singapore's total bond issuance amounted to USD116.4 billion in Q2 2019 on growth of 4.0% q-o-q and 12.2% y-o-y. The growth in total issuance was weaker than the 10.5% q-o-q and 24.1% y-o-y expansion in the previous quarter. Government issuance increased 4.0% q-o-q, driven by strong issuance of Singapore Government Securities (SGS) bills and bonds. The government issued more SGS bonds during the quarter to replace a 10-year SGS bond that matured in June. Among emerging East Asian economies, Singapore's government bond sector comprised the largest share of total issuance in Q2 2019 at 96.7%. Corporate bond issuance also increased 4.0% q-o-q in Q2 2019, down from 17.5% q-o-q growth in the previous quarter.

In Thailand, total bond issuance increased 5.4% q-o-q to USD92.6 billion in Q2 2019. Government bond issuance rose 4.1% q-o-q, reaching USD75.6 billion at the end of June. The growth was driven by increased issuance of Treasury bonds and state-owned enterprise bonds, which offset the 3.1% drop in Bank of Thailand bond issuance. The growth in new government bond issues was weaker than the 16.5% q-o-q expansion in Q1 2019. Corporate bond issuance grew 11.6% q-o-q in Q2 2019, also down from the 31.2% q-o-q growth in the previous quarter. Despite low interest rates, corporate borrowing was tempered by downside risks as the Thai economy was weighed down by weakening global demand. On an annual basis, growth in total bond issuance increased to 30.6% y-o-y in Q2 2019 from 19.6% y-o-y in the previous quarter. Government bond issuance represented 81.7% of total issuance in Q2 2019.

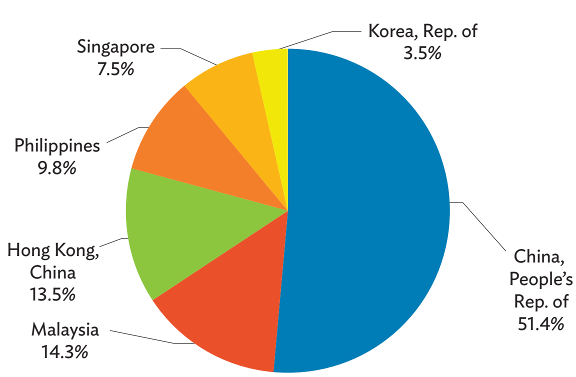
Viet Nam's total bond issuance amounted to USD23.2 billion in Q2 2019, up 295.1% q-o-q from a low base in the previous quarter, thus registering the highest growth rate in emerging East Asia during the review period. The growth was driven solely by a rebound in central bank issuance as the State Bank of Vietnam resumed the issuance of bills in March after a 5-month break. Central bank bond issuances accounted for 94.0% of Viet Nam's total issuance during the quarter. Issuance rose 123.8% y-o-y in Q2 2019, reversing the 72.2% y-o-y contraction in Q1 2019.

Cross-Border Bond Issuance

Intra-regional bond issuance in emerging East Asia totaled USD3.7 billion in Q2 2019.

Emerging East Asia's total intra-regional bond issuance reached USD3.7 billion in Q2 2019, down 35.5% q-o-q from the USD5.8 billion raised in Q1 2019 and 28.6% y-o-y from USD5.2 billion issued in Q2 2018. The PRC continued to dominate the market, with total cross-border bond issuance of USD1.9 billion in Q2 2019, comprising half of total intra-regional issuance during the quarter (**Figure 4**). Malaysia and Hong Kong, China followed with issuances of USD531.4 million and USD503.1 million, respectively, and shares of 14.3% and 13.5%. Other economies that issued intra-regional bonds in Q2 2019 include the Philippines (USD364.1 million), Singapore (USD277.8 million), and the Republic of Korea (USD131.6 million).

Figure 4: Origin Economy of Intra-Emerging East Asian Bond Issuance in the Second Quarter of 2019



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

Issuance of cross-border bonds from the PRC slowed in Q2 2019, totaling USD1.9 billion, which was only about half of the USD3.7 billion issued in the previous quarter. The decline could be attributed to a slowdown in the PRC's economy. Eight out of the eleven PRC-based companies issued HKD-denominated bonds totaling USD1.8 billion. Two companies issued SGD-denominated bonds amounting to USD124.1 million, while one firm issued USD16.9 million in MYR-denominated bonds. The region's single-largest bond issuance for the quarter was from the PRC as the Bank of China issued USD768.2 million worth of HKD-denominated 2-year bonds.

In Q2 2019, Malaysia surpassed Hong Kong, China as the economy with the second-highest volume of cross-border issuances at USD531.4 million. Malayan Banking Berhad was the sole issuer during the quarter, issuing bonds with tenors of 1, 3, and 5 years. Four bonds were issued in Chinese renminbi totaling USD339.3 million, while one was a USD192.0 million bond denominated in Hong Kong dollars.

Intra-regional bond issuances from Hong Kong, China in Q2 2019 amounted to USD503.1 million, all of which was denominated in Chinese renminbi. The Bank of East Asia (China) had the largest bond issuance from Hong Kong, China, amounting to USD218.4 million with a tenor of 10 years and a coupon rate of 4.94%.

In the Philippines, the central government was the sole issuer for the quarter, with its second-ever issuance of CNY-denominated bonds. In an effort to diversify its funding sources, the Government of the Philippines tapped the PRC market in May, issuing panda bonds amounting to USD364.1 million with a tenor of 3 years and priced at 3.58%. Proceeds from the issuance were to be used by the government to prop up its foreign exchange reserves and for other fiscal spending purposes. It represented the second-largest cross-border bond issuance in the region in Q2 2019.

Cross-border issuances in Singapore were denominated in both Chinese renminbi and Korean won. The largest issuer was ICBC Singapore, which issued a 3-year CNY-denominated bond worth USD145.6 million.

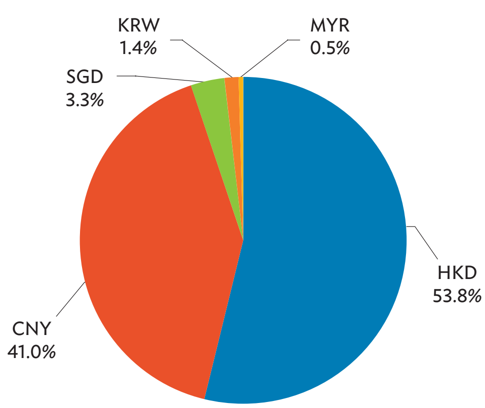
In the Republic of Korea, four banks issued USD131.6 million worth of Hong Kong dollars and CNY-denominated bonds. Government-owned

Korea Development Bank issued a 1-year CNY-denominated bond amounting to USD43.7 million.

The top 10 issuers in the region issued an aggregate USD3.1 billion in Q2 2019, comprising 82.8% of the regional total for the quarter, denominated in Chinese renminbi and Hong Kong dollars. Five companies were from the PRC, while the remaining five were from Hong Kong, China; Malaysia; the Philippines; and Singapore. The largest issuer, which also had the single-largest issue, was the Bank of China, which issued USD768.2 million worth of 2-year HKD-denominated bonds. This was followed by Malayan Banking Berhad with aggregate issuance of USD531.4 million. Other large issuers during the quarter include State Grid Overseas, the PRC's state-owned electric company, which issued 5-year and 10-year HKD-denominated bonds worth USD470.5 million.

Over half of the total regional issuance in Q2 2019 was denominated in Hong Kong dollars, amounting to USD2.0 billion, the majority of which was issued by companies from the PRC (**Figure 5**). Two other HKD-denominated bonds were issued in the Republic of Korea and Malaysia. This was followed by the Chinese renminbi, which accounted for 41.0% of total issuance at an aggregate amount of USD1.5 billion. All economies that issued intra-regional bonds in Q2 2019 issued at least a portion of such bonds in Chinese renminbi.

Figure 5: Currency Share of Intra-Emerging East Asian Bond Issuance in the Second Quarter of 2019



CNY = Chinese yuan, HKD = Hong Kong dollar, KRW = Korean won, MYR = Malaysian ringgit, SGD = Singapore dollar.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Other cross-border issuance currencies in Q2 2019 included Singapore dollars (3.3%, USD124.1 million), issued by companies from the PRC; Korean won (1.4%, USD52.0 million), which came solely from Singapore's Nomura International Fund; and Malaysian ringgit (0.5%, USD16.9 million) from one PRC-based company.

G3 Currency Issuance

The total G3 currency bond issuance in emerging East Asia amounted to USD210.5 billion in January–July.

Total G3 currency bonds issued in emerging East Asia during the January–July period totaled USD210.5 billion, an increase of 19.4% y-o-y from USD176.3 billion in the same period in 2018 (**Table 4**).[6] The growth was driven by increased G3 issuance in all economies in emerging East Asia except for Singapore, Thailand, and Viet Nam. On average, issuance of G3 currency bonds that were rated below investment grade by each of the top credit rating agencies increased to 12.1% of total issuances from 9.8% in January–July 2018. On the other hand, issuance of G3 currency bonds with no rating from any of the top credit rating agencies increased to 53.8% from 48.0% during the review period.

Among the emerging East Asian economies that issued G3 currency bonds during the review period, issuance was mostly in US dollars. Consequently, 92.3% of all G3 currency bonds issued during the review period were issued in US dollars, while 4.7% were in euros and 3.0% were JPY-denominated. In January–July, a total of USD194.3 billion worth of bonds denominated in US dollars were issued in emerging East Asia, representing a 22.4% y-o-y increase from the same period in the previous year. The equivalent of USD10.0 billion of EUR-denominated bonds were issued during the review period, a decline of 29.8% y-o-y, as most economies that had issued EUR-denominated bonds during January–July 2018 reduced such issuance in 2019. Bonds issued in Japanese yen totaled USD6.2 billion, a surge of 85.0% y-o-y, spurred by Malaysia's samurai bonds in March.

The PRC continued to dominate all economies in the issuance of G3 currency bonds, totaling USD136.8 billion during the January–July period, supported by its issuance

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

Table 4: G3 Currency Bond Issuance

2018			January to July 2019		
Issuer	Amount (USD billion)	Issue Date	Issuer	Amount (USD billion)	Issue Date
Cambodia	**0.3**		**Cambodia**	**0.0**	
China, People's Rep. of	**183.6**		**China, People's Rep. of**	**136.8**	
Tencent Holdings 3.595% 2028	2.5	19-Jan-18	Tencent Holdings 3.975% 2029	3.0	11-Apr-19
CNAC (HK) Finbridge Company 5.125% 2028	1.8	14-Mar-18	China Construction Bank 4.250% 2029	1.9	27-Feb-19
Scenery Journey 11.000% 2020	1.6	6-Nov-18	Guangzhou Bank 5.900% Perpetual	1.4	20-Jun-19
Others	177.8		Others	130.5	
Hong Kong, China	**21.9**		**Hong Kong, China**	**20.7**	
CHMT Peaceful Development Asia Property 7.5% 2019	3.3	25-Apr-18	Celestial Miles 5.75% Perpetual	1.0	31-Jan-19
Bank of China (Hong Kong) 5.9% Perpetual	3.0	14-Sep-18	Hong Kong, China (Sovereign) 2.50% 2024	1.0	28-May-19
ICBC (Asia) 4.9% Perpetual	2.5	21-Mar-18	AIA Group 3.60% 2029	1.0	9-Apr-19
Others	13.0		Others	17.7	
Indonesia	**26.1**		**Indonesia**	**15.0**	
Perusahaan Penerbit SBSN *Sukuk* 4.40% 2028	1.8	1-Mar-18	Perusahaan Penerbit SBSN *Sukuk* 4.450% 2029	1.3	20-Feb-19
Indonesia Asahan Aluminium 5.71% 2023	1.3	15-Nov-18	Indonesia (Sovereign) 1.450% 2026	0.8	18-Jun-19
Indonesia (Sovereign) 4.75% 2029	1.3	11-Dec-18	LLPL Capital 6.875% 2039	0.8	4-Feb-19
Others	21.8		Others	12.2	
Korea, Rep. of	**30.4**		**Korea, Rep. of**	**19.0**	
Hanwha Life Insurance 4.700% 2048	1.0	23-Apr-18	Republic of Korea (Sovereign) 2.500% 2029	1.0	19-Jun-19
Korea Development Bank 0.625% 2023	0.9	17-Jul-18	Export–Import Bank of Korea 0.375% 2024	0.8	26-Mar-19
Export–Import Bank of Korea 0.625% 2023	0.9	11-Jul-18	Korea National Oil Corporation 0.240% 2022	0.6	22-Jan-19
Others	27.6		Others	16.5	
Malaysia	**2.9**		**Malaysia**	**8.1**	
TNV Global Ventures Capital 4.85100% 2028	0.8	1-Nov-18	Malaysia (Sovereign) 0.530% 2029	1.8	15-Mar-19
Malayan Banking Berhad 3.51813% 2023	0.3	10-Aug-18	Resorts World Las Vegas 4.625% 2029	1.0	16-Apr-19
Others	1.9		Others	5.3	
Philippines	**6.2**		**Philippines**	**4.0**	
Philippines (Sovereign) 3.00% 2028	2.0	1-Feb-18	Philippines (Sovereign) 3.750% 2029	1.5	14-Jan-19
Philippines (Sovereign) 0.38% 2021	1.0	15-Aug-18	Philippines (Sovereign) 0.875% 2027	0.8	17-May-19
Others	3.2		Others	1.7	
Singapore	**16.1**		**Singapore**	**5.2**	
Temasek Financial 3.625% 2028	1.4	1-Aug-18	BOC Aviation 3.50% 2024	0.8	10-Apr-19
DBS Bank 3.300% 2021	1.3	27-Nov-18	DBS Group Holdings 2.85% 2022	0.8	16-Apr-19
Others	13.5		Others	3.7	
Thailand	**5.9**		**Thailand**	**1.3**	
Bangkok Bank of Hong Kong 4.45% 2028	0.6	19-Sep-18	Siam Commercial Bank 3.9% 2024	0.5	11-Feb-19
Bangkok Bank of Hong Kong 4.05% 2024	0.6	19-Sep-18	Siam Commercial Bank 4.4% 2029	0.5	11-Feb-19
Others	4.7		Others	0.3	
Viet Nam	**0.7**		**Viet Nam**	**0.3**	
Emerging East Asia Total	**294.0**		**Emerging East Asia Total**	**210.5**	
Memo Items:			**Memo Items:**		
India	**6.4**		**India**	**15.9**	
Export–Import Bank of India 3.875% 2028	1.0	1-Feb-18	Indian Oil Corporation 4.75% 2024	0.9	16-Jan-19
Others	5.4		Others	15.0	
Sri Lanka	**3.9**		**Sri Lanka**	**4.9**	
Sri Lanka (Sovereign) 5.75% 2023	1.3	18-Apr-18	Sri Lanka (Sovereign) 7.55% 2030	1.5	28-Jun-19
Others	2.7		Others	3.4	

USD = United States dollar.
Notes:
1. Data exclude certificates of deposit.
2. G3 currency bonds are bonds denominated in either euros, Japanese yen, or US dollars.
3. Bloomberg LP end-of-period rates are used.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

in US dollars. This was followed by Hong Kong, China and the Republic of Korea with USD20.7 billion and USD19.0 billion, respectively, both issuing mainly in US dollars as well.

In the first 7 months of 2019, G3 currency bond issuance increased in Malaysia (830.5% y-o-y); Hong Kong, China (41.9% y-o-y); the PRC (25.9% y-o-y); the Philippines (3.7% y-o-y); and Indonesia (1.2% y-o-y). Meanwhile, issuance of G3 currency bonds declined in Viet Nam (–56.5% y-o-y), Thailand (–52.7% y-o-y), and Singapore (–50.8% y-o-y). The Republic of Korea had about the same issuance during January–July as in the same period in 2018. Cambodia issued G3 currency bonds in January–July 2018, but not in January–July 2019.

The PRC led all economies in terms of total G3 currency bonds issued during January–July. It accounted for 65.0% of all G3 currency issuances in emerging East Asia, issuing USD131.5 billion in US dollars, the equivalent of USD5.1 billion in euros, and USD0.2 billion in Japanese yen. Multinational investment holdings conglomerate Tencent Holdings continued to lead all issuers from the PRC during the review period with issuance totaling USD6.0 billion. The Export–Import Bank of China increased its issuance of USD-denominated bonds with tenors of 4–5 years and varying coupon rates.

The Republic of Korea accounted for a 9.0% share of all G3 currency bonds issued during the review period. By denomination, it issued USD14.9 billion in US dollars, USD2.9 billion in euros, and USD1.2 billion in Japanese yen. The Export–Import Bank of Korea issued a total of USD2.5 billion via a combination of US dollars and euros. In June, it increased its issuance of USD-denominated bonds with two USD0.5 billion bonds with tenors of 3 and 5 years, and coupon rates of 2.87425% and 2.375%, respectively.

Hong Kong, China accounted for a 9.8% share of G3 currency bond issuance in January–July. By currency, USD19.8 billion was issued in US dollars, and JPY-denominated bonds amounted to USD0.9 billion. Securities brokerage company Haitong International issued 10 USD-denominated bonds, the largest of which was a USD0.7 billion 5-year bond with a 3.375% coupon rate. Proceeds from the 5-year bond will be used for the company's refinancing and general purposes.

G3 currency bond issuance among ASEAN member economies increased 0.9% y-o-y to USD34.0 billion in January–July from USD33.7 billion in the same period in 2018. As a share of emerging East Asia's total, ASEAN's G3 currency bond issuance accounted for 16.2% during the review period, down from 19.1% during the same period in 2018. Indonesia issued the most G3 currency bonds among ASEAN members, totaling USD15.0 billion. This was followed by Malaysia and Singapore, with issuance amounting to USD8.1 billion and USD5.2 billion, respectively.

Indonesia's G3 currency bond issuance in January–July accounted for 7.1% of the total in emerging East Asia, comprising USD12.6 billion in US dollars, USD1.6 billion in Japanese yen, and USD0.8 billion in euros. The Government of Indonesia issued in all three currencies, including a USD0.8 billion 7-year bond with a 1.45% coupon rate denominated in euros, a USD-denominated 10-year bond worth USD0.8 billion, and a series of six JPY-denominated bonds with various tenors and coupon rates. The samurai bonds will be used to finance debt repayment.

G3 currency bonds issued in Malaysia accounted for 3.9% of emerging East Asia's total, including USD-denominated bonds worth USD5.8 billion and USD2.3 billion worth of bonds denominated in Japanese yen. Malayan Banking Berhad issued three tranches of samurai bonds in May with tenors of 3, 5, and 10 years.

Singapore's share of issuance of G3 currency bonds in emerging East Asia was 2.5%, comprising USD5.0 billion issued in US dollars and USD0.2 billion in euros. Multinational banking and financial services corporation DBS Bank expanded its US dollar and euro issuances. In July, it issued a USD0.1 billion, 1-year bond with a 2.44775% coupon rate. In June, it issued two EUR-denominated 30-year bonds with coupon rates of 1.42% and 1.55%.

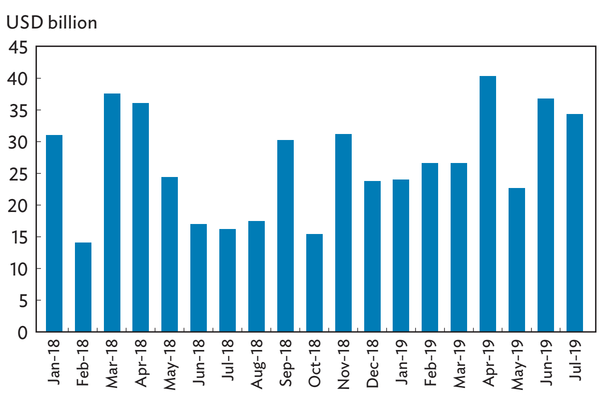
The Philippines accounted for a 1.9% share of total G3 currency bonds issued in emerging East Asia during the January–July period, comprising bonds denominated in US dollars and euros amounting to USD3.2 billion and USD0.8 billion, respectively. In May, the Government of the Philippines issued an 8-year EUR-denominated global bond with a coupon rate 0.875%. Proceeds from the issuance will be used for general purposes.

During the January–July period, 0.6% of all G3 currency bonds issued in the region were from Thailand, with all USD1.3 billion worth of these bonds denominated in US dollars. The Export–Import Bank of Thailand in May issued a USD0.3 billion, 5-year bond with a 3.3735% coupon rate.

Viet Nam accounted for the smallest share of G3 currency bond issuance in emerging East Asia at 0.1%, all of which was issued in US dollars. Vietnam Prosperity Bank was the sole issuer with a USD0.3 billion, 3-year bond with a coupon rate of 6.25%. The issuance was from the bank's Eurobond medium-term note program, with proceeds to be used for meeting the bank's capital and regulatory needs.

Monthly trends from January 2018 to July 2019 showed that April, June, and July 2019 were among the months with the most G3 currency bond issuance in emerging East Asia, with monthly issuance totals of USD40.2 billion, USD36.6 billion, and USD34.2 billion, respectively (**Figure 6**). Between January 2018 and July 2019, the PRC was consistently the main driver of growth, led by issuances from real estate operators and developers.

Figure 6: G3 Currency Bond Issuance in Emerging East Asia



USD = United States dollar.
Notes:
1. Emerging East Asia comprises Cambodia; the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.
2. G3 currency bonds are bonds denominated in either euros, Japanese yen, or US dollars.
3. Figures were computed based on 31 July 2019 currency exchange rates and do not include currency effects.

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

Government Bond Yield Curves

Government bond yield curves shifted downward for nearly all tenors in a majority of emerging East Asian markets as central banks in the region began easing monetary policy in response to the continued global economic slowdown.

Global economic growth moderated with the ongoing PRC–US trade dispute continuing to add to uncertainties. GDP growth moderated in Q2 2019 in advanced economies such as the US, where growth fell to 2.0% y-o-y from 3.1% y-o-y in the previous quarter. The euro area's GDP growth slipped to 1.2% y-o-y from 1.3% y-o-y during the same period. Japan's GDP growth also slowed to an annualized 1.3% in Q2 2019 from 2.2% in Q1 2019.

The Federal Reserve reduced its key policy rate by 25 bps on 31 July, citing increased uncertainties regarding the economic outlook. While the European Central Bank (ECB) and the Bank of Japan (BOJ) left key policy rates unchanged during their respective monetary policy meetings on 25 July and 30 July, both central banks signaled a readiness to employ additional stimulus measures if circumstances warrant it. Subsequently, on 12 September, the ECB cut the deposit facility rate by 10 bps to –0.50% and held unchanged the refinancing operations and marginal lending facility rates. The ECB also announced it would resume bond purchases at a monthly pace of EUR20 billion, effective 1 November.

Rising economic uncertainties over the growth outlook, softening inflation, and other events such as the PRC–US trade dispute have been cited as areas of concern by central banks. Both the ECB and the BOJ have slightly downgraded their growth forecasts for their respective economies. While US growth forecasts have been mostly unchanged, the Federal Reserve has downgraded its inflation outlook.

US GDP forecasts made in June were the same as in March, except for a slight increase in forecasted growth for 2020 to 2.0% from 1.9%. More significantly, there was a downgrade in the forecast for 2019 personal consumption expenditure inflation to 1.5% from 1.8%. The inflation forecast for 2020 was also slightly lowered to 1.9% from 2.0%.

In the euro area, the ECB downgraded in September its growth forecasts from those made in June. The 2019 and 2020 GDP growth forecasts were lowered to 1.1% and 1.2%, respectively, from previous forecasts of 1.2% and 1.4% made in June. The 2021 GDP growth forecast, however, was left unchanged at 1.4%.

The BOJ downgraded its GDP forecasts from those made in April. For 2019, the GDP forecast was reduced to 0.7% from 0.8%, while for 2021 the forecast was reduced to 1.1% from 1.2%. Forecasts for 2020 were unchanged.

The global economic slowdown also impacted emerging East Asian markets and investor sentiment, leading to declining yields in the region's LCY government bond markets between 1 June and 15 August.

As a result, 2-year yields have trended downward in nearly all emerging East Asian markets. For Hong Kong, China, while its 2-year yield has trended downward, its movement was not as strong compared with other markets, owing to seasonal liquidity demands and local political uncertainties (**Figure 7a**). Indonesia's 2-year yield also trended downward overall during the review period, but this included a slight upward spike toward the end of July (**Figure 7b**).

During the review period, 10-year yields moved similarly, with the 10-year yield of Hong Kong, China showing less downward movement (**Figure 8a**), while Indonesia's 10-year yield exhibited a spike toward the end of July (**Figure 8b**).

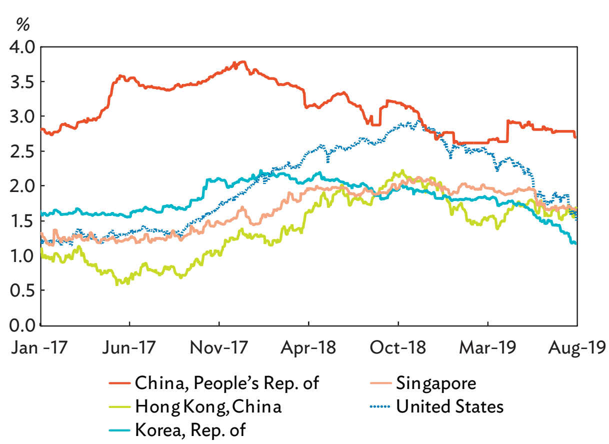
The entire yield curve shifted downward for nearly all markets between 1 June and 15 August with the exception of the PRC and Hong Kong, China (**Figure 9**). In both of these cases, yields rose at the short-end, with yields rising for tenors of less than 1 year in the PRC and for less than 2 years in Hong Kong, China.

While declines in yield curves in emerging East Asia were influenced by the dovish stances of central banks in advanced economies, slowing growth in the region also pushed down yields—with the exception of Indonesia, the Republic of Korea, and Malaysia—but some weaknesses are showing.

In Indonesia, GDP growth was roughly unchanged at 5.05% y-o-y in Q2 2019 versus 5.07% y-o-y in Q1 2019, but lower than the full-year GDP target of 5.3%. In the Republic of Korea, GDP expanded 1.0% q-o-q in Q2 2019 after falling 0.4% in the previous quarter. However, weaknesses remain as growth was largely driven by public spending, while private demand grew by only 0.7% q-o-q. In Malaysia, GDP growth accelerated to 4.9% y-o-y from 4.5% y-o-y in the same period.

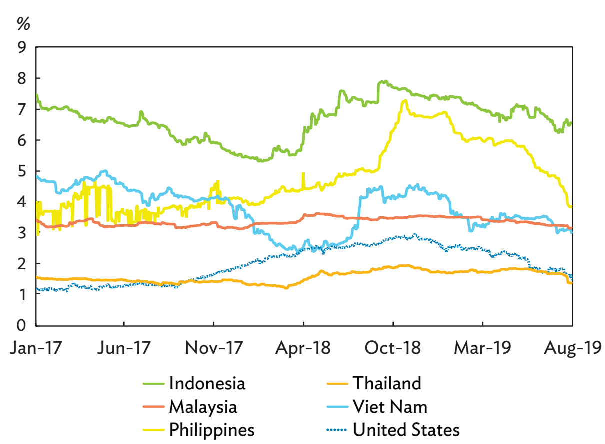
In the remaining emerging East Asian economies, GDP growth slowed in Q2 2019 compared with Q1 2019. In the PRC, GDP growth slowed to 6.2% y-o-y in Q2 2019

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



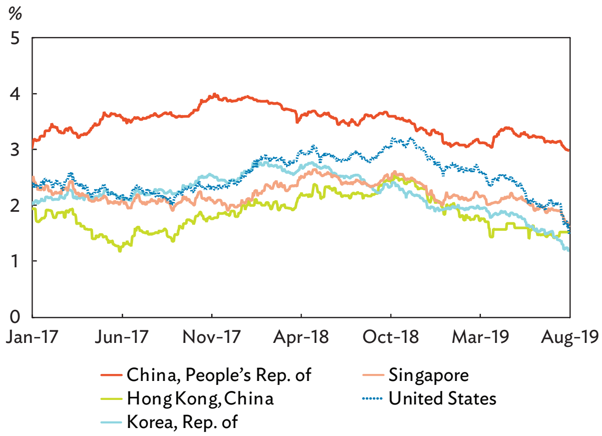
Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

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



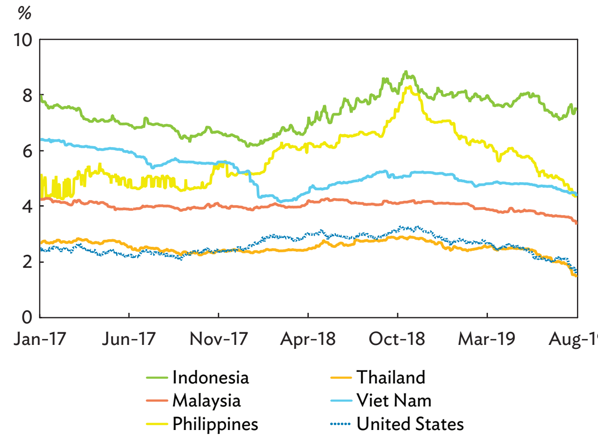
Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

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



Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

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



Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

from 6.4% y-o-y in Q1 2019. In Hong Kong, China, GDP growth slowed to 0.5% y-o-y in Q2 2019 from 0.6% y-o-y in the previous quarter. While on a seasonally adjusted q-o-q basis, the GDP of Hong Kong, China fell 0.4%. In the Philippines, GDP growth slipped to 5.5% y-o-y in Q2 2019 from 5.6% y-o-y in Q1 2019. In Singapore, GDP grew only 0.1% y-o-y in Q2 2019, down from 1.1% y-o-y in Q1 2019. On a seasonally adjusted q-o-q basis, GDP contracted 3.3% in Singapore. In Thailand, GDP growth fell to 2.3% y-o-y in Q2 2019 from 2.8% y-o-y in the first quarter.

Despite slowing economic growth, inflation rates in emerging East Asia have remained relatively stable. However, accelerated inflation was noted in Hong Kong, China (**Figure 10a**) and the PRC (**Figure 10b**), caused by rising pork prices due to the impact of swine flu. Rising inflation was also noted in Malaysia. The region's sole exception to the accelerated inflation trend was the Philippines, where inflation has shown a steady decline since October 2018.

Falling inflation allowed the Bangko Sentral ng Pilipinas to reduce policy rates by 25 bps each on 9 May and again on 8 August (**Figure 11a**). Slowing economic growth and the dovishness of advanced economy central banks prompted other central banks in the region to cut policy rates as well. The Republic of Korea reduced policy rates by 25 bps on 18 July and Thailand reduced policy rates by 25 bps on 7 August. Indonesia also reduced policy rates by 25 bps on 18 July and by another 25 bps on 22 August (**Figure 11b**).

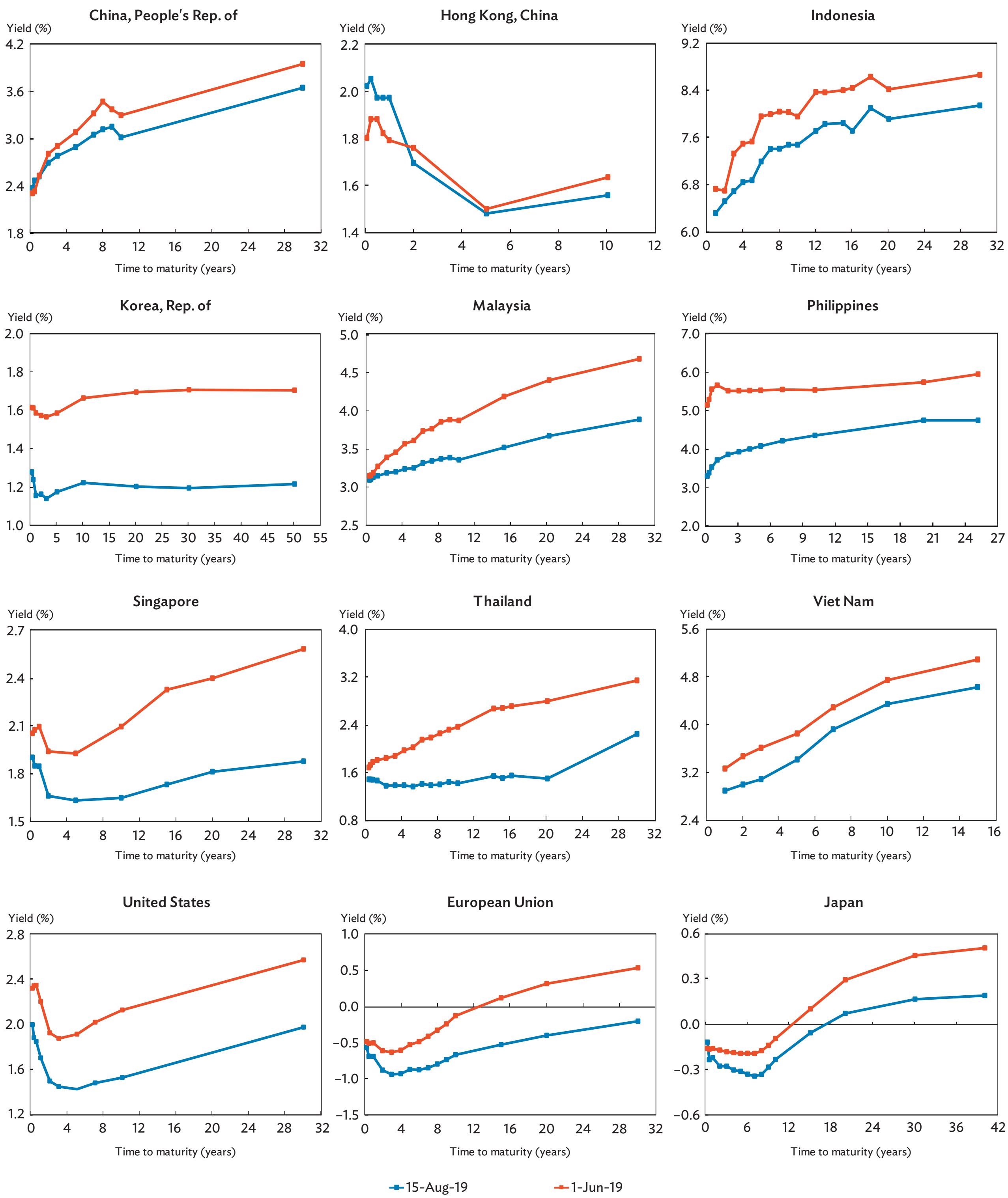
Slowing economic growth in the region led to 2-year versus 10-year yield spreads falling in all regional markets except the Philippines and Viet Nam (**Figure 12**).

Corporate Bond Credit Spreads

The yield spread on AAA-rated corporate versus government bonds rose in the Republic of Korea and Malaysia, but was unchanged in the PRC.

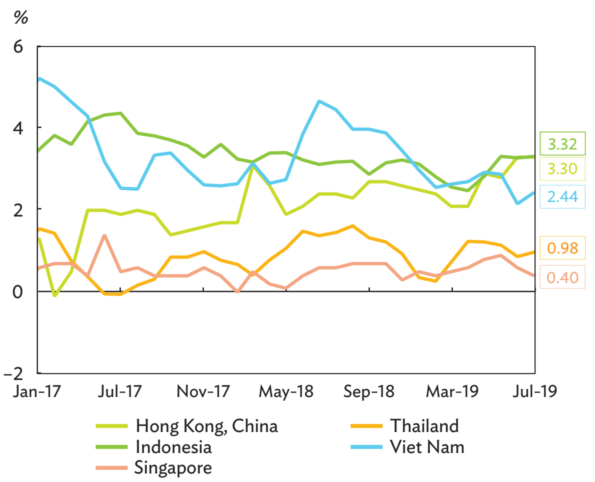
The global economic slowdown heightened risk aversion in emerging East Asia, leading to a rise in the yield spread between AAA-rated corporate bonds and government bonds in the Republic of Korea and Malaysia (**Figure 13a**). The spread was unchanged in the PRC, as corporate debt concerns were focused mainly on lower-rated bonds, resulting in a widening of the spread between yields on lower-rated corporate bonds versus AAA-rated bonds (**Figure 13b**). In contrast, the spread between yields on lower-rated corporate bonds versus AAA-rated bonds remained unchanged in the Republic of Korea and fell in Malaysia.

Figure 9: Benchmark Yield Curves—Local Currency Government Bonds



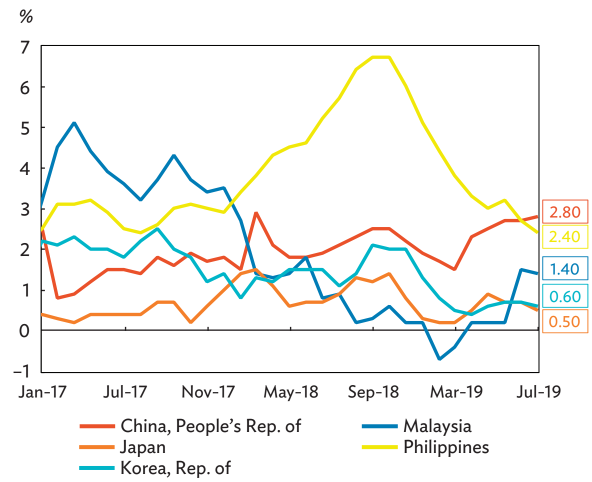
Sources: Based on data from Bloomberg LP and Thai Bond Market Association.

Figure 10a: Headline Inflation Rates



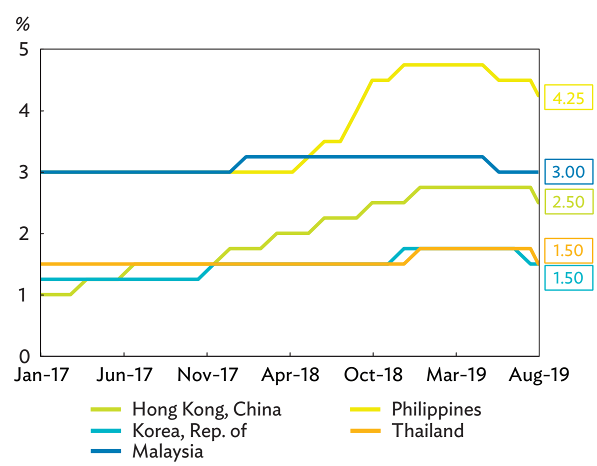
Note: Data as of July 2019.
Source: Based on data from Bloomberg LP.

Figure 10b: Headline Inflation Rates



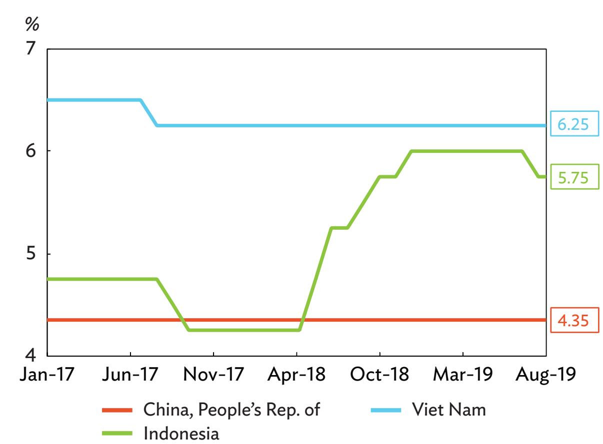
Note: Data as of July 2019.
Source: Based on data from Bloomberg LP.

Figure 11a: Policy Rates



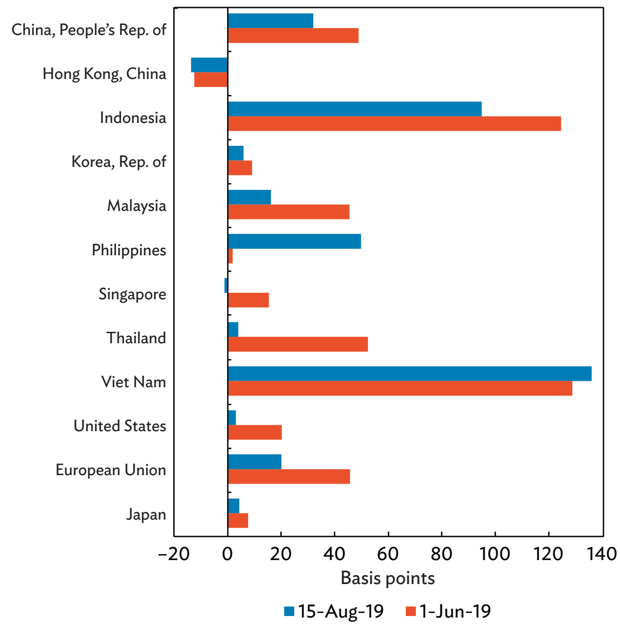
Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

Figure 11b: Policy Rates



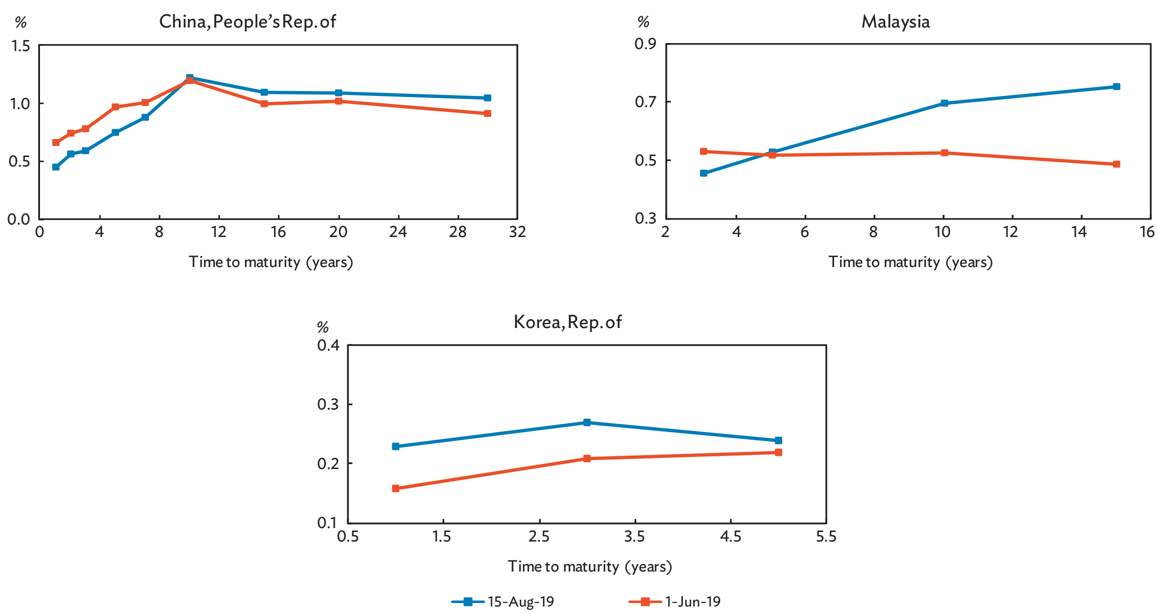
Note: Data as of 15 August 2019.
Source: Based on data from Bloomberg LP.

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



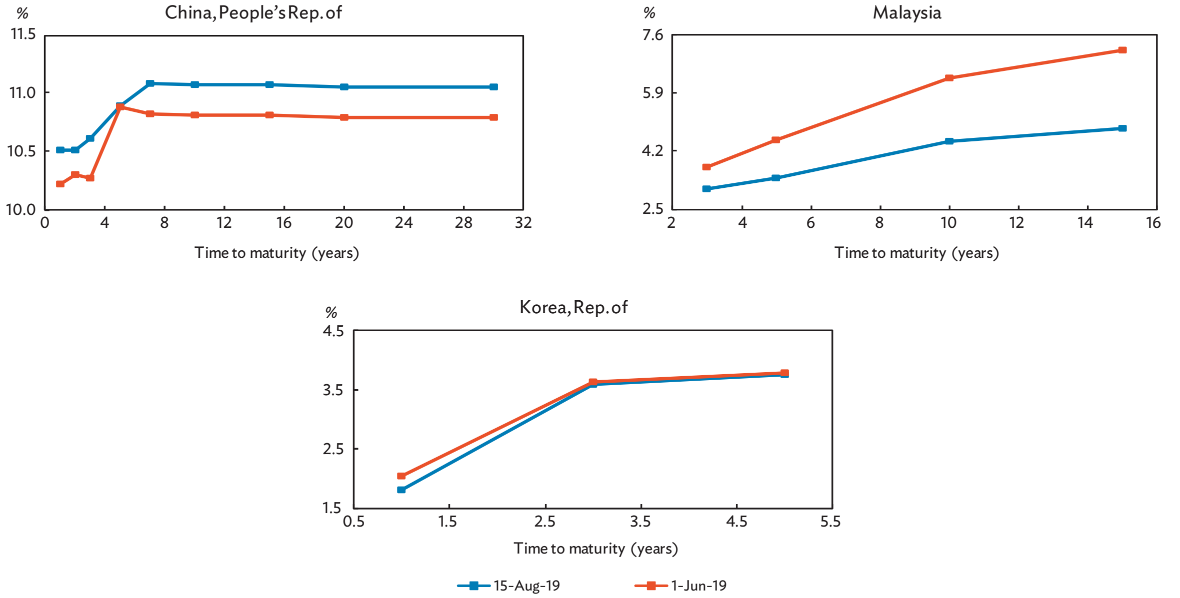
Source: Based on data from Bloomberg LP.

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 the Republic of Korea and Malaysia, data on corporate bonds yields are as of 31 May 2019 and 14 August 2019.
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 the Republic of Korea and Malaysia, data on corporate bonds yields are as of 31 May 2019 and 14 August 2019.

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

Policy and Regulatory Developments

Cambodia

Advanced Bank of Asia Lists Bonds on the Cambodia Securities Exchange

In August, Advanced Bank of Asia listed its bonds on the Cambodia Securities Exchange, making it the first commercial bank and third company to list its bonds on Cambodia's bourse. A 3-year bond amounting to KHR84.8 billion and carrying a coupon rate of 7.75% was issued to institutional and retail investors. Its coupon rate is higher than the term deposit rate of commercial banks, and the bond attained a B rating from S&P Global Ratings. Proceeds from the issuance will be used to expand the bank's operations to support rural businesses and small and medium-sized enterprises.

Since its launch in 2012, the Cambodia Securities Exchange has received total capital of more than USD150 million from eight listed companies, including five stock-listed companies and three bond-listed firms. The number of individual and institutional investors has also expanded since 2017 from 8,973 to more than 21,400.

People's Republic of China

The People's Republic of China Relaxes Restrictions on Use of Local Government Bonds Proceeds

On 11 June, the Government of the People's Republic of China allowed local governments to use funds raised from the issuance of special bonds for the 20%–25% equity requirement for certain types of infrastructure projects in order to boost infrastructure spending. The central government also said this would encourage local governments to issue special bonds with tenors longer than 10 years and use the proceeds of special bonds for Belt and Road Initiative projects, shanty-town renovations, and urban and rural infrastructure projects.

The People's Bank of China Reduces Reserve Requirement Ratio for Rural Banks

On 20 August, the People's Bank of China (PBOC) announced that it would make changes to how the benchmark loan prime rate is used. The PBOC said that banks are encouraged to use the loan prime rate as the benchmark for loan pricing instead of the existing 1-year benchmark lending rate. In addition, banks will need to link loan prime rate pricing to the rates used for the PBOC's existing medium-term lending facility. The goal of the PBOC is to reduce interest rate costs charged to borrowers.

Hong Kong, China

Hong Kong Monetary Authority and the Bank of Thailand Collaborate on Financial Innovation

On 12 May, the Hong Kong Monetary Authority (HKMA) and the Bank of Thailand (BOT) signed a memorandum of understanding to promote collaboration in financial innovation. One potential project highlighted during the signing was a joint research program on central bank digital currency, wherein the two banking authorities may share knowledge and experience from their respective research.

Hong Kong Monetary Authority Keeps Countercyclical Capital Buffer at 2.5%

On 9 July, the HKMA decided to maintain the countercyclical capital buffer (CCyB) at 2.5%. In its press statement, the HKMA noted that the latest data signals a lower CCyB at 1.75% due to the narrowing of the credit-to-gross domestic product gap, which indicated a slowdown in loan growth. However, after considering other factors, including the recovery of residential property prices and banking sector and economy-wide risks, the HKMA decided that holding the CCyB steady at 2.5% was more appropriate to provide an additional buffer should the systemic risks crystallize in the future. The CCyB is an integral part of the Basel III regulatory capital framework designed to increase the resilience of the banking sector in periods of excess credit growth.

Indonesia

Bank Indonesia Lowers Reserve Requirement Ratio

In June, Bank Indonesia (BI) announced cuts in the reserve requirement ratio for banks, which came into effect on 1 July, to help boost lending activities. The reserve requirement ratio was reduced by 50 basis points to 6.0% for conventional banks and 4.5% for Islamic banks. The average reserve requirement ratio was held steady at 3.0%.

Government Plans to Issue IDR185 Trillion Worth of Bonds in the Third Quarter of 2019

In June, the Government of Indonesia announced its plan to raise IDR185 trillion from the sale of Treasury instruments during the third quarter of 2019. The issuance plan includes the sale of conventional Treasury bills and bonds, and *sukuk*. For full-year 2019, the net issuance target was placed at IDR389 trillion with a gross issuance target of IDR825.7 trillion

Government Announces Macroeconomic Assumptions for 2020 Draft State Budget

In August, the President of Indonesia announced the macroeconomic assumptions for the draft 2020 state budget. Among the assumptions were (i) economic growth of 5.3% to be driven by consumption and investments, (ii) an inflation target of 3.1% to support purchasing power, (iii) an exchange rate of IDR14,400 per United States (US) dollar, (iv) a 3-month Treasury bill rate of 5.4%, and (v) an Indonesian crude oil price of USD65 per barrel. The government is looking at a 2020 budget deficit equivalent to 1.76% of the gross domestic product.

Republic of Korea

National Assembly Passes 2019 Supplementary Budget

In August, the National Assembly passed the 2019 supplementary budget to help boost the economy and improve public safety. The supplementary budget was KRW856.8 billion short of the KRW6.7 trillion budget submitted in April. The budget included additional allotments of KRW273.2 billion for spending on manufacturing supplies and KRW94.5 billion for disaster-stricken areas and programs aimed to improve air and water quality, and waste management.

The Bank of Korea and Financial Regulators Establish Cooperation to Avoid Sudden Volatility

In August, the Bank of Korea, Financial Services Commission, and Financial Supervisory Service held a meeting to discuss recent developments in financial markets and pledged cooperation to address any sudden volatility. Risks related to the current financial market volatility were stated, particularly the ongoing trade tensions between the People's Republic of China and the US, uncertainties over monetary policy direction in the US, and the sudden devaluation of the Chinese renminbi. The agencies also highlighted the Republic of Korea's record-high foreign exchange reserves and strong foreign net lending balance. The government will continue to monitor the markets. For the stock market, contingency plans include allowing stock buybacks and tightening short-selling rules. The government will also disburse 75% of the supplementary budget in August and September to support exports. In relation to this, the government will continue to conduct talks with Japan to address its imposition of trade restrictions on Korean exports.

Malaysia

Four Regional Central Banks Sign Letters of Intent on Local Currency Settlement

On 5 April, three bilateral letters of intent were signed by Bank Negara Malaysia (BNM), the Bangko Sentral ng Pilipinas (BSP), BI, and BOT. The Philippine central bank was party to all three letters with the three other central banks. The letters expressed intentions to establish local currency (LCY) settlement frameworks between the four economies involved. Having such frameworks is beneficial as LCY settlement of trade and other financial obligations reduces transaction costs and foreign exchange risks. Furthermore, LCY settlement within the Association of Southeast Asian Nations region will promote economic and financial integration, and help develop member economies' foreign exchange and financial markets. BI and the BOT already have an existing LCY settlement framework and agreed to expand its coverage.

Bank Negara Malaysia Announces Development Initiatives for the Financial Market

On 16 May, BNM announced initiatives to improve efficiency, accessibility, and liquidity in the domestic financial market. Available off-the-run bonds that may be borrowed through reverse repurchase for market making will be increased. The proposed extension of reverse repurchase tenors beyond 1 year is still up for review. The delivery mechanism for settlement of Malaysia Government Securities futures will be enhanced. Trust banks and global custodians are now allowed to apply under the dynamic hedging program in order to perform dynamic hedging on behalf of their clients. Institutional investors may now buy or sell forward contracts to purchase Malaysian ringgit above the current threshold of 25% of the underlying security, upon approval of BNM. A standard documentation guide for foreign exchange transactions has been developed. Finally, the central bank will continue facilitating the market-making capabilities of appointed overseas offices to ensure global market participants have ample access to ringgit prices.

Philippines

Bangko Sentral ng Pilipinas Issues Risk Management Guidelines for Investments

In August, the BSP issued risk management guidelines for investments made by banks and quasi-banks, given their exposures on bonds issued by emerging economies, complex structured products, and other tradable assets. The BSP guidelines highlight the need for due diligence prior to investing as well as on an ongoing basis. They consider lessons from the global financial crisis and the guidelines included in the Basel Core Principles for Effective Banking Supervision. In particular, banks and quasi-banks with significant holdings of foreign-currency-denominated securities are required to determine whether these firms have sufficient capital to cover risks that may arise from currency conversion restrictions imposed by relevant foreign governments.

Singapore

Monetary Authority of Singapore Replacing 24-Week Monetary Authority of Singapore Bills with 6-Month Singapore Government Securities Bills

On 24 May, the Monetary Authority of Singapore announced that it would gradually replace 24-week Monetary Authority of Singapore bills with 6-month Singapore Government Securities (SGS) bills starting in July. The switch was spurred by the SGS market's continued growth and development, with recent years seeing a steady increase in outstanding SGS bills and bonds. The growth was attributed to demand from financial institutions for high-quality liquid assets and from retail investors for Singapore Savings Bonds. The switch was also meant to meet the demands of an expanding investor base for short-term SGD-denominated securities as SGS bills become more accessible to a wider range of investors such as asset managers, corporations, and retail investors.

Thailand

Bank of Thailand Implements Measures to Enhance Monitoring of Short-Term Capital Flows

In July, the BOT issued new measures to stem the impact of short-term capital inflows amid a strengthening baht. The BOT lowered the limit on the outstanding balance of nonresident baht accounts and nonresident securities accounts for securities to THB200 million from THB300 million. The measures became effective on 22 July. Nonfinancial corporations with underlying trade and investment activities in Thailand that have opened accounts directly with Thai financial institutions may request a waiver from the new outstanding balance limit; requests for waivers will be considered on a case-by-case basis. In addition, the BOT tightened reporting requirements for nonresident holdings of debt securities issued in Thailand. The names of end beneficiaries are required to be reported for all nonresident holdings of Thai debt securities, effective for the July 2019 reporting period. In its press statement, the BOT emphasized that it would take additional measures if speculative inflows persisted.

Bank of Thailand Cuts Bond Supply in July

The BOT trimmed its supply of short-term bonds for July in a move viewed by market observers as an effort to slow capital inflows and curb the baht's appreciation. The weekly issuance of 3-month bonds was reduced from THB45 billion to THB35 billion, while the supply of 6-month bonds was cut from THB45 billion to THB40 billion per week. The supply of 1-year bonds was likewise be reduced to THB35 billion in July from THB40 billion in June. The total reduction in the month of July amounted to THB60 billion.

Viet Nam

Ha Noi Stock Exchange Launches Government Bond Futures

In July, the Ha Noi Stock Exchange launched the government bond futures contract, marking the second derivatives product available in Viet Nam. The bond futures contract will utilize a hypothetical 5-year government bond issued by the State Treasury, which has a large listing volume and commands high liquidity. Initially, the 5-year bond futures will only be traded by institutional investors. The derivatives market saw rapid development after the VN-30 Index futures contract was launched in August 2017, which was aimed to limit risks in the equity market. As of June, trading volume had increased 10 times and open interest volume surged 2.7 times relative to 2017. The bond futures contract is expected to meet investors' investment needs for risk prevention and support the further deepening and development of Viet Nam's government bond market.

Merger of Ha Noi Stock Exchange and Ho Chi Minh Stock Exchange into Viet Nam Stock Exchange

During the 36th session of the National Assembly Standing Committee held on 12–16 August, the merger of the Ha Noi Stock Exchange and the Ho Chi Minh Stock Exchange was announced. The merged entity will be known as the Viet Nam Stock Exchange and will be based in Ha Noi. It will be managed by the Ministry of Finance acting as a focal point for all stock- and securities-related activities. The National Assembly Standing Committee believes that the merger of the two stock exchanges will promote uniformity in the market, increase transparency and efficiency in governance, and ensure the legal rights of investors.

Market Summaries

People's Republic of China

Yield Movements

The People's Republic of China's (PRC) yield curve for local currency (LCY) bonds shifted downward for all tenors except short-dated tenors between 1 June and 15 August (**Figure 1**). For tenors of 1 year or longer, yields fell an average of 21 basis points (bps). In contrast, yields for tenors less than 1 year rose an average of 10 bps. The 2-year versus 10-year yield spread fell between 1 June and 15 August from 49 bps to 32 bps.

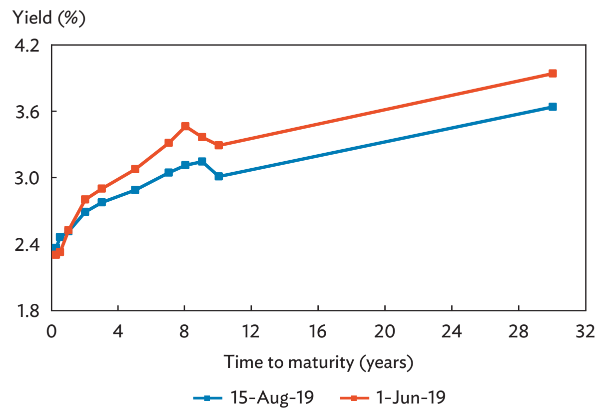
Yields for longer-dated tenors declined largely due to ongoing economic challenges facing the PRC, both domestic and external. On the domestic front, the PRC's economy continued to show signs of weakening. The gross domestic product (GDP) growth rate decelerated to 6.2% year-on-year (y-o-y) in the second quarter (Q2) of 2019 from 6.4% y-o-y in the first quarter (Q1). Industrial production weakened, with growth falling to 4.8% y-o-y in July from 6.3% y-o-y in June. Retail sales growth also declined to 7.6% y-o-y in July from 9.8% y-o-y in the previous month.

The external environment has also proved to be challenging to the PRC amid the ongoing trade dispute with the United States (US). Exports have been relatively weak, with the PRC reporting export growth of 3.3% y-o-y in July after a 1.3% y-o-y contraction in June.

The PRC's inflation rate has remained stable. Consumer prices grew 2.8% y-o-y in July after rising 2.7% y-o-y in June. Inflation has been largely supply-side driven, with food prices leading the increases mainly due to supply shocks impacting pork prices over the outbreak of swine flu.

While longer-term yields generally reflect economic conditions, shorter-term interest rates in the PRC follow funding conditions as demand increased in June before easing toward the end of the month due to corporate cash needs driven by end-of-period balance sheet reporting, before spiking again in July due to corporate tax payments. In addition, funding difficulties were noted for smaller lenders due to heightened risk aversion following the government takeover of Baoshang Bank on 24 May to control credit risks.

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



Source: Based on data from Bloomberg LP.

Size and Composition

LCY bonds outstanding in the PRC rose 4.0% quarter-on-quarter (q-o-q) in Q2 2019, an acceleration from 3.0% q-o-q growth in Q1 2019. On an annual basis, LCY bonds grew 16.7% y-o-y (**Table 1**).

Government bonds. The government bond market continued to expand in Q2 2019, with growth accelerating to 4.2% q-o-q from 2.5% q-o-q in Q1 2019. A rapid increase in government bonds outstanding was largely due to government efforts to mitigate the headwinds facing the PRC economy. As a result, local government bonds continued their strong growth, expanding 5.4% q-o-q in Q2 2019 after rising 5.2% in Q1 2019, driven by an increase in the local government bond quota in March. In addition, local governments have been instructed to complete their 2019 bond issuance by the end of September.

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

	Outstanding Amount (billion)						Growth Rates (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	CNY	USD	CNY	USD	CNY	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**67,720**	**10,228**	**76,012**	**11,325**	**79,049**	**11,512**	**3.9**	**15.4**	**4.0**	**16.7**
Government	44,114	6,663	49,061	7,309	51,135	7,447	4.4	16.0	4.2	15.9
Treasury Bonds and Other Government Bonds	13,841	2,091	14,882	2,217	15,461	2,252	2.8	10.1	3.9	11.7
Central Bank Bonds	0	0	2	0	4	1	0.0	0.0	166.7	0.0
Policy Bank Bonds	14,005	2,115	14,776	2,201	15,213	2,215	3.0	9.8	3.0	8.6
Local Government Bonds	16,268	2,457	19,401	2,890	20,457	2,979	7.0	28.0	5.4	25.7
Corporate	23,606	3,565	26,951	4,015	27,914	4,065	3.1	14.2	3.6	18.3
Policy Bank Bonds										
China Development Bank	7,743	1,169	8,328	1,241	8,580	1,250	2.3	7.8	3.0	10.8
Export–Import Bank of China	2,366	357	2,444	364	2,533	369	1.6	6.8	3.6	7.0
Agricultural Devt. Bank of China	3,895	588	4,005	597	4,100	597	5.3	16.1	2.4	5.3

( ) = negative, CNY = Chinese yuan, 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 local currency–USD rates are used.
4. Growth rates are calculated from local currency base and do not include currency effects.
Sources: CEIC and Bloomberg LP.

The issuance of local government bonds is mostly designed to finance local infrastructure projects. However, in June, regulators relaxed rules governing special bonds issued by local governments, allowing the use of proceeds in lieu of equity capital for some projects.

Treasury bond issuance also increased in Q2 2019, growing 159.9% q-o-q in Q2 2019 after contracting 52.2% q-o-q in Q1.

Corporate bonds. The corporate bond market grew 3.6% q-o-q in Q2 2019, down from 4.1% q-o-q growth in the previous quarter. Growth in corporate bonds slowed over concerns about the PRC's economy as well as corporate bond defaults (**Table 2**).

Increased issuance was noted for financial bonds, listed corporate bonds, and asset-backed securities in Q2 2019 versus Q1 2019 (**Figure 2**).

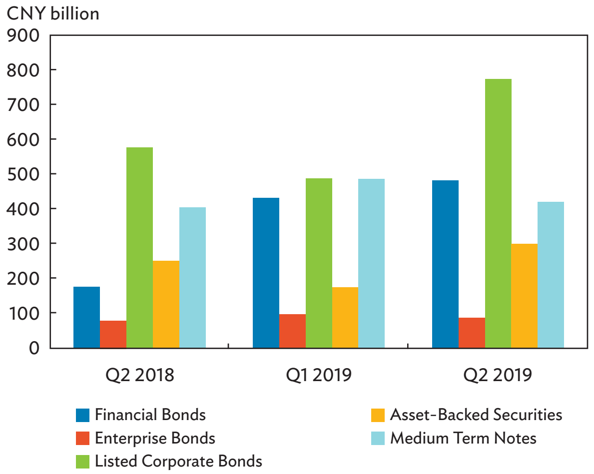
The PRC's LCY corporate bond market continued to be dominated by a few big issuers (**Table 3**). At the end of Q2 2019, the top 30 corporate bond issuers accounted for CNY7.7 trillion worth of corporate bonds outstanding, or about 27.5% of the total market. Of the top 30, the 10 largest issuers accounted for CNY4.8 trillion. China Railway, the top issuer, had more than four times the outstanding amount of bonds as the second-largest issuer, Industrial Commercial Bank

Table 2: Corporate Bonds Outstanding in Key Categories

	Amount (CNY billion)			Growth Rate (%)			
				Q2 2018		Q2 2019	
	Q2 2018	Q1 2019	Q2 2019	q-o-q	y-o-y	q-o-q	y-o-y
Financial Bonds	3,854	4,744	5,042	1.0	21.0	6.3	30.8
Enterprise Bonds	4,205	3,872	3,834	1.0	(6.4)	(1.0)	(8.8)
Listed Corporated Bonds	5,759	6,608	7,024	1.1	25.5	6.3	22.0
Commercial Papers	1,741	2,240	2,197	1.0	2.6	(1.9)	26.2
Medium Term Notes	5,056	5,813	5,919	1.0	12.2	1.8	17.1
Asset-Backed Securities	1,164	1,728	1,924	1.2	67.1	11.3	65.3

( ) = negative, CNY = Chinese yuan, q-o-q = quarter-on-quarter, Q1 = first quarter, Q2 = second quarter, y-o-y = year-on-year.
Source: CEIC.

Figure 2: Corporate Bond Issuance in Key Sectors



CNY = Chinese yuan, Q1 = first quarter, Q2 = second quarter.
Source: CEIC.

of China. The top 30 issuers included 13 banks, who continue to generate funding to strengthen their capital bases, improve liquidity, and lengthen their maturity profiles.

Table 4 lists the largest corporate bond issuances in Q2 2019. The top issuers consisted largely of banks and state-owned enterprises.

Investor Profile

Government bonds. Among the major government bond categories, banks were the single-largest holder at the end of June, owning more than 70% of the total outstanding government bonds (**Figure 3**). The concentration of bank holdings is the highest for local government bonds, as banks are asked by the government to support the funding efforts of local governments. Policy banks are the next largest holder of local government bonds. Unincorporated products were the second largest holder of policy bank bonds after banks.[7]

Liquidity

The volume of interest rate swaps rose 17.6% q-o-q in Q2 2019. The 7-day repurchase remained the most used interest rate swap, comprising a 75.3% share of the total interest rate swap volume during the quarter (**Table 5**).

Policy, Institutional, and Regulatory Developments

The People's Republic of China Relaxes Restrictions on Use of Local Government Bonds Proceeds

On 11 June, the Government of the PRC allowed local governments to use funds raised from the issuance of special bonds for the 20%–25% equity requirement for certain types of infrastructure projects in order to boost infrastructure spending. The central government also said this would encourage local governments to issue special bonds with tenors longer than 10 years and use the proceeds of special bonds for Belt and Road Initiative projects, shanty-town renovations, and urban and rural infrastructure projects.

The People's Bank of China Reduces Reserve Requirement Ratio for Rural Banks

On 20 August, the People's Bank of China (PBOC) announced that it would make changes to how the benchmark loan prime rate is used. The PBOC said that banks are encouraged to use the loan prime rate as the benchmark for loan pricing instead of the existing 1-year benchmark lending rate. In addition, banks will need to link loan prime rate pricing to the rates used for the PBOC's existing medium-term lending facility. The goal of the PBOC is to reduce interest rate costs charged to borrowers.

[7] Unincorporated products include banks' wealth management products, securities investment funds, trust funds, and insurance products.

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	1,765.5	257.1	Yes	No	Transportation
2.	Industrial and Commercial Bank of China	439.7	64.0	Yes	Yes	Banking
3.	Agricultural Bank of China	418.2	60.9	Yes	Yes	Banking
4.	Bank of China	412.0	60.0	Yes	Yes	Banking
5.	Central Huijin Investment	343.4	50.0	Yes	No	Asset Management
6.	China Construction Bank	327.2	47.6	Yes	Yes	Banking
7.	State Grid Corporation of China	320.0	46.6	Yes	No	Public Utilities
8.	China Minsheng Banking	290.0	42.2	No	Yes	Banking
9.	China CITIC Bank	267.6	39.0	No	Yes	Banking
10.	Bank of Communications	265.9	38.7	No	Yes	Banking
11.	Shanghai Pudong Development Bank	265.3	38.6	No	Yes	Banking
12.	China National Petroleum	260.8	38.0	Yes	No	Energy
13.	Industrial Bank	205.3	29.9	No	Yes	Banking
14.	State Power Investment	173.4	25.3	Yes	No	Energy
15.	Tianjin Infrastructure Construction and Investment Group	163.8	23.9	Yes	No	Industrial
16.	China Everbright Bank	161.5	23.5	Yes	Yes	Banking
17.	Huaxia Bank	143.9	21.0	Yes	No	Banking
18.	Ping An Bank	138.0	20.1	No	Yes	Banking
19.	CITIC Securities	133.4	19.4	Yes	Yes	Brokerage
20.	China Merchants Bank	126.7	18.4	Yes	Yes	Banking
21.	PetroChina	125.0	18.2	Yes	Yes	Energy
22.	Datong Coal Mine Group	120.8	17.6	Yes	No	Coal
23.	China Datang	113.5	16.5	Yes	Yes	Energy
24.	China Southern Power Grid	105.5	15.4	Yes	No	Energy
25.	China Merchants Securities	103.0	15.0	No	Yes	Brokerage
26.	China Three Gorges Corporation	102.1	14.9	Yes	No	Power
27.	China Life Insurance	100.0	14.6	Yes	Yes	Insurance
28.	GF Securities	98.0	14.3	No	Yes	Brokerage
29.	Guotai Junan Securities	93.0	13.5	No	Yes	Financial
30.	Haitong Securities	93.0	13.5	No	Yes	Brokerage
Total Top 30 LCY Corporate Issuers		**7,675.3**	**1,117.7**			
Total LCY Corporate Bonds		**27,914.1**	**4,065.1**			
Top 30 as % of Total LCY Corporate Bonds		**27.5%**	**27.5%**			

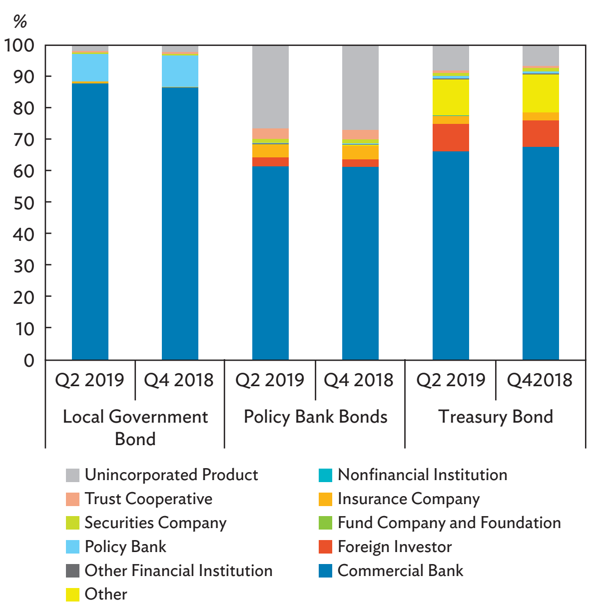
CNY = Chinese yuan, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Table 4: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (CNY billion)
Central Huijin Investment		
3-year bond	3.40	13.0
3-year bond	3.45	13.0
3-year bond	3.47	10.0
3-year bond	3.74	10.0
5-year bond	3.70	7.0
5-year bond	3.83	7.0
5-year bond	4.06	5.0
5-year bond	3.78	5.0
Agricultural Bank of China		
10-year bond	4.30	40.0
15-year bond	4.63	20.0
Industrial and Commercial Bank of China		
10-year bond	4.40	45.0
15-year bond	4.69	10.0
State Power Investment Corporation		
3-year bond	3.90	2.9
3-year bond	3.85	2.8
3-year bond	4.00	2.3
3-year bond	3.87	2.0
3-year bond	3.77	1.8
3-year bond	3.75	1.7
3-year bond	3.73	1.5
3-year bond	3.73	1.5

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

Figure 3: Government Bonds Investor Profile



Q2 = second quarter, Q4 = fourth quarter.
Source: Bloomberg LP.

Table 5: Notional Values of the People's Republic of China's Interest Rate Swap Market in the Second Quarter of 2019

Interest Rate Swap Benchmarks	Notional Amount (CNY billion)	Share of Total Notional Amount (%)	Growth Rate (%)
	Q2 2019		q-o-q
7-Day Repo Rate	33,894.5	75.3	19.4
Overnight SHIBOR	10,489.7	23.3	14.5
3-Month SHIBOR	339.0	0.8	110.6
1-Year Term Deposit Rate	157.5	0.4	–
1-Year Lending Rate	132.5	0.3	29.3
Loan Interest Rate 1 Year	0.0	–	(100.0)
5-Year Lending Rate	27.5	0.1	192.6
Depository Institution 7-Day Repo Rate	0.5	–	(97.0)
3-Year AAA Short-Term Notes/ Government Debt	0.0	–	(100.0)
Loan Interest Rate—5 Year * 1.05	0.00	–	(100.0)
Total	**45,041.2**	**100.0**	**17.6**

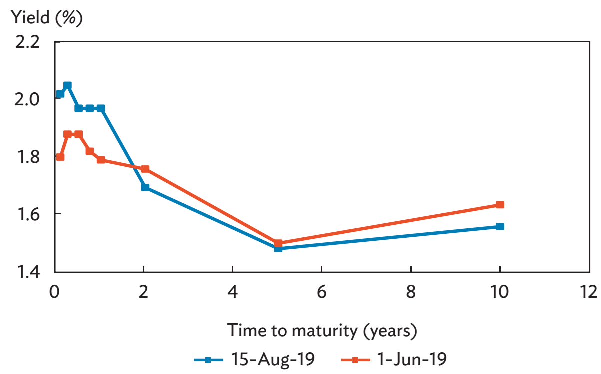
( ) = negative, – = not applicable, CNY = Chinese yuan, q-o-q = quarter-on-quarter, Q2 = second quarter, Repo = repurchase, SHIBOR = Shanghai Interbank Offered Rate.
Note: Growth rate computed based on notional amounts.
Sources: *AsianBondsOnline* and *ChinaMoney*.

Hong Kong, China

Yield Movements

The local currency (LCY) government bond yield curve of Hong Kong, China showed unusual movement during the review period. Between 1 June and 15 August, the yield curve rose at the shorter-end but dropped for tenors with maturities of 2 years and longer. The yields of short-dated bonds with maturities below 2 years rose 16 basis points (bps) on average, with the 1-month tenor gaining the most at 22 bps. In contrast, yields fell for bonds with maturities of 2 years and longer. The 2-year tenor shed 6 bps and the 10-year tenor dropped 8 bps (**Figure 1**). The inverted yield curve has been in place since the middle of April, when the 10-year yield fell below the 2-year rate by 2 bps. By the end of the review period, the gap had widened, with the 2-year yield outpacing the 10-year yield by 14 bps.

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



Source: Based on data from Bloomberg LP.

The yield curve's inversion reflected heightened uncertainties and expectations of an economic slowdown. The political unrest that unfolded during the quarter added to the headwinds brought by the trade dispute between the People's Republic of China and the United States (US). The jump in yields on short-dated bonds reflected tightened liquidity. The Hong Kong Monetary Authority's (HKMA) defense of the currency in the previous quarter reduced the aggregate balance of interbank liquidity to HKD54.3 billion (USD6.9 billion) at the beginning of the review period from HKD76.5 billion (USD9.8 billion) at the beginning of the year. Demand for cash surged during the review period, due to funding needs for companies' mid-year dividend payments and investors' anticipation of high-profile initial public offerings. The uncertainties brought by political protests gave rise to outflow concerns, increasing financial institutions' demand for liquid assets. The dwindling liquidity pushed the Hong Kong Interbank Offered Rate higher, causing bond yields to rise at the shorter-end of the curve.

Falling yields on longer-dated bonds followed a global trend that followed a series of policy rate cuts undertaken by major central banks during the quarter. In August, the HKMA lowered its base rate by 25 bps to 2.50% after the US Federal Reserve cut its key benchmark rate by 25 bps to a range of 2.00%–2.25%.

Weakening economic growth also created downward pressure on yields. The gross domestic product (GDP) growth of Hong Kong, China slowed to 0.5% year-on-year (y-o-y) in the second quarter (Q2) of 2019 from 0.6% y-o-y in the previous quarter. On a seasonally adjusted quarter-on-quarter (q-o-q) basis, GDP contracted 0.4% in Q2 2019, reversing the 1.3% q-o-q GDP expansion posted in the previous quarter. Merchandise exports dropped 5.6% y-o-y during the quarter, undermined by softening global economic growth. Gross domestic fixed capital formation contracted 11.6% y-o-y amid weak business sentiment. The government lowered its full-year 2019 growth forecast to a range of between zero and 1.0% from the previous 2.0%–3.0% estimate.

The inflation rate of Hong Kong, China was 3.3% y-o-y in July, the same rate posted in June. On a seasonally adjusted month-on-month basis, the average monthly inflation from May to July stood at 0.3%.

Size and Composition

The LCY bonds outstanding of Hong Kong, China declined to HKD1,955.5 billion in Q2 2019 from HKD1,959.9 in the previous quarter (**Table 1**). The 0.2% q-o-q drop in Q2 2019 reversed the 0.5% q-o-q growth in Q1 2019, driven largely by a contraction in

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	HKD	USD	HKD	USD	HKD	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**1,929**	**246**	**1,960**	**250**	**1,956**	**250**	**2.1**	**3.6**	**(0.2)**	**1.4**
Government	1,159	148	1,161	148	1,164	149	0.8	7.6	0.2	0.5
Exchange Fund Bills	1,019	130	1,035	132	1,042	133	0.5	10.4	0.6	2.3
Exchange Fund Notes	35	4	31	4	29	4	(4.9)	(18.6)	(5.8)	(16.0)
HKSAR Bonds	105	13	95	12	93	12	6.6	(5.5)	(2.1)	(11.4)
Corporate	771	98	799	102	791	101	3.9	(2.0)	(0.9)	2.7

( ) = negative, HKD = Hong Kong dollar, HKSAR = Hong Kong Special Administrative Region, 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 local currency–USD rates are used.
3. Growth rates are calculated from local currency base and do not include currency effects.
Source: Hong Kong Monetary Authority.

corporate bonds outstanding. Annual growth weakened to 1.4% y-o-y in Q2 2019 from 3.7% y-o-y in Q1 2019 due to slower growth of both government and corporate bonds. The bond market remains dominated by government bonds, which accounted for 59.5% of LCY bonds outstanding in Q2 2019.

Government bonds. The outstanding stock of LCY government bonds stood at HKD1,164.1 billion at the end of June, with marginal growth at 0.2% q-o-q and 0.5% y-o-y. The growth was driven by an expansion of Exchange Fund Bills (EFBs), which rose 0.6% q-o-q and 2.3% y-o-y. Both Exchange Fund Notes (EFNs) and Hong Kong Special Administrative Region (HKSAR) Bonds outstanding contracted during the review period. Outstanding EFNs dropped 5.8% q-o-q and 16.0% y-o-y, while HKSAR Bonds outstanding dipped 2.1% q-o-q and 11.4% y-o-y.

Total government issuance amounted to HKD834.7 billion in Q2 2019 on growth of 2.6% q-o-q and 2.8% y-o-y. Issuance of EFBs and EFNs by the HKMA increased 1.9% q-o-q, while issuance of HKSAR Bonds jumped 281.0% as the government re-opened 3-year, 5-year, and 10-year tenors worth a total of HKD8.0 billion during the quarter.

Exchange Fund Bills. At the end of June, outstanding EFBs reached HKD1,041.9 billion, driven by strong issuance during the quarter. New issuance edged up to HKD825.5 billion from HKD810.2 billion in the previous quarter. However, due to maturities, the growth of EFBs remained marginal, though slightly higher than in the previous quarter. In q-o-q terms, the growth of EFBs rose slightly to 0.6% q-o-q in Q2 2019 from 0.5% q-o-q in the previous quarter. Similarly, annual growth improved during the review period, rising to 2.3% y-o-y in Q2 2019 from 2.1% y-o-y in Q1 2019.

Exchange Fund Notes. Since 2015, the HKMA has limited the issuance of EFNs to 2-year tenors, issuing on average HKD1.2 billion EFNs per quarter. As a result, outstanding EFNs have declined steadily. Outstanding EFNs stood at HKD29.4 billion at the end of June, down 5.8% q-o-q from HKD31.2 billion at the end of Q1 2019.

Hong Kong Special Administrative Region Bonds. HKSAR Bonds outstanding stood at HKD92.7 billion at the end of June, down 2.1% q-o-q and 11.4% y-o-y, following the 10.5% q-o-q and 3.5% y-o-y drop recorded in the previous quarter. In Q2 2019, the government issued a 3-year bond worth HKD4.0 billion, a 5-year bond worth HKD2.5 billion, and a 10-year bond worth HKD1.5 billion under the Institutional Bond Issuance Programme.

Corporate bonds. Corporate bonds outstanding reached HKD791.4 billion at the end of June. The 0.9% q-o-q contraction in Q2 2019 reversed the 2.2% q-o-q growth in the previous quarter. Annual growth also slowed to 2.7% y-o-y in Q2 2019 from 7.7% y-o-y in Q1 2019.

The outstanding bonds of the top 31 corporate issuers in Hong Kong, China amounted to HKD217.8 billion in Q2 2019, comprising 27.5% of the total corporate bond market (**Table 2**). Government-owned financial firm Hong Kong Mortgage Corporation remained the top issuer, with outstanding bonds amounting

Table 2: Top 31 Nonbank Corporate Issuers of Local Currency Corporate Bonds in Hong Kong, China

	Issuers	Outstanding Amount		State-Owned	Listed Company	Type of Industry
		LCY Bonds (HKD billion)	LCY Bonds (USD billion)			
1.	Hong Kong Mortgage Corporation	30.7	3.9	Yes	No	Finance
2.	Sun Hung Kai & Co.	16.8	2.2	No	Yes	Finance
3.	MTR Corporation	12.0	1.5	Yes	Yes	Transportation
4.	Link Holdings	11.1	1.4	No	No	Finance
5.	The Hong Kong and China Gas Company	11.1	1.4	No	Yes	Utilities
6.	New World Development	11.0	1.4	No	Yes	Diversified
7.	Hong Kong Land	10.7	1.4	No	No	Real Estate
8.	Haitong International Securities Group	8.6	1.1	No	Yes	Finance
9.	The Wharf (Holdings)	8.6	1.1	No	Yes	Finance
10.	Henderson Land Development	8.3	1.1	No	No	Real Estate
11.	CLP Power Hong Kong Financing	8.3	1.1	No	No	Finance
12.	Swire Pacific	7.9	1.0	No	Yes	Diversified
13.	Smart Edge	6.8	0.9	No	No	Finance
14.	AIA Group	6.3	0.8	No	Yes	Insurance
15.	CK Asset Holdings	6.2	0.8	No	Yes	Real Estate
16.	Swire Properties	5.9	0.8	No	Yes	Real Estate
17.	Hongkong Electric	5.5	0.7	No	No	Utilities
18.	China Merchants Port Holdings	5.5	0.7	No	Yes	Transportation
19.	Hang Lung Properties	4.6	0.6	No	Yes	Real Estate
20.	Hysan Development Company	3.7	0.5	No	Yes	Real Estate
21.	IFC Development Corporation	3.5	0.4	No	No	Finance
22.	Lethai Group	3.0	0.4	No	Yes	Real Estate
23.	Emperor International Holdings	2.9	0.4	No	Yes	Real Estate
24.	Urban Renewal Authority	2.8	0.4	Yes	No	Real Estate
25.	Wharf Real Estate Investment	2.6	0.3	No	Yes	Real Estate
26.	Champion REIT	2.5	0.3	No	Yes	Real Estate
27.	China Dynamics (Holdings)	2.4	0.3	No	Yes	Diversified
28.	The 13 Holdings	2.2	0.3	No	Yes	Industrial
29.	Kowloon-Canton Railway	2.1	0.3	Yes	No	Transportation
30.	CK Hutchison Holdings	2.0	0.3	No	Yes	Diversified
31.	Gluon Xima International	2.0	0.3	No	No	Real Estate
Total Top 31 Nonbank LCY Corporate Issuers		**217.8**	**27.9**			
Total LCY Corporate Bonds		**791.4**	**101.3**			
Top 31 as % of Total LCY Corporate Bonds		**27.5%**	**27.5%**			

HKD = Hong Kong dollar, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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.

to HKD30.7 billion. The company with the second-largest amount of outstanding corporate bonds at HKD16.8 billion was Sung Hung Kai & Co., another financial firm. It was followed by MTR Corporation, a government-owned transportation company, with HKD12.0 billion of bonds outstanding. The next two largest issuers, Link Holdings and Hong Kong and China Gas Company, each had HKD11.1 billion of bonds outstanding, followed closely by New World Development with HKD11.0 billion of bonds outstanding. The top 31 issuers in Q2 2019 were mostly finance and real estate companies. Two-thirds were listed on the Hong Kong Stock Exchange and four were government-owned corporations.

Corporate issuance amounted to HKD75.9 billion in Q2 2019, down from HKD108.4 billion in the previous quarter. The top nonbank issuer, Hong Kong Mortgage Corporation, issued a total of HKD7.1 billion bonds from 13 issuances during the quarter, the largest of which was a 2-year bond worth HKD1.0 billion carrying a 1.89% coupon (**Table 3**). Smart Edge, an investment company, was the second-largest issuer during the quarter, with a 2-year bond worth HKD6.8 billion and carrying a 4.33% coupon. Link Holdings, a financial company, was the third-largest issuer during the quarter, with a 5-year bond worth HKD4.0 billion and carrying a 1.6% coupon. Haitong International, another financial firm, issued a total of HKD2.3 billion from four issuances of 1-year bonds carrying coupons ranging from 2.6% to 2.8%. New World Development—a diversified company with real estate, transportation, telecommunication, and other operations— issued a total of HKD1.6 billion from four issuances of 3-year, 10-year, and 15-year bonds with coupons ranging from 3.0% to 15.0%.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (HKD billion)
Hong Kong Mortgage Corporation		
3-month bills	1.50	0.13
3-month bills	0.00	0.66
3-month bills	1.42	0.47
1-year bond	1.93	0.50
1-year bond	2.06	0.50
1-year bond	1.82	0.55
1-year bond	1.96	0.52
1-year bond	2.00	0.50
1-year bond	1.88	0.90
1.5-year bond	1.76	0.50
2-year bond	1.89	1.00
2-year bond	1.98	0.75
30-year bond	2.98	0.13
Smart Edge		
2-year bond	4.33	6.80
Link Holdings		
5-year bond	1.60	4.00
Haitong International		
1-year bond	2.80	0.60
1-year bond	2.65	0.70
1-year bond	2.75	0.50
1-year bond	2.60	0.53
New World Development		
3-year bond	3.00	0.10
3-year bond	3.00	0.40
10-year bond	10.01	0.45
15-year bond	15.01	0.65

HKD = Hong Kong dollar.
Source: Bloomberg LP.

Policy, Institutional, and Regulatory Developments

Hong Kong Monetary Authority and the Bank of Thailand Collaborate on Financial Innovation

On 12 May, the HKMA and the Bank of Thailand signed a memorandum of understanding to promote collaboration in financial innovation. One potential project highlighted during the signing was a joint research program on central bank digital currency, wherein the two banking authorities may share knowledge and experience from their respective research.

Hong Kong Monetary Authority Keeps Countercyclical Capital Buffer at 2.5%

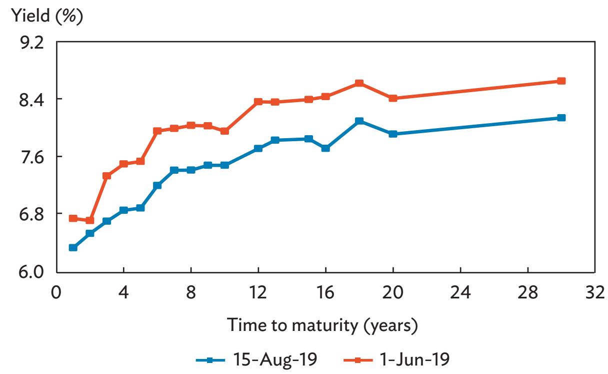
On 9 July, the HKMA decided to maintain the countercyclical capital buffer (CCyB) at 2.5%. In its press statement, the HKMA noted that the latest data signals a lower CCyB at 1.75% due to the narrowing of the credit-to-GDP gap, which indicated a slowdown in loan growth. However, after considering other factors, including the recovery of residential property prices and banking sector and economy-wide risks, the HKMA decided that holding the CCyB steady at 2.5% was more appropriate to provide an additional buffer should the systemic risks crystallize in the future. The CCyB is an integral part of the Basel III regulatory capital framework designed to increase the resilience of the banking sector in periods of excess credit growth.

Indonesia

Yield Movements

Local currency (LCY) government bond yields in Indonesia declined between 1 June and 15 August, shifting the entire yield curve downward (**Figure 1**). Yields shed an average of 29 basis points (bps) for maturities of 2 years or less and an average of 59 bps for maturities of 3 years or more. As a result of the downward movement in the yield curve, the spread between the 2-year and 10-year bond yields narrowed from 124 bps on 1 June to 95 bps on 15 August.

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



Source: Based on data from Bloomberg LP.

The downward trend in bond yields was largely influenced by the 25-bps policy rate cut by Bank Indonesia announced on 18 July and the sovereign ratings upgrade by S&P Global Ratings (S&P) on 31 May (see section on Ratings Update). It was the first policy rate cut of the year and came after Bank Indonesia had raised its policy rate six times in 2018 for a cumulative 175 bps. Another 25-bps cut was announced by the central bank on 22 August, which brought the 7-day reverse repurchase rate to 5.50%, the deposit facility rate to 4.75%, and the lending facility rate to 6.25%. The decision to ease monetary policy was taken on the back of low inflation expectations and efforts to boost economic growth as the global economic outlook remained weak. Bank Indonesia noted that lingering trade tensions between the People's Republic of China and the United States (US) has contributed to the slump in global trade performance and dragged down global economic growth.

Dovish stances by central banks in major advanced economies likewise contributed to the decline in bond yields. Amid global growth moderation and low inflation, the European Central Bank and the Bank of Japan hinted at easing measures, and the US Federal Reserve undertook a 25-bps cut of the federal funds target rate on 31 July. This, in turn, fueled investor interest in higher-yielding emerging market assets such as Indonesian bonds. Foreign fund inflows into Indonesia's LCY government bond market rebounded strongly in June and July after 2 consecutive months of outflows in April and May. The foreign holdings share in the LCY government bond market climbed to 39.1% at the end of June, a level last observed in March 2018.

Macroeconomic indicators in Indonesia have been relatively stable thus far in 2019. Consumer price inflation has been subdued, remaining within Bank Indonesia's target range of 2.5%–4.5% for full-year 2019. Consumer prices rose 3.3% year-on-year (y-o-y) in July, roughly the same level as in May and June. Real gross domestic product growth was also stable, rising 5.05% y-o-y in the second quarter (Q2) of 2019, broadly at par with the 5.07% y-o-y expansion in the first quarter (Q1). Domestic demand buoyed growth as household consumption rose 5.2% y-o-y, up from 5.0% y-o-y in Q1 2019. During the same period, growth in government consumption picked up to 8.2% y-o-y from 5.2% y-o-y, while investment growth was likewise stable at 5.0% y-o-y. On a quarter-on-quarter (q-o-q) basis, the economy grew 4.2% in Q2 2019, rebounding from a 0.5% contraction in Q1 2019. Bank Indonesia projects full-year 2019 economic growth to come in below the midpoint of its forecast range of 5.0%–5.4%.

The Indonesian rupiah strengthened vis-à-vis the US dollar during most of the review period, particularly from June through early August. However, following the sharp depreciation of the Argentine peso on 13 August, the Indonesian rupiah, along with other currencies in emerging East Asian markets, weakened against the greenback. Concerns over spillover effects in other emerging markets contributed to the overall weakness of the Indonesian rupiah versus the US dollar, albeit while posting the smallest depreciation among the region's currencies during the review period. Bank Indonesia announced that it stands ready to intervene to ensure stability in financial markets.

Size and Composition

Indonesia's LCY bond market reached a size of IDR3,069.9 trillion (USD217.3 billion) at the end of June, as growth contracted a marginal 0.5% q-o-q in Q2 2019 following an 8.7% q-o-q expansion in Q1 2019 (**Table 1**). The q-o-q decline came from contractions in both central bank bonds and corporate bonds. On a y-o-y basis, overall bond market growth moderated to 17.6% in Q2 2019 from 18.7% in Q1 2019.

Government bonds continued to account for a dominant share of Indonesia's LCY bond market at 86.4% of the total at the end of June, up from 86.2% at the end of March and 84.6% at the end of June 2018. Conventional bonds also increased their share of the total to 84.8% at the end of June from 84.5% at the end of March. The share of *sukuk* (Islamic bonds) slipped to 15.2% as all *sukuk* segments posted contractions during the review period.

Government bonds. The stock of LCY government bonds at the end of June totaled IDR2,652.6 trillion, with growth falling 0.3% q-o-q but rising 20.1% y-o-y. Central government bonds, comprising Treasury bills and Treasury bonds, which are issued by the Ministry of Finance for budget financing, posted marginal growth that was more than offset by contractions in the stock of central bank bonds.

Central government bonds. The stock of central government bonds posted a marginal gain of 0.1% q-o-q in Q2 2019 but rose at a much faster y-o-y pace of 15.2%. The slowdown in q-o-q growth was due largely to a decline in issuance volume during the quarter.

New issuance of Treasury bills and bonds tumbled 39.4% q-o-q to IDR150.4 trillion in Q2 2019. There were fewer scheduled auctions during the quarter due to the Muslim celebration of Eid al-Fitr. In addition, four auctions fell short of their respective target in May as liquidity tightened ahead of the holiday and concerns grew over the resurgence of trade tensions between the People's Republic of China and the US. The government, however, was not compelled to accept bids at a higher rate as it had mostly fulfilled its frontloading issuance plan and tapped the foreign currency bond market as a complement to its LCY issuance. Issuances of bonds denominated in Japanese yen, US dollars, and euros were concluded in the first semester of the year. After the holiday break in June, the government once again awarded bids over its targeted amount, taking advantage of hefty demand for Indonesian government bonds, buoyed by the S&P ratings upgrade and signals of easing monetary policy from major advanced economies.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	IDR	USD	IDR	USD	IDR	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**2,611,428**	**182**	**3,083,746**	**217**	**3,069,867**	**217**	**0.5**	**12.0**	**(0.5)**	**17.6**
Government	2,208,882	154	2,659,664	187	2,652,610	188	0.5	10.5	(0.3)	20.1
Central Govt. Bonds	2,196,915	153	2,527,993	177	2,531,039	179	0.6	12.5	0.1	15.2
of which: *Sukuk*	354,277	25	427,277	30	420,064	30	7.6	19.1	(1.7)	18.6
Central Bank Bonds	11,967	0.8	131,671	9	121,571	9	(7.9)	(74.2)	(7.7)	915.9
of which: *Sukuk*	11,967	0.8	24,915	2	21,938	2	(7.9)	27.0	(11.9)	83.3
Corporate	402,546	28	424,082	30	417,257	30	0.5	21.0	(1.6)	3.7
of which: *Sukuk*	14,692	1	24,606	2	24,133	2	(10.7)	9.8	(1.9)	64.3

( ) = negative, IDR = Indonesian rupiah, 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 local currency–USD rates are used.
3. Growth rates are calculated from local currency base and do not include currency effects.
4. The total stock of nontradable bonds as of 30 June 2019 stood at IDR205.5 trillion.
Sources: Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; Indonesia Stock Exchange; and Bloomberg LP.

Aside from the weekly Treasury auctions, the government also conducted private placements of some series of conventional Treasury bonds, project-based *sukuk*, and Islamic Treasury bills during the quarter

Central bank bonds. At the end of June, the outstanding stock of central bank bonds, comprising conventional and shari'ah-compliant Sertifikat Bank Indonesia (SBI) and Sukuk Bank Indonesia (SukBI), reached a size of IDR121.6 trillion. Growth declined 7.7% q-o-q but jumped more than ten-fold on a y-o-y basis from a small base in the earlier period. The stock of central bank bonds was dragged down by lower issuance volume of SBI during the quarter, an indication that the central bank is injecting money into the banking system. SBI have relatively longer maturities of 6, 9, and 12 months versus those of SukBI, which are issued in maturities of 7, 14, and 28 days.

In Q2 2019, central bank issuance slid to IDR59.0 trillion, down 44.6% q-o-q from IDR106.5 trillion in Q1 2019. Issuance of SBI dropped significantly as the central bank only had one offering of conventional SBI during the quarter. The issuance volume of conventional instruments is normally larger compared with their Islamic counterparts, a trend similarly observed for Treasury instruments. Issuance of SBI plummeted to IDR3.1 trillion in Q2 2019 from IDR45.5 trillion in the prior quarter. The issuance of SukBI also declined to IDR55.9 trillion in Q2 2019 from IDR61.0 trillion in Q1 2019.

Corporate bonds. At the end of June, corporate bonds outstanding stood at IDR417.3 trillion, down 1.6% q-o-q but up 3.7% y-o-y. The decline in the outstanding stock of bonds was due to a large volume of maturities that exceeded new issuance by corporates during the quarter.

A total of 117 firms comprised Indonesia's corporate bond market at the end of June. The issuers were dominated by banks and financial institutions, which accounted for a 60.6% share of the corporate bond total during the review period. Next were firms coming from infrastructure, utilities, and the transport sector, whose outstanding bond stock accounted for a 20.5% share of the total. Corporate issuers from the property, real estate, and construction sector had a share of 6.8%. All other sectors had a share of 6.0% or less.

The 30 largest corporate bond issuers presented in **Table 2** had an aggregate bond size of IDR311.6 trillion, accounting for 74.7% of the total corporate bond stock at the end of June. Of which, 19 firms were from the banking and financial sector, and the remaining were mostly from sectors requiring large amounts of capital such as energy, telecommunications, and manufacturing. The top 30 list also included 16 state-owned firms, 8 of which were ranked in the top 10.

Leading the list were five state-owned institutions, with the top spot taken by Indonesia Eximbank with outstanding bonds amounting to IDR35.1 trillion at the end of June. Energy firm Perusahaan Listrik Negara moved up to the second spot with outstanding bonds of IDR22.8 trillion. Bank Rakyat Indonesia (IDR21.0 trillion) dropped to the third spot as its outstanding bond total fell due to the maturity of a 3-year bond in May. Sarana Multi Infrastruktur moved up to the fourth spot from seventh in the prior quarter, following a triple-tranche issuance in June that lifted its bond stock to IDR17.3 trillion. Bank Tabungan Negara kept the fifth spot with a bond total of IDR17.1 trillion.

During the quarter, new bonds issued by corporates reached IDR28.8 trillion, up 30.9% q-o-q from IDR22.0 trillion in Q1 2019. On a y-o-y basis, corporate bond issuance saw a marginal decline of 0.6%.

A total of 17 firms tapped the bond market for funding during the quarter, which added 47 new series to the total corporate bond stock through the end of June. Issuance during the quarter comprised 38 new series of conventional bonds and nine of *sukuk*. Three series each of *sukuk mudharabah* (Islamic bonds backed by a profit-sharing scheme from a business venture or partnership) were issued by Adira Dnamika Multi Finance and Indonesia Eximbank in April. Another three series of *sukuk wakalah* (Islamic bonds backed by an agreement nominating another entity to act on its behalf) were added by Medco Power Indonesia in May. In terms of maturity, 17 bond series carried a maturity of 3 years, and 12 series each had maturities of 370 days and 5 years. The longest-dated bond issued during the quarter was the 15-year bond of Indonesia Eximbank.

The largest corporate bond issuers and their respective new bond issues in Q2 2019 are presented in **Table 3**. The largest corporate bond issuance during the quarter came from Indonesia Eximbank with total issuance worth IDR4.3 trillion from a multitranche bond deal in April. It was followed by Semen Indonesia with issuance of a dual-tranche bond amounting to IDR4.1 trillion in May and

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	35,139	2.49	Yes	No	Banking
2.	Perusahaan Listrik Negara	22,783	1.61	Yes	No	Energy
3.	Bank Rakyat Indonesia	20,990	1.49	Yes	Yes	Banking
4.	Sarana Multi Infrastruktur	17,345	1.23	Yes	No	Finance
5.	Bank Tabungan Negara	17,050	1.21	Yes	Yes	Banking
6.	Bank Pan Indonesia	15,427	1.09	No	Yes	Banking
7.	Indosat	15,372	1.09	No	Yes	Telecommunications
8.	Bank Mandiri	14,000	0.99	Yes	Yes	Banking
9.	Waskita Karya	13,707	0.97	Yes	Yes	Building Construction
10.	Sarana Multigriya Finansial	11,585	0.82	Yes	No	Finance
11.	Adira Dinamika Multifinance	11,120	0.79	No	Yes	Finance
12.	Federal International Finance	10,873	0.77	No	No	Finance
13.	Pupuk Indonesia	9,076	0.64	Yes	No	Chemical Manufacturing
14.	Telekomunikasi Indonesia	8,995	0.64	Yes	Yes	Telecommunications
15.	Permodalan Nasional Madani	7,746	0.55	Yes	No	Finance
16.	Perum Pegadaian	7,649	0.54	Yes	No	Finance
17.	Semen Indonesia	7,078	0.50	Yes	Yes	Cement Manufacturing
18.	Bank CIMB Niaga	7,037	0.50	No	Yes	Banking
19.	Hutama Karya	6,825	0.48	Yes	No	Nonbuilding Construction
20.	Medco-Energi Internasional	6,454	0.46	No	Yes	Petroleum and Natural Gas
21.	Astra Sedaya Finance	6,125	0.43	No	No	Finance
22.	Bank Maybank Indonesia	6,066	0.43	No	Yes	Banking
23.	XL Axiata	5,103	0.36	No	Yes	Telecommunications
24.	ADHI Karya	4,777	0.34	Yes	Yes	Building Construction
25.	BFI Finance Indonesia	4,602	0.33	No	Yes	Finance
26.	Maybank Indonesia Finance	4,350	0.31	No	No	Finance
27.	Bank Pembangunan Daerah Jawa Barat Dan Banten	4,252	0.30	Yes	Yes	Banking
28.	Tower Bersama Infrastructure	3,616	0.26	No	Yes	Telecommunications Infrastructure Provider
29.	Bank Permata	3,360	0.24	No	Yes	Banking
30.	Mandiri Tunas Finance	3,130	0.22	No	No	Finance
Total Top 30 LCY Corporate Issuers		**311,631**	**22.06**			
Total LCY Corporate Bonds		**417,257**	**29.54**			
Top 30 as % of Total LCY Corporate Bonds		**74.7%**	**74.7%**			

IDR = Indonesian rupiah, LCY = local currency, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (IDR billion)
Indonesia Eximbank		
370-day bond	7.35	147.00
370-day *sukuk mudharabah*	7.35	230.00
3-year bond	8.40	935.00
3-year *sukuk mudharabah*	8.40	145.00
5-year bond	8.90	1,523.00
5-year *sukuk mudharabah*	8.90	66.00
7-year bond	9.25	278.00
10-year bond	9.50	349.00
15-year bond	9.80	625.00
Semen Indonesia		
5-year bond	9.00	3,364.00
7-year bond	9.10	714.00
Sarana Multi Infrastruktur		
370-day bond	7.50	224.00
3-year bond	8.50	1,224.00
5-year bond	8.75	1,552.00
Adira Dinamika Multifinance		
370-day bond	7.75	1,105.00
370-day *sukuk mudharabah*	7.75	72.00
3-year bond	8.60	287.25
3-year *sukuk mudharabah*	8.60	10.00
5-year bond	9.15	607.75
5-year *sukuk mudharabah*	9.15	14.00
Permodalan Nasional Madani		
3-year bond	9.50	1,401.00
5-year bond	9.85	599.00
Bank Danamon		
370-day bond	7.55	1,148.00
3-year bond	8.55	852.00

IDR = Indonesian rupiah.
Note: *Sukuk mudharabah* are Islamic bonds backed by a profit-sharing scheme from a business venture or partnership.
Source: Indonesia Stock Exchange.

by Sarana Multi Infrastruktur with a triple-tranche bond worth IDR3.0 trillion in June.

Foreign currency bonds. In May, the Government of Indonesia raised JPY177.0 billion worth of samurai bonds in multiple tranches. The issuance marked the largest ever public samurai bond issuance in Asia and the longest-maturity samurai bonds (15 years and 20 years) from an Asian issuer. The issuance comprised the following tranches: (i) a JPY75.7 billion 3-year bond with a coupon rate of 0.54%, (ii) a JPY80.2 billion 5-year bond with a coupon rate of 0.83%, (iii) a JPY4.5 billion 7-year bond with a coupon rate of 0.96%, (iv) a JPY7.6 billion 10-year bond with a coupon rate of 1.17%, (v) a JPY4.0 billion 15-year bond with a coupon rate of 1.55%, and (vi) a JPY5.0 billion 20-year bond with a coupon rate of 1.79%.

In June, the Government of Indonesia priced its third issuance of dual-currency bonds. The bond sale comprised a EUR750 million 7-year bond with a coupon rate of 1.45% and a USD750 million 10-year bond with a coupon rate of 3.40%. The sale marked Indonesia's sixth issuance of EUR-denominated bonds and its second in a format registered with the US Securities and Exchange Commission. The USD-denominated bond was the government's third issuance under the Securities and Exchange Commission's registered shelf.

Investor Profiles

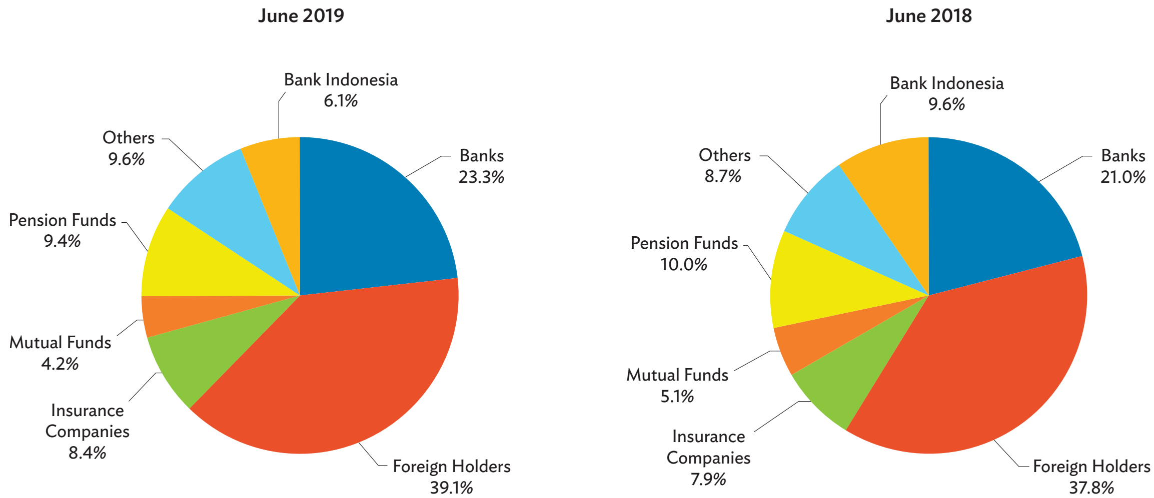
Central government bonds. Foreign investors in Indonesia's LCY government bond market maintained the single-largest share of holdings at the end of June. Nonresident holdings of central government bonds climbed to a 39.1% share of the total from 37.8% in the same period a year earlier (**Figure 2**). Offshore investors shored up their holdings of Indonesian government bonds in June following the rating upgrade from S&P.

Total holdings by nonresidents stood at IDR988.8 trillion at the end of June, up from IDR830.2 trillion at the end of June 2018. Of this amount, IDR162.6 trillion was held by foreign governments and central banks, representing a 6.4% share of the total central government bond stock in June. By type of bonds, the foreign holdings share for conventional bonds at the end of June was much higher at 46.0% than for Islamic bonds with a share of 4.0%.

Much of the LCY government bond holdings of nonresidents are in long-dated maturities. Foreign investor holdings in bonds with maturities of more than 5 years to 10 years accounted for a 35.4% share of the total (**Figure 3**). Their holdings of bonds with maturities of more than 10 years was also substantial at 32.0%. Maturities of more than 2 years to 5 years accounted for a 28.4% share and maturities of 2 years or less accounted for a 4.6% share.

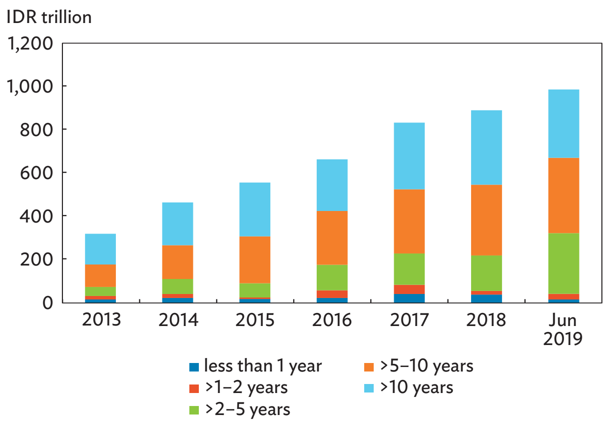
The next largest holders of LCY government bonds were banking institutions. Their holdings gained the most across all investor types, rising 2.3 percentage points to a 23.3% share at the end of June from a 21.0% share a year earlier. During the same period, insurance companies

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.

increased their holdings share by 0.5 percentage points to 8.4% from 7.9%.

In contrast, Bank Indonesia posted the largest decline in bond holdings, shedding 3.5 percentage points to a 6.1% share at the end of June from 9.6% a year earlier. The decrease reflected improved market conditions in 2019, as the central bank was not compelled to intervene heavily to stabilize bond prices. Also, bond holdings of mutual funds and pension funds edged lower to shares of 4.2% and 9.4%, respectively, from 5.1% and 10.0% a year earlier.

Ratings Update

On 31 May, S&P raised Indonesia's sovereign credit rating from BBB– to BBB. The rating was given a stable outlook. According to S&P, the rating upgrade was based on Indonesia's strong economic growth prospects and supportive policy dynamics. In addition, S&P also noted the relatively low debt level of the government and its moderate fiscal performance.

Policy, Institutional, and Regulatory Developments

Bank Indonesia Lowers Reserve Requirement Ratio

In June, Bank Indonesia announced cuts in the reserve requirement ratio for banks, which came into effect on 1 July, to help boost lending activities. The reserve requirement ratio was reduced by 50 bps to 6.0% for conventional banks and 4.5% for Islamic banks. The average reserve requirement ratio was held steady at 3.0%.

Government Plans to Issue IDR185 Trillion Worth of Bonds in the Third Quarter of 2019

In June, the Government of Indonesia announced its plan to raise IDR185 trillion from the sale of Treasury instruments during the third quarter of 2019. The issuance plan includes the sale of conventional Treasury bills and bonds, and *sukuk*. For full-year 2019, the net issuance target was placed at IDR389 trillion with a gross issuance target of IDR825.7 trillion

Government Announces Macroeconomic Assumptions for 2020 Draft State Budget

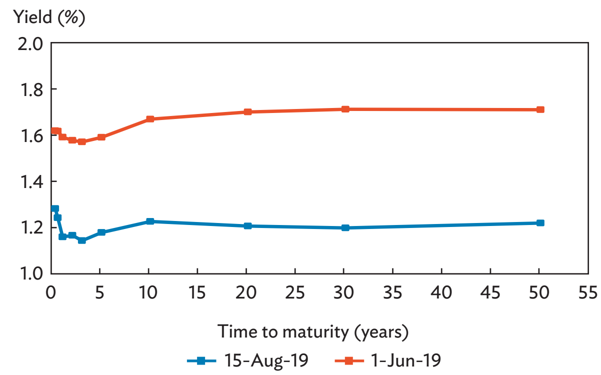
In August, the President of Indonesia announced the macroeconomic assumptions for the draft 2020 state budget. Among the assumptions were (i) economic growth of 5.3% to be driven by consumption and investments, (ii) an inflation target of 3.1% to support purchasing power, (iii) an exchange rate of IDR14,400 per US dollar, (iv) a 3-month Treasury bill rate of 5.4%, and (v) an Indonesian crude oil price of USD65 per barrel. The government is looking at a 2020 budget deficit equivalent to 1.76% of gross domestic product.

Republic of Korea

Yield Movements

Between 1 June and 15 August, local currency (LCY) government bond yields in the Republic of Korea fell for all tenors (**Figure 1**). The decline in yields was more pronounced at the longer end of the curve, with tenors of 20, 30, and 50 years falling an average of 50 basis points (bps). For securities with tenors of between 1 year and 10 years, yields fell 43 bps on average. Meanwhile, yields for the 3-month and 6-month tenors fell 34 bps and 38 bps, respectively, resulting in a slight inversion of the Republic of Korea's yield curve. The yield spread between the 2-year and 10-year tenors slightly fell to 6 bps from 9 bps.

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



Source: Based on data from Bloomberg LP.

Yields fell during the review period due to heightened expectations of a rate cut by the Bank of Korea in its July monetary policy meeting and further rate cuts before the year ends. This sentiment was driven by developments both domestically and in major economies, particularly the United States (US). On the domestic front, low levels of inflation, and the quarter-on-quarter (q-o-q) contraction in gross domestic product (GDP) growth in the first quarter (Q1) 2019 contributed to monetary easing by the Bank of Korea. The recent imposition of trade restrictions by Japan on the Republic of Korea's exports also contributed to the decline in yields. Tensions between the two economies pose an additional downside risk to domestic economic growth and could lead to a further deterioration in export performance.

Developments in major economies have contributed to the downward trend in yields. These include the rate cut by the US Federal Reserve in its July meeting and uncertainty over US monetary policy direction. The ongoing trade tensions between the US and the People's Republic of China (PRC), weaker global economic growth outlook, and dovish stances among central banks in developed markets continue to drive down yields in the Republic of Korea.

At its monetary policy meeting on 18 July, the Bank of Korea decided to cut its base rate by 25 bps to 1.50%, the first cut since 2016. The central bank noted that domestic economic growth eased and inflation remained low. Moreover, the Bank of Korea lowered its GDP growth forecasts for 2019 and 2020 to 2.2% year-on-year (y-o-y) and 2.5% y-o-y, respectively, from April forecasts of 2.5% y-o-y and 2.6% y-o-y. Inflation forecasts for 2019 and 2020 were also lowered to 0.7% y-oy and 1.3% y-o-y from 1.1% y-o-y and 1.6%, respectively.

The Republic of Korea's real GDP growth rose to 2.0% y-o-y in the second quarter (Q2) of 2019 from 1.7% y-o-y in Q1, based on estimates from the Bank of Korea. By type of expenditure, the faster GDP growth in Q2 2019 was primarily driven by higher growth rates in private and government consumption expenditure and a rebound in exports. On a q-o-q basis, the economy grew 1.0% in Q2 2019 following a 0.4% contraction in Q1 2019. Meanwhile, inflation remained subdued in Q2 2019 at a monthly average of 0.7% y-o-y before easing to 0.6% y-o-y in July.

The Republic of Korea's LCY government bond market witnessed a surge in net foreign bond inflows in May and June on expectations of a rate cut by the central bank and the resulting capital gains due to declining yields. However, foreign bond flows eased and reversed to marginal outflows in July following the rate cut on 18 July.

The Korean won was the worst-performing currency in the region during the review period, depreciating 2.0% and breaching the KRW1,200 per US dollar level in August. The continued weakening of the Korean won reflects the vulnerability of the Republic of Korea to external factors. These include the impact of the ongoing trade disputes between the PRC and the US given that both are major trading partners of the Republic of Korea. Recent trade restrictions imposed by Japan also led to the further weakening of the Korean won.

Size and Composition

The size of the Republic of Korea's LCY bond market rose 2.4% q-o-q to KRW2,332 trillion (USD2 trillion) at the end of June from KRW2,277 trillion at the end of March (**Table 1**). The growth was led by the 2.9% q-o-q rise in the stock of corporate bonds, while government bonds increased at a slower pace of 1.7% q-o-q.

Government bonds. The outstanding size of LCY government bond market expanded 1.7% q-o-q in Q2 2019 to KRW946 trillion, largely driven by the 2.7% q-o-q rise in central government bonds, which reached KRW600 trillion at the end of June. Meanwhile, the stock of central bank bonds posted a marginal increase of 0.3% q-o-q to KRW172 trillion. The amount of outstanding bonds issued by government-related entities declined 0.3% q-o-q to KRW175 trillion.

Issuance of government bonds inched up 1.1% q-o-q to KRW81 trillion, however the issuance volume for the quarter is still high compared to previous quarters. The government continued with its frontloading policy in 2019, with issuance of central government bonds up 2.4% q-o-q in Q2 2019. The government earlier announced that it plans to spend 70% of its 2019 budget in the first half of 2019. Issuance of Monetary Stabilization Bonds by the Bank of Korea also rose 1.8% q-o-q in Q2 2019.

Corporate bonds. The LCY corporate bond market posted growth of 2.9% q-o-q to reach KRW1.4 trillion at the end of June, primarily due to higher issuance during the quarter. **Table 2** lists the top 30 LCY corporate bond issuers at the end of June, with aggregate bonds outstanding of KRW859 trillion comprising 62% of the total LCY corporate bond market. Financial institutions, particularly securities and investment firms and banks, continued to dominate the list, accounting for around two-thirds of the top 30 corporate bond issuers. Korea Housing Finance Corporation, a government-related institution providing financial assistance for social housing, remained the largest issuer with outstanding bonds of KRW119 trillion.

Issuance of corporate bonds recovered in Q2 2019, with issuance up 28.2% q-o-q to KRW134 trillion as companies took advantage of declining interest rates. **Table 3** lists the notable corporate bond issuances in Q2 2019. Major banks in the Republic of Korea such as Woori Bank, Shinhan Bank, and Kookmin Bank continued to be the top issuers of bonds during the quarter.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	KRW	USD	KRW	USD	KRW	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**2,221,054**	**1,993**	**2,277,392**	**2,006**	**2,331,705**	**2,019**	**1.6**	**3.9**	**2.4**	**5.0**
Government	937,267	841	930,886	820	946,417	820	2.4	5.1	1.7	1.0
Central Government Bonds	589,426	529	584,006	514	599,552	519	3.6	6.7	2.7	1.7
Central Bank Bonds	174,630	157	171,150	151	171,580	149	(0.1)	(0.1)	0.3	(1.7)
Others	173,211	155	175,730	155	175,285	152	1.0	4.9	(0.3)	1.2
Corporate	1,283,787	1,152	1,346,506	1,186	1,385,288	1,200	1.0	3.0	2.9	7.9

( ) = negative, KRW = Korean won, 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 local currency–USD rates are used.
3. Growth rates are calculated from local currency 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	118,793	102.9	Yes	No	No	Housing Finance
2.	Mirae Asset Daewoo Co.	75,224	65.1	No	Yes	No	Securities
3.	Korea Investment and Securities	63,901	55.3	No	No	No	Securities
4.	Industrial Bank of Korea	52,150	45.2	Yes	Yes	No	Banking
5.	NH Investment & Securities	51,898	44.9	Yes	Yes	No	Securities
6.	KB Securities	49,735	43.1	No	No	No	Securities
7.	Hana Financial Investment	44,632	38.6	No	No	No	Securities
8.	Samsung Securities	31,413	27.2	No	Yes	No	Securities
9.	Shinhan Bank	30,712	26.6	No	No	No	Banking
10.	Korea Land & Housing Corporation	30,160	26.1	Yes	No	No	Real Estate
11.	Korea Electric Power Corporation	27,300	23.6	Yes	Yes	No	Electricity, Energy, and Power
12.	Korea Expressway	22,200	19.2	Yes	No	No	Transport Infrastructure
13.	Woori Bank	20,830	18.0	Yes	Yes	No	Banking
14.	KEB Hana Bank	19,030	16.5	No	No	No	Banking
15.	Kookmin Bank	18,874	16.3	No	No	No	Banking
16.	Shinyoung Securities	18,616	16.1	No	Yes	No	Securities
17.	Korea Rail Network Authority	18,370	15.9	Yes	No	No	Transport Infrastructure
18.	Korea Deposit Insurance Corporation	15,630	13.5	Yes	No	No	Insurance
19.	The Export-Import Bank of Korea	15,165	13.1	Yes	No	No	Banking
20.	Hyundai Capital Services	14,856	12.9	No	No	No	Consumer Finance
21.	Shinhan Card	14,205	12.3	No	No	No	Credit Card
22.	Korea SMEs and Startups Agency	13,633	11.8	Yes	No	No	SME Development
23.	KB Kookmin Bank Card	12,260	10.6	No	No	No	Consumer Finance
24.	Korea Gas Corporation	12,159	10.5	Yes	Yes	No	Gas Utility
25.	NongHyup Bank	12,020	10.4	Yes	No	No	Banking
26.	Hanwha Investment and Securities	11,780	10.2	No	No	No	Securities
27.	Standard Chartered Bank Korea	11,580	10.0	No	No	No	Banking
28.	Nonghyup	10,990	9.5	Yes	No	No	Banking
29.	Korea Student Aid Foundation	10,980	9.5	Yes	No	No	Student Loan
30.	Meritz Securities Co.	9,514	8.2	No	Yes	No	Securities
Total Top 30 LCY Corporate Issuers		**858,609**	**744**				
Total LCY Corporate Bonds		**1,385,288**	**1,200**				
Top 30 as % of Total LCY Corporate Bonds		**62.0%**	**62.0%**				

KOSDAQ = Korean Securities Dealers Automated Quotations, KOSPI = Korea Composite Stock Price Index, KRW = Korean won, LCY = local currency, SME = small and medium-sized enterprise, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (KRW billion)
Woori Bank		
1-year bond	1.88	400
2-year bond	1.85	600
Shinhan Bank		
2-year bond	1.86	400
3-year bond	1.88	400
Kookmin Bank		
5-year bond	1.61	400
5-year bond	1.90	400
Standard Chartered Bank		
5-year bond	1.66	500
SK Hynix		
3-year bond	1.96	410

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

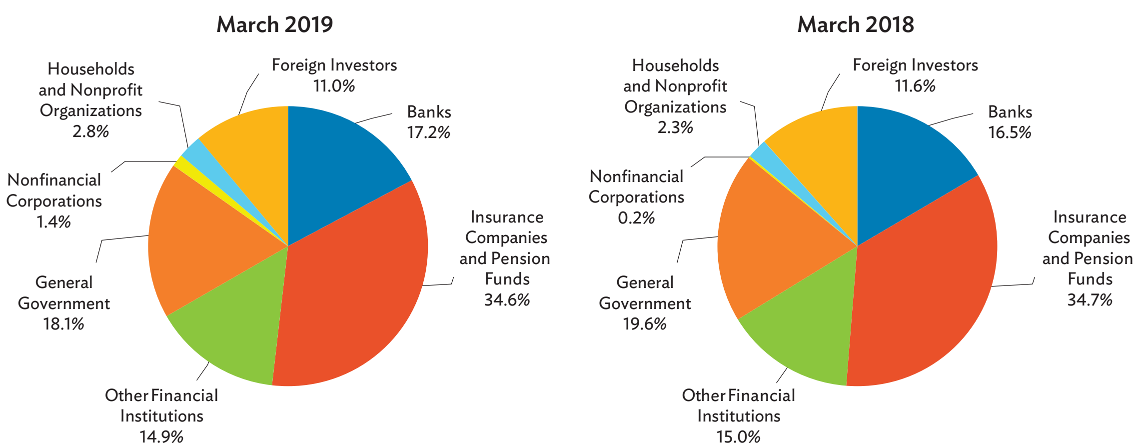
Foreign Exchange Stabilization Bonds. The Republic of Korea issued USD1.5 billion worth of Foreign Exchange Stabilization Bonds on 12 June. These bonds are issued to secure the Republic of Korea's foreign exchange reserves amid increasing volatility in the market. The resulting rates also serve as a guide for prospective companies planning to issue bonds offshore. The issue comprised USD500 million worth of 5-year Green and Sustainability Bonds with a coupon of 2.0% and a yield of 2.177% (30 bps over the 5-year US Treasury) and USD1.0 billion worth of 10-year bonds with coupon of 2.5% and yield of 2.677% (55 bps over the 10-year US Treasury).

Investor Profile

Insurance companies and pension funds remained the largest holders of the Republic of Korea's LCY government bonds, accounting for 34.6% of all holdings at the end of March, almost at par with its share in the same period in 2018 (**Figure 2**). The general government continued to be the second-largest holder with its share slightly lower at 18.1% versus 19.6% in March 2018. The share of banks rose to 17.2% at the end of March from 16.5%, while the share of other financial institutions was marginally changed at 14.9% versus 15.0% at the end of March 2018. Foreign holdings of the Republic of Korea's LCY government bonds remained low at 11.0% in March 2019.

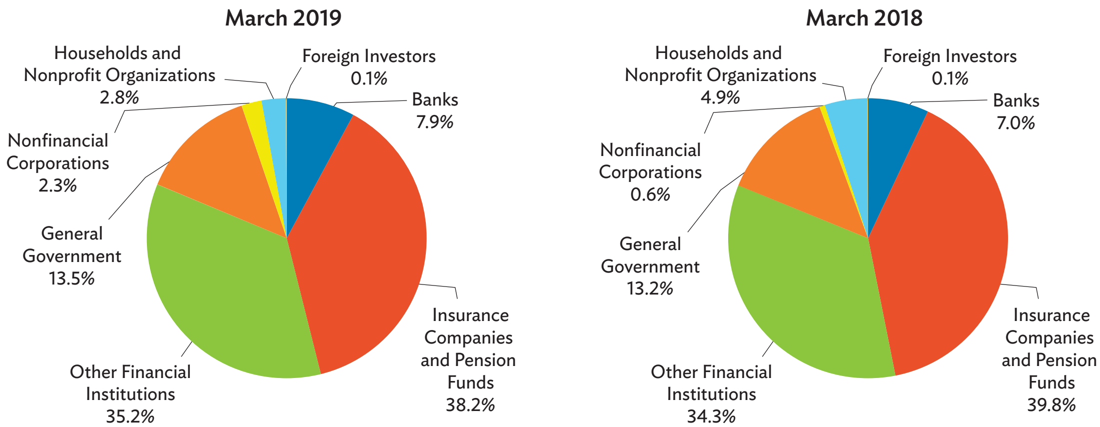
Insurance companies and pension funds and other financial institutions continue to be the two largest holders of the Republic of Korea's LCY corporate bonds (**Figure 3**). The share of insurance companies and pension funds slightly fell to 38.2% at the end of March 2019 from 39.8% in March 2018, while the share of other financial institutions inched up to 35.2% from 34.3%. The shares of the general government and banks were almost unchanged from a year earlier at 13.5% and 7.9%, respectively. The share of foreign investors remained negligible during the review period at 0.1%.

Figure 2: Local Currency Government Bonds Investor Profile



Sources: *AsianBondsOnline* and the Bank of Korea.

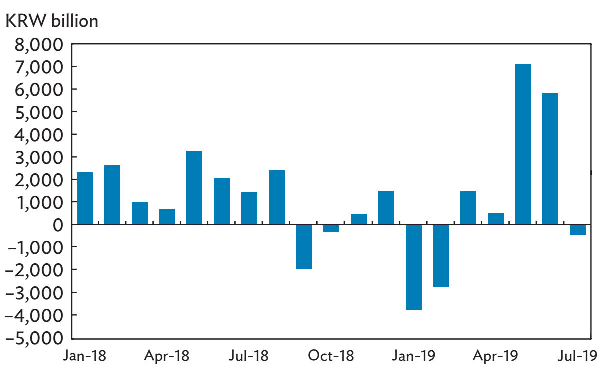
Figure 3: Local Currency Corporate Bonds Investor Profile



Sources: *AsianBondsOnline* and the Bank of Korea.

The Republic of Korea's LCY bond market saw a surge in net foreign inflows in May and June of KRW7,076 billion and KRW5,801 billion, respectively, as investors anticipated capital gains from declining yields ahead of an expected rate cut by the Bank of Korea at its 18 July monetary policy meeting (**Figure 4**). The foreign bond flows reversed in July, with a monthly outflow amounting to KRW421 billion, following the eventual rate cut.

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



KRW = Korean won.
Source: Financial Supervisory Service.

Policy and Regulatory Developments

National Assembly Passes 2019 Supplementary Budget

In August, the National Assembly passed the 2019 supplementary budget to help boost the economy and improve public safety. The supplementary budget was KRW856.8 billion short of the KRW6.7 trillion budget submitted in April. The budget included additional allotments of KRW273.2 billion for spending on manufacturing supplies and KRW94.5 billion for disaster-stricken areas and programs aimed to improve air and water quality, and waste management.

The Bank of Korea and Financial Regulators Establish Cooperation to Avoid Sudden Volatility

In August, the Bank of Korea, Financial Services Commission, and Financial Supervisory Service held a meeting to discuss recent developments in financial markets and pledged cooperation to address any sudden volatility. Risks related to the current financial market volatility were stated, particularly the ongoing trade tensions between the PRC and the US, uncertainties over monetary policy direction in the US, and the sudden devaluation of the Chinese renminbi. The agencies also highlighted the Republic of Korea's record-high foreign exchange reserves and strong foreign net lending balance. The government will continue to monitor the markets. For the stock market, contingency plans include allowing stock buybacks and tightening short-selling rules. The government will also disburse 75% of the supplementary budget in August and September to support exports. In relation to this, the government will continue to conduct talks with Japan to address its imposition of trade restrictions on Korean exports.

Government to Provide Financial Support to Firms Affected by Japan's Export Restrictions

In August, the Financial Services Commission held an emergency meeting to discuss financial support for firms affected by the imposition of trade restrictions by Japan. Measures include rolling over maturing loans; disbursing fresh loans worth KRW6 trillion; and funding long-term investments related to the material, components, and equipment industries.

Malaysia

Yield Movements

Between 1 June and 15 August, Malaysia's local currency (LCY) government bond yields declined for all tenors (**Figure 1**). The shorter-end of the yield curve (1–6 months) declined an average of 5 basis points (bps), while the belly of the curve (4–10 years) decreased an average of 41 bps. On the other hand, longer-term tenors (15–30 years) decreased an average of 69 bps. The yield spread between 2-year and 10-year government bonds contracted from 46 bps on 1 June to 16 bps on 15 August.

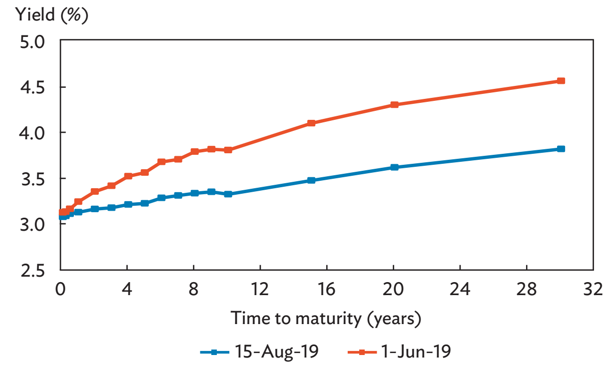
The decline in LCY government bond yields during the review period can be attributed to Bank Negara Malaysia's (BNM) reduction of its overnight policy rate by 25 bps to 3.00% on 7 May. Overall confidence in Malaysia's economic growth also contributed to the demand for Malaysia's government securities. The decrease in the yield curve was reflective of the trend in the region after the United States (US) cut the federal funds rate during its Federal Open Market Committee meeting on 31 July.

Malaysia's economic growth accelerated to 4.9% year-on-year (y-o-y) in the second quarter (Q2) of 2019 from 4.5% y-o-y in the first quarter (Q1). The current account surplus has been increasing since the third quarter of 2018, reaching a peak of MYR16.4 billion in Q1 2019 on high levels of foreign direct investment. The trade surplus increased in June despite exports falling as electrical and electronic exports declined. According to the Department of Statistics, Malaysia's Leading Economic Index indicates continued growth for the Malaysian economy.

Consumer price inflation eased to 1.4% y-o-y in July from 1.5% y-o-y in June. Core inflation increased to 2.0% y-o-y in July from 1.9% y-o-y in June. Although inflation remained low, Bank Negara Malaysia projects it to rise in the coming months as the effects of changes in consumption tax policy wane.

BNM kept its policy rate unchanged during its monetary policy committee meeting on 9 July as the economy grew in line with expectations on continued domestic and external demand. The committee decision was also supported by the inflation outlook.

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



Source: Based on data from Bloomberg LP.

Despite strong economic prospects, the Malaysian ringgit depreciated during the latter part of the review period, reaching a high of MYR4.196 per US dollar on 13 August from a low of MYR4.1085 per US dollar on 15 July. The depreciation was attributed mainly to FTSE Russell raising concerns last April regarding Malaysian bonds and considering excluding them from its World Global Bonds Index, and Norway's sovereign wealth fund dropping Malaysia from its fixed income portfolio. The depreciation was also spurred by contagion concerns after the Argentine peso depreciated sharply on 13 August. According to BNM, the weakness of the ringgit is not a cause for concern as the domestic currency has played a key role in absorbing external shocks and ensuring no disruptions to the economy. Such external shocks include the ongoing trade war between the People's Republic of China and the US, and the looming threat of a global recession.

Size and Composition

Malaysia's LCY bond market expanded 3.3% quarter-on-quarter (q-o-q) in Q2 2019 to MYR1,488.1 billion (USD360.1 billion) from MYR1,440.8 billion in Q1 2019 (**Table 1**). The growth corresponds to an 8.7% y-o-y jump from MYR1,368.9 billion in Q2 2018. Growth in the LCY bond market in Q2 2019 was supported by both LCY government and corporate bonds, which accounted for 52.4% and 47.6%, respectively, of total LCY bonds outstanding at the end of June. Total outstanding *sukuk* (Islamic bonds) at the end of the review period

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	MYR	USD	MYR	USD	MYR	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**1,369**	**339**	**1,441**	**353**	**1,488**	**360**	**2.2**	**9.9**	**3.3**	**8.7**
Government	722	179	766	188	779	189	2.5	7.9	1.8	7.8
Central Government Bonds	676	167	720	176	742	180	3.0	6.6	3.0	9.8
of which: *Sukuk*	295	73	327	80	333	81	3.0	12.2	2.0	13.0
Central Bank Bills	18	5	17	4	9	2	(9.0)	149.0	(46.8)	(49.7)
of which: *Sukuk*	6	1	5	1	2	0.4	450.0	–	(71.2)	(72.7)
Sukuk Perumahan Kerajaan	28	7	28	7	28	7	0.0	0.0	0.0	(1.8)
Corporate	646	160	675	165	709	172	1.9	12.2	5.0	9.7
of which: *Sukuk*	489	121	520	127	555	134	1.8	15.0	6.8	13.5

( ) = negative, – = not applicable, 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 local currency–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 and Bloomberg LP.

stood at MYR917.5 billion, growing 4.3% q-o-q from MYR879.4 billion at the end of the previous quarter, spurred by increased stocks of government and corporate *sukuk*.

Issuance of LCY bonds in Q2 2019 increased 9.8% q-o-q to MYR113.1 billion from MYR103.0 billion in Q1 2019, driven by the expansion of LCY corporate bond issuance, which was slightly offset by the contraction in issuance of LCY government bonds.

Government bonds. The LCY government bond market grew 1.8% q-o-q to MYR779.1 billion in Q2 2019, up from MYR765.7 billion in the previous quarter. The growth was mainly due to the 3.0% q-o-q increase in outstanding central government bonds, which comprised about 95% of total outstanding LCY government bonds. This was offset by the decline of almost one-half in the stock of central bank bills, although they represent only about 1% of total LCY government bonds outstanding. There was no change in the outstanding stock of Sukuk Perumahan Kerajaan, which had about a 4% share of total outstanding LCY government bonds.

LCY government bonds issued in Q2 2019 declined 31.7% q-o-q as issuances of government bonds, Treasury bills, and central bank bills all decreased. Issuance of Malaysian Government Securities and Government Investment Issues dropped as well compared to the previous quarter.

Corporate bonds. LCY corporate bonds outstanding jumped 5.0% q-o-q to MYR709.0 billion in Q2 2019 from MYR675.2 billion in Q1 2019. Outstanding corporate *sukuk* increased 6.8% q-o-q to MYR554.8 billion at the end of June from MYR519.5 billion in the prior quarter.

The top 30 LCY corporate bond issuers in Malaysia accounted for MYR416.2 billion, or 58.7% of total LCY corporate bonds outstanding as of the end of Q2 2019 (**Table 2**). Government institutions Danainfra Nasional and Cagamas dominated all issuers with outstanding LCY corporate bonds amounting to MYR57.8 billion (8.2% of total LCY corporate bonds outstanding) and MYR33.5 billion (4.7% of total LCY corporate bonds outstanding), respectively. By industry, finance companies comprised the largest share (53.2%) of the top 30 issuers of LCY corporate bonds during the review period with MYR221.6 billion in outstanding LCY corporate bonds. This was followed by the transport, storage, and communications industry with MYR70 billion, or a share of 16.8% of total LCY corporate bonds outstanding at the end of Q2 2019.

Issuance of LCY corporate bonds soared 68.3% q-o-q in Q2 2019 due to a large dual-tranche issuance in May by Urusharta Jamaah.

Urusharta Jamaah had the largest issuance in Q2 2019 (**Table 3**). The state-owned finance company issued dual-tranche zero coupon bonds comprising

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	57.8	14.0	Yes	No	Finance
2.	Cagamas	33.5	8.1	Yes	No	Finance
3.	Project Lebuhraya Usahasama	29.9	7.2	No	No	Transport, Storage, and Communications
4.	Prasarana	29.5	7.1	Yes	No	Transport, Storage, and Communications
5.	Urusharta Jamaah	27.6	6.7	Yes	No	Finance
6.	Perbadanan Tabung Pendidikan Tinggi Nasional	21.6	5.2	Yes	No	Finance
7.	Lembaga Pembiayaan Perumahan Sektor Awam	20.8	5.0	Yes	No	Property and Real Estate
8.	Pengurusan Air	17.3	4.2	Yes	No	Energy, Gas, and Water
9.	Khazanah	14.0	3.4	Yes	No	Finance
10.	CIMB Bank	13.3	3.2	Yes	No	Finance
11.	Maybank	11.9	2.9	No	Yes	Banking
12.	Sarawak Energy	11.3	2.7	Yes	No	Energy, Gas, and Water
13.	Maybank Islamic	11.0	2.7	No	Yes	Banking
14.	CIMB Group Holdings	11.0	2.7	Yes	No	Finance
15.	Danga Capital	10.0	2.4	Yes	No	Finance
16.	Jimah East Power	9.0	2.2	Yes	No	Energy, Gas, and Water
17.	GENM Capital	7.6	1.8	No	No	Finance
18.	GOVCO Holdings	7.3	1.8	Yes	No	Finance
19.	Bank Pembangunan Malaysia	7.3	1.8	Yes	No	Banking
20.	Rantau Abang Capital	7.0	1.7	Yes	No	Finance
21.	Tenaga Nasional	7.0	1.7	No	Yes	Energy, Gas, and Water
22.	Bakun Hydro Power Generation	6.5	1.6	No	No	Energy, Gas, and Water
23.	YTL Power International	6.1	1.5	No	Yes	Energy, Gas, and Water
24.	ValueCap	6.0	1.5	Yes	No	Finance
25.	Public Bank	5.9	1.4	No	No	Banking
26.	Telekom Malaysia	5.8	1.4	No	Yes	Telecommunications
27.	Turus Pesawat	5.3	1.3	Yes	No	Transport, Storage, and Communications
28.	EDRA Energy	5.1	1.2	No	Yes	Energy, Gas, and Water
29.	Celcom Networks	5.0	1.2	No	No	Transport, Storage, and Communications
30.	1Malaysia Development	5.0	1.2	Yes	No	Finance
Total Top 30 LCY Corporate Issuers		**416.2**	**100.7**			
Total LCY Corporate Bonds		**709.0**	**171.6**			
Top 30 as % of Total LCY Corporate Bonds		**58.7%**	**58.7%**			

LCY = local currency, MYR = Malaysian ringgit, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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 data.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (MYR billion)
Urusharta Jamaah		
7-year Islamic MTN	0.00	13.2
10-year Islamic MTN	0.00	14.3
Danainfra Nasional		
7-year Islamic MTN	4.03	0.7
10-year Islamic MTN	4.08	0.4
15-year Islamic MTN	4.30	0.8
18-year Islamic MTN	4.53	0.6
24-year Islamic MTN	4.72	0.5
29-year Islamic MTN	4.82	0.8
Maybank		
10-year *Sukuk*	4.50	1.0

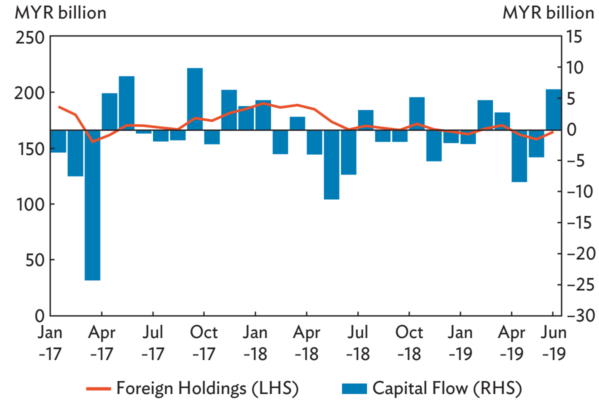
MTN = medium-term note, MYR = Malaysian ringgit.
Source: Bank Negara Malaysia Bond Info Hub.

MYR13.2 billion worth of 7-year and MYR14.3 billion worth of 10-year Islamic medium-term notes. Proceeds from the *sukuk murabahah* (Islamic bonds where bondholders are entitled to shares in the revenues generated by the *sukuk* assets) will be used to finance the transfer of assets from the Malaysian hajj pilgrim fund board, Lembaga Tabung Haji, to Urusharta Jamaah after the former transferred underperforming assets to the latter. The asset transfer helped Lembaga Tabung Haji restore its balance sheet. Danainfra Nasional, the government-owned institution in charge of funding public infrastructure projects, issued six tranches of *sukuk* in April. Its tenors ranged from 7 years to 29 years with coupon rates between 4.03% and 4.82%. Maybank issued a MYR1.0 billion 10-year *sukuk* with a 4.50% coupon rate, the proceeds of which are intended to be part of Maybank's consolidated capital level.

Investor Profile

Foreign holdings of LCY government bonds in Q2 2019 dropped to MYR487.7 billion from MYR503.7 billion in Q1 2019 due to capital outflows in April and May spurred by FTSE Russell's announcement that it was reevaluating Malaysian bonds and may potentially exclude them from the World Global Bonds Index (**Figure 2**). Malaysia experienced heavy outflows amid easing economic growth in Q1 2019, weaker global oil prices, and heighted uncertainties in the trade war between the People's Republic of China and the US. Capital inflows recorded in June were not enough to offset the outflows. A total of MYR5.9 billion in capital outflows was

Figure 2: Foreign Holdings and Capital Flows of Local Currency Central 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.

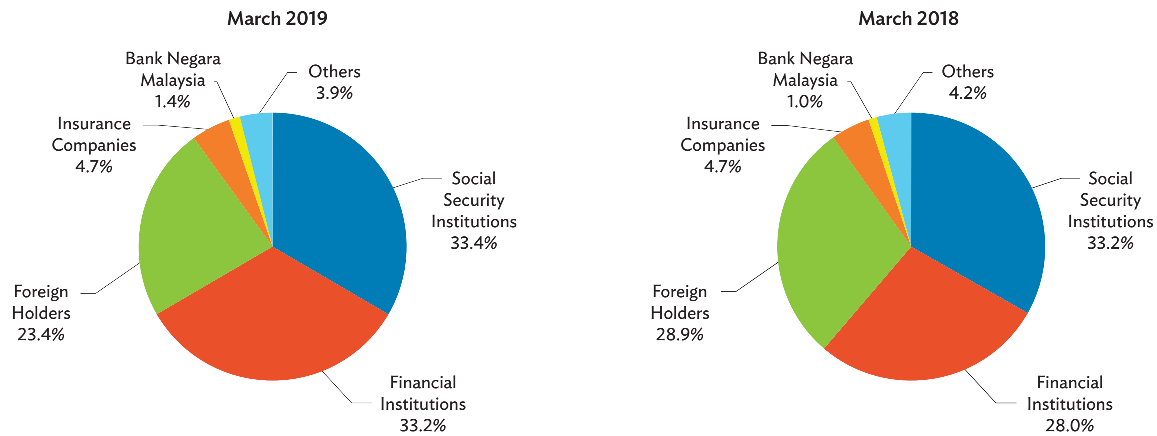
recorded during the review period, a reversal from the capital inflows of MYR5.7 billion posted in the previous quarter. As a share of LCY government bonds, foreign holdings of LCY government bonds declined to 22.3% at the end of Q2 2019 from 23.8% at the end of Q1 2019.

Social security institutions dominated all investors in LCY government bonds with a 33.4% share of the total at the end of Q1 2019, up from 33.2% at the end of Q1 2018 (**Figure 3**). Financial institutions followed with a share of 33.2% at the end of Q1 2019, up from 28.0% at the end of Q1 2018, overtaking foreign holders, whose share fell to 23.4% from 28.9% during the review period. Insurance companies retained their share at 4.7%, while BNM's holdings of LCY government bonds increased to 1.4% of the total at the end of Q1 2019 from 1.0% a year earlier.

Ratings Update

On 18 July, Fitch Ratings affirmed Malaysia's long-term foreign currency issuer default rating at A– with a stable outlook. The affirmation was attributed to the economy's promising medium-term growth despite high public debt and weak governance indicators. The latter is expected to improve as the government continues to promote transparency and address corruption. Despite the anticipated moderation of economic growth due to external factors such as global trade tensions, Malaysia's diversified export base is expected to support the

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.

economy amid sluggish demand in some sectors. Public consumption and investment are both expected to pick up in the next few years as infrastructure projects are negotiated. On the other hand, expectations for private investment growth are less sanguine as investors face uncertainties in external trade and the domestic political scene. Fitch Ratings viewed BNM's monetary policy as being supportive of economic growth. A future ratings upgrade may be possible if there is sustained government debt reduction and the government commits to greater transparency . Malaysia's long-term local currency issuer default rating was likewise affirmed at A– with a stable outlook.

Policy, Institutional, and Regulatory Developments

Four Regional Central Banks Sign Letters of Intent on Local Currency Settlement

On 5 April, three bilateral letters of intent were signed by BNM, the Bangko Sentral ng Pilipinas, Bank Indonesia, and the Bank of Thailand. The Philippine central bank was party to all three letters with the three other central banks. The letters expressed intentions to establish LCY settlement frameworks between the four economies involved. Having such frameworks is beneficial as LCY settlement of trade and other financial obligations reduces transaction costs and foreign exchange risks. Furthermore, LCY settlement within the Association of Southeast Asian Nations region will promote economic and financial integration, and help develop member economies' foreign exchange and financial markets. Bank Indonesia and the Bank of Thailand already have an existing LCY settlement framework and agreed to expand its coverage.

Bank Negara Malaysia and Securities Commission Malaysia Discuss Financial Market Developments

On 23 April, BNM and Securities Commission Malaysia held a meeting to discuss sustainability, digital assets, and resilience in the financial market. BNM's value-based intermediation strategy and Securities Commission Malaysia's sustainable and responsible investment framework are already aligned, and the two institutions pledged to perform joint research to develop guidelines on fundraising and lending practices of sustainable economic activities. Another research opportunity relates to the mechanisms of feedback interaction of transferring environment-related risks to the financial system. BNM and Securities Commission Malaysia discussed how to develop innovations in digital assets, hold early-stage fundraising for companies, and trade such assets. The following considerations were incorporated into the discussion: oversight, monitoring of risks, and financial integrity. Finally, the two regulators looked into maintaining a resilient Malaysian financial market. Currently, Malaysia's economy is supported by domestic liquidity, sound market infrastructure, and strong macroeconomic fundamentals. The bond market is also thriving, supported by a strong secondary market with high average daily trading volume. BNM and Securities Commission Malaysia are committed to continued transparency with key market players in order to develop and maintain the stability of the financial market.

Bank Negara Malaysia Announces Development Initiatives for the Financial Market

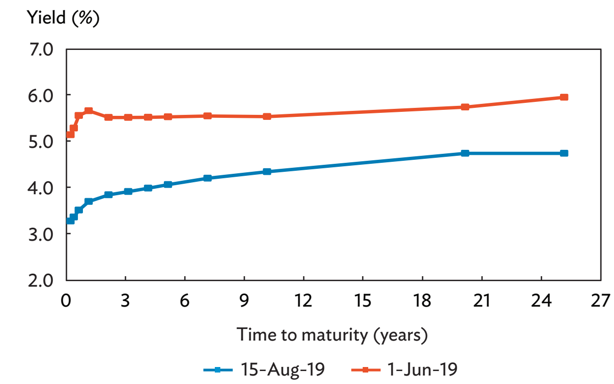
On 16 May, BNM announced initiatives to improve efficiency, accessibility, and liquidity in the domestic financial market. Available off-the-run bonds that may be borrowed through reverse repurchase for market making will be increased. The proposed extension of reverse repurchase tenors beyond 1 year is still up for review. The delivery mechanism for settlement of Malaysia Government Securities futures will be enhanced. Trust banks and global custodians are now allowed to apply under the dynamic hedging program in order to perform dynamic hedging on behalf of their clients. Institutional investors may now buy or sell forward contracts to purchase Malaysian ringgit above the current threshold of 25% of the underlying security, upon approval of BNM. A standard documentation guide for foreign exchange transactions has been developed. Finally, the central bank will continue facilitating the market-making capabilities of appointed overseas offices to ensure global market participants have ample access to ringgit prices.

Philippines

Yield Movements

Between 1 June and 15 August, local currency (LCY) government bond yields in the Philippines fell for all tenors (**Figure 1**). The decline in yields was most pronounced for tenors of 1 year and less at an average of 195 basis points (bps). Yields for bonds with tenors of 2 years up to 25 years, excluding the 20-year which fell 100 bps, fell an average of 143 bps. The spread between the 2-year and 10-year yields widened to 50 bps from 2 bps as the Philippine yield curve normalized following a slight inversion earlier in the year when yields in the middle to longer-end of the curve saw sharper declines than those at the shorter-end, which saw minimal movement.

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



Source: Based on data from Bloomberg LP.

Yields fell in the Philippines during the review period due to monetary easing by the Bangko Sentral ng Pilipinas (BSP) in August and the United States (US) Federal Reserve in July, as well as the dovish stances of central banks in other major economies. Yields have been on a downward trend since June due to expectations of a policy rate cut by the BSP amid easing inflation. In addition, the remaining 100 bps in the 200-bps cut in reserve requirement ratios, announced by the BSP on 16 May, which took effect via two 50-bps cuts (28 June and 26 July) also contributed to additional liquidity in the market, further boosting demand for government securities.

Easing inflation, lower-than-expected second quarter (Q2) gross domestic product growth results, and statements by the central bank governor bolstered expectations of further rate cuts by the BSP during the remainder of the year. A slowdown in US economic growth and continued trade tensions with the People's Republic of China have led to expectations of a more neutral stance or the possibility of another rate cut by the Federal Reserve. These developments have also driven the downward trend in Philippine yields.

On 8 August, the BSP cut the interest rate on its overnight reverse repurchase facility by 25 bps to 4.25%. The interest rates for the overnight deposit and lending facilities were also reduced by 25 bps each to 3.75% and 4.75%, respectively. The BSP stated that the decision to cut rates was due to easing inflation, with baseline forecasts expected to remain in the central bank's target range of 2.0%–4.0% until 2021. Risks to the inflation outlook remain balanced for the next 2 years and are expected to be on the downside in 2021 due to weak global economic growth prospects. The outlook for domestic economic growth remains firm as household spending is expected to recover along with the government's accelerated implementation of its infrastructure spending program. The BSP also stated that these developments give them room for further rate cuts as a preemptive move to address risks related to weakening global growth.

Inflation eased toward the end of Q2 2019, rising slightly from 3.0% y-o-y in April to 3.2% y-o-y in May before slowing to 2.7% y-o-y in June. Inflation eased further in July to 2.4% y-o-y, primarily driven by the deceleration in price increases for food and nonalcoholic beverages. Year-to-date average inflation was 3.3% y-o-y at the end of July, which was within the government's target range for full-year 2019.

The Philippines' real gross domestic product growth slightly eased to 5.5% y-o-y in Q2 2019 from 5.6% y-o-y in the first quarter (Q1) of 2019. Slower economic growth continued due to the delayed passage of the 2019 budget and the government's infrastructure spending program. By type of expenditure, all categories posted slower annual growth rates in Q2 2019 except for investment, which declined 8.5% y-o-y during the quarter to reverse the 8.0% y-o-y growth posted in the previous quarter. Growth in private consumption, government consumption, and exports also eased in Q2 2019.

The Philippine peso strengthened in both June and July, hovering at the lower half of the PHP51 per US dollar level. This was due to a weaker US dollar and easing inflation supporting expectations of a policy rate cut by the BSP. However, the Philippine peso depreciated sharply in the first half of August to the PHP52 per US dollar level as a result of renewed investor risk aversion toward emerging markets. This negative sentiment resulted from the rate cut by the Federal Reserve, the resumption of the trade dispute between the People's Republic of China and the US, the devaluation of the Chinese renminbi, the results of Argentina's elections, and fears of a global economic recession following the inversion of the yield curve in the US.

Size and Composition

The size of the Philippine bond market rose 1.8% quarter-on-quarter (q-o-q) to PHP6,707 billion (USD131 billion) at the end of June from PHP6,588 billion at the end of March (**Table 1**). The growth was driven by both the government and corporate segments, which posted increases of 1.7% q-o-q and 2.3% q-o-q, respectively.

Government bonds. The amount of LCY government bonds outstanding inched up 1.7% q-o-q in Q2 2019 to PHP5,290 billion, which was slower than the 8.8% q-o-q growth posted in Q1 2019. The slower growth was primarily driven by the high base in Q1 2019 due to the large issuance of Retail Treasury Bonds, which also resulted in minimal growth in Treasury bonds of only 1.2% q-o-q to PHP4,616 billion at the end of June. Meanwhile, the stock of Treasury bills rose 7.4% q-o-q to PHP652 billion, and bonds issued by government-related entities declined more than a third to PHP22 billion due to maturing bonds and no new issuances during the quarter.

Issuance of government bonds in Q2 2019 fell by more than half to PHP312 billion from PHP675 billion in the previous quarter. This was mainly due to the large issuance volume of Retail Treasury Bonds of PHP236 billion in Q1 2019. The government also had a lower planned issuance volume in Q2 2019 compared with the previous quarter. In addition, one offer of PHP20 billion worth of Treasury bonds was rejected in April due to the high rates sought by market participants and given that the Bureau of Treasury (BTr) already had a huge cash buffer from the high volume raised in Q1 2019.

Corporate bonds. The corporate bond market posted growth of 2.3% q-o-q in Q2 2019 to reach a size of PHP1,417 billion at the end of June on a surge in issuance during the quarter. Banks with aggregate bonds outstanding of PHP492 billion accounted for the largest share in the Philippine corporate bond market at 34.7%

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	PHP	USD	PHP	USD	PHP	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**5,741**	**108**	**6,588**	**125**	**6,707**	**131**	**2.6**	**11.1**	**1.8**	**16.8**
Government	4,592	86	5,203	99	5,290	103	2.5	9.0	1.7	15.2
Treasury Bills	381	7	608	12	652	13	14.6	19.9	7.4	71.2
Treasury Bonds	4,170	78	4,562	87	4,616	90	1.6	8.5	1.2	10.7
Others	40	1	34	1	22	0.4	(0.01)	(20.5)	(35.5)	(45.9)
Corporate	1,149	22	1,385	26	1,417	28	3.2	20.0	2.3	23.3

( ) = negative, 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 local currency–USD rates are used.
3. Growth rates are calculated from local currency 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 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.

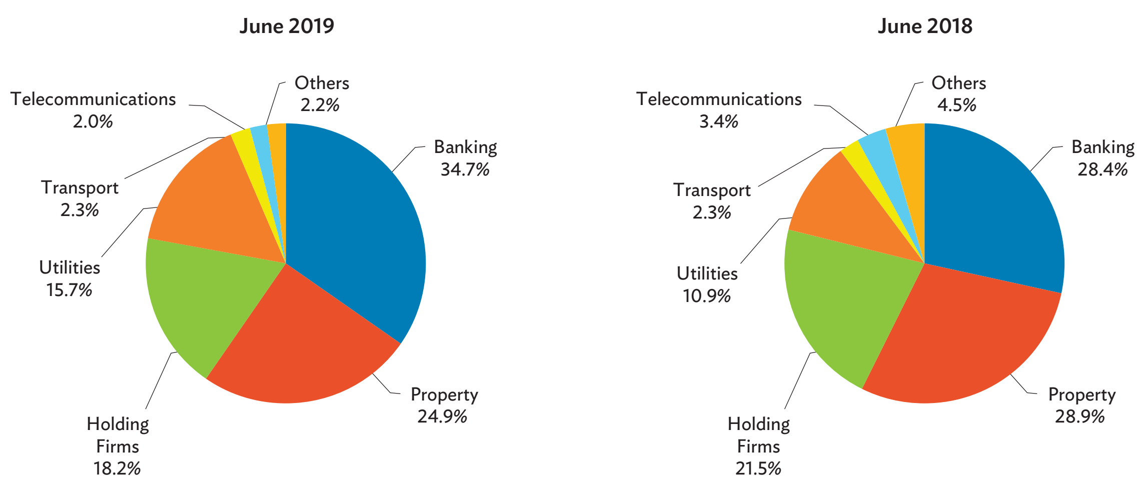
at the end of June, a 6-percentage-point increase from its share in the same period in 2018 (**Figure 2**). Meanwhile, the share of property firms (PHP353 billion) declined to 24.9% at the end of June from 28.9% a year earlier. The share of holding firms (PHP259 billion) also declined to 18.2% from 21.5% during the review period, while that of utility companies (PHP222 billion) rose to 15.7% from 10.9%.

Only 57 companies are actively tapping the bond market in the Philippines. The top 30 issuers accounted for 88.8% of total LCY corporate bonds outstanding at the end of June (**Table 2**). Out of the top 30 bond issuers, only four companies were privately held corporations and the rest were publicly listed with the Philippine Stock Exchange. Banks comprised a third of the list, followed by property firms and holding companies. Ayala Land and SM Prime Holdings remained the largest corporate issuers in the Philippines with approximately PHP104 billion of outstanding bonds each at the end of June. Metrobank was the next largest borrower with roughly the same outstanding amount as as the top two issuers at PHP103 billion.

Issuance of corporate bonds more than doubled in Q2 2019 compared with the previous quarter, with total issuance amounting to PHP126 billion as companies took advantage of declining interest rates. **Table 3** lists the corporate bond issuances in Q2 2019. SMC Global Power was the largest bond issuer for the quarter, issuing PHP30 billion worth of 3-year, 5-year, and 7-year bonds. Universal banks—Security Bank, Metrobank, and Philippine National Bank—also issued medium-term bonds at volumes of PHP18 billion, PHP17.5 billion, and PHP14 billion, respectively.

Foreign currency bonds. In an effort to diversify funding sources, the Government of the Philippines successfully raised funds via two offshore issuances in Q2 2019. In May, the government raised EUR750 million (USD842 million) worth of 8-year bonds priced at 0.875%, or a 70-bps spread over benchmark, the first EUR-denominated issuance in 13 years. The BTr stated that the bonds had high demand and were oversubscribed, which led the government to raise the initial offer volume from EUR500 million. In the same month, the government issued its second panda bonds, or CNY-denominated bonds; the first was in March 2018. The government raised CNY2.5 billion via the issuance of a 3-year bond with a coupon rate of 3.58% that was priced at a spread of 32 bps over benchmark. In August, the government returned to the offshore market to issue JPY92 billion (USD855 million) worth of samurai bonds. The offer included a JPY30.4 billion 3-year bond, JPY21 billion 5-year bond, JPY18 billion 7-year bond, and JPY23 billion 10-year bond. The bonds were priced at 0.18%, 0.28%, 0.43%, and 0.59%, respectively.

Figure 2: Local Currency Corporate Bonds Outstanding by Sector



Source: Based on data from Bloomberg LP.

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	103.9	2.0	No	Yes	Property
2.	SM Prime Holdings	103.7	2.0	No	Yes	Property
3.	Metropolitan Bank	103.3	2.0	No	Yes	Banking
4.	BDO Unibank	89.8	1.8	No	Yes	Banking
5.	SMC Global Power	80.0	1.6	No	No	Electricity, Energy, and Power
6.	San Miguel	60.0	1.2	No	Yes	Holding Firms
7.	Philippine National Bank	54.6	1.1	No	Yes	Banking
8.	Security Bank	47.4	0.9	No	Yes	Banking
9.	SM Investments	47.3	0.9	No	Yes	Holding Firms
10.	Petron	42.9	0.8	No	Yes	Electricity, Energy, and Power
11.	Rizal Commercial Banking Corporation	41.2	0.8	No	Yes	Banking
12.	Ayala Corporation	40.0	0.8	No	Yes	Holding Firms
13.	Vista Land	38.0	0.7	No	Yes	Property
14.	Bank of the Philippine Islands	37.2	0.7	No	Yes	Banking
15.	Aboitiz Equity Ventures	37.0	0.7	No	Yes	Holding Firms
16.	Maynilad	33.3	0.6	No	No	Water
17.	Union Bank of the Philippines	30.8	0.6	No	Yes	Banking
18.	JG Summit	30.0	0.6	No	Yes	Holding Firms
19.	East West Banking	28.8	0.6	No	Yes	Banking
20.	China Bank	26.2	0.5	No	Yes	Banking
21.	Aboitiz Power	23.2	0.5	No	Yes	Electricity, Energy, and Power
22.	Manila Electric Company	23.0	0.4	No	Yes	Electricity, Energy, and Power
23.	GT Capital	22.0	0.4	No	Yes	Holding Firms
24.	Filinvest Land	22.0	0.4	No	Yes	Property
25.	San Miguel Brewery	22.0	0.4	No	No	Brewery
26.	Doubledragon	15.0	0.3	No	Yes	Property
27.	PLDT	15.0	0.3	No	Yes	Telecommunications
28.	Philippine Savings Bank	14.5	0.3	No	Yes	Banking
29.	NLEX Corporation	13.9	0.3	No	No	Transport
30.	Robinsons Land	12.0	0.2	No	Yes	Property
Total Top 30 LCY Corporate Issuers		**1,258.0**	**24.5**			
Total LCY Corporate Bonds		**1,416.9**	**27.6**			
Top 30 as % of Total LCY Corporate Bonds		**88.8%**	**88.8%**			

LCY = local currency, PHP = Philippine peso, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (PHP billion)
SMC Global Power		
3-year bond	6.84	13.84
5-year bond	7.18	9.23
7-year bond	7.60	6.92
Security Bank		
2-year bond	5.88	18.00
Metrobank		
3-year bond	6.30	17.50
Philippine National Bank		
2-year bond	6.30	13.87
SM Prime Holdings		
3-year bond	6.22	10.00
Rizal Commercial Banking		
2-year bond	6.15	8.00
BDO Unibank		
6-year bond	5.38	7.32
Ayala Land		
7-year bond	6.37	7.01
Unionbank Philippines		
3-year bond	6.00	5.80
Aboitiz Equity Ventures		
5-year bond	6.02	3.35
10-year bond	6.32	1.65
Century Properties		
3-year bond	7.82	3.00

PHP = Philippine peso.
Source: Bloomberg LP.

Investor Profile

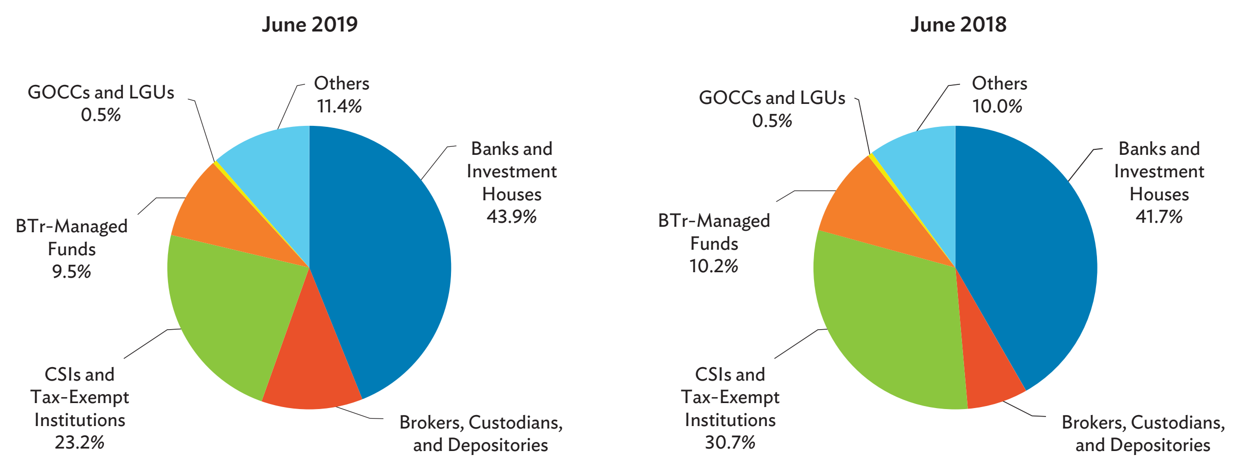
Banks and investment houses continued to be the largest holder of Philippine LCY government bonds, with a share inching up to 43.9% at the end of June from 41.7% at the end of June 2018 (**Figure 3**). On the other hand, the share of contractual savings institutions—including the Social Security System, Government Service Insurance System, Pag-IBIG, and life insurance companies—and tax-exempt institutions, such as trusts and other tax-exempt entities, declined to 23.2% from 30.7% during the same period. The share of custodians rose to 11.5% from 6.9% during the review period, while that of BTr-managed funds slightly fell to 9.5% from 10.2%.

Policy, Institutional, and Regulatory Developments

Bangko Sentral ng Pilipinas Issues Risk Management Guidelines for Investments

In August, the BSP issued risk management guidelines for investments made by banks and quasi-banks, given their exposures on bonds issued by emerging economies, complex structured products, and other tradable assets. The BSP guidelines highlight the need for due diligence prior to investing as well as on an ongoing basis.

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.

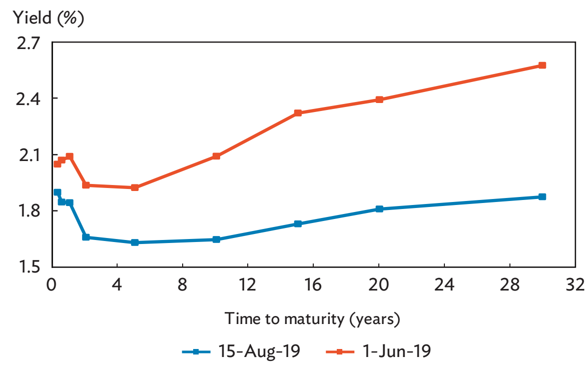
They consider lessons from the global financial crisis and the guidelines included in the Basel Core Principles for Effective Banking Supervision. In particular, banks and quasi-banks with significant holdings of foreign-currency-denominated securities are required to determine whether these firms have sufficient capital to cover risks that may arise from currency conversion restrictions imposed by relevant foreign governments.

Singapore

Yield Movements

Between 1 June and 15 August, Singapore's local currency (LCY) government bond yields declined for all tenors (**Figure 1**). The lower end of the yield curve (3 months–1 year) declined an average of 21 basis points (bps). However, short-term yields remain elevated due to the impacts of tightened liquidity since the start of 2019 as evidenced by the decreasing spread between the London Interbank Offered Rate and Singapore Interbank Offered Rate. On the other hand, long-term tenors (10–30 years) recorded a larger decline, decreasing an average of 58 bps. The yield spread between 2-year and 10-year government bonds contracted from 15 bps on 1 June to –1 bps on 15 August, adding to concerns that Singapore may be entering a recession.

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



Source: Based on data from Bloomberg LP.

The yield curve for Singapore LCY government bonds shifted downward during the review period, following the movement of government bond yields in the United States (US) as demand for safe-haven assets increased. The drop in US yields was due to the Federal Open Market Committee's decision to cut the federal funds rate during its meeting on 31 July. On the other hand, Singapore's investors' flight to safety was triggered by the escalating trade war between the People's Republic of China (PRC) and the US, a weak global economic growth outlook, and the slowing domestic economy threatening the prospects of trade-dependent Singapore.

Together with the global economy, Singapore's export and growth outlook has suffered due to the ongoing trade war between the PRC and the US. Singapore's non-oil domestic exports have contracted since March 2019, reaching their biggest annual decline of 17.4% year-on-year (y-o-y) in June. Electronics exports have been declining since December 2018. As both the international and domestic growth outlook are bleak, and with Singapore's economy growing just 0.1% y-o-y in the second quarter (Q2) of 2019 after posting 1.1% y-o-y growth in the first quarter (Q1) of 2019, the Ministry of Trade and Industry downgraded its full-year 2019 GDP forecast in August to between zero and 1.0% from 1.5%–2.5% as reported in May.

The Singapore dollar has also reflected the detrimental effects of the escalation of the PRC–US trade war. The Singapore dollar strengthened to an exchange rate of SGD1.353 per US dollar toward the end of June. However, near the end of the review period, on 14 August, the Singapore dollar had depreciated to SGD1.390 per US dollar.

Singapore's core inflation has been slowing since the start of 2019, reaching a low of 0.8% y-o-y in July. The Monetary Authority of Singapore (MAS) does not expect an acceleration of inflationary pressures given the slowdown in both the domestic and global economy, and the restraining effects of monetary policy tightening in 2018. The MAS expects inflation to fall in the lower half of the 1.0%–2.0% range for full-year 2019.

Due to forecasts of a weak trade performance, poor economic growth in the first half of 2019, and slowing inflation, market expects the MAS to ease policy in October in order to stimulate the economy. This would cause the exchange rate to depreciate further, making Singapore's goods more attractive to outside buyers.

Size and Composition

Singapore's LCY bond market expanded 2.3% quarter-on-quarter (q-o-q) in Q2 2019 to SGD429.2 billion (USD317.2 billion) from SGD419.7 billion in Q1 2019 (**Table 1**). The growth corresponds to a 9.9% y-o-y jump from SGD390.4 billion in Q2 2018. The rise in the LCY bond market was supported by the growth of both LCY

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	SGD	USD	SGD	USD	SGD	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**390**	**287**	**420**	**310**	**429**	**317**	**1.8**	**11.8**	**2.3**	**9.9**
Government	237	174	256	188	262	194	3.0	14.7	2.7	10.7
SGS Bills and Bonds	123	90	130	96	129	96	1.7	9.6	(0.2)	5.1
MAS Bills	114	84	126	93	133	98	4.5	20.8	5.6	16.7
Corporate	153	113	164	121	167	123	(0.1)	7.6	1.7	8.8

( ) = negative, 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 local currency–USD rates are used.
4. Growth rates are calculated from local currency base and do not include currency effects.
Sources: Bloomberg LP, Monetary Authority of Singapore, and Singapore Government Securities.

government and corporate bonds, which accounted for 61.1% and 38.9%, respectively, of total LCY bonds outstanding at the end of Q2 2019.

Issuance of LCY bonds in Q2 2019 increased 4.0% q-o-q to SGD157.5 billion from SGD151.4 billion in Q1 2019, driven by the expansion of both LCY government and corporate bond issuance.

Government bonds. LCY government bond market grew 2.7% q-o-q to SGD262.3 billion in Q2 2019 from SGD255.5 billion in the previous quarter. The growth was mainly due to the 5.6% q-o-q increase in outstanding MAS bills, which comprised about 51% of total outstanding LCY government bonds. This was partially offset by the 0.2% q-o-q decline in outstanding Singapore Government Securities (SGS) bills and bonds, with about a 49% share of total LCY government bonds outstanding. The decline was due to the redemptions of SGS bonds during the quarter.

LCY government bonds issued in Q2 2019 grew 4.0% q-o-q as issuances of MAS bills and SGS bills and bonds increased. More SGS bonds were issued during the quarter to replace the 10-year SGS bond that matured in June.

On 24 May, MAS announced that, starting in July 2019, it would gradually replace 24-week MAS bills with 6-month SGS bills as the SGS market continues to develop. The switch was also meant to meet the demand for short-term SGD-denominated securities as SGS bills are more accessible to a wider range of investors.

Corporate bonds. LCY corporate bonds outstanding increased 1.7% q-o-q to SGD166.9 billion in Q2 2019 from SGD164.2 billion in Q1 2019, helped by the increase in outstanding corporate bonds in the industrial sector.

The top 30 LCY corporate bond issuers in Singapore accounted for a combined SGD77.6 billion, or 46.5% of total LCY corporate bonds outstanding at the end of Q2 2019 (**Table 2**). Government institutions such as the Housing & Development Board and the Land Transport Authority dominated all issuers with outstanding LCY corporate bonds amounting to SGD22.4 billion (13.4% of total LCY corporate bonds outstanding) and SGD10.4 billion (6.2% of total LCY corporate bonds outstanding), respectively. In terms of industry, real estate companies had the largest share (43.3%) of the top 30 issuers of LCY corporate bonds during the review period with SGD33.6 billion. This was followed by the transportation industry with SGD15.6 billion and a share of 20.1% of total LCY corporate bonds outstanding at the end of Q2 2019.

Issuance of LCY corporate bonds jumped 4.0% q-o-q in Q2 2019 due to a surge in issuances in May and June. Most companies opted to offer large issuances compared to the previous quarter, taking advantage of the low-interest-rate environment.

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	22.4	16.6	Yes	No	Real Estate
2.	Land Transport Authority	10.4	7.7	Yes	No	Transportation
3.	Singapore Airlines	4.4	3.2	Yes	Yes	Transportation
4.	Frasers Property	3.8	2.8	No	Yes	Real Estate
5.	Temasek Financial	3.6	2.7	Yes	No	Finance
6.	DBS Group Holdings	2.5	1.9	No	Yes	Banking
7.	United Overseas Bank	2.5	1.8	No	Yes	Banking
8.	Mapletree Treasury Services	2.4	1.8	No	No	Finance
9.	Keppel Corporation	2.2	1.6	No	Yes	Diversified
10.	Capitaland	1.8	1.3	Yes	Yes	Real Estate
11.	Capitaland Treasury	1.6	1.2	No	No	Finance
12.	Oversea-Chinese Banking Corporation	1.5	1.1	No	Yes	Banking
13.	City Developments Limited	1.5	1.1	No	Yes	Real Estate
14.	CMT MTN	1.4	1.0	No	No	Finance
15.	SP Powerassets	1.3	1.0	No	No	Utilities
16.	Public Utilities Board	1.3	1.0	Yes	No	Utilities
17.	Olam International	1.2	0.9	No	Yes	Consumer Goods
18.	GLL IHT	1.2	0.9	No	No	Real Estate
19.	Singtel Group Treasury	1.2	0.8	No	No	Finance
20.	Shangri-La Hotel	1.1	0.8	No	Yes	Real Estate
21.	Suntec REIT	0.9	0.7	No	Yes	Real Estate
22.	Hyflux	0.9	0.7	No	Yes	Utilities
23.	Ascendas	0.9	0.7	No	Yes	Finance
24.	Mapletree Commercial Trust	0.9	0.6	No	Yes	Real Estate
25.	Sembcorp Financial Services	0.9	0.6	No	No	Engineering
26.	DBS Bank	0.8	0.6	No	Yes	Banking
27.	Sembcorp Industries	0.8	0.6	No	Yes	Shipbuilding
28.	Singapore Technologies Telemedia	0.8	0.6	Yes	No	Utilities
29.	SMRT Capital	0.8	0.6	No	No	Transportation
30.	National University of Singapore	0.8	0.6	No	No	Education
Total Top 30 LCY Corporate Issuers		**77.6**	**57.3**			
Total LCY Corporate Bonds		**166.9**	**123.4**			
Top 30 as % of Total LCY Corporate Bonds		**46.5%**	**46.5%**			

LCY = local currency, SGD = Singapore dollar, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (SGD million)
Land Transport Authority		
35-year bond	3.300	1,400
Housing & Development Board		
5-year bond	2.164	700
Frasers Property		
Perpetual bond	4.980	400
Keppel Infrastructure		
Perpetual bond	4.750	300
Singapore Press Holdings		
Perpetual bond	4.500	150
Wing Tai Holdings		
Perpetual bond	4.480	150
Oversea-Chinese Banking Corporation		
5-year bond	5.000	2

SGD = Singapore dollar.
Source: Bloomberg LP.

The Land Transport Authority issued the single-largest LCY corporate bond in Q2 2019. The state-owned company issued a SGD1,400 million 35-year bond with a coupon rate of 3.3% under its SGD12 billion multicurrency medium-term note program. Oversea-Chinese Banking Corporation issued an LCY corporate bond with the highest coupon during the review period: a SGD2 million 5-year bond with a 5.00% coupon rate. Several companies issued perpetual bonds whose issuance amount ranged from SGD150 million to SGD400 million and with coupon rates of between 4.48% and 4.98%. Proceeds from the perpetual bonds will be used to finance general working capital and to refinance company borrowing.

Policy, Institutional, and Regulatory Developments

Monetary Authority of Singapore Replacing 24-Week Monetary Authority of Singapore Bills with 6-Month Singapore Government Securities Bills

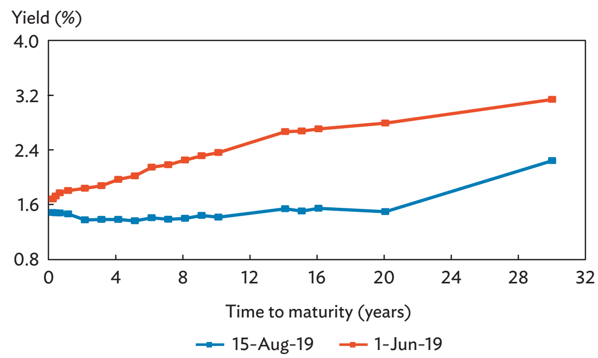
On 24 May, the MAS announced that it would gradually replace 24-week MAS bills with 6-month SGS bills starting in July. The switch was spurred by the SGS market's continued growth and development, with recent years seeing a steady increase in outstanding SGS bills and bonds. The growth was attributed to demand from financial institutions for high-quality liquid assets and from retail investors for Singapore Savings Bonds. The switch was also meant to meet the demands of an expanding investor base for short-term SGD-denominated securities as SGS bills become more accessible to a wider range of investors such as asset managers, corporations, and retail investors.

Thailand

Yield Movements

Between 1 June and 15 August, Thailand's local currency (LCY) government bond yields fell for all tenors, shifting the entire yield curve downward (**Figure 1**). The 20-year tenor exhibited the largest drop in yield at 130 basis points (bps). Yields declined an average of 27 bps for short-dated tenors with maturities of up to 1 year, 71 bps for tenors with maturities between 2 years and 10 years, and 113 bps for tenors with maturities longer than 10 years. As a result, the yield curve flattened at the belly of the curve, with the yields of short- to medium-dated bonds converging within the range of 1.36%–1.48%. The spread between 2-year and 10-year tenors narrowed significantly from 52 bps on 1 June to 4 bps on 15 August. Among the tenors with maturities longer than 10 years, the 30-year bond exhibited the smallest decline in yield at 90 bps. It was also the only tenor with a yield above 2.0% at the end of the review period.

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



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

The downward shift of the Thai LCY government bond yield curve followed the global trend of falling government bond yields, which has been driven by a surge in investor demand for safe-haven assets, particularly sovereign bonds, amid concerns over slowing global growth and escalating trade tensions between the People's Republic of China and the United States (US). In Thailand, falling yields also reflected the weakening prospects of the export-reliant economy, which continued to suffer from the prolonged trade dispute between two of its major trading partners.

A shift toward a more dovish monetary policy environment globally also created downward pressure on yields. The review period saw a series of monetary policy easing across the region following the 25-bps cut to the federal funds rate announced by the US Federal Reserve on 31 July. On 7 August, the Bank of Thailand (BOT) decided to reduce its policy rate by 25 bps to 1.50% to boost economic growth and push inflation up toward the target range.

Thailand's gross domestic product (GDP) growth slowed to 2.3% year-on-year (y-o-y) in the second quarter (Q2) of 2019 from 2.8% y-o-y in the previous quarter amid a continuing slowdown in domestic and external demand. The growth was the slowest pace recorded since the third quarter of 2014. The agriculture sector contracted 1.1% y-o-y in Q2 2019, while the nonagricultural sector expanded 2.6% y-o-y. Growth in the latter was driven primarily by the services sector, which expanded 3.5% y-o-y. In contrast, manufacturing production contracted 0.2% y-o-y, due to a decline in export-oriented sectors such as computers, rubber, and plastic products.

Between 1 June and 15 August, the Thai baht appreciated 2.2% against the US dollar, outperforming other currencies in emerging East Asia. Since the beginning of the year, the baht has appreciated against the US dollar by 5.0%. The baht's strength was partly driven by foreign capital inflows during the period. In May and June, Thailand's LCY bond market recorded inflows of foreign funds worth THB91.4 billion. To curb the baht's appreciation and counter speculative capital flows, the BOT reduced the supply of short-term bills, lowered the limit on nonresident baht accounts, and tightened reporting requirements for nonresident holdings of Thai debt securities in July.

Thailand's consumer price inflation dropped to 0.5% y-o-y in August from 1.0% y-o-y in July. Core inflation, which excludes volatile fresh food and energy prices, rose to 0.5% y-o-y in August from 0.4% y-o-y in July. Headline inflation fell below the BOT's target range of 1.0%–4.0% for a third straight month.

Size and Composition

Thailand's LCY bond market expanded in size to THB13,036.9 billion (USD424.9 billion) at the end of Q2 2019 from THB12,649.0 billion (USD398.6 billion) in the first quarter (Q1) of 2019 (**Table 1**). The growth of 3.1% quarter-on-quarter (q-o-q) in Q2 2019 surpassed the 1.6% q-o-q growth in the previous quarter, driven by faster expansion of both government and corporate bonds. The bond market in Thailand remains largely dominated by government bonds, which accounted for 71.5% of the LCY bonds outstanding in Q2 2019. On a y-o-y basis, Thailand's LCY bond market expanded 9.4% in Q2 2019, easing slightly from the 10.9% growth in Q1 2019.

Government bonds. The outstanding stock of LCY government bonds amounted to THB9,319.3 billion at the end of June, with growth accelerating to 2.3% q-o-q in Q2 2019 from 1.4% q-o-q in the previous quarter. Central bank bonds and state-owned enterprise and other bonds led the expansion, rising to THB3,771.7 billion and THB793.6 billion on growth of 5.4% q-o-q and 4.7% q-o-q, respectively. Due to maturities, government bonds and Treasury bills fell slightly in Q2 2019, contracting 0.4% q-o-q to THB4,754.1 billion at the end of June.

In the same period, government bond issuance rose 4.1% q-o-q, reaching THB2,320.1 billion at the end of June. The growth was driven by increased issuance of Treasury and state enterprise bonds, which more than offset the drop in BOT bond issuance. The growth in new government bond issues in Q2 2019 was weaker than the 16.5% q-o-q expansion in Q1 2019.

Corporate bonds. The outstanding stock of LCY corporate bonds rose to THB3,717.5 billion at the end of June from THB3,537.6 billion at the end of March, with growth accelerating to 5.1% q-o-q in Q2 2019 from 2.3% q-o-q in Q1 2019. Annual growth was also faster at 13.2% y-o-y compared to the 10.3% y-o-y expansion in the previous quarter. The growth was supported by relatively high issuance of corporate debt during the quarter. Corporate debt issuance in Q2 2019 rose 11.6% q-o-q and 41.7% y-o-y, reaching THB520.9 billion.

The top 30 issuers of LCY bonds in Thailand accounted for 54.4% of the total outstanding stock of LCY corporate bonds, with a combined amount worth THB2,023.6 billion (**Table 2**). Food and beverages, banking, and communications firms together comprised half of the top 30 issuers. A majority of the companies were listed private companies; only four of them were state-owned firms. Among the top issuers, six had outstanding LCY bond stocks exceeding THB100 billion at the end of Q2 2019: Siam Cement (THB181.5 billion), Thai Beverage (THB180.0 billion), CP All (THB164.8 billion), Bank of Ayudhya (THB130.8 billion), Berli Jucker (THB121.8 billion), and Charoen Pokphand Foods (THB109.5 billion).

In Q2 2019, the Bank of Ayudhya issued the largest amount of corporate bonds totaling THB33.8 billion,

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	THB	USD	THB	USD	THB	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	**11,918**	**361**	**12,649**	**399**	**13,037**	**425**	**4.4**	**8.6**	**3.1**	**9.4**
Government	8,634	261	9,111	287	9,319	304	5.3	8.4	2.3	7.9
Government Bonds and Treasury Bills	4,532	137	4,774	150	4,754	155	2.4	10.5	(0.4)	4.9
Central Bank Bonds	3,268	99	3,579	113	3,772	123	10.0	6.1	5.4	15.4
State-Owned Enterprise and Other Bonds	834	25	758	24	794	26	3.2	6.8	4.7	(4.8)
Corporate	3,284	99	3,538	111	3,718	121	2.4	9.1	5.1	13.2

( ) = negative, 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 local currency–USD rates are used.
3. Growth rates are calculated from local currency base and do not include currency effects.
Source: Bank of Thailand.

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.	Siam Cement	181.5	5.9	Yes	Yes	Construction Materials
2.	Thai Beverage	180.0	5.9	No	No	Food and Beverage
3.	CP All	164.8	5.4	No	Yes	Commerce
4.	Bank of Ayudhya	130.8	4.3	No	Yes	Banking
5.	Berli Jucker	121.8	4.0	No	Yes	Commerce
6.	Charoen Pokphand Foods	109.5	3.6	No	Yes	Food and Beverage
7.	PTT	84.7	2.8	Yes	Yes	Energy and Utilities
8.	Toyota Leasing Thailand	82.2	2.7	No	No	Finance and Securities
9.	True Move H Universal Communication	82.0	2.7	No	No	Communications
10.	Thai Airways International	69.1	2.3	Yes	Yes	Transportation and Logistics
11.	Minor International	66.0	2.2	No	Yes	Hospitality and Leisure
12.	Indorama Ventures	63.9	2.1	No	Yes	Petrochemical and Chemicals
13.	CPF Thailand	61.0	2.0	No	Yes	Food and Beverage
14.	True Corp	54.1	1.8	No	Yes	Communications
15.	TMB Bank	50.4	1.6	No	Yes	Banking
16.	Banpu	48.9	1.6	No	Yes	Energy and Utilities
17.	Krungthai Card	44.9	1.5	Yes	Yes	Banking
18.	Mitr Phol Sugar	42.2	1.4	No	No	Food and Beverage
19.	Land & Houses	40.5	1.3	No	Yes	Property and Construction
20.	Bangkok Expressway and Metro	38.2	1.2	No	Yes	Transportation and Logistics
21.	CH. Karnchang	38.1	1.2	No	Yes	Property and Construction
22.	TPI Polene	36.6	1.2	No	Yes	Property and Construction
23.	Advanced Wireless	32.4	1.1	No	Yes	Communications
24.	Thai Union Group	30.6	1.0	No	Yes	Food and Beverage
25.	DTAC Trinet	29.5	1.0	No	Yes	Communications
26.	BTS Group	28.5	0.9	No	Yes	Hospitality and Leisure
27.	Bangkok Commercial Asset Management	28.2	0.9	No	No	Finance and Securities
28.	Kasikorn Bank	28.0	0.9	No	Yes	Banking
29.	Sansiri	27.9	0.9	No	Yes	Property and Construction
30.	Muangthai Capital	27.4	0.9	No	Yes	Finance and Securities
Total Top 30 LCY Corporate Issuers		**2,023.6**	**66.0**			
Total LCY Corporate Bonds		**3,717.5**	**121.2**			
Top 30 as % of Total LCY Corporate Bonds		**54.4%**	**54.4%**			

LCY = local currency, THB = Thai baht, USD = United States dollar.
Notes:
1. Data as of 30 June 2019.
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.

comprising a 3-year bond with a 2.37% coupon and a 5-year bond with a 3.80% coupon (**Table 3**). The next largest issuer during the quarter was TMB Bank, which borrowed a total of THB30.0 billion from a 10-year bond carrying a 4.0% coupon. True Corp, a communications company, followed with total issuance of THB25.0 billion from five issuances of bonds with tenors ranging from 1.25 years to 5.26 years, and carrying coupons ranging from 3.3% to 5.0%. CPF Thailand was the fourth-largest issuer during the quarter, with a multitranche issuance amounting to THB17.0 billion. Another notable issuance included Siam Cement's THB15.0 billion 4-year bond carrying a 3.1% coupon.

Table 3: Notable Local Currency Corporate Bond Issuance in the Second Quarter of 2019

Corporate Issuers	Coupon Rate (%)	Issued Amount (THB billion)
Bank of Ayudhya		
3-year bond	2.37	15.0
10-year bond	3.80	18.8
TMB Bank		
10-year bond	4.00	30.0
True Corp		
1.25-year bond	3.30	1.8
2-year bond	3.70	5.2
2.98-year bond	3.80	0.3
3.25-year bond	4.00	5.8
5.26-year bond	5.00	11.8
CPF Thailand		
4-year bond	2.91	4.0
6-year bond	3.34	2.0
8-year bond	3.65	0.5
10-year bond	4.00	4.0
12-year bond	4.18	6.5
Siam Cement		
4-year bond	3.10	15.0

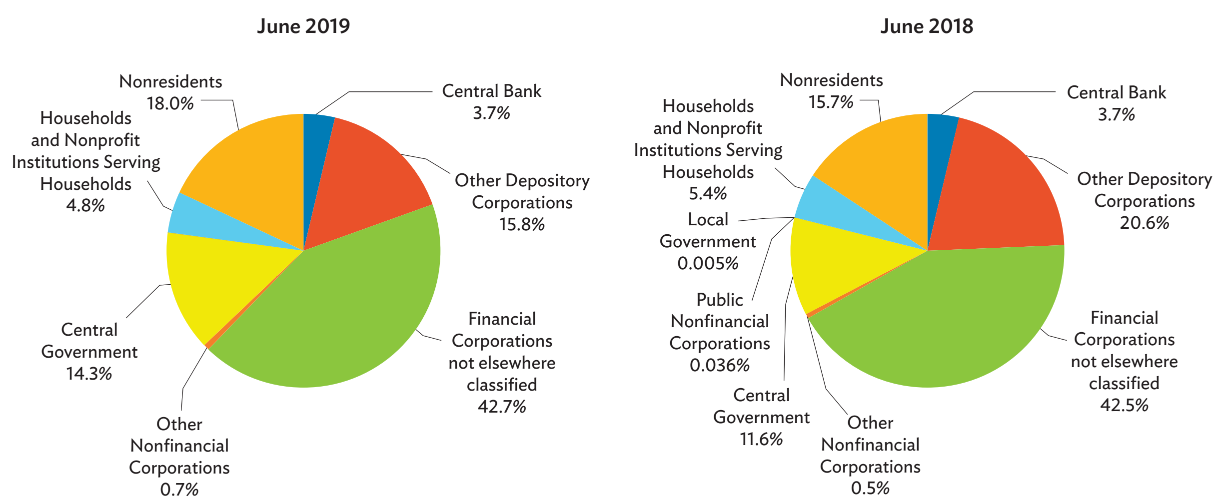
THB = Thai baht.
Source: Bloomberg LP.

Investor Profile

Central government bonds. Financial corporations and nonresidents together held more than 60% of Thailand's LCY government bonds at the end of June (**Figure 2**). Financial corporations continued to hold the single-largest share of LCY government bonds, accounting for 42.7% of the total at the end of June. Between June 2018 and June 2019, the share of nonresidents rose from 15.7% to 18.0%, while the share of other depository corporations dropped from 20.6% to 15.8%. As a result, nonresidents surpassed the holdings of other depository corporations, becoming the second-largest holding group of LCY government bonds at the end of June. During the same period, the central government's share of holdings increased from 11.6% to 14.3%. Together, these four groups accounted for 90.8% of LCY government bonds outstanding at the end of June, up from 90.4% a year earlier.

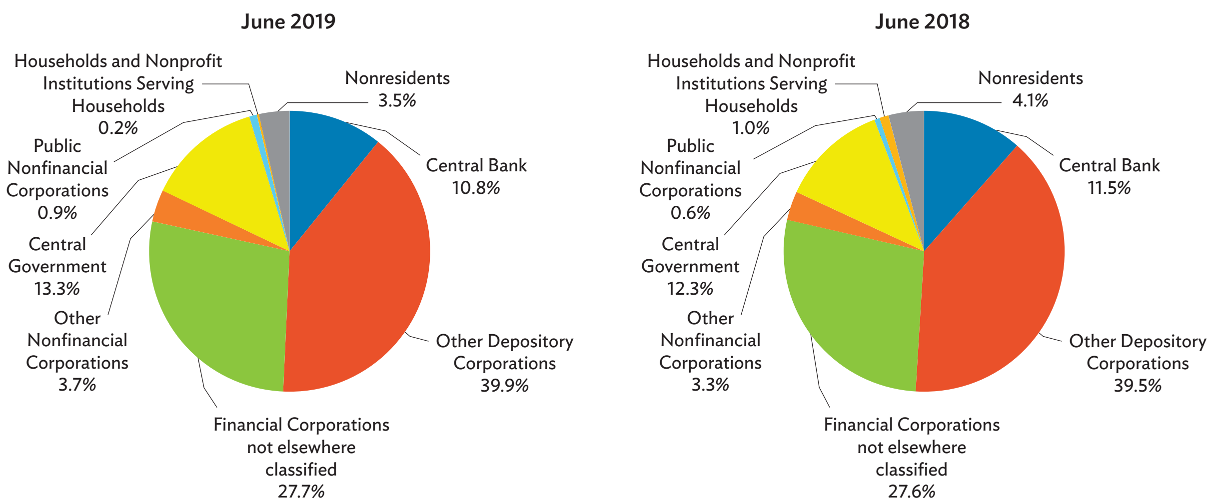
Central bank bonds. The distribution of LCY central bank securities remained stable between June 2018 and June 2019 (**Figure 3**). At the end of June 2019,

Figure 2: Local Currency Government Bonds Investor Profile



Note: Government bonds include Treasury bills and bonds.
Sources: *AsianBondsOnline* and Bank of Thailand.

Figure 3: Local Currency Central Bank Securities Investor Profile

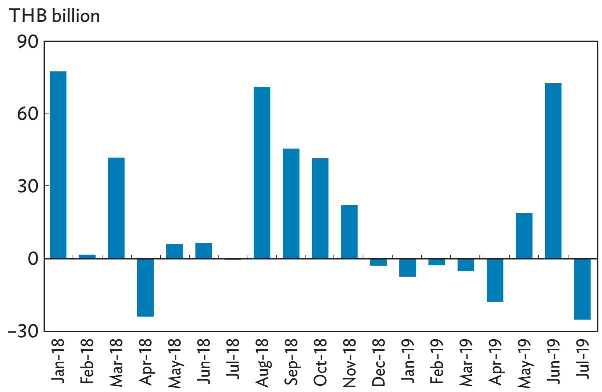


Source: Bank of Thailand.

other depository corporations held the largest share of LCY central bank bonds at 39.9%, followed by financial corporations (27.7%) and the central government (13.3%). The share of these three groups barely changed from that of a year earlier. The central bank's holdings decreased slightly to 10.8% from 11.5% a year earlier. These four investor groups cumulatively held 91.7% of the total LCY central bank bonds at the end of June 2019, up from 90.9% a year earlier.

Foreign investors in Thailand's LCY bond market recorded net outflows in 5 of the 7 months from January to July (**Figure 4**). However, the relatively high inflows in May (THB18.9 billion) and June (THB72.5 billion) more than offset the outflows, resulting in net inflows of THB33.2 billion during the 7-month period. Following the orderly conclusion of the national election in March, which eased political uncertainties, renewed market sentiment drew large inflows in May and June. The surge of inflows into short-term bonds contributed to the accelerated appreciation of the baht, prompting the BOT to implement several measures to stem short-term capital inflows and curb the baht's appreciation. In July, the BOT reduced its supply of 3-month, 6-month, and

Figure 4: Foreign Investor Net Trading of Local Currency Bonds in Thailand



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

1-year bonds by a total of THB60 billion. It also lowered the limit on the outstanding balance of nonresident baht accounts and nonresident securities accounts to THB200 million from THB300 million. In addition, the BOT tightened reporting requirements for nonresident holdings of Thai debt securities. As a result, net trading of LCY bonds recorded outflows of THB25.1 billion in July.

Policy, Institutional, and Regulatory Developments

Bank of Thailand Implements Measures to Enhance Monitoring of Short-Term Capital Flows

In July, the BOT issued new measures to stem the impact of short-term capital inflows amid a strengthening baht. The BOT lowered the limit on the outstanding balance of nonresident baht accounts and nonresident securities accounts for securities to THB200 million from THB300 million. The measures became effective on 22 July. Nonfinancial corporations with underlying trade and investment activities in Thailand that have opened accounts directly with Thai financial institutions may request a waiver from the new outstanding balance limit; requests for waivers will be considered on a case-by-case basis. In addition, the BOT tightened reporting requirements for nonresident holdings of debt securities issued in Thailand. The names of end beneficiaries are required to be reported for all nonresident holdings of Thai debt securities, effective for the July 2019 reporting period. In its press statement, the BOT emphasized that it would take additional measures if speculative inflows persisted.

Bank of Thailand Cuts Bond Supply in July

The BOT trimmed its supply of short-term bonds for July in a move viewed by market observers as an effort to slow capital inflows and curb the baht's appreciation. The weekly issuance of 3-month bonds was reduced from THB45 billion to THB35 billion, while the supply of 6-month bonds was cut from THB45 billion to THB40 billion per week. The supply of 1-year bonds was likewise be reduced to THB35 billion in July from THB40 billion in June. The total reduction in the month of July amounted to THB60 billion.

Bank of Thailand and the Bank of the Lao People's Democratic Republic Sign Memorandum of Understanding on Banking Supervision

On 22 June, the BOT and the Bank of the Lao People's Democratic Republic signed a memorandum of understanding (MOU) on banking supervision. The MOU provides guidance on how the two monetary authorities will coordinate and share information to effectively supervise banking organizations that operate in both economies in accordance with the principles set out in the Basel Core Principles for Effective Banking Supervision.

Bank of Thailand and the State Bank of Vietnam Sign MOU on Banking Supervision and Financial Innovation

On 6 August, the BOT and the State Bank of Vietnam signed an MOU covering banking supervision and financial innovation. The MOU for banking supervision superseded the previous MOU signed in 2010 and was designed to strengthen cooperation between the two monetary authorities in the areas of information exchange and crisis management. The MOU on cooperation for financial innovation aimed to promote cooperation between the two central banks in developing financial services that leverage financial technology. It also provided a framework for cooperation in facilitating digital payment systems connectivity between the two economies.

Viet Nam

Yield Movements

Local currency (LCY) government bond yields in Viet Nam trended lower between 1 June and 15 August, leading the entire yield curve to shift downward (**Figure 1**). Bond yields declined an average of 44 basis points (bps) across the curve, with the 1-year and 7-year bonds shedding the least at 37 bps each. As a result, the spread between the 2-year and 10-year tenors widened to 136 bps from 129 bps. Viet Nam and the Philippines were the only markets in emerging East Asia that saw a widening of the spread between 2-year and 10-year yields during the review period.

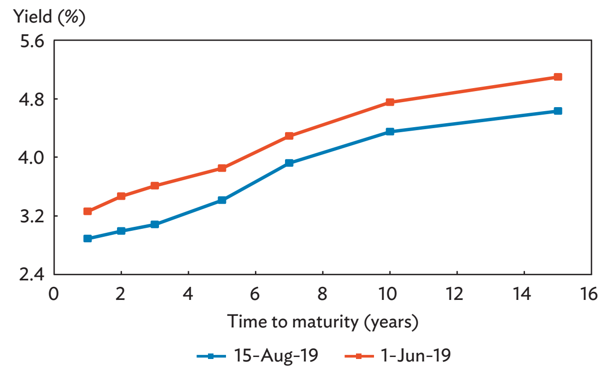
The downward trend in bond yields was largely driven by positive sentiments over Viet Nam's economy as the ongoing trade dispute between the People's Republic of China and the United States (US) turned into gains for the domestic economy. As the People's Republic of China and the US imposed tariffs on each other's goods, importers from both markets have turned to Viet Nam's manufacturing-driven economy for trade. While the US is also considering imposing tariffs on Vietnamese goods, trade pacts and concession agreements that Viet Nam has entered into with other markets can serve as a buffer against US tariffs.

Strong foreign inflows into the market also resulted in abundant liquidity, which led interbank rates to fall, leading yields to trend lower across the length of the curve. Dovish stances among the central banks of major advanced economies, on account of global growth moderation, also drove yields lower. To support economic growth, the US Federal Reserve cut the federal funds rate on 31 July. Other central banks in emerging East Asia have likewise engaged in monetary policy easing.

The State Bank of Vietnam held its refinancing rate steady at 6.25% and discount rate at 4.25%, levels that have been kept in place since July 2017. The central bank is opting to manage uncertainties in financial markets through macroprudential measures, including keeping the credit growth target at 14.0% for this year.

During the review period, the Vietnamese dong was one of two currencies in emerging East Asia that strengthened against the US dollar, gaining 0.9%. Foreign direct investment and inflows into the equity market helped sustain the value of the dong, as well as intervention by the central bank.

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



Source: Based on data from Bloomberg LP.

Viet Nam continued to post robust economic growth in the second quarter (Q2) of 2019, outperforming its emerging East Asian peers. Real gross domestic product (GDP) growth reached 6.7% year-on-year (y-o-y) in Q2 2019, slightly easing from 6.8% y-o-y in the first quarter (Q1). However, on a year-to-date basis, GDP growth moderated, falling to 6.8% y-o-y from 7.1% y-o-y in the same 6-month period a year earlier. Growth was buoyed by industry and construction, which expanded 8.9% y-o-y, albeit this was down slightly from 9.1% y-o-y in the same period in the prior year.

Size and Composition

Viet Nam continued to have the smallest LCY bond market in emerging East Asia, with outstanding bonds of VND1,233.5 trillion (USD52.9 billion) at the end of June (**Table 1**). Overall bond market growth rebounded in Q2 2019, rising 2.6% quarter-on-quarter (q-o-q) from 0.8% q-o-q in Q1 2019. In the same period, y-o-y growth also quickened to 4.2% from 0.5%.

Government bonds. At the end of June, the outstanding stock of LCY government bonds climbed to VND1,127.6 trillion, rising 3.2% q-o-q in Q2 2019, which was up from 0.9% q-o-q growth in Q1 2019.

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

	Outstanding Amount (billion)						Growth Rate (%)			
	Q2 2018		Q1 2019		Q2 2019		Q2 2018		Q2 2019	
	VND	USD	VND	USD	VND	USD	q-o-q	y-o-y	q-o-q	y-o-y
Total	1,183,532	52	1,201,959	52	1,233,519	53	(1.0)	14.7	2.6	4.2
Government	1,095,953	48	1,092,228	47	1,127,565	48	(2.1)	12.2	3.2	2.9
Treasury Bonds	857,454	37	919,151	40	932,040	40	1.7	8.7	1.4	8.7
Central Bank Bills	58,400	3	4,900	0	32,999	1	(36.0)	–	573.5	(43.5)
Government-Guaranteed and Municipal Bonds	180,099	8	168,177	7	162,526	7	(2.5)	(4.0)	(3.4)	(9.8)
Corporate	87,579	4	109,731	5	105,954	5	14.7	58.2	(3.4)	21.0

– = not applicable, ( ) = negative, 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 local currency–USD rates are used.
2. Growth rates are calculated from local currency base and do not include currency effects.
Sources: Bloomberg LP and Vietnam Bond Market Association.

The overall stock of government bonds was lifted by the surge in central bank bills in Q2 2019, while Treasury bonds posted a slower expansion and government-guaranteed and municipal bonds contracted during the review period. On an annual basis, growth in government bonds rebounded to 2.9% y-o-y following a 2.4% y-o-y contraction in the prior quarter.

Treasury bonds continued to account for a significant majority of the government bond stock, representing an 82.7% share of the government bond total. The stock of Treasury bonds totaled VND932.0 trillion at the end of June, up 1.4% q-o-q and 8.7% y-o-y.

The outstanding amount of central bank bills jumped to VND33.0 trillion, rising more than six-fold on a q-o-q basis. On a y-o-y basis, however, a contraction of 43.5% was recorded. The State Bank of Vietnam resumed issuing bills in March, following a 5-month hiatus, to siphon excess money from the banking system and safeguard the stability of the Vietnamese dong.

On the other hand, the outstanding stock of government-guaranteed and municipal bonds slightly declined to VND162.5 trillion at the end of June, slipping 3.4% q-o-q and 9.8% y-o-y.

Corporate bonds. The outstanding amount of LCY corporate bonds stood at VND106.0 trillion at the end of June, falling 3.4% q-o-q but rising 21.0% y-o-y. *AsianBondsOnline* data on corporate bonds in Viet Nam, showed that the entire corporate bond market comprised 44 institutions. Many corporates in Viet Nam issue bonds through private placements in which information is mostly undisclosed.[8]

Aggregate bonds outstanding of the 30 largest bond issuers in Viet Nam amounted to VND89.7 trillion (**Table 2**), accounting for 84.7% of the corporate bond total at the end of June. In the top spot was Vingroup with outstanding bonds amounting to VND12.6 trillion, overtaking Vinhomes, which was a close second with VND12.5 trillion, and Masan Consumer Holdings, which was third with VND11.1 trillion. Together, the top three firms accounted for 34.2% of the corporate bond stock. The top 30 list was dominated by firms from the banking and real estate sectors. Of the list, 4 are state-owned firms and 20 are listed with the Ha Noi Stock Exchange.

Policy, Institutional, and Regulatory Developments

Ha Noi Stock Exchange Launches Government Bond Futures

In July, the Ha Noi Stock Exchange launched the government bond futures contract, marking the second derivatives product available in Viet Nam. The bond futures contract will utilize a hypothetical 5-year government bond issued by the State Treasury, which has a large listing volume and commands high liquidity. Initially, the 5-year bond futures will only be traded by

[8] As most bonds in Viet Nam are issued via private placement, our data on corporate bonds may be understated.

Table 2: Top 30 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.	Vingroup	12,600	0.54	No	Yes	Real Estate
2.	Vinhomes	12,500	0.54	No	Yes	Real Estate
3.	Masan Consumer Holdings	11,100	0.48	No	No	Diversified Operations
4.	Vietnam Joint Stock Commercial Bank for Industry and Trade	8,200	0.35	Yes	Yes	Banking
5.	Asia Commercial Joint Stock Bank	6,800	0.29	No	No	Banking
6.	Vinpearl	5,800	0.25	No	No	Hotel Operator
7.	Ho Chi Minh City Infrastructure Investment	3,550	0.15	No	Yes	Infrastructure
8.	Bank for Investment and Development of Vietnam	3,050	0.13	Yes	Yes	Banking
9.	Hoang Anh Gia Lai	3,000	0.13	No	Yes	Real Estate
10.	Masan Group	3,000	0.13	No	Yes	Finance
11.	Vietnam Prosperity Joint Stock Commercial Bank	3,000	0.13	No	Yes	Banking
12.	Vietnam Technological and Commercial Joint Stock Bank	3,000	0.13	No	No	Banking
13.	Sai Dong Urban Investment and Development	2,600	0.11	No	No	Real Estate
14.	Hoan My Medical	2,330	0.10	No	No	Healthcare Services
15.	Refrigeration Electrical	2,318	0.10	No	Yes	Manufacturing
16.	Vietnam International Commercial Bank	2,203	0.09	No	Yes	Agriculture
17.	Agro Nutrition International	2,000	0.09	No	No	Agriculture
18.	Joint Stock Commercial Bank for Foreign Trade of Vietnam	2,000	0.09	Yes	Yes	Banking
19.	Vietnam Electrical Equipment	1,800	0.08	No	Yes	Manufacturing
20.	Masan Resources	1,500	0.06	No	Yes	Mining
21.	Nui Phao Mining	1,500	0.06	No	No	Mining
22	Saigon-Hanoi Securities	1,150	0.05	No	Yes	Finance
23.	SSI Securities	1,150	0.05	No	Yes	Finance
24.	Mobile World Investment	1,135	0.05	No	Yes	Manufacturing
25.	Pan Group	1,135	0.05	No	Yes	Consumer Services
26.	No Va Land Investment Group	1,000	0.04	No	Yes	Real Estate
27.	TTC Education Joint Stock Company	951	0.04	No	No	Education Services
28.	Vietnam Bank for Agriculture and Rural Development	760	0.03	Yes	No	Banking
29.	Nam Long Investment	660	0.03	No	Yes	Real Estate
30.	Khang Dien House Trading	534	0.02	No	Yes	Building and Construction
Total Top 30 LCY Corporate Issuers		**89,726**	**3.85**			
Total LCY Corporate Bonds		**105,954**	**4.55**			
Top 30 as % of Total LCY Corporate Bonds		**84.7%**	**84.7%**			

LCY = local currency, USD = United States dollar, VND = Vietnamese dong.
Notes:
1. Data as of 30 June 2019.
2. State-owned firms are defined as those in which the government has more than a 50% ownership stake.
Sources: *AsianBondsOnline* calculations based on Bloomberg LP and Vietnam Bond Market Association data.

institutional investors. The derivatives market saw rapid development after the VN-30 Index futures contract was launched in August 2017, which was aimed to limit risks in the equity market. As of June, trading volume had increased 10 times and open interest volume surged 2.7 times relative to 2017. The bond futures contract is expected to meet investors' investment needs for risk prevention and support the further deepening and development of Viet Nam's government bond market.

Merger of Ha Noi Stock Exchange and Ho Chi Minh Stock Exchange into Viet Nam Stock Exchange

During the 36th session of the National Assembly Standing Committee held on 12–16 August, the merger of the Ha Noi Stock Exchange and the Ho Chi Minh Stock Exchange was announced. The merged entity will be known as the Viet Nam Stock Exchange and will be based in Ha Noi. It will be managed by the Ministry of Finance acting as a focal point for all stock- and securities-related activities. The National Assembly Standing Committee believes that the merger of the two stock exchanges will promote uniformity in the market, increase transparency and efficiency in governance, and ensure the legal rights of investors.

Asia Bond Monitor
September 2019

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.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members —49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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