

Bond Market Developments in the Fourth Quarter of 2021

Size and Composition

Emerging East Asia's bond market reached a size of USD22.8 trillion at the end of December 2021.

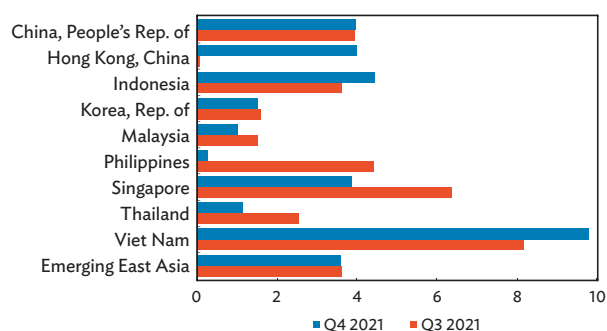
The amount of outstanding local currency (LCY) bonds in emerging East Asia continued to expand in the fourth quarter (Q4) of 2021, amounting to USD22.8 trillion at the end of December.² The overall growth of 3.6% quarter-on-quarter (q-o-q) in Q4 2021 was the same as that of the third quarter (Q3), as the pace of growth in both the government and corporate bond segments was little changed between the 2 quarters. The decline in q-o-q growth in five of region's nine markets between Q3 2021 and Q4 2021 was offset by steady bond market growth in the People's Republic of China (PRC) combined with faster growth in Hong Kong, China; Indonesia; and Viet Nam (**Figure 1a**).

All nine markets in emerging East Asia posted positive q-o-q growth rates in Q4 2021, with Viet Nam; Indonesia; and Hong Kong, China posting the fastest expansions. Meanwhile, Thailand, Malaysia, and the Philippines recorded the slowest q-o-q growth rates in Q4 2021.

On a year-on-year (y-o-y) basis, overall growth in emerging East Asia's LCY bond market picked up, rising to 12.8% in Q4 2021 from 12.3% in Q3 2021 (**Figure 1b**). Five of the region's nine markets posted higher y-o-y growth rates in Q4 2021 than in the previous quarter. The LCY bond markets in Viet Nam, Singapore, and Indonesia recorded the region's fastest y-o-y expansions, while those of the Republic of Korea; Thailand; and Hong Kong, China experienced the weakest growth in Q4 2021. Nonetheless, all nine regional markets recorded positive y-o-y growth during the quarter.

The LCY bond market in the PRC remained the region's largest, with an outstanding bond stock amounting to USD18.1 trillion at the end of December. The PRC's

Figure 1a: Growth of Local Currency Bond Markets in the Third and Fourth Quarters of 2021 (q-o-q, %)



q-o-q = quarter-on-quarter, Q3 = third quarter, Q4 = fourth quarter.

Notes:

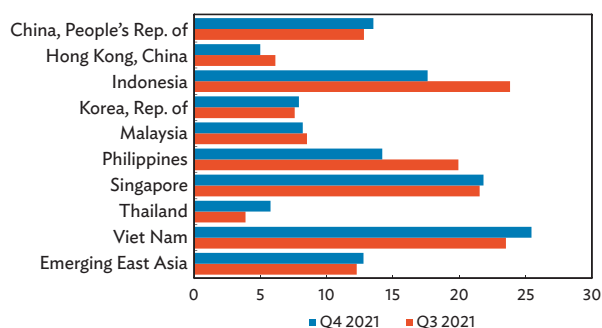
1. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.
2. Growth rates are calculated from local currency base and do not include currency effects.
3. Emerging East Asia growth figures are based on 31 December 2021 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (CEIC Data Company); 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 (KG ZeroIn Corporation 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).

share of the region's total bond market rose to 79.5% in Q4 2021 from 79.2% in the prior quarter. Overall growth was steady at 3.9% q-o-q between Q3 2021 and Q4 2021. The uptick in the growth of government bonds from 4.1% q-o-q in Q3 2021 to 4.5% q-o-q in Q4 2021 offset the slowdown in the growth of corporate bonds from 3.7% q-o-q in Q3 2021 to 2.9% q-o-q in Q4 2021. Growth in the government bond segment was supported by the strong expansion of outstanding local government bonds and Treasury and other government bonds, as the government continued debt issuance to support economic recovery. Meanwhile, rising default risk in property bonds dampened market sentiment, leading to a drop in issuance and weaker growth in the outstanding corporate bond stock in Q4 2021 compared to the prior quarter. On a y-o-y basis, growth in the PRC's LCY bond market rose to 13.6% in Q4 2021 from 12.8% in Q3 2021.

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

Figure 1b: Growth of Local Currency Bond Markets in the Third and Fourth Quarters of 2021 (y-o-y, %)



Q3 = third quarter, Q4 = fourth quarter, y-o-y = year-on-year.

Notes:

1. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.
2. Growth rates are calculated from local currency base and do not include currency effects.
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Sources: People's Republic of China (CEIC Data Company); 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 (KG Zeroin Corporation and The Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP and Vietnam Bond Market Association).

The Republic of Korea's LCY bond market reached a size of USD2.4 trillion at the end of December, thus maintaining its position as the region's second-largest LCY bond market. However, its share of the regional LCY bond stock dipped to 10.5% in Q4 2021 from 10.7% in Q3 2021. Overall growth slipped to 1.5% q-o-q in Q4 2021 from 1.6% in the previous quarter. Growth in the government bond segment dropped to 0.2% q-o-q in Q4 2021 from 1.9% q-o-q in the previous quarter. Outstanding central government bonds continued to contract, dropping 7.1% q-o-q in Q4 2021 after declining 2.1% q-o-q in Q3 2021, as the government continued to wind down debt issuance. Growth in the corporate bond segment rose to 2.4% q-o-q in Q4 2021 from 1.4% q-o-q in Q3 2021, buoyed by a rebound in issuance amid robust economic recovery. On an annual basis, the Republic of Korea's LCY bond market expanded 7.9% y-o-y in Q4 2021, up from 7.6% y-o-y in the previous quarter.

The outstanding LCY bond stock in Hong Kong, China amounted to USD323.9 billion at the end of December 2021. Overall growth jumped to 4.0% q-o-q in Q4 2021 from 0.1% q-o-q in Q3 2021, underpinned by a faster

growth in the government bond segment and a rebound in the corporate bond segment. Government bonds outstanding expanded 5.2% q-o-q in Q4 2021, up from 3.0% q-o-q in the previous quarter. To meet strong market demand amid ample liquidity in the financial system, the Hong Kong Monetary Authority increased its issuance of Exchange Fund Bills (EFBs) in Q4 2021, thus contributing to the growth of outstanding government bond stock. Corporate bonds outstanding rose 2.7% q-o-q in Q4 2021, reversing the 2.9% q-o-q contraction Q3 2021, as initial signs of economic recovery boosted investor confidence. On a y-o-y basis, the LCY bond market in Hong Kong, China expanded 5.0% in Q4 2021 versus 6.1% in Q3 2021.

The aggregate amount of LCY bonds outstanding among members of the Association of Southeast Asian Nations (ASEAN) reached USD2.0 trillion at the end of December, up from USD1.9 trillion at the end of September.³ The ASEAN member economies' share of the region's total bond stock dipped to 8.6% in Q4 2021 from 8.7% in the previous quarter. The amount of LCY bonds outstanding in the markets of ASEAN member economies expanded 2.6% q-o-q and 13.6% y-o-y in Q4 2021, down from 3.8% q-o-q and 14.5% y-o-y in Q3 2021. At the end of December, ASEAN member economies' aggregate LCY government bond stock stood at USD1.4 trillion, accounting for a 72.6% share of the ASEAN total. The corporate bond stock was USD538.4 billion and accounted for the remaining 27.4% share. Singapore, Thailand, and Malaysia were home to the three largest LCY bond markets among ASEAN members at the end of December.

Singapore's LCY bond market reached a size of USD449.5 billion at the end of December. Overall growth dropped to 3.8% q-o-q in Q4 2021 from 6.4% q-o-q in the prior quarter, as a slowdown in the expansion of the government bond segment outpaced an uptick in the growth of the corporate bond segment. Growth in outstanding government bonds dropped to 4.1% q-o-q in Q4 2021 from 8.0% q-o-q in Q3 2021, mainly due to a contraction in outstanding Singapore Government Securities. Meanwhile, outstanding corporate bonds rose 3.3% q-o-q in Q4 2021, up from 3.0% q-o-q in the prior quarter. On an annual basis, Singapore's LCY bond market grew 21.9% y-o-y in Q4 2021 versus 21.6% y-o-y in Q3 2021.

³ LCY bond statistics for ASEAN include the markets of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

The stock of outstanding LCY bonds in Thailand stood at USD443.5 billion at the end of December. Overall growth declined to 1.1% q-o-q in Q4 2021 from 2.5% q-o-q in Q3 2021 as growth in both the government and corporate bond segments eased. Government bonds outstanding rose 1.6% q-o-q in Q4 2021, down from 2.2% q-o-q in the previous quarter mainly due to contractions in Bank of Thailand bonds and state-owned enterprise and other bonds, as well as weaker growth in government bonds and Treasury bills. Growth in outstanding corporate bonds plummeted to 0.01% q-o-q in Q4 2021 from 3.4% q-o-q in the previous quarter, due to maturities and a contraction in issuance amid lingering uncertainties over tourism and economic revival. On a y-o-y basis, Thailand's LCY bond market posted 5.8% growth in Q4 2021, up from 3.9% in the prior quarter.

Malaysia's LCY bond market expanded 1.0% q-o-q and 8.2% y-o-y to reach USD416.7 billion at the end of Q4 2021. However, growth eased from 1.5% q-o-q and 8.5% y-o-y in Q3 2021. Outstanding government bonds expanded 1.2% q-o-q in Q4 2021, down from a 1.5% q-o-q gain in Q3 2021. A contraction in issuance of Treasury and other government bonds, as well as lack of issuance of new central bank bills, contributed to the slowdown in growth of outstanding government bonds. Growth in corporate bonds outstanding also slipped to 0.8% q-o-q in Q4 2021 from 1.4% q-o-q in the previous quarter.

Malaysia's *sukuk* (Islamic bond) market continued to be the largest in emerging East Asia. At the end of December, total *sukuk* outstanding in Malaysia reached USD264.7 billion. Malaysia's government *sukuk* outstanding stood at USD110.2 billion, or 48.4% of the total LCY government bond market in Q4 2021. With an outstanding amount of USD154.4 billion, corporate *sukuk* dominated Malaysia's corporate bond market with an 81.8% share of the total.

LCY bonds outstanding in Indonesia reached USD372.6 billion at the end of December. Overall growth rose to 4.4% q-o-q in Q4 2021 from 3.6% q-o-q in Q3 2021 due to faster growth in the government bond segment combined with a rebound in the corporate bond segment. The stock of LCY government bonds increased 4.6% q-o-q in Q4 2021 versus 4.0% q-o-q in the prior quarter. Growth in the government bond segment stemmed from expansions in central government and Bank Indonesia bonds, as nontradable bonds recorded

a contraction during the quarter. Corporate bonds outstanding rose 2.0% q-o-q in Q4 2021, reversing the 0.2% q-o-q contraction in the previous quarter, as issuance exceeded maturities. On a y-o-y basis, Indonesia's bond market posted growth of 17.7% in Q4 2021, down from 23.9% in Q3 2021.

Indonesia's *sukuk* market amounted to USD68.0 billion at the end of December. Government *sukuk* stood at USD65.6 billion, representing 19.1% of Indonesia's LCY government bond market. Corporate *sukuk* totaled USD2.4 billion, or 8.1% of Indonesia's total LCY corporate bond market.

The Philippines LCY bond market totaled USD191.9 billion at the end of December. Overall growth dropped to 0.3% q-o-q in Q4 2021 from 4.4% q-o-q in Q3 2021. The growth slowdown was due to weaker growth in the government bond segment combined with a continuing contraction in the corporate bond segment. Outstanding government bonds were roughly unchanged, expanding 0.5% q-o-q in Q4 2021, down from a 6.2% q-o-q gain in the prior quarter as the government sought to manage its debt-to-gross-domestic-product (GDP) ratio. Treasury bonds were the sole driver of growth in Q4 2021, as the amount of outstanding Treasury bills, Bangko Sentral ng Pilipinas securities, and other bonds contracted. Due to maturities, corporate bonds outstanding declined 1.3% q-o-q in Q4 2021 after contracting 5.1% q-o-q in Q3 2021. On an annual basis, the stock of LCY bonds in the Philippines expanded 14.2% y-o-y in Q4 2021, down from 20.0% y-o-y in Q3 2021.

Viet Nam's LCY bond market remained both the smallest and the fastest-growing market in the region with bonds outstanding amounting to USD91.5 billion at the end of December. Overall growth accelerated to 9.8% q-o-q in Q4 2021 from 8.1% q-o-q in the previous quarter, driven by faster expansions in the government and corporate bond segments. Government bonds outstanding rose 5.3% q-o-q in Q4 2021, up from 4.2% q-o-q in the preceding quarter. The growth in government bonds was supported by a 5.7% q-o-q expansion in Treasury bonds and a 1.7% q-o-q rise in government-guaranteed and municipal bonds in Q4 2021; there were no outstanding central bank bills at the end of December. Corporate bonds outstanding jumped 22.7% q-o-q in Q4 2021, up from 21.4% q-o-q in the previous quarter, on the back

of a resurgence in issuance. On a y-o-y basis, Viet Nam's outstanding LCY bond stock rose 25.5% in Q4 2021 versus 23.6% in Q3 2021.

Government bonds continued to comprise a majority of emerging East Asia's LCY bond market in Q4 2021. The region's government bond stock amounted to USD14.3 trillion in nominal terms, accounting for a 62.7% share of the total LCY bond market at the end of December (**Table 1**). Growth in the region's government bond market rose slightly to 4.0% q-o-q in Q4 2021 from 3.9% q-o-q in Q3 2021. All nine government bond markets in the region posted positive q-o-q growth rates in Q4 2021. Growth in the PRC's government bond market was broadly steady between Q3 2021 and Q4 2021, while Hong Kong, China; Indonesia; and Viet Nam experienced faster q-o-q growth in government bonds in Q4 2021 versus Q3 2021. The rest of the region's market recorded a slowdown in growth. On a y-o-y basis, emerging East Asia's government bond stock rose 13.9% in Q4 2021, up from 13.5% in the previous quarter.

The PRC and the Republic of Korea remained home to the two largest government bond markets in emerging East Asia with a combined share of 88.8% of the region's total government bond stock at the end of Q4 2021. ASEAN member economies accounted for a combined 10.0% of the region's total government bond market. The largest government bond markets among ASEAN member economies were those of Indonesia, Thailand, and Singapore.

The maturity profile of emerging East Asia's government bonds was mostly concentrated in medium- to longer-term bonds at the end of December (**Figure 2**). The exceptions were the PRC and Hong Kong, China, where short-term bonds comprised a relatively larger share of total outstanding bonds. In both cases, market demand was higher for shorter-dated bonds. On the other hand, longer-dated bonds with tenors of 10 years or longer dominated the markets of Viet Nam, Thailand, and the Republic of Korea.

LCY corporate bonds outstanding in emerging East Asia amounted to USD8.5 trillion at the end of December, representing 37.3% of the region's total LCY bond market. Growth in the region's LCY bond market eased to 2.8% q-o-q in Q4 2021 from 3.1% q-o-q in the previous quarter, driven primarily by a slowdown in the PRC market, the region's largest corporate bond market.

The corporate bond markets of the PRC and the Republic of Korea accounted for 91.8% of the region's total corporate bonds outstanding at the end of December. ASEAN member economies' share stood at 6.3%. Among ASEAN member economies, Malaysia, Singapore, and Thailand had the largest shares of corporate bonds outstanding, while Viet Nam remained home to the smallest corporate bond market in the region.

Emerging East Asia's total LCY bonds outstanding were equivalent to 98.6% of the region's GDP at the end of December, expanding from 97.5% in September and from 97.8% in December 2020 (**Table 2**). The higher share was largely due to governments continuing to mobilize debt financing for economic recovery and pandemic support programs, but GDP growth in the region was slowed by uncertainty due to episodes of surges in coronavirus disease (COVID-19) cases. The slowdown in the PRC's exceptionally large economy in Q4 2021 considerably contributed to the moderation of the region's aggregate GDP growth.

All economies in the region saw increases in their bond market share to GDP from Q3 2021 to Q4 2021 except for the Philippines, which posted a decline as a result of less borrowing during Q4 2021 and a better than expected quarterly GDP growth. The bond market-GDP-share exceeded 100% in the Republic of Korea, Malaysia, Singapore, and the PRC. Viet Nam's bond market as a share of GDP was the smallest in the region at the end of Q4 2021 at 24.9%.

Emerging East Asia's government bonds increased to the equivalent of 61.8% of the region's GDP in Q4 2021 from 60.8% in Q3 2021, while corporate bonds marginally increased to 36.8% of GDP from 36.7% over the same period. The regional market with the highest share of government bonds to GDP in Q4 2021 was Singapore (77.2%). For corporate bonds, it was the Republic of Korea (86.8%).

Table 1: Size and Composition of Local Currency Bond Markets

	Q4 2020		Q3 2021		Q4 2021		Growth Rate (LCY-base %)				Growth Rate (USD-base %)			
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	Q4 2020		Q4 2021		Q4 2020		Q4 2021	
							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	15,537	100.0	17,190	100.0	18,117	100.0	3.3	20.5	3.9	13.6	7.5	28.5	5.4	16.6
Government	9,978	64.2	11,043	64.2	11,701	64.6	3.8	20.6	4.5	14.2	8.0	28.7	6.0	17.3
Corporate	5,559	35.8	6,146	35.8	6,416	35.4	2.4	20.1	2.9	12.4	6.5	28.2	4.4	15.4
Hong Kong, China														
Total	310	100.0	312	100.0	324	100.0	5.1	6.1	4.0	5.0	5.1	6.6	3.8	4.4
Government	153	49.3	161	51.6	169	52.2	2.3	0.2	5.2	11.2	2.3	0.7	5.0	10.5
Corporate	157	50.7	151	48.4	155	47.8	7.9	12.6	2.7	(1.0)	7.9	13.1	2.6	(1.5)
Indonesia														
Total	322	100.0	356	100.0	373	100.0	10.0	28.7	4.4	17.7	16.5	27.1	4.8	15.9
Government	291	90.6	326	91.7	342	91.9	11.6	33.6	4.6	19.4	18.2	31.8	5.0	17.6
Corporate	30	9.4	29	8.3	30	8.1	(3.4)	(4.4)	2.0	1.1	2.3	(5.6)	2.3	(0.4)
Korea, Rep. of														
Total	2,424	100.0	2,365	100.0	2,388	100.0	1.2	9.4	1.5	7.9	9.0	16.3	1.0	(1.5)
Government	993	41.0	996	42.1	994	41.6	0.9	13.3	0.2	9.6	8.7	20.6	(0.2)	0.1
Corporate	1,430	59.0	1,368	57.9	1,395	58.4	1.4	6.8	2.4	6.8	9.2	13.6	1.9	(2.5)
Malaysia														
Total	399	100.0	411	100.0	417	100.0	1.3	8.0	1.0	8.2	4.7	9.9	1.5	4.4
Government	212	53.1	224	54.6	228	54.7	0.5	10.3	1.2	11.4	3.9	12.2	1.7	7.4
Corporate	187	46.9	186	45.4	189	45.3	2.2	5.6	0.8	4.6	5.7	7.4	1.3	1.0
Philippines														
Total	178	100.0	191	100.0	192	100.0	5.3	28.9	0.3	14.2	6.3	36.0	0.3	7.6
Government	145	81.2	163	85.3	164	85.5	7.0	35.3	0.5	20.3	8.0	42.7	0.6	13.3
Corporate	34	18.8	28	14.7	28	14.5	(1.3)	7.1	(1.3)	(11.8)	(0.4)	13.0	(1.2)	(17.0)
Singapore														
Total	376	100.0	430	100.0	449	100.0	3.6	10.4	3.8	21.9	7.0	12.4	4.5	19.4
Government	249	66.2	291	67.7	305	67.9	5.3	15.3	4.1	24.9	8.7	17.4	4.8	22.4
Corporate	127	33.8	139	32.3	144	32.1	0.5	1.8	3.3	16.0	3.7	3.7	4.0	13.7
Thailand														
Total	465	100.0	432	100.0	443	100.0	(0.7)	5.2	1.1	5.8	51.8	67.3	2.6	(4.6)
Government	342	73.5	313	72.5	323	72.8	(0.3)	8.3	1.6	4.7	51.1	64.2	3.1	(5.5)
Corporate	123	26.5	119	27.5	121	27.2	(1.8)	(2.5)	0.01	8.6	53.6	76.4	1.5	(2.0)
Viet Nam														
Total	72	100.0	84	100.0	92	100.0	8.1	31.4	9.8	25.5	8.5	31.8	9.5	27.0
Government	60	82.8	62	74.3	65	71.3	7.0	18.7	5.3	8.0	7.4	19.1	5.0	9.3
Corporate	12	17.2	21	25.7	26	28.7	13.9	172.4	22.7	110.0	14.3	173.3	22.3	112.5
Emerging East Asia														
Total	20,083	100.0	21,769	100.0	22,795	100.0	3.1	18.3	3.6	12.8	8.4	26.5	4.7	13.5
Government	12,423	61.9	13,580	62.4	14,291	62.7	3.6	19.6	4.0	13.9	9.0	27.9	5.2	15.0
Corporate	7,660	38.1	8,189	37.6	8,504	37.3	2.2	16.3	2.8	11.0	7.5	24.2	3.8	11.0
Japan														
Total	12,115	100.0	11,428	100.0	11,338	100.0	3.2	5.0	2.6	4.3	5.4	10.5	(0.8)	(6.4)
Government	11,250	92.9	10,601	92.8	10,515	92.7	3.3	5.1	2.6	4.2	5.5	10.5	(0.8)	(6.5)
Corporate	865	7.1	828	7.2	823	7.3	2.3	4.6	2.9	6.0	4.5	10.1	(0.5)	(4.9)
Memo Item: India														
Total	2,105	100.0	2,265	100.0	2,292	100.0	2.3	16.4	1.3	10.7	3.3	13.7	1.2	8.8
Government	1,624	77.2	1,767	78.0	1,798	78.5	2.0	17.9	1.9	12.6	3.0	15.2	1.8	10.7
Corporate	481	22.8	499	22.0	493	21.5	3.2	11.8	(0.9)	4.3	4.2	9.2	(1.1)	2.5

(-) = negative, LCY = local currency, q-o-q = quarter-on-quarter, Q3 = third quarter, Q4 = fourth 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.

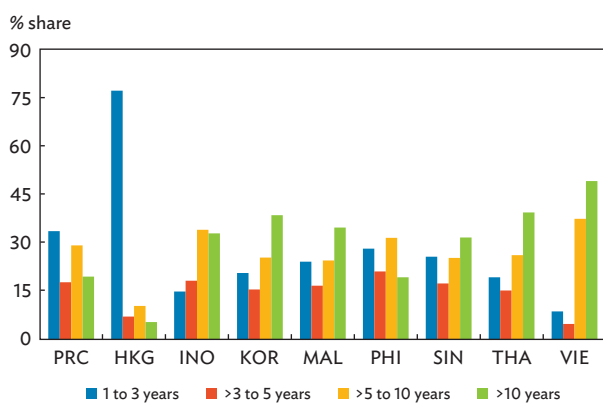
3. Bloomberg LP end-of-period LCY-USD rates are used.

4. For LCY base, emerging East Asia growth figures based on 31 December 2021 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 Data Company); 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 (KG Zeroin Corporation 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); Japan (Japan Securities Dealers Association); and India (Securities and Exchange Board of India and Bloomberg LP).

Figure 2: Maturity Profiles of Local Currency Government Bonds in Emerging East Asia



PRC = China, People's Rep. of; HKG = Hong Kong, China; INO = Indonesia; KOR = Korea, Rep. of; MAL = Malaysia; PHI = Philippines; SIN = Singapore; THA = Thailand; VIE = Viet Nam.

Notes:

1. Government bonds include Treasury bills and bonds.
2. Data as of 31 December 2021.

Source: *AsianBondsOnline*.

Foreign Holdings

Foreign investor ownership of government bonds increased in most emerging East Asian markets in Q4 2021.

The foreign investor holdings share increased from Q3 2021 to Q4 2021 in all emerging East Asian markets except for Indonesia, where it decreased, and for Viet Nam, where it was almost unchanged (**Figure 3**). In contrast, most markets saw quarterly declines in their foreign investor holdings share in Q3 2021. This indicates growing confidence among offshore investors as the region's economies are poised for a rebound on the back of increasing mobility levels and vaccination rates.

In the PRC, the share of foreign investor holdings increased to 10.9% at the end of December from 10.6% at the end of September. It also rose from a level of 9.7% at the end of December 2020, which was a more rapid gain compared to other markets in the region where the foreign investor holdings shares only moderately increased if not declined during the same period. The sustained increase can be explained by the fact that the share of foreign ownership is relatively low compared to most markets in the region, thus the potential for further expansion is high. Moreover, measures taken to open up the bond market and the inclusion of the PRC

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

	Q4 2020	Q3 2021	Q4 2021
China, People's Rep. of			
Total	100.1	99.4	100.7
Government	64.3	63.8	65.0
Corporate	35.8	35.5	35.7
Hong Kong, China			
Total	89.9	86.2	88.2
Government	44.3	44.4	46.0
Corporate	45.6	41.8	42.2
Indonesia			
Total	29.3	31.0	31.3
Government	26.5	28.5	28.8
Corporate	2.8	2.6	2.5
Korea, Rep. of			
Total	143.4	148.1	148.7
Government	58.7	62.4	61.9
Corporate	84.6	85.7	86.8
Malaysia			
Total	119.4	125.2	125.3
Government	63.4	68.3	68.5
Corporate	55.9	56.8	56.8
Philippines			
Total	47.8	51.7	50.5
Government	38.8	44.1	43.1
Corporate	9.0	7.6	7.3
Singapore			
Total	104.4	112.2	113.7
Government	69.2	76.0	77.2
Corporate	35.3	36.2	36.5
Thailand			
Total	88.9	90.9	91.0
Government	65.4	65.9	66.2
Corporate	23.6	25.0	24.8
Viet Nam			
Total	26.5	23.4	24.9
Government	21.9	17.4	17.7
Corporate	4.5	6.0	7.1
Emerging East Asia			
Total	97.8	97.5	98.6
Government	60.5	60.8	61.8
Corporate	37.3	36.7	36.8
Japan			
Total	232.4	234.2	240.8
Government	215.8	217.2	223.3
Corporate	16.6	17.0	17.5

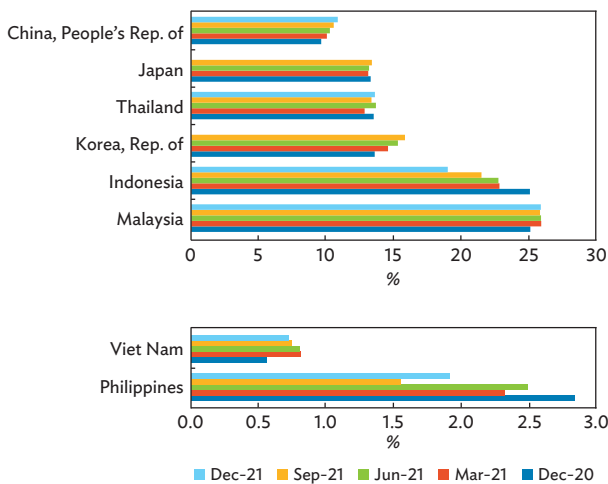
GDP = gross domestic product, Q3 = third quarter, Q4 = fourth quarter.

Notes:

1. Data for GDP is from CEIC Data Company.
2. For Singapore, corporate bonds outstanding are based on *AsianBondsOnline* estimates.

Sources: People's Republic of China (CEIC Data Company); 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 (KG Zeroin Corporation 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).

Figure 3: Foreign Holdings of Local Currency Government Bonds in Select Asian Markets (% of total)



Note: Data for Japan and the Republic of Korea are as of 30 September 2021.
Source: AsianBondsOnline calculations based on data from local market sources.

government bonds in global bond indices, including most recently, the FTSE World Government Bond Index, are leading to more diverse opportunities for overseas investors. The attraction of the PRC's bonds was reflected in its market having the largest capital net inflows in emerging East Asia in Q4 2021.

The foreign ownership share in Malaysia's government bond market moderately increased to 26.0% at the end of December from 25.9% at the end of September. The shifting stance of the United States (US) Federal Reserve regarding future interest rate hikes may have reduced overall foreign interest in the region's LCY bonds. However, the attractive rate differential favoring Malaysian bonds eased some foreign investor aversion toward the regional market, yielding positive capital flows in Q4 2021. Lower issuance volume and a high level of maturities in the government bond market may also have contributed to the moderate increase. Malaysia has the highest foreign holdings share of LCY government bonds in the region.

The share of foreign ownership of LCY government bonds in the Philippines and Thailand increased in Q4 2021, reversing the quarterly declines in Q3 2021. In the Philippines, the share increased to 1.9% at the end of December after having fallen to 1.6% at the end of September. In Thailand, the share increased to 13.7% at the end of December after having fallen to 13.4% at the end of September. Relatively better investment conditions

amid improved growth prospects and the easing of COVID-19 restrictions prompted capital inflows to the Philippines and Thailand in Q4 2021, lifting the foreign holdings share in both markets.

In Indonesia, foreign ownership of government bonds continued to decline in Q4 2021, which was in contrast to other markets in the region. The foreign holdings share fell to 19.0% at the end of December from 21.6% at the end of September, underpinned by foreign capital outflows during Q4 2021. Even as there was less foreign investor participation, government bond issuances were being absorbed by domestic holders. In addition, the central bank continued to purchase bonds from the primary market following the extension of the burden-sharing arrangement with the government through 2022 to support the fiscal deficit. In Viet Nam, the foreign holdings share was marginally changed at 0.7% in the same review period.

The Republic of Korea saw its foreign holdings share rise to 15.9% at the end of September from 15.4% at the end of June, sustaining the upward trend in place since June 2019. Korean government bonds offer an attractive return, spurring demand overseas as evidenced by foreign investors maintaining a high net-buying position.

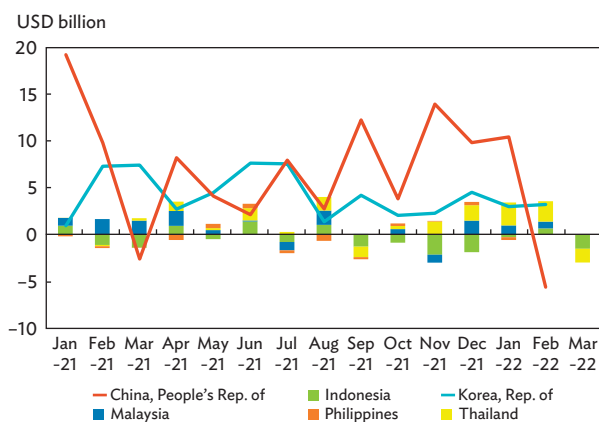
Foreign Fund Flows

Most emerging East Asian economies witnessed sustained foreign fund inflows into their government bond markets in Q4 2021.

Total net inflows to emerging East Asia picked up to USD36.7 billion in Q4 2021 from USD35.0 billion in Q3 2021 (Figure 4). Foreign investors were net buyers of the region's government bonds during the quarter. Net inflows amounted to USD6.2 billion in October, which more than doubled in November to USD14.6 billion and reached USD15.9 billion in December. The region sustained substantial foreign capital inflows into 2022, reaching USD16.2 billion in January. In February, regional net inflows totaled USD1.1 billion. Preliminary data for Indonesia and Thailand, however, showed total net outflows of USD3.0 billion in the first 9 days of March as a result of uncertainty from the Russian invasion of Ukraine.

Emerging East Asian government bonds continued to attract foreign capital as economic recovery was well underway and the COVID-19 situation was better

Figure 4: Foreign Capital Flows in Local Currency Bond Markets in Emerging East Asia



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 are as of 9 March 2022 except for the People's Republic of China, the Republic of Korea, and Malaysia (28 February 2022); and the Philippines (31 January 2022).
3. Figures were computed based on 9 March 2022 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).

managed, easing worries over monetary normalization by major central banks. While yields have been rising in developed markets, interest rate differentials that favor emerging East Asia continued to play a major factor in foreign investor decisions to direct funds into the region's bond market. Moreover, the Federal Reserve's tapering and normalization process is being carried out in a transparent and properly communicated manner, preventing a sudden reversal of capital flows.

Foreign fund inflows in the PRC amounted to USD27.5 billion in Q4 2021, up from USD22.9 billion in the previous quarter. The largest monthly net inflows were posted in November, amounting to USD13.9 billion, nearly quadruple the amount in October. November was the first month of PRC government bonds' inclusion in the FTSE Russell's World Government Index. In January, the PRC government bond market drew in USD10.4 billion of foreign funds. Favorable returns due to slowing domestic inflation and a stable Chinese yuan were catalysts for the sustained foreign interest in the government bond market. However, the PRC had a reversal in February, recording net outflows of USD5.6 billion.

In the Republic of Korea, net inflows slowed to USD8.8 billion in Q4 2021 from USD13.1 billion in Q3 2021. Foreign buying of Korean government bonds diminished quarterly throughout 2021 after rebounding in the first quarter of the year. Net inflows in October amounted to USD2.0 billion and turned more than double in December to USD4.5 billion. The Republic of Korea attracted USD3.0 billion and USD3.2 billion worth of foreign funds in January and February, respectively. Surging inflation and the Bank of Korea's interest rate hikes may have capped foreign investors' appetite for the securities. Nonetheless, the Korean bond market remained the second-largest destination of foreign funds in the region.

Improved growth prospects brought by increased economic activities and the easing of COVID-19 curbs drove larger net foreign fund inflows to the markets of Malaysia, the Philippines, and Thailand. In Malaysia, foreign funds invested in government bonds increased to USD1.2 billion in Q4 2021 from USD0.7 billion in Q3 2021. Net outflows from the Philippines of USD1.2 billion in Q3 2021 reversed to inflows of USD0.7 billion in Q4 2021. In Thailand, net inflows jumped from USD0.6 billion to USD3.4 billion during the same period. The Federal Reserve's announcement that it would start tapering its bond purchases in November may have adversely affected foreign investor sentiment toward the Malaysian and Philippine markets, as Malaysia posted a sell-off during the month while the Philippines saw a decline in net inflows; both markets recovered in December. Thailand continued to attract strong interest, recording net inflows of USD2.4 billion and USD2.2 billion in January and February, respectively. Malaysia also posted net inflows albeit at lower levels of USD1.0 billion and USD0.7 billion in the same period. In the Philippines, rising COVID-19 cases may have led to net outflows of USD0.3 billion in January.

Indonesia was the only market in emerging East Asia that experienced net foreign fund outflows in Q4 2021. It posted net outflows of USD4.9 billion, larger than the net outflows of USD1.1 billion in the previous quarter. In all 3 months of Q4 2021, Indonesia recorded net outflows. In January 2022, foreign investors sold a net USD0.3 billion. However, this reconciles with the government's move to develop the domestic investor base and rely less on foreign funds. Indonesia, however, recorded net fund inflows of USD0.7 billion for the month of February. High levels of liquidity generated by domestic investors provide support to the development of the Indonesian government bond market.

LCY Bond Issuance

The issuance volume of LCY bonds in emerging East Asia totaled USD9.0 trillion in 2021.

Issuance of LCY bonds in emerging East Asia continued its upward trajectory in 2021, with regional markets focused on strengthening economic recovery amid the COVID-19 outbreak. Issuance in 2021 surpassed that of 2020, marking the highest annual issuance to date for the region. Aggregate issuance of LCY bonds in emerging East Asia reached USD9.0 trillion for full-year 2021, up by 7.1% y-o-y from USD8.4 billion in 2020 (**Figure 5**). ASEAN member economies accounted for a 17.0% share of the regional issuance total in 2021, with their share rising from 14.7% in 2020. The PRC; Hong Kong, China; and the Republic of Korea saw declines in their corresponding shares to 67.7%, 6.3%, and 9.0%, respectively.

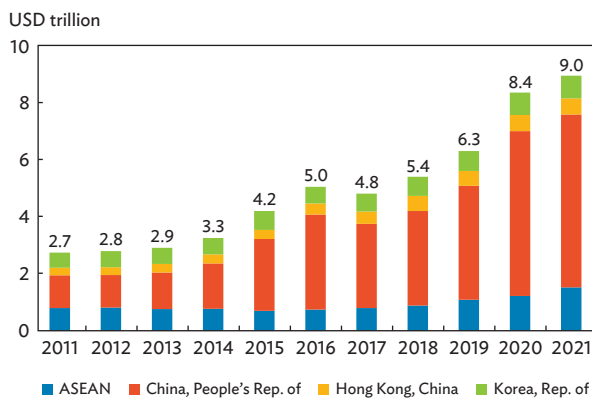
Strong momentum in issuance was buoyed by increased issuance in all bond segments. Government bonds and corporate bonds accounted for most of the issuance volume, representing shares of 40.7% and 42.0%, respectively, of the 2021 issuance total (**Figure 6**). Central bank issuance accounted for the remaining 17.2% share. Strong government bond issuance continued due to the need to support pandemic response measures,

while improving economic optimism led to increased corporate bond issuance.

Quarterly issuance volumes were broadly steady in 2021. In Q4 2021, total LCY bond issuance in the region tallied USD2.4 trillion, inching up from USD2.3 trillion in Q3 2021 (**Table 3**). Issuance growth was positive in six out of nine emerging East Asian markets in Q4 2021 compared with Q3 2021, including Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; Singapore; and Viet Nam. On the other hand, q-o-q contractions in issuance volume were noted in the PRC, the Philippines, and Thailand.

Overall issuance growth in the region's LCY bond market moderated to 0.2% q-o-q in Q4 2021 from 5.1% q-o-q in Q3 2021, dragged down by a 9.6% q-o-q contraction in the issuance of Treasury and other government bonds. Most governments had already fulfilled their borrowing needs, leading to reduced issuance volume during the quarter. In addition, issuance was somewhat curtailed as investors sought higher yields, driven by shifting US monetary policy. Nonetheless, issuance of Treasury and other government bonds was still substantial in Q4 2021 at USD912.2 billion. The only regional markets that had increased issuance of Treasury and other government bonds in Q4 2021 versus Q3 2021 were Indonesia, Singapore, and Thailand. Treasury and other government bonds accounted for 38.5% of the region's aggregate issuance in Q4 2021.

Figure 5: Local Currency Bond Issuance in Emerging East Asia



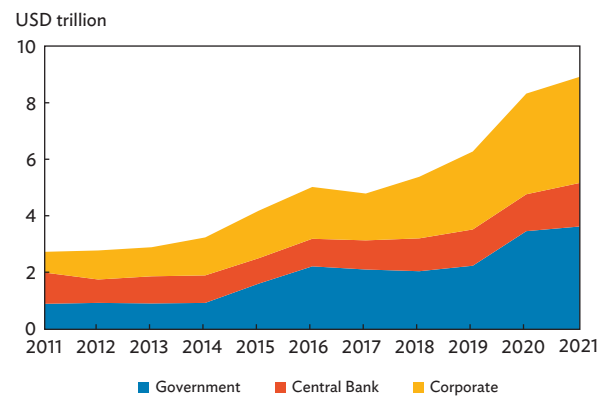
ASEAN = Association of Southeast Asian Nations, USD = United States dollar.

Notes:

1. ASEAN includes the markets of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.
2. Figures were computed based on 31 December 2021 currency exchange rates and do not include currency effects.

Source: AsianBondsOnline.

Figure 6: Issuance Volume by Type of Bond



USD = United States dollar.

Note: Figures were computed based on 31 December 2021 currency exchange rates and do not include currency effects.

Source: AsianBondsOnline.

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

	Q4 2020		Q3 2021		Q4 2021		Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	Q4 2021		Q4 2021	
							q-o-q	y-o-y	q-o-q	y-o-y
China, People's Rep. of										
Total	1,294	100.0	1,629	100.0	1,598	100.0	(3.2)	20.3	(1.9)	23.5
Government	590	45.6	848	52.1	775	48.5	(9.8)	27.9	(8.6)	31.3
Central Bank	0	0.0	0	0.0	0	0.0	-	-	-	-
Treasury and Other Govt.	590	45.6	848	52.1	775	48.5	(9.8)	27.9	(8.6)	31.3
Corporate	703	54.4	781	47.9	823	51.5	3.9	13.9	5.3	17.0
Hong Kong, China										
Total	146	100.0	139	100.0	144	100.0	4.0	(1.1)	3.9	(1.6)
Government	112	76.3	113	81.8	118	81.7	4.0	6.0	3.8	5.4
Central Bank	107	73.1	109	78.9	117	81.1	6.9	9.7	6.7	9.1
Treasury and Other Govt.	5	3.2	4	2.9	1	0.7	(75.8)	(79.5)	(75.8)	(79.6)
Corporate	35	23.7	25	18.2	26	18.3	4.2	(23.8)	4.0	(24.2)
Indonesia										
Total	47	100.0	48	100.0	49	100.0	1.4	4.9	1.7	3.3
Government	46	96.8	46	95.2	47	95.5	1.7	3.5	2.0	2.0
Central Bank	14	29.7	27	57.0	28	57.4	2.0	102.7	2.4	99.7
Treasury and Other Govt.	32	67.1	18	38.2	19	38.1	1.1	(40.4)	1.4	(41.3)
Corporate	2	3.2	2	4.8	2	4.5	(4.4)	45.1	(4.0)	42.9
Korea, Rep. of										
Total	210	100.0	180	100.0	205	100.0	14.3	6.6	13.7	(2.6)
Government	78	37.2	78	43.4	60	29.4	(22.5)	(15.6)	(22.9)	(22.9)
Central Bank	29	13.8	27	15.0	21	10.3	(21.2)	(20.2)	(21.6)	(27.2)
Treasury and Other Govt.	49	23.4	51	28.4	39	19.1	(23.2)	(12.9)	(23.5)	(20.5)
Corporate	132	62.8	102	56.6	144	70.6	42.5	19.8	41.8	9.4
Malaysia										
Total	22	100.0	21	100.0	21	100.0	2.6	(0.7)	1.6	(4.7)
Government	8	35.1	12	55.9	11	53.7	(1.3)	51.9	(2.3)	45.9
Central Bank	0	0.0	0	0.0	0	0.0	-	-	-	-
Treasury and Other Govt.	8	35.1	12	55.9	11	53.7	(1.3)	51.9	(2.3)	45.9
Corporate	14	64.9	9	44.1	10	46.3	7.6	(29.2)	6.5	(32.0)
Philippines										
Total	29	100.0	42	100.0	39	100.0	(7.0)	43.2	(7.0)	34.9
Government	28	95.8	41	97.7	38	97.1	(7.6)	45.2	(7.6)	36.7
Central Bank	17	60.2	26	62.3	24	60.0	(10.4)	42.9	(10.4)	34.6
Treasury and Other Govt.	10	35.6	15	35.4	15	37.0	(2.6)	49.1	(2.6)	40.4
Corporate	1	4.2	1	2.3	1	2.9	18.4	(0.9)	18.4	(6.7)
Singapore										
Total	164	100.0	205	100.0	244	100.0	18.0	52.0	18.7	48.9
Government	160	97.9	200	97.4	240	98.2	19.0	52.4	19.7	49.3
Central Bank	135	82.5	174	84.8	211	86.3	20.1	59.1	20.9	55.9
Treasury and Other Govt.	25	15.5	26	12.6	29	11.9	11.4	16.7	12.1	14.4
Corporate	3	2.1	5	2.6	4	1.8	(18.6)	31.9	(18.1)	29.3
Thailand										
Total	74	100.0	69	100.0	62	100.0	(12.5)	(8.3)	(11.2)	(17.3)
Government	65	87.6	55	79.9	50	82.1	(10.1)	(14.1)	(8.8)	(22.5)
Central Bank	49	66.4	37	53.4	31	50.9	(16.6)	(29.8)	(15.4)	(36.7)
Treasury and Other Govt.	16	21.2	18	26.5	19	31.2	3.0	35.0	4.5	21.8
Corporate	9	12.4	14	20.1	11	17.9	(22.1)	32.4	(20.9)	19.4

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Table 3 continued

	Q4 2020		Q3 2021		Q4 2021		Growth Rate (LCY-base %)		Growth Rate (USD-base %)		
	Amount (USD billion)	% share	Amount (USD billion)	% share	Amount (USD billion)	% share	Q4 2021		Q4 2021		
							q-o-q	y-o-y	q-o-q	y-o-y	
Viet Nam											
Total	7	100.0	9	100.0	9	100.0	5.8	25.4	5.5	26.9	
Government	5	73.3	5	52.9	4	42.4	(15.1)	(27.4)	(15.4)	(26.6)	
Central Bank	0	0.0	0	0.0	0	0.0	-	-	-	-	
Treasury and Other Govt.	5	73.3	5	52.9	4	42.4	(15.1)	(27.4)	(15.4)	(26.6)	
Corporate	2	26.7	4	47.1	5	57.6	29.4	170.8	29.1	174.1	
Emerging East Asia											
Total	1,994	100.0	2,342	100.0	2,371	100.0	0.2	18.8	1.2	18.9	
Government	1,093	54.8	1,398	59.7	1,344	56.7	(4.8)	23.4	(3.9)	22.9	
Central Bank	352	17.7	401	17.1	431	18.2	7.1	26.8	7.5	22.5	
Treasury and Other Govt.	741	37.1	997	42.6	912	38.5	(9.6)	21.8	(8.5)	23.2	
Corporate	902	45.2	944	40.3	1,027	43.3	7.6	13.2	8.8	13.9	
Japan											
Total	771	100.0	502	100.0	662	100.0	36.2	(4.3)	31.7	(14.2)	
Government	718	93.2	464	92.5	615	93.0	36.9	(4.6)	32.4	(14.4)	
Central Bank	0	0.0	10	2.0	0	0.0	(100.0)	-	-	-	
Treasury and Other Govt.	718	93.2	454	90.5	615	93.0	40.0	(4.6)	35.4	(14.4)	
Corporate	53	6.8	38	7.5	47	7.0	27.7	(1.2)	23.5	(11.4)	

(-) = negative, -- = not applicable, LCY = local currency, q-o-q = quarter-on-quarter, Q3 = third quarter, Q4 = fourth 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 31 December 2021 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (CEIC Data Company); 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 (KG Zeroin Corporation and The Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Singapore Government Securities and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP, Hanoi Stock Exchange, and Vietnam Bond Market Association); and Japan (Japan Securities Dealers Association).

In Q4 2021, growth in the issuance of central bank instruments eased to 7.1% q-o-q in Q4 2021 from 8.6% q-o-q in the preceding quarter. Total central bank issuance during the quarter stood at USD431.3 billion, accounting for an 18.2% share of emerging East Asia's total issuance.

Corporate bonds continued to account for the largest share of issuance during the quarter with volume reaching USD1,027.4 billion, representing a 43.3% share of the regional issuance total. Growth in corporate bond issuance quickened to 7.6% q-o-q from 5.1% q-o-q in Q3 2021. Issuance during the quarter was active in most markets, with corporates taking advantage of still low borrowing cost in anticipation of rising interest rates. Six markets in the region recorded higher volume of issuance in Q4 2021: the PRC; Hong Kong, China; the Republic of Korea; Malaysia; the Philippines; and Viet Nam.

The y-o-y issuance growth in emerging East Asia swelled to 18.8% in Q4 2021 from only 0.8% in Q3 2021. The bond markets of the PRC, Indonesia, the Republic of Korea, the

Philippines, Singapore, and Viet Nam recorded positive y-o-y expansions in Q4 2021, while contractions were observed in Hong Kong, China; Malaysia; and Thailand. Treasury and other government bond issuance rebounded with a 21.8% y-o-y hike following a decline of 7.6% y-o-y in Q3 2021. Central bank issuance growth accelerated to 26.8% y-o-y in Q4 2021 from 19.0% y-o-y in Q3 2021, while corporate bond issuance growth climbed to 13.2% y-o-y from 4.1% y-o-y over the same period.

The PRC's bond issuance declined 3.2% q-o-q in Q4 2021 to USD1.6 trillion as government bond issuance fell 9.8% q-o-q. While Treasury bond issuance gained 11.2% q-o-q, government bond issuance was dragged down by the 16.5% q-o-q decline in local government bond issuance and a 28.0% q-o-q decline in policy bank bond issuance. The slowdown in local government bond issuance was due to high issuance in July–October as local governments sought to complete their issuance quotas. Issuance volume markedly dropped in November and December. In contrast, corporate bond issuance growth slowed to 3.9% q-o-q from 11.5% q-o-q due to

economic growth concerns and negative sentiments over property default issues. On a y-o-y basis, overall issuance rose 20.3% in Q4 2021 after contracting 1.7% in Q3 2021.

In the Republic of Korea, total issuance during the quarter rose to USD204.6 billion, on growth of 14.3% q-o-q. Overall issuance was pulled down by a deceleration in the issuance of government bonds, which contracted 22.5% q-o-q. Issuance of instruments from the Bank of Korea, as well as Treasury and other government bonds, fell in Q4 2021 for the second quarter in a row, following a high volume of borrowing in the first half of the year. In contrast, issuance of corporate bonds was robust during the quarter, as firms engaged in borrowings ahead of market expectations that the Bank of Korea would further raise policy rates. (The Bank of Korea previously raised policy rates in August 2021, November 2021, and January 2022.) On an annual basis, LCY bond sales in the Republic of Korea grew 6.6% y-o-y in Q4 2021 after a 3.7% y-o-y contraction in Q3 2021.

LCY bond issuance in Hong Kong, China rebounded strongly in Q4 2021 to USD144.0 billion, posting growth of 4.0% q-o-q after a 0.8% q-o-q decline in Q3 2021. Growth was largely driven by increased issuance of central bank instruments, particularly EFBs. The Hong Kong Monetary Authority raised its planned issuance of EFBs in each month from September through December due to abundant liquidity in the banking system. This led central bank issuance growth during the quarter to rise to 6.9% q-o-q from 3.0% q-o-q in Q3 2021. In contrast, issuance of Hong Kong Special Administrative Region bonds substantially dropped by 75.8% q-o-q. Corporate bond issuance rebounded, rising 4.2% q-o-q following a decline of 15.8% q-o-q in Q3 2021. On a y-o-y basis, Hong Kong, China's bond issuance declined at a slower pace of 1.1% in Q4 2021 versus a 3.7% drop in Q3 2021.

The aggregate LCY bond sales of ASEAN members reached USD424.1 billion in Q4 2021. ASEAN bond issuance accounted for a 17.9% share of emerging East Asia's total issuance volume during the quarter, up from 16.8% in Q3 2021. Issuance growth inched up to 6.8% q-o-q in Q4 2021 from 6.3% q-o-q in Q3 2021. On an annual basis, issuance growth expanded by a much faster 28.3% y-o-y in Q4 2021 than the 18.1% y-o-y registered in the previous quarter. The markets of Indonesia, Malaysia, Singapore, and Viet Nam engaged in more borrowing in Q4 2021 than in Q3 2021, while the Philippines and Thailand engaged in less bond issuance. Among all ASEAN members, the three largest issuers of

LCY bonds during the quarter were Singapore, Thailand, and Indonesia, accounting for 57.5%, 14.5%, and 11.5%, respectively, of ASEAN's issuance total in Q4 2021.

Singapore's Q4 2021 LCY bond issuance reached USD243.9 billion, gaining 18.0% q-o-q versus 6.7% q-o-q in Q3 2021. Singapore's LCY bond issuance growth came solely from the government bond sector, with issuance rising 19.0% q-o-q, while corporate bond issuance fell 18.6% q-o-q. Central bank bond issuance was the biggest driver in Singapore's government bond sector, gaining 20.1% q-o-q as the central bank sought to limit inflationary pressure. LCY bond issuance in Singapore climbed the fastest among regional markets, with growth of 52.0% y-o-y in Q4 2021.

Thailand's LCY bond issuance fell 12.5% q-o-q to USD61.5 billion in Q4 2021, driven by quarterly declines in both the government and corporate bond sectors. Government bond issuance fell 10.1% q-o-q due to a 16.6% q-o-q decline in central bank issuance, as the Bank of Thailand pledged more support for COVID-19 relief measures. Treasury bonds and other government bond issuance rose 3.0% q-o-q in Q4 2021, while corporate bond issuance fell 22.1% q-o-q. On an annual basis, Thailand's LCY bond issuance declined 8.3% y-o-y in Q4 2021 due to the decline in central bank issuance.

In Indonesia, issuance growth moderated to 1.4% q-o-q in Q4 2021 from 22.5% q-o-q in Q3 2021. Total issuance volume reached USD48.7 billion during the quarter, with government bonds accounting for a 95.5% share. Overall growth in government bonds decelerated to 1.7% q-o-q in Q4 2021 from 20.7% q-o-q in Q3 2021. Bank Indonesia continued to actively issue Sukuk Bank Indonesia, yet growth moderated to 2.0% q-o-q in Q4 2021. Issuance of Treasury bills and bonds in Q4 2021 also eased to 1.1% q-o-q from 13.3% q-o-q in the earlier quarter, as the government cancelled all remaining scheduled auctions after 2 November due to adequate funding for its budgetary needs. Corporate bond issuance declined 4.4% q-o-q in Q4 2021 following a 73.3% q-o-q hike in the preceding quarter. On an annual basis, issuance growth eased to 4.9% y-o-y in Q4 2021 from 11.3% y-o-y in Q3 2021.

LCY bond sales in the Philippines declined to USD39.2 billion in Q4 2021, falling 7.0% q-o-q after posting growth of 4.5% q-o-q in the preceding quarter. Overall, growth was dragged down by a slowdown in the issuance of government bonds, which declined 7.6% q-o-q in Q4 2021. Both the issuance

of Bangko Sentral ng Pilipinas bills (-10.4% q-o-q) and Treasury and other government bonds (-2.6% q-o-q) contracted during the quarter. The Bureau of the Treasury scaled back its issuance of Treasury bills and bonds in December and also allowed more outstanding bonds to mature. This was undertaken to allow the debt-to-GDP ratio to fall below 60% at the end of 2021. The corporate bond segment was the sole driver of growth in the Philippines, as issuance growth surged to 18.4% q-o-q in Q4 2021 from 5.1% q-o-q in Q3 2021. On a y-o-y basis, the growth in LCY bond issuance moderated to 43.2% in Q4 2021 from 74.4% in the prior quarter.

LCY bond issuance in Malaysia tallied USD21.3 billion in Q4 2021 on growth of 2.6% q-o-q. Similar to the Philippines, corporate bonds drove issuance growth during the quarter as government issuance fell 1.3% q-o-q in Q4 2021 on the back of a 13.4% q-o-q decline in Q3 2021. Issuance volume was dampened as investors sought higher rates after the US Federal Reserve's tapering announcement. Corporate bond issuance grew 7.6% q-o-q following a decline of 15.3% q-o-q in Q3 2021. On a y-o-y basis, LCY bond issuance growth in Malaysia declined at a slower pace of 0.7% versus a 3.5% drop in Q3 2021.

Viet Nam's LCY bond issuance totaled USD9.4 billion Q4 2021 on a 5.8% q-o-q gain. Growth in Viet Nam's bond issuance was solely due to a 29.4% q-o-q increase in corporate issuance to USD5.4 billion on optimism over Viet Nam's economy. Viet Nam's GDP grew 5.2% y-o-y in Q4 2021, bouncing back from Q3 2021's 6.2% y-o-y decline. In contrast, government bond issuance fell 15.1% q-o-q after Viet Nam failed to meet its auction targets as market participants sought higher yields. On a y-o-y basis, Viet Nam's bond issuance grew 25.4% in Q4 2021.

Cross-Border Bond Issuance

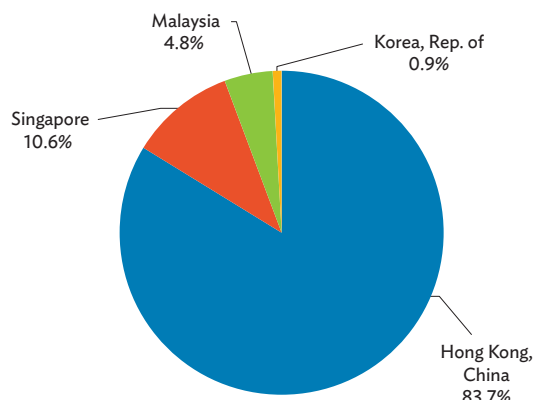
Emerging East Asia's cross-border bond issuance fell to USD4.4 billion in Q4 2021.

Emerging East Asia's cross-border bond issuance totaled USD4.4 billion in Q4 2021, a 35.9% q-o-q decline from the USD6.9 billion raised in the previous quarter. The lower issuance volume for the quarter can be attributed to rising yields in the region, which made it costly for firms to raise funds via bond issuance, and with firms having already met their borrowing requirements for the year. Institutions from four regional economies issued cross-border bonds in Q4 2021, with a large majority continuing to come from Hong Kong, China. Other

economies that registered issuance of cross-border bonds were Singapore, Malaysia, and the Republic of Korea. Monthly issuance volumes amounted to USD1.8 billion, USD1.7 billion, and USD0.9 billion for the months of October, November, and December, respectively. Compared with the same period in 2020, total intra-regional bond issuance increased almost four-fold in Q4 2021 from USD1.2 billion.

Hong Kong, China remained home to the largest cross-border issuance volume in the region with a market share of 83.7% in Q4 2021, a reflection of its developed bond market infrastructure that makes it more accessible and efficient for firms to issue cross-border bonds (**Figure 7**). Aggregate issuance for the quarter reached USD3.7 billion; however, this was a 31.5% q-o-q decline from USD5.4 billion in Q3 2021. Sixteen firms issued cross-border bonds in Q4 2021, which were all denominated in Chinese yuan except for one which was in Singapore dollars. Financial companies and Hong Kong, China's government led the issuance of cross-border bonds in Q4 2021, with shares of 29.6% and 21.1%, respectively. The government was the single-largest issuer in both Hong Kong, China and in the entire region in Q4 2021, with a total issuance volume of USD775.8 million. The issuances were denominated in Chinese yuan in two tranches with tenors of 3 years (CNY2.5 billion) and 5 years (CNY2.5 billion). The bond offer was also the government's inaugural offering of offshore yuan bonds and was part of the government's Green Bond Programme. Shenzhen International Holdings, which invests in and operates logistics and toll road infrastructure, raised USD620.7 million via

Figure 7: Origin Economies of Intra-Emerging East Asian Bond Issuance in the Fourth Quarter of 2021



Source: AsianBondsOnline calculations based on Bloomberg LP data.

issuance of 6-year CNY-denominated bonds. It was also the second-largest aggregate issuer of cross-border bonds and had the single-largest issuance in both Hong Kong, China and the region in Q4 2021. Another notable issuer was China Power International, which also had the second-largest aggregate issuance, raised USD620.7 million via issuance of 6-month and 3-year CNY-denominated bonds.

In Singapore, four firms issued cross-border bonds in Q4 2021 with a total volume of USD463.8 million, which was more than double the USD219.9 million raised in the previous quarter. Asia Water Technology led all issuers with USD232.7 million worth of 5-year CNY-denominated bonds. A financial company, Ascendas REIT, raised USD122.0 million via 10-year HKD-denominated bonds. Trafigura Group, involved in commodities trading, issued USD108.6 million worth of 3-year Chinese yuan bonds. Meanwhile, Nomura International Fund raised a total of USD0.4 million via issuance of 5-year CNY-denominated bonds.

In Malaysia, only two institutions issued intra-regional bonds in Q4 2021 with an aggregate amount of USD212.5 million. Cagamas Global, a state-owned mortgage corporation, raised USD147.3 million via issuance of 2-year bonds denominated in Singapore dollars. Malayan Banking issued a total of USD65.2 million worth of 3-year CNY-denominated bonds.

The Export-Import Bank of Korea was the sole issuer of intra-regional bonds from the Republic of Korea in

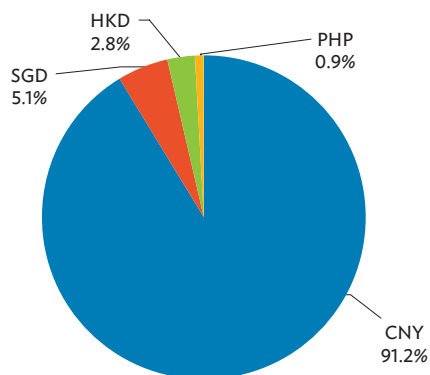
Q4 2021, raising USD39.2 million worth of 2-year bonds denominated in Philippine pesos.

The top 10 issuers of intra-regional bonds in Q4 2021 reached an aggregate volume of USD3.6 billion and comprised 81.4% of the regional total. Eight of the firms were from Hong Kong, China and had total issuance of USD3.2 billion, led by the Government of the Hong Kong Special Administrative Region of the PRC; Shenzhen International Holdings; and China Power International. Other firms in the list were from Singapore (Asia Water Technology) and Malaysia (Cagamas Global).

The Chinese yuan continued to be the most widely used currency for cross-border bonds in Q4 2021 with an aggregate issuance volume of USD4.0 billion, accounting for a share of 91.2% of the regional total (**Figure 8**). Firms from Hong Kong, China; Malaysia; and Singapore issued in Chinese yuan. Other currencies used were the Singapore dollar (5.1%, USD224.6 million), Hong Kong dollar (2.8%, USD122.0 million), and Philippine peso (0.9%, USD39.2 million).

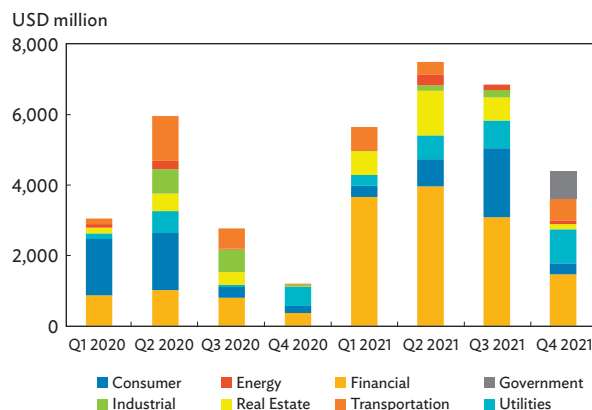
In Q4 2021, financial companies remained the largest issuer group of cross-border bonds in emerging East Asia, with an aggregate volume of USD1.5 billion, comprising a third of the regional total (**Figure 9**). The Bank of China Group was the largest issuer from the finance sector with total volume of USD310.3 million, followed by the

Figure 8: Currency Shares of Intra-Emerging East Asian Bond Issuance in the Fourth Quarter of 2021



CNY = Chinese yuan, HKD = Hong Kong dollar, PHP = Philippine peso, SGD = Singapore dollar.
Source: *AsianBondsOnline* calculations based on Bloomberg LP data.

Figure 9: Intra-Emerging East Asian Bond Issuance by Sector



Q1 = first quarter, Q2 = second quarter, Q3 = third quarter, Q4 = fourth quarter, USD = US dollar.

Note: Figures were computed based on 31 December 2021 exchange rates and do not include currency effects.

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

Hong Kong Mortgage Corporation with USD257.6 million. Utility companies were the second-largest issuer group in Q4 2021 with total issuance of USD969.8 million and a regional share of 22.1%. It was the only group that posted a quarterly increase in its regional issuance share from Q3 2021. The notable issuers from this group were China Power International Development and Asia Water Technology. The third-largest group was the government sector at USD775.8 million and a 17.7% share, with the government in Hong Kong, China as the sole issuer. The transportation sector also had a notable share of 14.1% and an issuance volume of USD620.7 million, with Shenzhen International Holdings as the sole issuer of cross-border bonds from this sector in Q4 2021.

G3 Currency Bond Issuance

Emerging East Asia's G3 currency bond issuance totaled USD376.4 billion in 2021.

Issuance of G3 currency bonds in emerging East Asia totaled USD376.4 billion in 2021, a contraction of 0.5% y-o-y from USD378.1 billion in 2020 (Table 4).⁴ The slightly smaller issuance amount was the result of most of the region's economies having less G3 bond issuance in 2021 compared to the previous year due to rising US dollar interest rates.

In 2021, 91.4% of the total issuance of G3 currency bonds was in US dollars, 8.0% in euros, and 0.6% in Japanese yen. The value of USD-denominated bonds issued in emerging East Asia in 2021 was USD344.0 billion, a 1.0% y-o-y decrease from the previous year. Most economies in the region had less US dollar issuance in 2021 than in 2020, led by the PRC whose issuance declined by USD12.6 billion. Funds raised in euros totaled USD30.2 billion in 2021, growing 7.2% y-o-y due to increased issuance activities in Hong Kong, China; Indonesia; the Republic of Korea; the Philippines; and Singapore. Proceeds from bonds issued in Japanese yen amounted to USD2.2 billion, falling 7.8% y-o-y because of large declines in Hong Kong, China's and Malaysia's issuance during the year.

More than 50.0% of the G3 currency bonds issued in the region came from entities in the PRC, which issued a total of USD217.4 billion worth in 2021. This was followed

by the Republic of Korea with USD43.9 billion and Hong Kong, China with USD39.7 billion. All economies in the region used the US dollar as their main G3 currency of choice in 2021.

In 2021, y-o-y declines in the issuance of G3 currency bonds were recorded in the Philippines (-30.0%), Thailand (-23.0%), Malaysia (-7.1%), the PRC (-6.4%), and Indonesia (-5.2%). The drop in the PRC's issuance was due to government efforts to rein in credit risk and uncertainties over bond defaults. Annual growth in G3 currency bond issuance was posted in Viet Nam (1,868.8%); the Republic of Korea (46.3%); Singapore (11.8%); and Hong Kong, China (14.0%). Cambodia did not issue any G3 currency bonds in 2021 after issuing USD350.0 million in 2020.

In 2021, 57.8% of all G3 currency bond issuance in emerging East Asia was from the PRC. Of this, USD203.2 billion was issued in US dollars and the equivalent of USD14.2 billion was issued in euros. In October, the Government of the PRC issued a four-tranche USD-denominated bond worth USD4.0 billion and with maturities of 3 years, 5 years, 10 years, and 30 years. Proceeds from the issuance will be used for general government purposes. The following month it issued three tranches of bonds denominated in euros totaling USD4.5 billion and with tenors of 3 years, 7 years, and 12 years. The issuances aimed to improve benchmark rates for offshore bonds issued by the PRC. Also in November, NXP Semiconductors NV, through its subsidiaries, raised USD2.0 billion from a triple-tranche USD-denominated bond issuance with tenors of 10 years, 20 years, and 30 years. The funds raised will be used to redeem some of the company's existing debts and for general corporate purposes.

During the review period, the Republic of Korea accounted for 11.7% of all issuance of G3 currency bonds in the region: USD37.8 billion was issued in US dollars, the equivalent of USD6.0 billion in EUR-denominated bonds, and USD0.1 billion in Japanese yen. In October, Kookmin Bank issued USD568.5 million worth of 5-year EUR-denominated bonds with a coupon rate of 0.048%. The commercial bank also issued seven USD-denominated bonds in Q4 2021 with tenors of 1 year and 2 years. Korea Housing Finance Corporate issued a USD625.4 million EUR-denominated sustainable

⁴ G3 currency bonds are denominated in either euros, Japanese yen, or US dollars. For the discussion on G3 currency issuance, 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.

Table 4: G3 Currency Bond Issuance

2020			2021		
Issuer	Amount (USD billion)	Issue Date	Issuer	Amount (USD billion)	Issue Date
Cambodia	0.4		Cambodia	0.0	
China, People's Rep. of	232.3		China, People's Rep. of	217.4	
Industrial and Commercial Bank of China 3.58% Perpetual	2.9	23-Sep-20	Industrial and Commercial Bank of China 3.200% Perpetual	6.2	24-Sep-21
Bank of China 3.60% Perpetual	2.8	4-Mar-20	China Development Bank 0.380% 2022	2.0	10-Jun-21
Bank of Communications 3.80% Perpetual	2.8	18-Nov-20	Prosus 3.061% 2031	1.9	13-Jul-21
Others	223.8		Others	207.4	
Hong Kong, China	34.8		Hong Kong, China	39.7	
AIA Group 3.200% 2040	1.8	16-Sep-20	Hong Kong, China (Sovereign) 0.000% 2026	1.4	24-Nov-21
MTR Corporation 1.625% 2030	1.2	19-Aug-20	NWD Finance 4.125% Perpetual	1.2	10-Jun-21
AIA Group 3.375% 2030	1.0	7-Apr-20	Hong Kong, China (Sovereign) 0.625% 2026	1.0	2-Feb-21
Others	30.9		Others	36.1	
Indonesia	27.9		Indonesia	26.4	
Indonesia (Sovereign) 3.85% 2030	1.7	15-Apr-20	Indonesia (Sovereign) 3.05% 2051	2.0	12-Jan-21
Indonesia (Sovereign) 4.20% 2050	1.7	15-Apr-20	Perusahaan Penerbit SBSN Indonesia III 1.50% 2026	1.3	9-Jun-21
Indonesia (Sovereign) 0.90% 2027	1.2	14-Jan-20	Indonesia (Sovereign) 1.85% 2031	1.3	12-Jan-21
Others	23.4		Others	21.9	
Korea, Rep. of	30.0		Korea, Rep. of	43.9	
Korea Housing Finance Corporation 0.010% 2025	1.2	5-Feb-20	Posco 0.00% 2026	1.2	1-Sep-21
Korea Development Bank 1.250% 2025	1.0	3-Jun-20	Korea Housing Finance Corporation 0.01% 2026	1.1	29-Jun-21
Export-Import Bank of Korea 0.829% 2025	0.9	27-Apr-20	SK Hynix 1.50% 2026	1.0	19-Jan-21
Others	26.9		Others	40.6	
Malaysia	17.2		Malaysia	16.0	
Petronas Capital 4.55% 2050	2.8	21-Apr-20	Petronas Capital 3.404% 2061	1.8	28-Apr-21
Petronas Capital 3.50% 2030	2.3	21-Apr-20	Petronas Capital 2.480% 2032	1.3	28-Apr-21
Others	12.2		Others	13.0	
Philippines	15.5		Philippines	10.8	
Philippines (Sovereign) 2.65% 2045	1.5	10-Dec-20	Philippines (Sovereign) 3.200% 2046	2.3	6-Jul-21
Philippines (Sovereign) 2.95% 2045	1.4	5-May-20	Philippines (Sovereign) 1.375% 2026	1.1	8-Oct-21
Others	12.6		Others	7.5	
Singapore	14.7		Singapore	16.5	
United Overseas Bank 0.010% 2027	1.2	1-Dec-20	BOC Aviation 1.625% 2024	1.0	29-Apr-21
Oversea-Chinese Banking Corporation 1.832% 2030	1.0	10-Sep-20	Temasek Financial I 2.750% 2061	1.0	2-Aug-21
Others	12.5		Others	14.5	
Thailand	5.3		Thailand	4.1	
Bangkok Bank in Hong Kong, China 5.0% Perpetual	0.8	23-Sep-20	Bankok Bank in Hong Kong, China 3.466% 2036	1.0	23-Sep-21
PTT Treasury 3.7% 2070	0.7	16-Jul-20	GC Treasury Center 2.980% 2031	0.7	18-Mar-21
Others	3.8		Others	2.4	
Viet Nam	0.1		Viet Nam	1.6	
Emerging East Asia Total	378.1		Emerging East Asia Total	376.4	
Memo Items:			Memo Items:		
India	14.3		India	23.7	
Vedanta Holdings Mauritius II 13.00% 2023	1.4	21-Aug-20	Vedanta Resources 8.95% 2025	1.2	11-Mar-21
Others	12.9		Others	22.5	
Sri Lanka	0.4		Sri Lanka	0.8	
Sri Lanka (Sovereign) 6.57% 2021	0.1	30-Jul-20	Sri Lanka (Sovereign) 7.95% 2024	0.2	3-May-21
Others	0.3		Others	0.6	

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.
4. 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.
5. Figures after the issuer name reflect the coupon rate and year of maturity of the bond.

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

covered bond in October. Proceeds from the issuance will be used to fund green and social projects of the company.

Hong Kong, China accounted for a 10.5% share of all bonds denominated in G3 currencies in 2021. This comprised USD-denominated bonds that amounted to USD36.5 billion, while a total of USD2.9 billion was EUR-denominated, and bonds denominated in Japanese yen amounted to USD0.3 billion. In November, the government raised USD3.0 billion from its multicurrency green bond issuance: the EUR-denominated tranches had tenors of 5 years and 20 years, while the USD-denominated tranche had a maturity of 10 years. Funds raised from the issuance will be part of Hong Kong, China's Capital Works Reserve Fund, which will be used for sustainable economic development projects. The issuance is also meant to expand Hong Kong, China's investor base. The Hong Kong Mortgage Corporation, a government-owned entity, offered 10 USD-denominated bond issuances in Q4 2021 amounting to USD550.0 million and with tenors from 1 year to 3 years.

G3 currency bonds issued by ASEAN member economies in 2021 dropped 7.0% y-o-y.⁵ G3 currency bond issuance in the region totaled USD75.4 billion, which was down from the USD81.0 billion issued in 2020, as fund-raising activities in most economies slowed during the year. Only Singapore and Viet Nam posted increased issuance of G3 currency bonds in 2021. ASEAN issuance in 2021 was at 20.0% of total G3 currency bond issuance in emerging East Asia, less than the 21.4% share recorded in 2020. During the review period, Indonesia continued to have the highest volume of G3 currency bond issuance in the ASEAN region despite the decline in its issuance. Singapore, Malaysia, the Philippines, Thailand, and Viet Nam followed in descending order in terms of issuance volume.

In 2021, G3 currency bond issuances in Indonesia accounted for 7.0% of the total in emerging East Asia at USD23.3 billion in US dollars, USD2.3 billion equivalent in euros, and USD0.9 billion equivalent in Japanese yen. Bank Indonesia raised about USD1.4 billion in short-term, zero-coupon USD-denominated securities in Q4 2021 as part of the government's stimulus program to combat the effects of the COVID-19 pandemic. In October, Indofood CBP, a producer of consumer products, issued a USD1.0 billion dual-tranche USD-denominated global

bond with tenors of 11 years and 31 years. Proceeds from the issuance will be used to meet the company's obligations in its acquisition of Pinehill Company and for general corporate purposes.

Singapore accounted for 4.4% of total G3 currency bonds issued in emerging East Asia in 2021 with USD13.6 billion in US dollars, USD2.5 billion equivalent in euros, and USD0.4 billion equivalent in Japanese yen. In October, DBS Bank expanded its stock of G3 currency bonds by issuing a dual-currency bond: a EUR-denominated tranche worth USD852.8 million and a USD-denominated tranche amounting to USD210.0 million. Both tranches had a tenor of 5 years. In December, real estate company Mapletree Logistics Trust issued two samurai bonds. The first one was an 8-year bond equivalent to USD17.4 million and with a coupon rate of 0.7%. The second issuance was a dual-tranche bond totaling USD104.3 million, both of which had a tenor of 9 years and a coupon rate of 0.9%. Proceeds from the latest samurai bond issuance will be used for general corporate purposes and for refinancing existing obligations.

During the review period, G3 currency bonds issuance in Malaysia was 4.2% of the total for emerging East Asia with USD-denominated issuances totaling USD15.9 billion and JPY-denominated bonds amounting to USD0.1 billion. In October, Malayan Banking increased its stock of USD-denominated and JPY-denominated bonds through separate issuances during the month. The USD-denominated bond was a USD255.0 million zero-coupon bond with a tenor of 40 years, while the samurai bond was a 5-year bond totaling USD86.9 million and with a coupon rate of 0.21%. In November, the Export-Import Bank of Malaysia issued a 5-year USD350.0 million USD-denominated bond with a coupon rate of 1.831%. Issued through the company's multicurrency medium-term note program, proceeds from the issuance will be used for general corporate purposes.

A 2.9% share of total issuance of G3 currency bonds in emerging East Asia in 2021 came from the Philippines. In terms of currency, US dollar bonds totaled USD8.0 billion, USD2.4 billion worth of bonds were denominated in euros, and JPY-denominated bonds totaled USD0.5 billion. In October, the Government of the Philippines issued a USD1.6 billion dual-tranche USD-denominated retail onshore dollar bonds with maturities of 5 years and

⁵ For the discussion on G3 currency issuance, data for ASEAN include Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

10 years. The issuance aimed to attract retail investors to foster a more inclusive investment environment in the Philippines. In November, Globe Telecommunications raised USD600.0 million from its issuance of a USD-denominated perpetual bond with a 4.2% coupon rate. Proceeds from the offering will be used for the telecommunications company's capital expenditures, the refinancing of existing debts, and other general corporate purposes.

During the review period, Thailand had a share of 1.1% of all G3 currency bonds issued in the region, raising funds solely in US dollars totaling USD4.1 billion. In October, life insurance company Muang Thai Life Assurance issued a 15-year USD-denominated callable bond with a coupon rate of 3.552%. The USD400 million raised from the offering will be used for general corporate purposes and to meet capital requirements.

Only 0.4% of all G3 currency bonds issued in emerging East Asia were from Viet Nam in 2021, with USD-denominated bonds worth USD1.6 billion. In December, property developer Phu My Hung Development raised USD150.0 million from a 5-year USD-denominated bond. The bond had a coupon rate of 2.0% and proceeds will be part of the company's guarantee facility.

Emerging East Asia's monthly G3 currency bond issuance from December 2020 to December 2021 is shown in **Figure 10**. After a dip in October, issuance picked up again in November as most economies ramped up their G3 currency fund-raising activities. Issuance fell again across all economies in the region in December as the Omicron variant of COVID-19 caused concerns around the world, and as markets anticipated a further reduction in the US Federal Reserve's asset purchases. The low December issuance volume resulted in less G3 currency bond issuance in 2021 than in 2020.

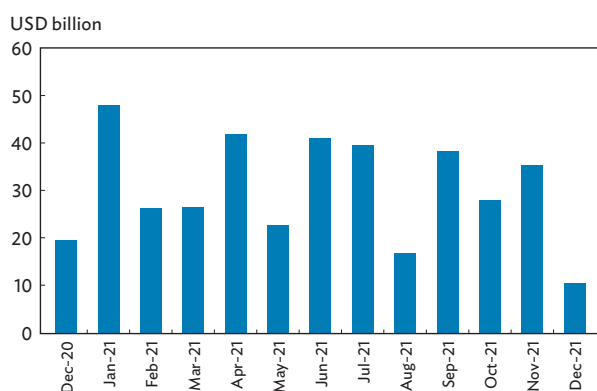
Bond Yield Movements

Emerging East Asia's government bond yields rose as central banks globally began tightening monetary policy in response to rising inflation.

As economies continue to recover, global inflation has begun to rise, prompting many central banks and monetary authorities to begin tightening monetary policy. The Federal Reserve announced during its 2–3 November meeting that it would begin reducing the pace of its monthly asset purchases by USD10 billion for US Treasuries and USD5 billion for mortgage-backed securities each month. The Federal Reserve later accelerated the pace of its monthly reductions to USD20 billion and USD10 billion, respectively, at its 14–15 December meeting, with its asset purchases set to end entirely in March 2022. Further tightening was also done during its 15–16 March meeting, where it raised the Federal funds target rate range by 25 basis points (bps) to 0.25% to 0.50%. The Federal Reserve also said that it could also begin reducing its bond holdings in an upcoming meeting.

The European Central Bank (ECB) has also slowed the pace of its asset purchases, with the amounts purchased under the Pandemic Emergency Purchase Programme (PEPP) being reduced each quarter. During its 16 December meeting, the ECB affirmed that the PEPP would end in March 2022. However, there would be a transition period wherein after the end of the PEPP, monthly purchases under the Asset Purchase Programme (APP) would be increased to EUR40 billion in Q2 2022 before falling to EUR30 billion in Q3 2022 and EUR20 billion in successive quarters. The ECB provided no indication when the APP was set to end but did mention that a rate hike was unlikely. However, in the ECB's 3 February meeting, the ECB noted that

Figure 10: 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; the Lao People's Democratic Republic; 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 December 2021 currency exchange rates and do not include currency effects.

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

inflation was running higher than previously expected, and it subsequently refrained from saying that a rate hike was unlikely. During its 10 March meeting, the ECB announced that it would accelerate the reduction of its APP to EUR40 billion in April, EUR30 billion in May, and EUR20 billion in June and could stop the APP in the third quarter subject to incoming data.

The Bank of Japan (BOJ) was the furthest along among its peers in normalizing monetary policy. During its 18 January meeting, monetary policy was largely left unchanged but the BOJ affirmed that purchases of commercial paper and corporate bonds would end in March 2022, but purchases of Japanese Government Bonds would continue. The BOJ also said that its policy rates are expected to remain at current levels or below, suggesting that economic conditions did not yet warrant discussion on the timing of rate adjustments.

Among other advanced economies, the Bank of England (BOE) has also been tightening in response to rising inflation. On 16 December, the BOE raised the base rate to 0.25% from 0.10%. On 3 February, the BOE raised the base rate by an additional 25 bps to 0.50%.

Yields have also risen in emerging East Asia, pressured by central banks in advanced economies and the region. The 2-year yield trended upward in nearly all emerging East Asian markets between 30 November 2021 and 15 February 2022. A strong rise in 2-year yields was seen in the Republic of Korea and Hong Kong, China (Figure 11a). In particular, the Republic of Korea had

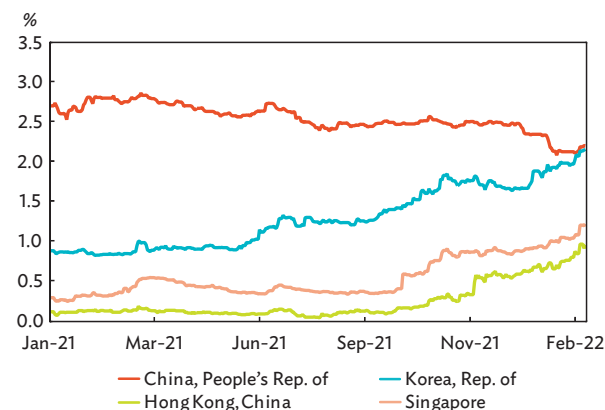
the largest gain in the 2-year yield among emerging East Asian markets following the Bank of Korea's efforts to rein in inflation. In contrast, Hong Kong, China's rise in yields followed US yields, owing to the economy's lack of independent monetary policy.

The PRC was the sole market in emerging East Asia to show a noticeable decline in its 2-year yield, as the slowing economy necessitated additional support from the People's Bank of China (PBOC). The Philippines' 2-year yield declined from the start of December through the first half of January due to ample liquidity in the banking system, but the yield began rising following indications that the Federal Reserve would raise interest rates at its next monetary meeting in March (Figure 11b). Thailand's 2-year yield was roughly stable during the review period, exhibiting only a mild decline.

Emerging East Asia's 10-year yields largely followed similar patterns to those of the 2-year yields. The steepest rise among 10-year yields was again noted in the Republic of Korea (Figure 12a). Hong Kong, China's and Singapore's 10-year yields also mirrored movements in their respective 2-year yields. Bucking the regional trend once again, the PRC's 10-year yield exhibited a notable decline.

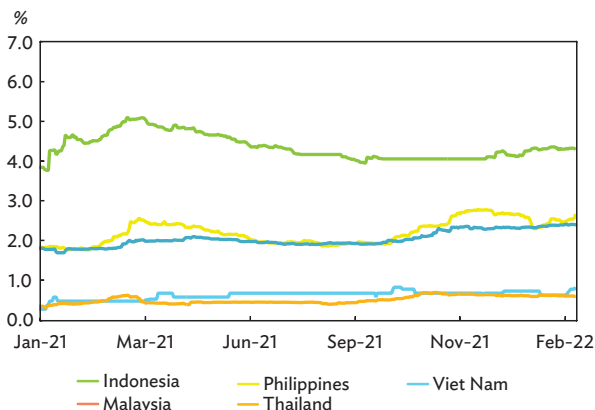
In contrast to the movement in its 2-year yield, Thailand's 10-year yield rose during the review period (Figure 12b). The Philippines' 10-year yield followed a similar pattern to its 2-year yield, but the spike in its 10-year yield toward the end of the review period was significantly higher.

Figure 11a: 2-Year Local Currency Government Bond Yields

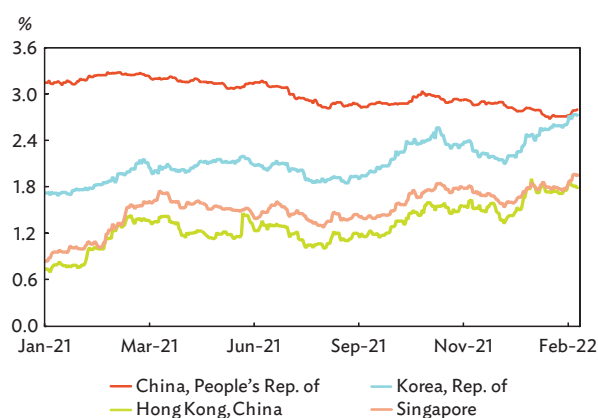


Note: Data coverage is from 1 January 2021 to 15 February 2022.
Source: Based on data from Bloomberg LP.

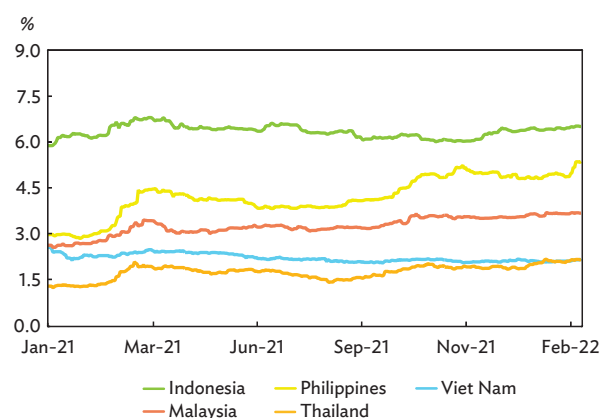
Figure 11b: 2-Year Local Currency Government Bond Yields



Note: Data coverage is from 1 January 2021 to 15 February 2022.
Source: Based on data from Bloomberg LP.

Figure 12a: 10-Year Local Currency Government Bond Yields

Note: Data coverage is from 1 January 2021 to 15 February 2022.
Source: Based on data from Bloomberg LP.

Figure 12b: 10-Year Local Currency Government Bond Yields

Note: Data coverage is from 1 January 2021 to 15 February 2022.
Source: Based on data from Bloomberg LP.

Yield curve movements in emerging East Asia followed trends in the 2-year and 10-year yields, with all markets except the PRC showing a rising yield curve between 30 November and 15 February (**Figure 13**). The most pronounced upward shift was in the Republic of Korea, where the yield curve shifted upward by an average of 39 bps across all tenors. The yield curves of Hong Kong, China and Singapore also rose across all tenors by an average of 27 bps and 24 bps, respectively. All other regional markets except the PRC showed a rise in most tenors across the yield curve.

In the Philippines and Thailand, there was a decline in yields with tenors of 2 years or less, reflecting abundant liquidity in the financial system with many banks preferring shorter-term tenors in expectation of higher interest rates.

The 2-year versus 10-year yield rose in all markets except in Hong Kong, China; the Republic of Korea; Singapore; and Viet Nam (**Figure 14**).

The PRC was the only market in emerging East Asia to exhibit a notable decline in its yields, largely due to the weakening of its economic growth and concerns regarding property company defaults. The PRC's GDP growth slowed to 4.0% y-o-y in Q4 2021 from 4.9% y-o-y in Q3 2021 and 7.9% y-o-y in Q2 2021. Similarly, Hong Kong, China's GDP growth slowed to 4.8% y-o-y in Q4 2021 from 5.5% y-o-y in Q3 2021. Singapore's

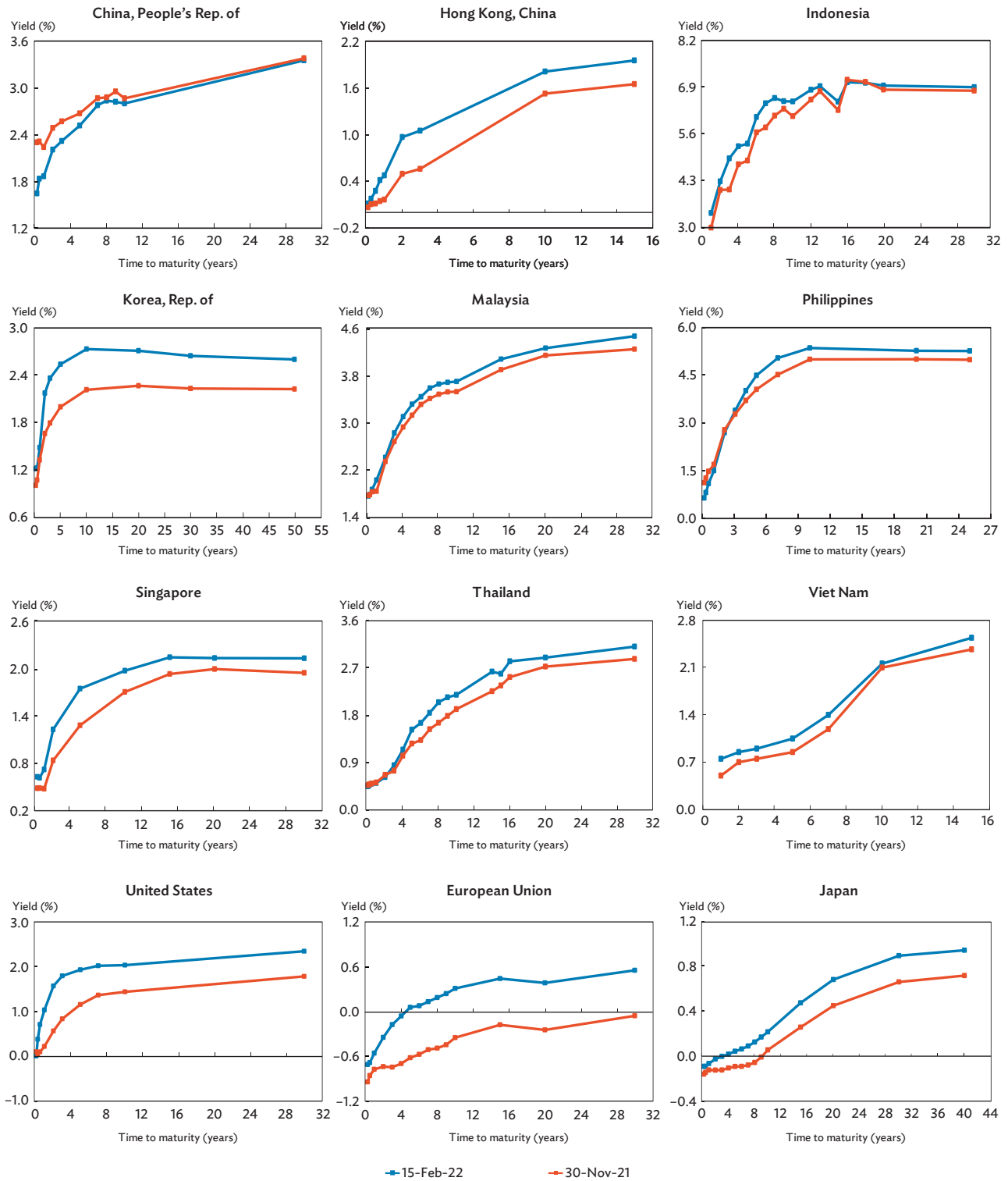
GDP growth also slowed to 6.1% y-o-y in Q4 2021 from 7.5% y-o-y in Q3 2021.

In contrast, other markets in the region experienced a quickening in their GDP growth in Q4 2021 as economies began to recover from the pandemic and gradually open up. The fastest recovery of Q4 2021 was in Viet Nam, where GDP bounced back with growth of 5.2% y-o-y in Q4 2021 from a decline of 6.2% y-o-y in the previous quarter. Malaysia's GDP also recovered in Q4 2021 with growth of 3.6% y-o-y following a 4.5% y-o-y contraction in the previous quarter. In addition, Thailand reported positive GDP growth of 1.9% y-o-y in Q4 2021 after a 0.2% y-o-y decline in Q3 2021. Both Indonesia and the Philippines reported slightly better GDP growth results in Q4 2021 at 5.0% y-o-y and 7.7% y-o-y, respectively, versus 3.5% y-o-y and 6.9% y-o-y in Q3 2021. The Republic of Korea had roughly stable GDP growth in Q4 2021 at 4.2% y-o-y versus 4.0% y-o-y in Q3 2021.

With economic recovery underway in most markets, inflation in the region has been trending upward. Among all economies in the region, Singapore had the highest inflation rate at the end of January (**Figure 15a**). After recording the highest inflation rate in the region in Q3 2021, inflation in the Philippines trended downward in Q4 2021 (**Figure 15b**).

With inflation on the rise, some central banks and monetary authorities in emerging East Asia have begun

Figure 13: Benchmark Yield Curves—Local Currency Government Bonds



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

tightening. The first to do so was the Bank of Korea beginning with a rate increase on 26 August 2021 and continuing on 25 November 2021 and again on 14 January 2022 (**Table 5**). Monetary Authority of Singapore twice

raised the slope of its Singapore Dollar Nominal Effective Exchange Rate, the first time on 14 October 2021 and again on 25 January 2022 in an off-schedule meeting.

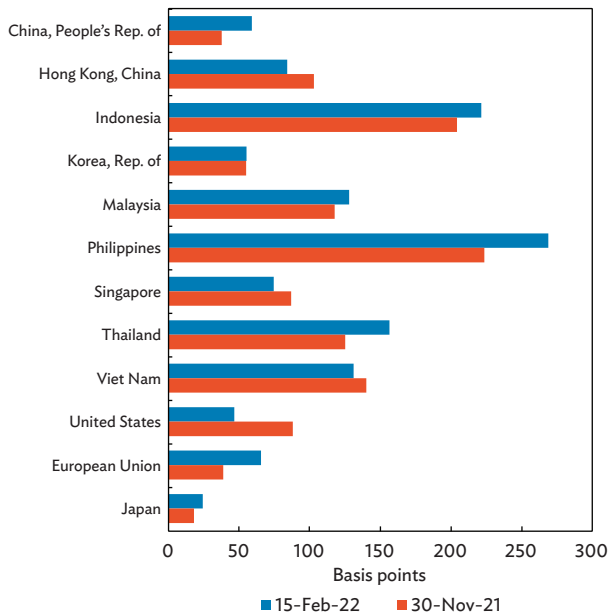
While some central banks in emerging East Asia were tightening, the PBOC had the distinction of being the only regional central bank to ease monetary policy. The PBOC reduced by 50 bps the reserve requirement ratio on 6 December. It also reduced by 10 bps the rate on its 1-year medium-term lending facility to 2.85% on 16 January.

Corporate spreads largely rose in the PRC and the Republic of Korea.

The spread between AAA-rated yields and government yields rose in the PRC and the Republic of Korea. In the PRC, demand for AAA-rated paper fell amid rising credit concerns and the potential spillover from defaults in the property sector. In the Republic of Korea, spreads widened largely due to concerns of a slowdown as the Bank of Korea tightened monetary policy. The spread fell in Malaysia on a return to GDP growth in Q4 2021 and was unchanged in Thailand (**Figure 16a**).

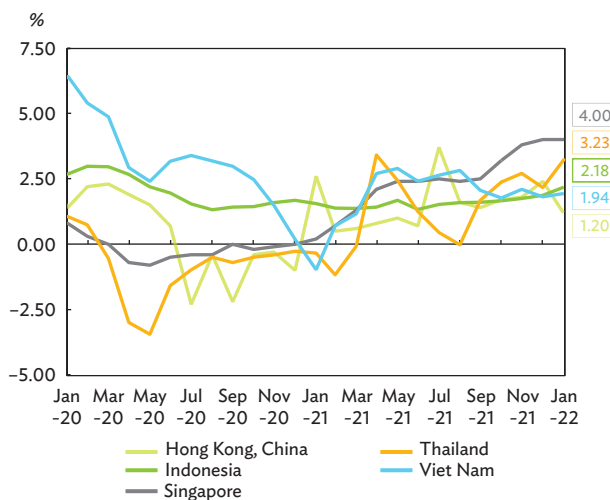
For lower-rated bonds, spreads were unchanged in most markets for which data are available but rose in Malaysia. (**Figure 16b**).

Figure 14: Yield Spreads between 2-Year and 10-Year Government Bonds



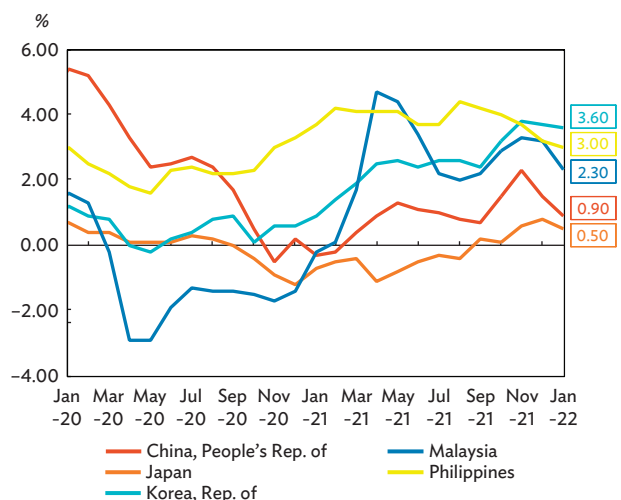
Source: AsianBondsOnline computations based on Bloomberg LP data.

Figure 15a: Headline Inflation Rates



Note: Data coverage is from January 2020 to January 2022. Source: Based on data from Bloomberg LP.

Figure 15: Headline Inflation Rates



Note: Data coverage is from January 2020 to January 2022. Source: Based on data from Bloomberg LP.

Table 5: Policy Rate Changes

Economy	Policy Rate 31-Jan-2021 (%)	Rate Change (%)												Policy Rate 15-Feb-2022 (%)	Change in Policy Rates (basis points)	
		Feb-2021	Mar-2021	Apr-2021	May-2021	Jun-2021	Jul-2021	Aug-2021	Sep-2021	Oct-2021	Nov-2021	Dec-2021	Jan-2022			Feb-2022
United States	0.25														0.25	0
Euro Area	(0.50)														(0.50)	0
Japan	(0.10)														(0.10)	0
China, People's Rep. of	2.95												↓0.10		2.85	↓ 10
Indonesia	3.75	↓0.25													3.50	↓ 25
Korea, Rep. of	0.50						↑0.25				↑0.25		↑0.25		1.25	↑ 75
Malaysia	1.75														1.75	0
Philippines	2.00														2.00	0
Singapore	-								↑				↑		-	-
Thailand	0.50														0.50	0
Viet Nam	4.00														4.00	0

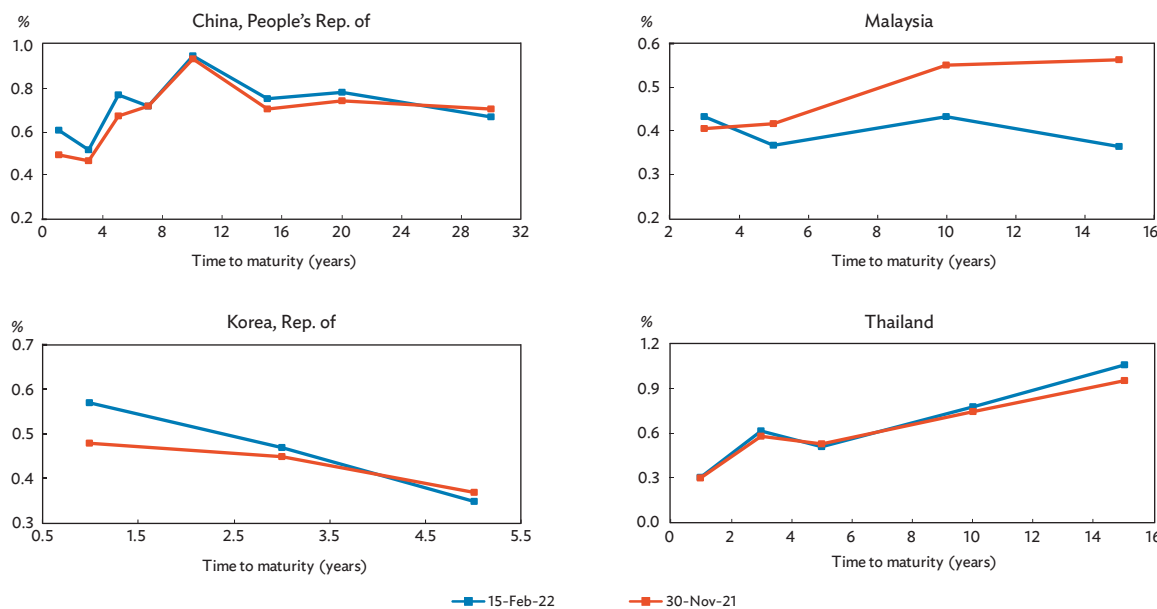
(-) = negative.

Notes:

1. Data coverage is from 31 January 2021 to 15 February 2022.
2. For the People's Republic of China, data used in the chart are for the 1-year medium-term lending facility rate. While the 1-year benchmark lending rate is the official policy rate of the People's Bank of China, market players use the 1-year medium-term lending facility rate as a guide for the monetary policy direction of the People's Bank of China.
3. The up (down) arrow for Singapore signifies monetary policy tightening (loosening) by its central bank. Monetary Authority of Singapore utilizes the exchange rate to guide its monetary policy.

Sources: Various central bank websites.

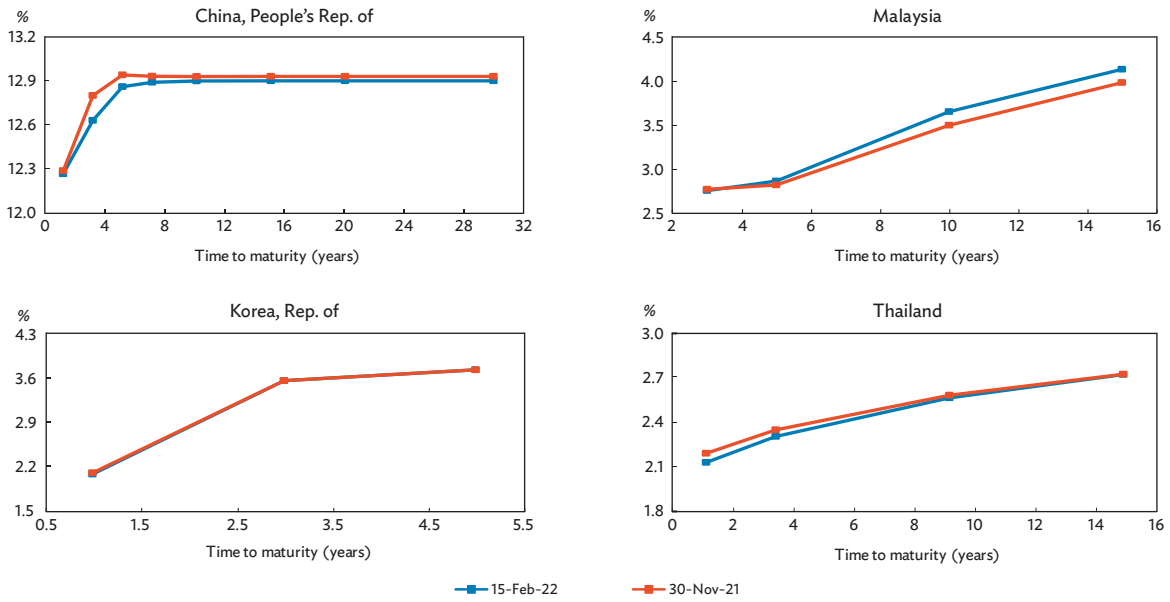
Figure 16a: Credit Spreads—Local Currency Corporates Rated AAA versus Government Bonds



Notes:

1. Credit spreads are obtained by subtracting government yields from corporate indicative yields.
 2. For Malaysia, data on corporate bond yields are as of 30 November 2021 and 14 February 2022.
- Sources: People's Republic of China (Bloomberg LP); Republic of Korea (KG Zeroin Corporation); Malaysia (Fully Automated System for Issuing/Tendering Bank Negara Malaysia); and Thailand (Bloomberg LP).

Figure 16b: Credit Spreads—Lower-Rated Local Currency Corporates versus AAA



Notes:

1. Credit spreads are obtained by subtracting government yields from corporate indicative yields.
 2. For Malaysia, data on corporate bond yields are as of 30 November 2021 and 14 February 2022.
- Sources: People's Republic of China (Bloomberg LP); Republic of Korea (KG Zeroin Corporation); Malaysia (Fully Automated System for Issuing/Tendering Bank Negara Malaysia); and Thailand (Bloomberg LP).