Bond Market Developments in the Third Quarter of 2022

Size and Composition

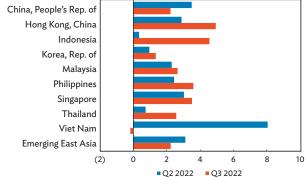
Emerging East Asia's local currency bond market reached a size of USD22.0 trillion at the end of September.

Emerging East Asia's local currency (LCY) bond market expanded 2.3% quarter-on-quarter (q-o-q) in the third guarter (Q3) of 2022 to reach a size of USD22.0 trillion at the end of September.² Overall growth eased from 3.1% g-o-g in the second guarter (Q2) of 2022 as expansions in both the government and corporate bond segments slowed. Growth in the region's LCY bond market during the review period was largely capped by a slowdown in the market of the People's Republic of China (PRC). Rising borrowing costs and heightened economic uncertainties also affected the region's bond market. Interest rates rose as most regional central banks raised their policy rates to combat inflation and in response to the United States (US) Federal Reserve's aggressive monetary policy tightening. Uncertainties from slowing global growth, persistent global inflation, geopolitical risks, and the impacts of the US Federal Reserve's prolonged monetary policy tightening cycle became more pronounced during the review period.

Eight out of nine LCY bond markets in emerging East Asia recorded positive q-o-q growth in Q3 2022, while the market of Viet Nam showed negative q-o-q growth (**Figure 1a**). Among those that experienced positive q-o-q expansions, seven markets (Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand) posted faster q-o-q growth in Q3 2022 than in the prior quarter. The markets of Hong Kong, China and Indonesia showed the fastest q-o-q expansions, while the markets of the PRC and the Republic of Korea experienced the weakest q-o-q growth in Q3 2022.

On a year-on-year (y-o-y) basis, growth in emerging East Asia's LCY bond market also slowed to 12.5% in Q3 2022 from 14.0% in the previous quarter. The markets





q-o-q = quarter-on-quarter, Q2 = second quarter, Q3 = third quarter. Notes:

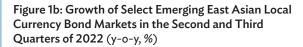
- ${\bf 1.} \ \ {\bf For Singapore, corporate bonds \ outstanding \ are \ based \ on \ } {\bf A} {\it sianBonds Online}$ estimates.
- Growth rates are calculated from local currency base and do not include currency effects.
- Emerging East Asia growth figures are based on 30 September 2022 currency exchange rates and do not include currency effects.

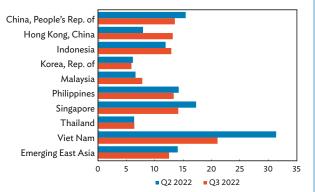
Sources: People's Republic of China (CEIC Data Company); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia; Directorate General of Budget Financing and Risk Management, Ministry of Finance; and Indonesia Stock Exchange); Republic of Korea (KG Zeroin Corporation and The Bank of 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).

of Viet Nam and Singapore recorded the fastest y-o-y growth, while the markets of Thailand and the Republic of Korea showed the slowest y-o-y expansions in Q3 2022. All nine markets posted positive y-o-y growth, although five (the PRC, the Republic of Korea, the Philippines, Singapore, and Viet Nam) of the nine markets experienced slower y-o-y expansions in Q3 2022 than in Q2 2022 (**Figure 1b**). The markets of Hong Kong, China; Indonesia; and Malaysia experienced faster y-o-y growth in Q3 2022 than in the previous quarter while Thailand grew at the same pace from Q2 2022.

The PRC remained home to the region's largest LCY bond market. At the end of September, the PRC's LCY bond market reached a size of USD17.7 trillion, accounting for

² Emerging East Asia is defined to include member states of the Association of Southeast Asian Nations (ASEAN) plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.





Q2 = second quarter, Q3 = third quarter, y-o-y = year-on-year.

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- 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).

80.2% of the region's total bond stock. Overall growth in the PRC's LCY bond market dropped to 2.2% q-o-q in Q3 2022 from 3.5% q-o-q in Q2 2022, as expansions in both the government and corporate segments slowed. Growth in LCY government bonds outstanding dipped to 2.8% q-o-q in Q3 2022 from 4.3% q-o-q in the previous quarter, due primarily to a contraction in issuance, as local government bond annual quotas had been nearly fulfilled in earlier quarters. Growth in government bonds was supported by expansions in Treasury and other government bonds (4.9% q-o-q), policy bank bonds (3.8% q-o-q), and local government bonds (0.8% q-o-q). Meanwhile, growth in the PRC's corporate bond market eased to 1.2% q-o-q in Q3 2022 from 2.0% q-o-q in the previous quarter, amid a worsening property market slump and "zero-COVID" restrictions. On a y-o-y basis, the PRC's LCY bond market expanded 13.5% in Q3 2022, down from 15.4% in Q2 2022.

With an outstanding bond stock of USD2.1 trillion at the end of September, the Republic of Korea's LCY bond market continued to be the second-largest in the region. Its share of the region's total bond market slipped to

9.4% at the end of September. The Republic of Korea's LCY bond market posted 1.3% q-o-q growth in Q3 2022, up from 1.0% q-o-q in the prior quarter. Growth in the government bond segment rose to 1.8% q-o-q in Q3 2022 from 1.6% q-o-q in Q2 2022, due primarily to faster growth in other government bonds. Growth in other government bonds picked up, rising 3.0% q-o-q in Q3 2022 from 1.9% q-o-q in the previous quarter. The stock of central government bonds rose 2.1% q-o-q in Q3 2022, down from 3.4% g-o-g in the previous guarter. The Bank of Korea's bonds outstanding continued to contract, dropping 2.3% q-o-q in Q3 2022 following a 10.2% g-o-g decline in the prior guarter. On the other hand, growth in the corporate bond market inched up to 1.0% q-o-q in Q3 2022 from 0.5% q-o-q in the previous quarter. On a y-o-y basis, growth in the Republic of Korea's LCY bond market eased to 5.9% in Q3 2022 from 6.1% in Q2 2022.

Hong Kong, China's LCY bonds outstanding totaled USD350.1 billion at the end of September. Overall growth rose to 4.9% q-o-q in Q3 2022 from 2.9% q-o-q in the previous quarter, driven by faster growth in both the government and corporate bond segments. Government bonds outstanding expanded 3.7% in Q3 2022, up from 1.5% in Q2 2022. The faster growth in government bonds in Q3 2022 stemmed from stronger growth in outstanding Exchange Fund Bills and Hong Kong Special Administrative Region (HKSAR) bonds, as well as a narrower contraction in outstanding Exchange Fund Notes. The review period saw record issuance of 3-year floating rate Silver Bonds, which are bonds intended for senior citizens. Meanwhile, growth in the corporate bond segment accelerated to 6.2% q-o-q in Q3 2022 from 4.4% q-o-q in the previous quarter. On an annual basis, Hong Kong, China's LCY bond market expanded 13.2% y-o-y in Q3 2022, up from 7.9% y-o-y in the prior quarter.

The aggregate LCY bond stock of the members of the Association of Southeast Asian Nations (ASEAN) amounted to USD1,938.0 billion at the end of September, with growth rising to 3.1% q-o-q in Q3 2022 from 2.0% in Q2 2022. Annual growth eased to 11.1% y-o-y in Q3 2022 from 11.8% y-o-y in the previous quarter. ASEAN members' share of emerging East Asia's total LCY bond market rose slightly to 8.8% in Q3 2022 from 8.7% in Q2 2022. The ASEAN LCY bond market remained dominated by government bonds. Total government bonds among all ASEAN markets amounted

to USD1,426.1 billion at the end of September, comprising 73.6% of the total ASEAN LCY bond market. Outstanding corporate bonds amounted to USD0.5 billion, or 26.4% of the total market. The LCY bond markets of Singapore, Thailand, and Malaysia remained the region's largest, while Viet Nam accounted for the smallest LCY bond market in ASEAN.

Singapore's LCY bond market expanded 3.5% q-o-q in Q3 2022 to reach a size of USD464.3 billion at the end of September. The rate of q-o-q growth in Q3 2022 outpaced that of the previous quarter (3.0% q-o-q). The faster expansion in Q3 2022 stemmed solely from the government bond segment as the corporate bond segment recorded a marginal contraction. Growth in outstanding government bonds accelerated to 5.1% q-o-q in Q3 2022 from 3.8% q-o-q in the preceding quarter. The strong growth in government bonds was supported by expansions in Singapore Government Securities (1.4% q-o-q) and Monetary Authority of Singapore (MAS) bills (8.8% q-o-q). The review period saw the inaugural issuance of Singapore's sovereign green bonds worth SGD2.4 billion. Meanwhile, Singapore's stock of outstanding LCY corporate bonds recorded a marginal contraction in Q3 2022 amid rising borrowing costs. The MAS tightened its monetary policy in July and October to arrest rising inflation. On a y-o-y basis, Singapore's LCY bond market expanded 14.1% in Q3 2022, down from 17.3% in Q2 2022.

Thailand's outstanding LCY bond stock totaled USD410.7 billion at the end of September. Quarterly growth rose to 2.6% q-o-q in Q3 2022 from 0.7% q-o-q in the preceding quarter, driven by a recovery in the government bond segment. Government bonds outstanding expanded 2.3% q-o-q in Q3 2022, reversing the 0.7% q-o-q decline in Q2 2022. The rebound in the government bond segment stemmed from growth in government bonds and Treasury bills (3.8% q-o-q) and state-owned enterprise and other bonds (1.9% q-o-q), as well as a narrower contraction in Bank of Thailand (BOT) bonds outstanding. Meanwhile, growth in the corporate bond market dropped to 3.4% q-o-q in Q3 2022 from 4.6% q-o-q in Q2 2022, mainly due to higher borrowing costs. The BOT raised its benchmark raised by 25 basis points (bps) each in August and September after holding it at a record low rate of 0.50% for over 2 years. On a y-o-y basis, growth in Thailand's LCY bond market was unchanged at 6.4% in Q2 2022 and Q3 2022.

Outstanding LCY bonds in Malaysia amounted to USD399.6 billion at the end of September, with quarterly growth inching up to 2.6% in Q3 2022 from 2.3% in the prior quarter. The higher overall growth was driven primarily by a faster expansion in the corporate bond segment. The outstanding LCY government bond stock rose 3.2% q-o-q in Q3 2022 versus 4.1% q-o-q in Q2 2022. Central government bonds continued to drive most of the growth in total government bonds. Renewed issuance of Bank Negara Malaysia bills also contributed to overall growth in government bonds during the review period. Meanwhile, expansion in corporate bonds outstanding picked up, rising to 1.9% q-o-q in Q3 2022 from a tepid pace of 0.1% q-o-q in the previous quarter. On an annual basis, Malaysia' LCY bond market expanded 7.8% y-o-y in Q3 2022, up from 6.6% y-o-y in Q2 2022.

Malaysia's sukuk (Islamic bond) market remained the largest in emerging East Asia with total sukuk outstanding amounting to USD255.1 billion at the end of September on growth of 3.9% q-o-q in Q3 2022. Government sukuk outstanding amounted to USD111.6 billion, representing nearly half (49.3%) of Malaysia's total LCY government bond stock. Meanwhile, corporate sukuk dominated Malaysia's LCY corporate bond market—outstanding corporate sukuk totaled USD143.6 billion, or 82.8% of the total corporate bond market.

Indonesia's LCY bond market reached a size of USD377.4 billion at the end of September on growth of 4.5% q-o-q and 12.9% y-o-y in Q3 2022. Growth accelerated from 0.3% q-o-q and 11.9% y-o-y in Q2 2022. Faster quarterly growth in Q3 2022 stemmed from a stronger expansion in the government bond segment combined with a rebound in the corporate bond segment. Growth in LCY government bonds outstanding jumped to 4.6% q-o-q in Q3 2022 from 0.6% q-o-q in the previous quarter, driven by robust growth in central government bonds. Central banks bonds and nontradable bonds, on the other hand, recorded contractions during the review period. Meanwhile, Indonesia's corporate bond market rebounded in Q3 2022 on positive business sentiment as Indonesia's economic recovery gained ground. LCY corporate bonds outstanding rose 4.1% q-o-q after declining 2.3% q-o-q in the prior quarter as issuance rebounded.

Indonesia's sukuk market reached a size of USD70.5 billion at the end of September after rising 7.1% q-o-q. Sukuk

outstanding comprised 18.7% of Indonesia's LCY bond market. Government sukuk outstanding amounted to USD67.9 billion, comprising 19.6% of Indonesia's LCY government bond market. Outstanding corporate sukuk totaled USD2.6 billion, representing 8.7% of Indonesia's LCY corporate bond market.

The outstanding stock of LCY bonds in the Philippines stood at USD188.6 billion at the end of September. Overall growth accelerated to 3.6% q-o-q in Q3 2022 from 2.4% q-o-q in Q2 2022 as the government issued Retail Treasury Bonds in September and corporate bonds recovered. Government bonds outstanding posted 3.9% q-o-q growth in Q3 2022, down from 4.1% q-o-q in the previous quarter. Treasury bonds increased during the period but contractions were noted in Bangko Sentral ng Pilipinas securities and other government bonds. Corporate bonds outstanding rose 1.4% q-o-q in Q3 2022, reversing the 7.1% q-o-q decline in the previous quarter. On an annual basis, growth in the Philippines' LCY bond market moderated to 13.3% y-o-y in Q3 2022 from 14.2% y-o-y in the prior quarter.

At the end of September, Viet Nam's LCY bond market remained the smallest in emerging East Asia with an outstanding bond stock of USD97.4 billion. Viet Nam's LCY bond market contracted 0.2% q-o-q in Q3 2022, driven by a decline in the government bond segment combined with a slowdown in the corporate bond segment. Outstanding LCY government bonds fell 2.0% q-o-q in Q3 2022, reversing the 7.4% q-o-q gain posted in the prior quarter. Contractions in the State Bank of Vietnam's (SBV) outstanding bills and government-guaranteed and municipal bonds drove the decline in government bonds during the review period. Meanwhile, growth in corporate bonds outstanding plunged to 4.1% q-o-q in Q3 2022 from 9.5% q-o-q in Q2 2022 amid rising borrowing costs. The SBV raised its policy rate by 100 bps each in September and October after holding it steady since October 2020. On a y-o-y basis, Viet Nam's LCY bond market expanded 21.1% in Q3 2022, down from 31.4% in the previous quarter.

Government bonds continued to dominate emerging East Asia's LCY bond market. The region's aggregate LCY government bond stock totaled USD14.0 trillion at the end of September, accounting for 63.6% of the region's total LCY bond market (Table 1). Growth in the region's government bonds declined to 2.8% q-o-q in Q3 2022 from 3.9% q-o-q in Q2 2022. Except for Viet Nam, all of the region's LCY government bond markets saw positive q-o-q growth in Q3 2022, supported by gains in issuance in nearly all markets except the PRC and the Republic of Korea. Both the PRC and the Republic of Korea frontloaded borrowing in the first half of the year to boost economic recovery. Annual growth in emerging East Asia's LCY government bond stock moderated to 14.3% in Q3 2022 from 15.6% in Q2 2022.

The market of the PRC remained the largest in the region, comprising 82.2% of the region's LCY government bond market at the end of September. A distant second was the Republic of Korea's, which represented 6.3% of the region's total LCY government bond market at the end of the review period. Meanwhile, ASEAN member economies accounted for 10.2% of the region's government bond market. Within ASEAN, the largest government bond markets were those of Indonesia and Singapore, while the smallest were those of the Philippines and Viet Nam.

At the end of the review period, emerging East Asia's LCY government bonds remained concentrated in mediumto long-term tenors (Figure 2). About 54% of the region's total government bonds had maturities of over 5 years. Apart from the PRC; Hong Kong, China; and the Philippines; all markets in the region had over half of their government bonds concentrated in tenors of greater than 5 years. Hong Kong, China's government bonds remained dominated by shorter-dated bonds due to robust market demand for short-term securities. About 80.0% of Hong Kong, China's government bonds had maturities of 1-3 years, while only 10.8% had maturities of more than 5 years.

Emerging East Asia's corporate bond market amounted to USD8.0 trillion at the end of September, comprising 36.4% of the region's total LCY bond stock. Growth dipped to 1.3% q-o-q and 9.6% y-o-y in Q3 2022 from 1.8% q-o-q and 11.5% y-o-y in the prior quarter. Except for the market of Singapore, all of the region's LCY corporate bond markets showed positive q-o-q growth in Q3 2022. Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; and the Philippines posted faster q-o-q growth in Q3 2022 versus Q2 2022. However, the slower expansion in the corporate bond market in the PRC and, to a lesser extent, in Thailand and Viet Nam capped the region's LCY corporate bond growth during the review period.

Table 1: Size and Composition of Select Emerging East Asian Local Currency Bond Markets

	Q3 2021		Q2 2022		Q3 2022		Gro	wth Rate	(LCY-base	e %)	Growth Rate (USD-base %)			
	Amount		Amount		Amount		Q3 2	2021	Q3 2	2022	Q3 2021		Q3 :	2022
	(USD billion)	% share	(USD billion)	% share	(USD billion)	% share	q-o-q	у-о-у	q-o-q	у-о-у	q-o-q	у-о-у	q-o-q	у-о-у
China, People's Rep. of														
Total	17,190	100.0	18,368	100.0	17,676	100.0	3.9	12.8	2.2	13.5	4.1	18.9	(3.8)	2.8
Government	11,043	64.2	11,898	64.8	11,512	65.1	4.1	13.4	2.8	15.1	4.3	19.5	(3.2)	4.2
Corporate	6,146	35.8	6,469	35.2	6,164	34.9	3.7	11.8	1.2	10.7	3.9	17.8	(4.7)	0.3
Hong Kong, China														
Total	312	100.0	334	100.0	350	100.0	0.1	6.1	4.9	13.2	(0.2)	5.6	4.9	12.2
Government	161	51.6	176	52.7	183	52.1	3.0	8.2	3.7	14.4	2.7	7.7	3.7	13.5
Corporate	151	48.4	158	47.3	168	47.9	(2.9)	4.1	6.2	11.8	(3.1)	3.6	6.2	10.9
Indonesia														
Total	356	100.0	369	100.0	377	100.0	3.6	23.9	4.5	12.9	5.0	28.8	2.3	6.1
Government	326	91.7	339	92.0	347	92.0	4.0	27.3	4.6	13.3	5.3	32.3	2.3	6.5
Corporate	29	8.3	29	8.0	30	8.0	(0.2)	(4.2)	4.1	8.4	1.1	(0.5)	1.8	1.9
Korea, Rep. of							()	(")				()		
Total	2,365	100.0	2,253	100.0	2,071	100.0	1.6	7.6	1.3	5.9	(3.4)	6.3	(8.0)	(12.4)
Government	996	42.1	956	42.4	883	42.6	1.9	10.4	1.8	7.1	(3.1)	9.0	(7.6)	(11.4)
Corporate	1,369	57.9	1,296	57.6	1,188	57.4	1.4	5.7	1.0	5.0	(3.6)	4.41	(8.4)	(13.2)
Malaysia	,		,		,						()		()	()
Total	411	100.0	410	100.0	400	100.0	1.5	8.5	2.6	7.8	0.6	7.8	(2.4)	(2.7)
Government	224	54.6	230	56.3	226	56.6	1.5	10.6	3.2	11.8	0.6	9.8	(1.9)	0.9
Corporate	186	45.4	179	43.7	173	43.4	1.4	6.1	1.9	3.1	0.5	5.4	(3.2)	(7.0)
Philippines		.5	.,,		.,,	.5		• • • • • • • • • • • • • • • • • • • •			0.5	<u> </u>	(3.2)	(7.0)
Total	191	100.0	194	100.0	189	100.0	4.4	20.0	3.6	13.3	(0.1)	14.1	(2.9)	(1.5)
Government	163	85.3	169	86.8	164	87.1	6.2	28.0	3.9	15.8	1.7	21.7	(2.6)	0.7
Corporate	28	14.7	26	13.2	24	12.9	(5.1)	(11.9)	1.4	(0.9)	(9.2)	(16.2)	(4.9)	(13.8)
Singapore		1 1.7		13.2		12.7	(3.1)	(11.2)	1. 1	(0.2)	(7.2)	(10.2)	(1.7)	(13.0)
Total	430	100.0	463	100.0	464	100.0	6.4	21.6	3.5	14.1	5.4	22.3	0.3	8.0
Government	291	67.7	321	69.3	327	70.4	8.0	26.3	5.1	18.6	7.1	27.0	1.8	12.2
Corporate	139	32.3	142	30.7	138	29.6	3.0	12.8	(0.03)	4.7	2.1	13.4	(3.2)	(1.0)
Thailand	139	32.3	142	30.7	130	29.0	3.0	12.0	(0.03)	7./	2.1	13.4	(3.2)	(1.0)
Total	430	100.0	427	100.0	411	100.0	2.5	3.9	2.6	6.4	40.6	54.9	(3.9)	(4.6)
Government	312	72.5	307	71.9	294	71.7	2.2	2.8	2.3	5.2	38.0	50.0	(4.2)	(5.6)
Corporate	119	27.5	120	28.1	116	28.3	3.4	6.7	3.4	9.5	47.8	69.7		
Viet Nam	117	27.5	120	20.1	110	20.3	3.4	0.7	3.4	7.3	47.0	09.7	(3.2)	(1.9)
Total	84	100.0	100	100.0	97	100.0	0.2	23.7	(0.2)	21.1	9.5	26.0	(2.6)	15.5
			70				8.3		(0.2)				(2.6)	
Government	63	74.4		70.3	67	69.1	4.3	9.8	(2.0)	12.4	5.4	11.8	(4.4)	7.2
Corporate	22	25.6	30	29.7	30	30.9	22.0	96.1	4.1	46.1	23.3	99.7	1.6	39.4
Emerging East Asia	21.760	100.0	22.017	100.0	22.025	100.0	2.6	12.2	2.2	12.5	2.7	177	(2.0)	1.2
Total	21,769	100.0	22,917	100.0	22,035	100.0	3.6	12.3	2.3	12.5	3.7	17.7	(3.9)	1.2
Government	13,580	62.4	14,468	63.1	14,004	63.6	3.9	13.5	2.8	14.3	4.3	19.3	(3.2)	3.1
Corporate	8,189	37.6	8,450	36.9	8,031	36.4	3.1	10.4	1.3	9.6	2.7	15.1	(5.0)	(1.9)
Japan 											(2.5)			/a.a.=:
Total	11,428	100.0	9,659	100.0	9,084	100.0	(0.6)	4.9	0.3	3.4	(0.8)	(0.6)	(6.0)	(20.5)
Government	10,601	92.8	8,957	92.7	8,417	92.7	(0.7)	4.9	0.2	3.3	(0.8)	(0.6)	(6.0)	(20.6)
Corporate	828	7.2	702	7.3	667	7.3	(0.02)	5.5	1.3	4.8	(0.2)	(0.02)	(5.0)	(19.4)

() = negative, LCY = local currency, q-o-q = quarter-on-quarter, Q2 = second quarter, Q3 = third quarter, USD = United States dollar, y-o-y = year-on-year. Notes:

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).

For Singapore, corporate bonds outstanding are based on AsianBondsOnline estimates.
 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 September 2022 currency exchange rates and do not include currency effects.

2. Data as of 30 September 2022. Source: AsianBondsOnline.



The corporate bond markets of the PRC and the Republic of Korea remained the largest in emerging East Asia. Together, the two markets accounted for 91.5% of the region's total corporate bonds outstanding at the end of September. Meanwhile, the combined shares of ASEAN member economies comprised 6.4% of the region's total corporate bond stock. Within ASEAN, Malaysia and Singapore remained home to the two largest LCY corporate bond markets, while Indonesia and the Philippines had the two smallest LCY corporate bond markets in the region at the end of September.

The value of LCY bonds outstanding in emerging East Asia at the end of Q3 2022 was equivalent to 101.6% of the region's total gross domestic product (GDP), marginally higher than 101.4% in Q2 2022 (**Table 2**). The increase in the share of outstanding government bonds to GDP was offset by a decline in the share of outstanding corporate bonds to GDP. The share of government bonds to GDP rose to 64.6% at the end of September from 64.0% at the end of June, while the share of corporate bonds outstanding to GDP fell to 37.0% from 37.4% in the same period.

Table 2: Size and Composition of Select Emerging East Asian Local Currency Bond Markets (% of GDP)

	Q3 2021	Q2 2022	Q3 2022
China, People's Rep. of	Q3 2021	QZ ZOZZ	Q3 2022
Total	99.4	104.6	105.3
Government	63.8	67.7	68.6
Corporate	35.5	36.8	36.7
Hong Kong, China	33.3	30.0	30.7
Total	86.1	92.1	96.7
Government	44.4	46.6	50.7
Corporate	41.7	43.6	46.3
Indonesia	71.7	+3.0	40.3
Total	31.0	30.1	30.2
Government	28.5	27.7	27.8
Corporate	2.6	2.4	2.4
Korea, Rep. of	2.0	2.7	2.7
Total	147.7	150.6	151.4
Government	62.2	63.9	64.6
Corporate	85.5	86.6	86.8
Malaysia	05.5	80.0	80.8
Total	125.1	125.9	125.1
Government	68.3	70.8	70.8
Corporate	56.8	55.1	54.3
Philippines	30.0	33.1	54.5
Total	51.6	51.9	52.1
Government	44.0	45.0	45.4
Corporate	7.6	6.8	6.7
Singapore	7.0	0.6	0.7
Total	112.2	114.8	115.1
Government	76.0	79.6	81.0
Corporate	36.2	35.2	34.1
Thailand	30.2	33.2	34.1
Total	91.0	90.2	90.2
Government	66.0	64.8	64.7
Corporate	25.1	25.4	25.6
Viet Nam	23.1	23.4	23.0
Total	23.6	26.3	25.2
Government	17.6	18.5	17.4
Corporate	6.1	7.8	7.8
Emerging East Asia	0.1	7.0	7.0
Total	97.5	101.4	101.6
Government	60.8	64.0	64.6
Corporate	36.7	37.4	37.0
Japan	30.7	37.7	37.0
Total	234.5	241.3	241.3
Government	217.5	223.8	223.6
Corporate	17.0	17.5	17.7
Corporate	17.0	17.5	17.7

GDP = gross domestic product, Q2 = second quarter, Q3 = third quarter. Notes:

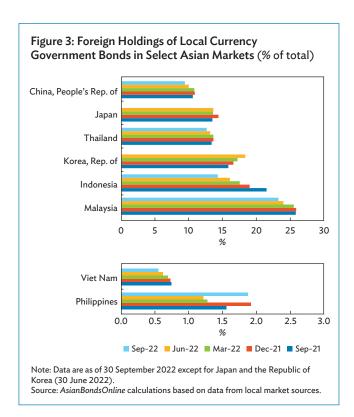
- 1. Data for GDP is from CEIC. Q3 2022 GDP figure carried over from Q2 2022 for Singapore.
- 2. For Singapore, corporate bonds outstanding are based on AsianBondsOnline estimates

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).

At the end of the review period, four economies in the region logged LCY bonds-to-GDP shares surpassing 100% in Q3 2022. The leader of the pack was the Republic of Korea with 151.4%, followed by Malaysia (125.1%), Singapore (115.1%), and the PRC (105.3%). As in previous quarters, Viet Nam lagged all economies in the region with a bonds-to-GDP share of only 25.2%.

Six economies recorded an increase in the size of the LCY bond market as a percentage of GDP from Q2 2022 to Q3 2022: the PRC; Hong Kong, China; Indonesia; the Republic of Korea; the Philippines; and Singapore. Except for the PRC, all five economies also showed an increase in their respective governmentbonds-to-GDP shares. For the corporate bonds-to-GDP share, only the Republic of Korea, Thailand, and Hong Kong, China logged an expansion from Q2 2022 to Q3 2022.

In Q3 2022, the largest government-bonds-to-GDP share in emerging East Asia was in Singapore (81.0%), while Viet Nam had the smallest (17.4%). The Republic of Korea had the largest share of LCY corporate bonds to GDP at 86.8%, while Indonesia had the smallest at 2.4%.

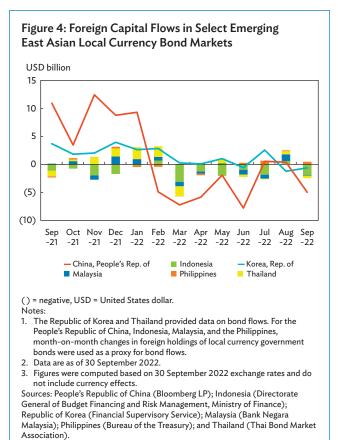


Foreign Investor Holdings and Foreign Bond Flows

Emerging East Asia posted net foreign bond outflow of USD5.5 billion in the third quarter of 2022, largely due to the People's Republic of China; shares of foreign holdings also declined.

Foreign holdings of emerging East Asian LCY government bond markets declined further in Q3 2022 as the Federal Reserve and other major central banks reiterated their commitment to aggressive monetary tightening to abate high inflation (Figure 3). The rise in US Treasury yields and the strengthening of the US dollar continued to mute foreign demand in regional bond markets, particularly in the month of September.

The region experienced a reprieve from outflows in July and August, with some LCY government bond markets posting net inflows (Figure 4). This was due to the temporary shift in global risk sentiment



as market participants expected a slowdown in the aggressive monetary tightening of the Federal Reserve. In addition, inflation in the US started to peak in June with July data starting to show a slowdown in inflation. In July, the region posted aggregate net inflows of USD0.8 billion, led by inflows in the LCY bond market of the Republic of Korea. In August, net inflows rose to USD1.5 billion with nearly all markets posting net inflows. However, in September, nearly all markets posted net foreign outflows except the Philippines. This was largely driven by the Jackson Hole speech in late August when the Federal Reserve reiterated its commitment to fight inflation via aggressive monetary tightening, sending a signal that it would not be paring back rate increases in the near-term contrary to market expectations. Outflows were exacerbated in the PRC due to ongoing economic weakness. The Federal Reserve subsequently delivered another 75 bps rate hike at its 20-21 September monetary policy meeting.

Foreign investors returned to the PRC's LCY government bond market in July, posting marginal net inflows of USD0.5 billion following net outflows from February to June. The inflows were largely due to an improvement in domestic bonds' negative interest rate differential with US Treasury yields, which declined during the month. The relative stability of the Chinese yuan in July also contributed to the increase in demand for domestic bonds. In August, net foreign inflows slightly declined to USD0.3 billion, while September posted outflows of USD5.0 billion, driven by the divergence in monetary policy with the US that led to the depreciation of the Chinese yuan. Foreign holdings of the PRC's LCY government bond market fell to 9.4% in Q3 2022 from 10.0% in Q2 2022.

In the Republic of Korea, the domestic government bond market posted quarterly net inflows of USD0.5 billion in Q3 2022, slightly higher than the USD0.3 billion posted in Q2 2022. However, this was low compared to quarterly inflows in recent years. Although the Republic of Korea remained a safe haven for foreign investors relative to its peers, as evidenced by the USD2.5 billion of net inflows in July, it has not been spared by the capital outflows from the region as US Treasury yields rose at a faster pace than domestic bond yields. This resulted in USD1.3 billion and USD0.7 billion of net outflows in August and September, respectively, which were largely driven by expectations of a continuation of aggressive monetary tightening by the Federal Reserve. Despite recent rate hikes by the Bank of Korea, the pace of the central bank's increases

was slower compared to its US counterpart. In addition, a sharp depreciation of the Korean won, the weakest currency in the region year-to-date, also reduced the attractiveness of the returns of domestic bonds. Foreign holdings rose to 18.4% in Q2 2022 from 17.2% in Q1 2022, based on current available data.

Malaysia's foreign holdings share fell to 23.3% in Q3 2022 from 24.1% in Q2 2022, but it continued to have the highest share in the region. The quarterly decline of 0.7 percentage points was less than the 1.5 percentage points decline from Q1 2022 to Q2 2022. The falling foreign holdings share occurred in spite of the USD0.3 billion of net inflows registered in Q3 2022, reversing the USD1.1 billion of net outflows in Q2 2022, as the USD1.2 billion of net inflows in August more than offset outflows of USD0.7 billion and USD0.1 billion in July and September, respectively. Despite the rate hike by the Bank Negara Malaysia in September, foreign investors still sold Malaysian bonds as rates remained low compared to US Treasuries amid the aggressive rate hikes of the Federal Reserve.

The foreign holdings share in Indonesia's LCY government bond market fell to 14.3% in Q3 2022 from 16.1% in Q2 2022 as net foreign outflows continued during the most recent quarter. Foreign investors sold a net USD3.3 billion of LCY bonds in Q3 2022, slightly lower than the USD4.5 billion of outflows in Q2 2022. This was largely driven by USD1.9 billion of net outflows in both July and September, which more than offset the USD0.5 billion of net inflows recorded in August. Despite the end of the accommodative stance of Bank Indonesia in August, when it started to raise policy rates, the narrowing yield premiums of domestic bonds over US Treasury yields continued to make Indonesian LCY bonds less attractive to foreign investors.

In Thailand, foreign investors sold a net USD0.02 billion of LCY government bonds in Q3 2022, a reversal from the USD0.6 billion of net inflows posted in the previous quarter. The net quarterly outflows were driven by USD0.1 billion and USD0.5 billion of net outflows in July and September, respectively, which offset the marginal USD0.6 billion net inflows in August. Similar to Indonesia, the slower pace of rate hikes by the Bank of Thailand relative to the Federal Reserve and the weakening of the Thai baht contributed to the foreign outflows from its LCY bond market. As a result, foreign holdings of Thailand's LCY government bond market declined further to 12.7% in Q3 2022 from 13.2% in Q2 2022.

In the Philippines, the LCY government bond market registered net foreign inflows of USD0.6 billion, USD0.1 billion, and USD0.4 billion in July, August, and September, respectively. However, the LCY bond market's foreign holdings share remained negligible at 1.9% in Q3 2022. In Viet Nam, the foreign holdings share also remained negligible at 0.5% in Q3 2022, slightly lower than 0.6% in Q2 2022.

Given the continued outflows from the region's LCY bond markets that resulted in declining shares of foreign holdings, domestic investor groups saw an increase in their corresponding shares in recent quarters. This highlights the continued contribution of domestic investors to market stability amid a foreign sell-off in the region. For example, banks and insurance companies and pension funds registered increases in their shares in most markets in the region (Figure 5). Central banks also increased in their participation, particularly in Indonesia and Thailand.

Local Currency Bond Issuance

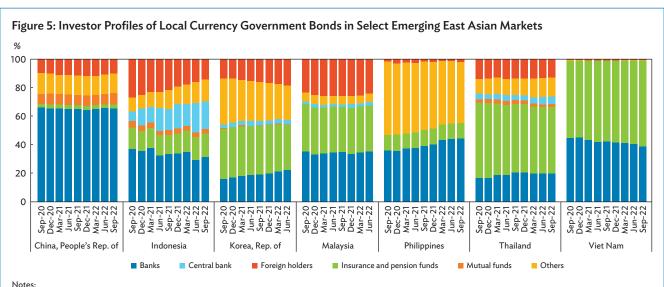
Emerging East Asia issued a total of USD2.2 trillion of local currency bonds in the third quarter of 2022.

Q3 2022 marked the sixth consecutive quarter where regional bond market issuance tallied over USD2.0 trillion. As the Federal Reserve maintained its aggressive monetary tightening stance, issuers turned to the LCY

bond market to support their financing needs, but they were also cautious amid uncertainty and rising borrowing costs. While regional central banks tightened their monetary policies, the pace of rate hikes remained relatively subdued with some markets only raising rates starting in August (Indonesia, Thailand) or September (Viet Nam).

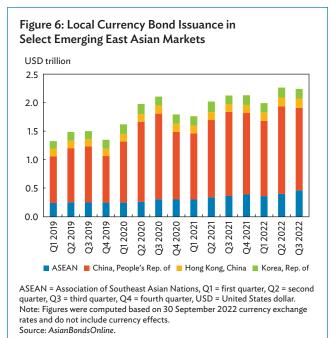
Total issuance of LCY bonds in emerging East Asia tallied USD2.2 trillion in Q3 2022, a decline of 1.1% q-o-q from a 13.6% q-o-q hike in Q2 2022 (Figure 6). Overall growth was dragged down by the 12.0% q-o-q contraction in the issuance of Treasury and other government bonds during the quarter. On a y-o-y basis, growth in Treasury and other government bond issuance also eased.

While issuance of Treasury instruments slowed during the quarter, they continued to account for a substantial share of emerging East Asia's issuance volume in Q3 2022 (Figure 7). Newly issued Treasury and other government bonds comprised 42.3% of the region's issuance total during the quarter. It also accounted for a 66.2% share of the regional government bond issuance total. Treasury and other government bond issuance declined to USD948.6 billion in Q3 2022. The larger markets of the PRC and the Republic of Korea tapered issuance of Treasury and other government bonds, dragging down the regional total. Similarly, Thailand reduced its issuance during the quarter as it had already met its borrowing plan total before the end of its fiscal year in September. On the



^{1.} Data for the Republic of Korea and Malaysia are up to 30 June 2022.

^{2. &}quot;Others" include government institutions, individuals, securities companies, custodians, private corporations, and all other investors not elsewhere classified. Source: AsianBondsOnline



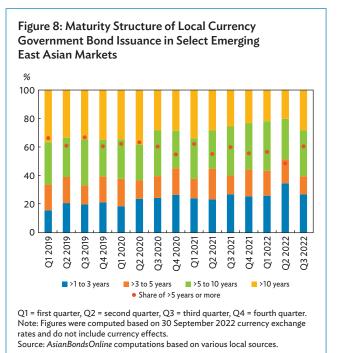
Select Emerging East Asian Markets Share of total (%) 100 90 80 70 60 50 40 30 20 10 Q3 2019 2020 Q1 2021 Q3 2021 Q1 2022 2019 Q4 2021 Q2 2020 9 22 03 Central Bank ■ Government Q1 = first quarter, Q2 = second quarter, Q3 = third quarter, Q4 = fourth quarter, USD = United States dollar. Note: Figures were computed based on 30 September 2022 currency exchange rates and do not include currency effects. Source: AsianBondsOnline

Figure 7: Share in Bond Issuance by Type of Bonds in

other hand, some governments continued to secure funding to support fiscal measures and spur economic recovery, while also taking advantage of interest rates that remained low in the region.

The maturity structure of the region's LCY Treasury bond issuance shifted toward longer-term tenors in Q3 2022. Treasury bonds with maturities of over 5 years accounted for 60.5% of the region's total issuance, inching up from 48.6% in Q2 2022 (Figure 8). This reflected improved capacity of investors to absorb longer-term durations. Bonds with maturities of 5 years or less comprised 39.5% of the regional issuance volume in Q3 2022, down from 51.4% in the preceding quarter.

Corporate bond issuance rebounded in Q3 2022, largely driven by higher issuance from the PRC as it eased monetary policy, leading to lower borrowing costs. Regional corporate bond issuance totaled USD808.1 billion on growth of 5.7% q-o-q, reversing the 4.7% q-o-q contraction in Q2 2022. Four out of nine markets in the region saw increased q-o-q issuance of corporate bonds during the quarter, including the PRC, Indonesia, the Republic of Korea, and the Philippines. On an annual basis, corporate bond issuance declined 4.9% y-o-y, a slowdown from the 5.2% y-o-y contraction in Q2 2022. Corporate bonds accounted for 36.1% of emerging East Asia's bond issuance total during the quarter.



Among all bond segments, central bank bonds posted the fastest expansion in issuance at 14.7% q-o-q and 28.3% y-o-y. This was up from 6.6% q-o-q and 21.6% y-o-y in Q2 2022. Most central banks engaged in market operations to mop-up liquidity amid persistent high inflation levels across the region. All regional central banks except one saw q-o-q increases in the issuance of central bank instruments. The sole exception was the Bangko Sentral ng Pilipinas, which tapered its issuance amid aggressive policy rate hikes in recent months. Central bank issuance totaled USD484.1 billion in emerging East Asia, accounting for 21.6% of the regional issuance volume in Q3 2022.

Overall, seven out of nine regional markets saw higher LCY bond issuance in Q3 2022 compared with Q2 2022 (Table 3). The markets of Hong Kong, China; Indonesia; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam posted increased issuance during the quarter. In contrast, the PRC and the Republic of Korea had lower issuance volumes compared with Q2 2022. On a y-o-y basis, the majority of emerging East Asian markets recorded higher bond sales, with only the PRC, Indonesia, and Thailand posting declines.

LCY bond issuance in the PRC totaled USD1,443.2 billion in Q3 2022, posting a contraction of 5.9% q-o-q after gaining 16.3% q-o-q in Q2 2022. Lower bond sales stemmed from a 14.2% g-o-g drop in the issuance of Treasury and other government bonds during the quarter. Local authorities had mostly used up the special bond quota for issuing local government bonds following directives from the government for its utilization by the end of June to boost infrastructure activities. To further prop up the economy, the State Council announced an increase of CNY500 billion in its special bond quota in August that was to be utilized by October.

Corporate bond issuance in the PRC rebounded in Q3 2022 on growth of 7.2% q-o-q, reversing the 8.8% q-o-q decline in the preceding quarter. Monetary easing by the People's Bank of China encouraged firms to tap the bond market for funding and take advantage of lower borrowing costs. On a y-o-y basis, LCY bond issuance in the PRC dropped 2.2% in Q3 2022. The PRC accounted for 64.4% of the region's aggregate issuance volume in Q3 2022, down from 67.7% in Q2 2022.

LCY bond sales in the Republic of Korea tallied USD164.6 billion, posting a decline of 5.0% q-o-q in Q3 2022. Overall growth was dragged down by the 23.7% q-o-q contraction in the issuance of Treasury and other government bonds as the Republic of Korea engaged in a frontloading policy in the first half of the year. Central bank issuance climbed the most among all bond segments, up 11.7% q-o-q following a 21.2% q-o-q contraction in Q2 2022. Corporate bond issuance grew a modest 2.4% q-o-q as corporates borrowed from the bond market in anticipation of further policy rate hikes by the Bank of Korea. Overall issuance on an annual basis rose to 10.6% y-o-y in Q3 2022, a reversal from the 6.3% y-o-y decline in Q2 2022.

In Hong Kong, China, LCY bond issuance reached USD159.6 billion in Q3 2022, inching up 2.1% q-o-q. Issuance of government bonds expanded 3.5% q-o-q, driven largely by an increase in the issuance of HKSAR bonds. The majority of HKSAR bond issuance during the quarter was from the issuance of Silver Bonds amounting to HKD45.0 billion. Exchange Fund Bills and Exchange Fund Notes also contributed to the q-o-q gain in issuance during the quarter. Corporate bond issuance contracted 3.3% q-o-q in Q3 2022 amid rising borrowing costs. Hong Kong, China largely tracks movements in US interest rates as its currency is pegged to the US dollar. On an annual basis, LCY bond issuance in Hong Kong, China grew at a faster pace of 16.1% y-o-y in Q3 2022 versus 12.7% y-o-y in Q2 2022.

ASEAN member economies collectively raised USD473.3 billion from the sale of LCY bonds in Q3 2022, accounting for 21.1% of emerging East Asia's issuance total. Growth quickened by 17.8% q-o-q and 29.6% y-o-y in Q3 2022, up from 10.4% q-o-q and 17.0% y-o-y in the preceding quarter. All six ASEAN markets had increased issuance activities in Q3 2022. Singapore, Thailand, the Philippines, and Indonesia were the largest issuers of LCY bonds in the ASEAN space, accounting for 56.8%, 12.4%, 9.9%, and 9.3% shares of total issuance, respectively.

Singapore continued to account for the largest issuance volume among ASEAN member economies in Q3 2022. Total issuance reached USD268.9 billion, with growth easing to 14.4% q-o-q from 16.1% q-o-q in Q2 2022. Much of the growth was contributed by the government bond segment, largely from increased issuance of central bank bills to help contain inflationary pressure. Singapore is among the markets in emerging East Asia with relatively high inflation. Issuance of Treasury and other government bonds also contributed to the overall growth but to a lesser extent. On the other hand, corporate bond issuance contracted a significant 25.2% q-o-q amid elevated borrowing cost as the Monetary Authority of Singapore

Table 3: Local Currency Bond Issuance in Select Emerging East Asian Market (gross)

	Q3 2021		Q2 2	022	Q3 2	022	Growt (LCY-l	h Rate base %)	Growth Rate (USD-base %)		
	Amount		Amount		Amount		03 2	2022	03	2022	
	(USD billion)	% share	(USD billion)	% share	(USD billion)	% share	q-o-q	у-о-у	q-o-q	у-о-у	
China, People's Rep. of											
Total	1,629	100.0	1,629	100.0	1,443	100.0	(5.9)	(2.2)	(11.4)	(11.4)	
Government	848	52.1	996	61.1	804	55.7	(14.2)	4.7	(19.2)	(5.1)	
Central Bank	0	0.0	0	0.0	0	0.0	-	-	-	(3)	
Treasury and Other Govt.	848	52.1	996	61.1	804	55.7	(14.2)	4.7	(19.2)	(5.1)	
Corporate	781	47.9	633	38.9	639	44.3	7.2	(9.7)	0.9	(18.2)	
Hong Kong, China								(,,,,		(2)	
Total	139	100.0	156	100.0	160	100.0	2.1	16.1	2.1	15.1	
Government	113	81.8	125	79.6	129	80.7	3.5	14.6	3.5	13.7	
Central Bank	109	78.9	121	77.3	123	76.8	1.5	13.0	1.4	12.1	
Treasury and Other Govt.	4	2.9	3.6	2.3	6	3.9	71.9	58.1	71.9	56.8	
Corporate	25	18.2	32	20.4	31	19.3	(3.3)	22.8	(3.4)	21.8	
Indonesia							, ,		, ,		
Total	48	100.0	34	100.0	44	100.0	31.9	(1.8)	29.0	(7.7)	
Government	46	95.2	32	94.0	41	91.7	28.6	(5.4)	25.8	(11.1)	
Central Bank	27	57.0	22	65.0	23	52.0	5.4	(10.4)	3.1	(15.8)	
Treasury and Other Govt.	18	38.2	10	29.1	18	39.8	80.4	2.1	76.5	(4.0)	
Corporate	2	4.8	2	6.0	4	8.3	83.3	71.0	79.3	60.7	
Korea, Rep. of											
Total	180	100.0	191	100.0	165	100.0	(5.0)	10.6	(13.8)	(8.5)	
Government	78	43.4	79	41.5	61	36.9	(15.5)	6.0	(23.3)	(22.3)	
Central Bank	27	15.0	18	9.6	19	11.2	11.7	(17.1)	1.4	(31.4)	
Treasury and Other Govt.	51	28.4	61	31.9	42	25.7	(23.7)	(0.2)	(30.7)	(17.4)	
Corporate	102	56.6	112	58.5	104	63.1	2.4	23.3	(7.0)	2.0	
Malaysia											
Total	21	100.0	25	100.0	26	100.0	7.2	36.3	1.9	23.0	
Government	12	55.9	15	60.6	16	63.5	12.4	54.9	6.9	39.9	
Central Bank	0	0.0	0.2	0.8	0.9	3.5	388.2	_	364.1	_	
Treasury and Other Govt.	12	55.9	15	59.8	15	60.0	7.6	46.4	2.3	32.1	
Corporate	9	44.1	10	39.4	9	36.5	(0.7)	12.7	(5.6)	1.7	
Philippines									. ,		
Total	42	100.0	43	100.0	47	100.0	15.5	28.0	0.03	2.8	
Government	41	97.7	42	96.2	45	95.4	14.7	25.0	(1.1)	0.0	
Central Bank	26	62.3	32	73.1	28	60.7	(4.1)	24.6	(10.1)	8.4	
Treasury and Other Govt.	15	35.4	10	23.1	16	34.7	74.0	25.7	27.2	(14.7)	
Corporate	1	2.3	2	3.8	2	4.6	37.7	154.0	29.0	120.9	
Singapore											
Total	205	100.0	243	100.0	269	100.0	14.4	38.3	10.8	30.9	
Government	200	97.4	239	98.5	266	99.0	15.0	40.6	11.4	33.0	
Central Bank	174	84.8	209	86.2	237	88.3	17.1	44.0	13.4	36.2	
Treasury and Other Govt.	26	12.6	30	12.2	29	10.7	0.5	17.9	(2.7)	11.6	
Corporate	5	2.6	4	1.5	3	1.0	(25.2)	(46.2)	(27.6)	(49.1)	
Thailand			•				(==,=)	(.3.2)	(=).0)	(,,,,)	
Total	69	100.0	61	100.0	59	100.0	1.9	(5.3)	(4.5)	(15.1)	
Government	55	79.9	44	72.5	44	74.8	5.2	(11.3)	(1.4)	(20.5)	
Central Bank	37	53.4	25	40.5	28	48.0	20.8	(11.5)	13.2	(23.7)	
Treasury and Other Govt.	18	26.5	20	32.0	16	26.9	(14.4)	(4.0)	(19.8)	(13.9)	
ricasary and Other Govt.	10	20.5	20	32.0	10	20.9	(17.7)	(7.0)	(17.0)	(13.2)	

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Table 3 continued

	Q3 2021		Q2 2	022	Q3 2	022	Growth Rate (LCY-base %)		Growth Rate (USD-base %)	
	Amount		Amount		Amount		Q3	2022	Q3 2022	
	(USD billion)	% share	(USD billion)	% share	(USD billion)	% share	q-o-q	у-о-у	q-o-q	у-о-у
Viet Nam										
Total	9	100.0	12	100.0	29	100.0	158.8	244.3	152.5	228.4
Government	5	52.9	9	74.4	27	93.0	223.8	505.3	215.9	477.4
Central Bank	0	0.0	7	62.2	25	86.4	259.6	-	250.8	-
Treasury and Other Govt.	5	52.9	1	12.2	2	6.6	40.8	(56.9)	37.4	(58.9)
Corporate	4	47.1	3	25.6	2	7.0	(29.8)	(49.2)	(31.5)	(51.5)
Emerging East Asia										
Total	2,342	100.0	2,395	100.0	2,241	100.0	(1.1)	5.4	(6.4)	(4.3)
Government	1,398	59.7	1,581	66.0	1,433	63.9	(4.5)	12.1	(9.4)	2.5
Central Bank	401	17.1	435	18.1	484	21.6	14.7	28.3	11.4	20.7
Treasury and Other Govt.	997	42.6	1,146	47.9	949	42.3	(12.0)	5.4	(17.2)	(4.8)
Corporate	944	40.3	814	34.0	808	36.1	5.7	(4.9)	(0.7)	(14.4)
Japan										
Total	502	100.0	412	100.0	373	100.0	(3.4)	(3.3)	(9.4)	(25.7)
Government	464	92.5	384	93.3	347	92.9	(3.7)	(2.9)	(9.7)	(25.3)
Central Bank	10	2.0	16	3.9	0	0.0	(100.0)	(100.0)	-	(100.0)
Treasury and Other Govt.	454	90.5	368	89.3	347	92.9	0.5	(0.7)	(5.7)	(23.6)
Corporate	38	7.5	28	6.7	26	7.1	1.3	(9.0)	(5.1)	(30.1)

^{() =} negative, - = not applicable, LCY = local currency, q-o-q = quarter-on-quarter, Q2 = second quarter, Q3 = third quarter, USD = United States dollar, y-o-y = year-on-year. Notes:

engaged in monetary tightening measures. On a y-o-y basis, LCY bond issuance in Singapore grew at a faster pace of 38.3% in Q3 2022 versus 29.0% in Q2 2022.

In Thailand, total bond sales in Q3 2022 reached USD58.6 billion on growth of 1.9% q-o-q. The rise in issuance during the quarter stemmed solely from a recovery in the government bond segment. Government bond issuance rebounded, with the 5.2% q-o-q growth in Q3 2022 reversing the 5.9% q-o-q decline in the previous quarter. Meanwhile, corporate bond issuance contracted 6.9% q-o-q in Q3 2022 amid rising borrowing costs as the BOT started monetary policy tightening during the quarter. On an annual basis, bond issuance in Thailand contracted at a faster pace of 5.3% y-o-y in Q3 2022 than 1.7% y-o-y in Q2 2022.

LCY bond issuance growth in the Philippines accelerated to 15.5% q-o-q in Q3 2022 after rising a marginal 0.3% q-o-q in the prior quarter. Total issuance reached

USD46.9 billion, buoyed by higher sales of Treasury and other government bonds, as well as corporate bonds. In September, the government raised PHP420.4 billion from the sale of its 28th series of Retail Treasury Bonds, which carried a maturity of 5.5 years and a coupon rate of 5.75%. About PHP108.5 billion of the amount came from a debt switch of bonds that will mature later this year and early next year. Corporate bond issuance also rebounded in Q3 2022, climbing 37.7% q-o-q after contracting 40.2% q-o-q in Q2 2022. In contrast, issuance of central bank bills declined 4.1% q-o-q, as the Bangko Sentral ng Pilipinas aggressively raised policy rates starting in May to quell inflationary pressure and stabilize the domestic currency. Compared with the same period a year earlier, bond issuance growth rose to 28.0% y-o-y in Q3 2022 from 15.8% y-o-y in Q2 2022.

In Indonesia, bond issuance rebounded strongly, with growth surging to 31.9% q-o-q after contracting 22.4% q-o-q in Q2 2022. Issuance volume tallied

^{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 September 2022 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).

USD44.2 billion in Q3 2022, with growth recorded across all bond types, reversing the contraction from the prior quarter. Issuance of Treasury and other government bonds nearly doubled from Q2 2022. Aside from regular Treasury auctions and private placement issuance, the government also raised IDR27.0 trillion from the sale of sukuk ritel (retail Islamic bonds) in September. The sukuk ritel carried a maturity of 3 years and a coupon rate of 5.90%. Corporate bond issuance also recovered in Q3 2022, rising 83.3% q-o-q. Firms rushed to issue bonds ahead of expectations of higher borrowing costs. Bank Indonesia was among the few central banks in the region that tightened its policy rate starting in August. On a y-o-y basis, however, LCY bond issuance contracted at a slower pace of 1.8% in Q3 2022 versus a decline of 8.8% in Q2 2022.

LCY bond sales in Viet Nam more than doubled in Q3 2022, with issuance rising to USD29.2 billion. Strong issuance growth was maintained at 158.8% q-o-q, which was broadly the same pace of expansion during the preceding quarter. Growth was largely buoyed by the high volume of issuance from the central bank, which accounted for 86.4% of Viet Nam's issuance total during the quarter The SBV opted to engage in open market operations to stabilize the exchange rate, holding off on raising rates and doing so only in September with a 100 bps hike to contain inflationary pressure. Due to the short-term maturity of SBV bills, the large volume of issuance had no significant impact on Viet Nam's outstanding bond stock at the end of September. Treasury and other government bonds also contributed to the growth, rising 40.8% q-o-q. In contrast, issuance of corporate bonds contracted 29.8% q-o-q, following a strong expansion of 120.5% q-o-q in Q2 2022. On an annual basis, Viet Nam's issuance growth surged a substantial 244.3% y-o-y in Q3 2022, up from 25.7% y-o-y in Q2 2022.

In Malaysia, bond issuance growth moderated to 7.2% q-o-q in Q3 2022, after climbing 35.5% q-o-q in Q2 2022, to reach USD25.5 billion, the smallest issuance amount among ASEAN peers. Growth was solely driven by government bond issuance, which rose 12.4% q-o-q, moderating from 33.7% q-o-q growth in Q2 2022. Both the central government and the central bank increased issuance during the quarter. In contrast, corporate bond issuance contracted a marginal 0.7% q-o-q over rising borrowing costs. The Bank Negara Malaysia raised policy rates by 25 bps in both July and September. On a y-o-y

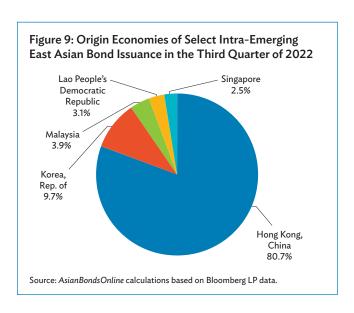
basis, Malaysia's bond issuance growth accelerated to 36.3% in Q3 2022 from 9.0% in the preceding quarter.

Cross-Border Bond Issuance

Emerging East Asia's cross-border bond issuance reached USD8.0 billion in Q3 2022

Cross border bond issuance in emerging East Asia totaled USD8.0 billion in Q3 2022, a 20.6% q-o-q increase from the USD6.6 billion raised in the previous quarter. Hong Kong, China continued to comprise the largest share of the region's quarterly aggregate issuance volume at 80.7% (Figure 9). Other economies that registered cross-border bond issuances in Q3 2022 include the Republic of Korea, the Lao People's Democratic Republic (Lao PDR), Malaysia, and Singapore. Monthly issuance volumes amounted to USD2.1 billion, USD3.7 billion, and USD2.2 billion, respectively, in July, August, and September.

Hong Kong, China continued to dominate the region with an aggregate issuance volume of USD6.4 billion, a 32.3% q-o-q increase from USD4.9 billion in Q2 2022. Eleven institutions from Hong Kong, China raised funds via cross-border issuances during the quarter, and all bonds were denominated in Chinese yuan. Firms from the transportation sector continued to have the largest collective issuance volume in Q3 2022 at USD2.4 billion. China Merchants Group, a PRC state-owned company based in Hong Kong, China that is primarily involved in



shipping and integrated transportation, led the group with total issuance of USD2.1 billion via multiple short-term bonds and one perpetual bond. MTR Corporation, which operates the Mass Transit Railway in Hong Kong, China, raised a total of USD199.6 million via two 2-year green bonds and a 3-year bond. Firms involved in consumer products comprised the second-largest group and accounted for nearly a third of the total issuance volume in Hong Kong, China. The two companies from this sector were China Mengniu Dairy, which issued USD1.9 billion worth of short-term bonds, and China Tourism with USD210.8 million. The other notable issuers from Hong Kong, China were China Power International Development and Pioneer Reward with USD702.6 million each.

The Republic of Korea registered the second-largest aggregate issuance volume in emerging East Asia at USD777.0 million for a 9.7% share of the regional total. The Export-Import Bank of Korea issued USD393.7 million worth of 1-year and 2-year bonds denominated in Chinese yuan, Hong Kong dollars, and Singapore dollars. State-owned Korea Development Bank issued USD198.4 million worth of multi-tenor bonds denominated in Chinese yuan and Hong Kong dollars. Other issuers of cross-border bonds from the Republic of Korea were Hyundai Capital (USD114.4 million) and the Industrial Bank of Korea (USD70.5 million).

Cagamas Global, Malaysia's state-owned mortgage corporation, was the sole issuer of cross-border bonds in Malaysia in Q3 2022, raising a total of USD313.5 million worth of SGD-denominated 1-year bonds.

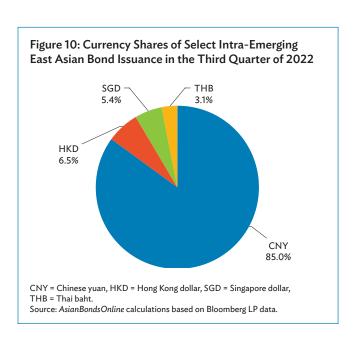
In the Lao PDR, Xayaburi Power Company issued USD222.5 million worth of multitranche THBdenominated green bonds in July to repay and refinance loans used for the funding of its hydropower plant. The other issuer, EDL-Generation Public Company, which is involved in the generation and wholesale of electricity in the Lao PDR, raised USD25.8 million worth of THB-denominated bonds.

In Singapore, Korea Development Bank-Singapore issued USD148.3 million of 3-year bonds denominated in Chinese yuan and Hong Kong dollars. Meanwhile, Nomura International Fund raised USD54.9 million via issuance of multi-tenor Chinese yuan bonds.

The top 10 issuers in the region had an aggregate issuance volume of USD7.1 billion and accounted for 88.7% of the regional total in Q3 2022. Seven out of the top 10 issuers were from Hong Kong, China, while the rest were from the Republic of Korea, Malaysia, and the Lao PDR. The top four issuers were from Hong Kong, China, including China Merchants Group, Mengniu Dairy, China Power International, and Pioneer Reward.

The Chinese yuan remained the predominant issuance currency for cross-border bonds in the region in Q3 2022 with a share of 85.0% and a total volume of USD6.8 billion (Figure 10). Firms from Hong Kong, China, the Republic of Korea, and Singapore issued cross-border bonds denominated in Chinese yuan. Bonds denominated in Hong Kong dollars followed with a 6.5% share of cross-border bond issuance and a total volume of USD515.7 million. Other currencies used in cross-border issuance were the Singapore dollar (5.4%, USD429.9 million) and the Thai baht (3.1%, USD248.3 million).

Issuance of cross-border bonds in emerging East Asia in Q3 2022 were largely concentrated in three sectors. The transportation sector comprised 32.6% of the regional issuance for the quarter, slightly higher than its 31.0% share in Q2 2022, with aggregate issuance volume of USD2.6 billion (Figure 11). China Merchants Group accounted for a large share of this total with issuance of USD2.1 billion. The financial sector with an aggregate issuance volume of USD2.5 billion also comprised almost





a third of the regional total with a share of 30.8%, which was lower than its 35.6% share in Q2 2022. The two largest issuers from this industry include Pioneer Reward (USD702.6 million) and the Export-Import Bank of Korea (USD393.7 million). Companies involved in consumer products raised a total of USD2.1 billion in Q3 2022, comprising 26.1% of the regional total, which was well up from 6.4% in the previous quarter. The largest issuer from this industry was China Mengniu Dairy (USD1.9 billion). The issuance shares of companies from the utilities (USD728.4 million) and industrial (USD114.4 million) sectors declined in Q3 2022 to 9.1% and 1.4%, respectively, from 10.7% and 2.3% in Q2 2022.

Source: AsianBondsOnline calculations based on Bloomberg LP data.

G3 Currency Bond Issuance

A total of USD189.8 billion worth of G3 currency bonds was issued from January to September in emerging East Asia.

During the January-September review period, emerging East Asian economies raised USD189.8 billion through the G3 currency bonds issuance, a contraction of 37.3% y-o-y from USD302.6 billion in the same period in 2021 (Table 4).3 Only the Republic of Korea among all economies in the region logged an increased volume of

issuance of G3 currency bonds during the review period, expanding its bond issuance size denominated in all three G3 currencies. Large contractions in G3 issuances were registered in all other emerging East Asian economies due to the strong performance of the US dollar resulting from Federal Reserve rate hikes meant to temper inflationary pressure. There were also significantly fewer issuing companies from all economies in the region, except for the PRC and the Republic of Korea, during the first 9 months of 2022 compared to the same period in 2021.

Of the total amount of G3 currency bonds issued in emerging East Asia in the first 3 quarters of 2022, 93.4% was denominated in US dollars, 5.7% in euros, and 0.9% in Japanese yen. The region's aggregate USD-denominated bond issuance during the January-September period was USD177.2 billion, a drop of 37.3% y-o-y from January-September 2021 on tepid issuance activity from all economies in the region except the Republic of Korea. EUR-denominated bond issuance amounted to USD10.8 billion during the review period, a decline of 39.5% y-o-y brought about by the decline in issuances from the PRC and the absence of fundraising activities in most other regional markets. During the first 9 months of 2022, bonds denominated in Japanese yen totaled USD1.8 billion, falling 5.2% y-o-y due to sluggish issuance from Hong Kong, China; Indonesia; and Malaysia compared with a year earlier.

Entities from the PRC continued to lead emerging East Asia in the issuance of G3 currency bonds, issuing the equivalent of USD110.7 billion in January-September 2022. The Republic of Korea was a distant second with USD36.2 billion, followed by Hong Kong, China with USD12.1 billion. During the review period, all emerging East Asian economies used the US dollar as their currency of choice in their G3 fundraising activities.

From January to September, a y-o-y decline in the issuance of G3 currency bonds was registered in nearly all economies in the region: the Philippines (-67.2%); Hong Kong, China (-64.7%); Malaysia (-61.4%); Indonesia (-49.7%); Singapore (-35.8%); the PRC (-34.8%); and Thailand (-34.2%). Only the Republic of Korea posted growth with a 3.6% y-o-y increase. No G3 currency bonds were issued in Viet Nam

 $^{^{\}rm 3}$ G3 currency bonds are denominated in either euros, Japanese yen, or US dollars.

Table 4: G3 Currency Bond Issuance in Select Asian Markets

2021		January–September 2022						
Issuer	Amount (USD billion)	Issue Date	Issuer	Amount (USD billion)	Issue Date			
China, People's Rep. of	217.4		China, People's Rep. of	110.7				
Industrial and Commercial Bank of China 3.200% Perpetual	6.2	24-Sep-21	Easy Tactic 7.50% 2027	2.2	11-Jul-22			
China Development Bank 0.380% 2022	2.0	10-Jun-21	China Construction Bank 2.85% 2032	2.0	21-Jan-22			
Prosus 3.061% 2031	1.9	13-Jul-21	Easy Tactic 7.50% 2028	1.6	11-Jul-22			
Others	207.4		Others	104.9				
Hong Kong, China	39.7		Hong Kong, China	12.1				
Hong Kong, China (Sovereign) 0.000% 2026	1.4	24-Nov-21	Airport Authority Hong Kong 2.50% 2032	1.2	12-Jan-22			
NWD Finance 4.125% Perpetual	1.2	10-Jun-21	Airport Authority Hong Kong 3.25% 2052	1.2	12-Jan-22			
Hong Kong, China (Sovereign) 0.625% 2026	1.0	2-Feb-21	Airport Authority Hong Kong 1.75% 2027	1.0	12-Jan-22			
Others	36.1		Others	8.7				
Indonesia	26.4		Indonesia	11.7				
Indonesia (Sovereign) 3.05% 2051	2.0	12-Jan-21	Perusahaan Penerbit SBSN Indonesia III 4.400% 2027	1.8	6-Jun-22			
Perusahaan Penerbit SBSN Indonesia III 1.50% 2026	1.3	9-Jun-21	Perusahaan Penerbit SBSN Indonesia III 4.700% 2032	1.5	6-Jun-22			
Indonesia (Sovereign) 1.85% 2031	1.3	12-Jan-21	Freeport Indonesia 5.315% 2032	1.5	14-Apr-22			
Others	21.9		Others	7.0				
Korea, Rep. of	43.9		Korea, Rep. of	36.2				
Posco 0.00% 2026	1.2	1-Sep-21	Export-Import Bank of Korea 4.00% 2024	1.0	15-Sep-22			
Korea Housing Finance Corporation 0.01% 2026	1.1	29-Jun-21	Korea Development Bank 2.00% 2025	1.0	24-Feb-22			
SK Hynix 1.50% 2026	1.0	19-Jan-21	Export-Import Bank of Korea 4.25% 2027	1.0	15-Sep-22			
Others	40.6		Others	33.2				
Malaysia	16.0		Malaysia	5.0				
Petronas Capital 3.404% 2061	1.8	28-Apr-21	Misc Capital Two (Labuan) 3.75% 2027	0.6	6-Apr-22			
Petronas Capital 2.480% 2032	1.3	28-Apr-21	Bank Negara Malaysia 0.00% 2022	0.6	25-Jan-22			
Others	13.0		Others	3.8				
Philippines	10.8		Philippines	2.7				
Philippines (Sovereign) 3.200% 2046	2.3	6-Jul-21	Philippines (Sovereign) 4.200% 2047	1.0	29-Mar-22			
Philippines (Sovereign) 1.375% 2026	1.1	8-Oct-21	Philippines (Sovereign) 3.556% 2032	0.8	29-Mar-22			
Others	7.5		Others	1.0				
Singapore	16.5		Singapore	9.0				
BOC Aviation 1.625% 2024	1.0	29-Apr-21	DBS Bank 2.375% 2027	1.5	17-Mar-22			
Temasek Financial I 2.750% 2061	1.0	2-Aug-21	United Overseas Bank 0.387% 2025	1.5	17-Mar-22			
Others	14.5		Others	6.1				
Thailand	4.1		Thailand	2.4				
Bangkok Bank in Hong Kong, China 3.466% 2036	1.0	23-Sep-21	GC Treasury Center 4.4% 2032	1.0	30-Mar-22			
GC Treasury Center 2.980% 2031	0.7	18-Mar-21	Bangkok Bank in Hong Kong, China 4.3% 2027	0.8	15-Jun-22			
Others	2.4		Others	0.7				
Viet Nam	1.6		Viet Nam	-				
Emerging East Asia Total	376.4		Emerging East Asia Total	189.8				
Memo Items:			Memo Items:					
India	23.7		India	6.7				
Vedanta Resources 8.95% 2025	1.2	11-Mar-21	Reliance Industries 3.625% 2052	1.8	12-Jan-22			
Others	22.5		Others	5.0				
Sri Lanka	0.8		Sri Lanka	0.02				
Sri Lanka (Sovereign) 7.95% 2024	0.2	3-May-21	Sri Lanka (Sovereign) 8% 2023	0.01	24-Jan-22			
Others	0.6		Others	0.01				

USD = United States dollar.

Data exclude certificates of deposit.
 G3 currency bonds are bonds denominated in either euros, Japanese yen, or US dollars.
 Bloomberg LP end-of-period rates are used.
 Figures after the issuer name reflect the coupon rate and year of maturity of the bond.
 Source: AsianBondsOnline calculations based on Bloomberg LP data.

from January to September 2022 in contrast to the same period in the prior year.

Of all G3 currency bond sales in emerging East Asia from January to September 2022, 58.3% were from issuers in the PRC: USD104.4 billion in US dollars, the equivalent of USD6.1 billion in euros, and the equivalent of USD0.1 billion in Japanese yen. In August, consumer electronics company Lenovo Group raised USD675.0 million from its 7-year USD-denominated convertible bond. Proceeds from the issuance will be used to partially repurchase some of the company's existing convertible bonds and for general corporate funding purposes. From August to September, the Macau, China branch of the Bank of China issued five bonds denominated in US dollars totaling USD16.4 million. The fixed-income securities have periodic distribution rates from 2.20% to 4.25% and tenors from 2 years to 4 years.

During the review period, the Republic of Korea had a 19.1% share of the total issuance of G3 currency bonds from the region: USD32.8 billion was issued in US dollars, the equivalent of USD3.1 billion was in euros, and the equivalent of USD0.3 billion was raised in Japanese yen. In August and September, Hana Bank raised a total of USD220.0 million from six bonds denominated in US dollars. The issuances had tenors of 2 years. and 3 years. In August, Hyundai Capital, a consumer financial services company, issued a JPY-denominated bond worth USD27.6 million, with a tenor of 2 years. The issuance had a coupon rate of 0.77%. About a month later, Hyundai Capital raised USD60.0 million from a 1-year bond with a coupon rate of 4.78%.

From January to September 2022, Hong Kong, China accounted for 6.4% of regional G3 currency bond issuance, comprising USD-denominated bonds totaling USD12.0 billion and JPY-denominated bonds amounting to USD0.1 billion. In September, CNCB (Hong Kong) Investment issued a USD300.0 million 1-year USDdenominated bond. It had a period distribution rate of 4.2132%. In August, Guotai Junan International, an investment holding company, raised USD66.5 million from its issuance of a 1-year bond denominated in US dollars and with a coupon rate of 3.95%.

Amid tepid fundraising activities from most economies in the region, issuance of G3 currency bonds in the ASEAN

region decreased 51.5% y-o-y during the first 9 months of the year.⁴ On an aggregate basis, USD30.9 billion worth of G3 currency bonds were issued by entities based in ASEAN, which was lower than the USD63.6 billion recorded in the first 9 months of 2021, with reduced issuance from most economies in the region. ASEAN member economies' regional G3 currency issuance share was 16.3% during the review period, fell from 21.0% in the prior year. Indonesia accounted for the most G3 currency bond issuance among ASEAN members in January-September 2022. This was followed by Singapore, Malaysia, the Philippines, and Thailand.

Indonesian G3 currency bond issuance in the January-September review period was 6.2% of the emerging East Asian total. Most of the economy's issuances were denominated in US dollars, totaling USD11.2 billion, while USD0.6 billion worth of bonds were denominated in Japanese yen. In September, the Government of Indonesia issued three tranches of a callable USD-denominated bond totaling USD2.7 billion. The issuance had tenors of 5 years, 10 years, and 30 years. Proceeds from the global bond will be utilized to repurchase some of the government's outstanding USD-denominated bonds and to fund the state budget. In the same month, Perusahaan Penerbit SBSN Indonesia III, a government special purpose vehicle in charge of issuing Shariah-compliant, foreign-currencydenominated securities, raised USD175.0 million from its dual-tranche issuance of USD-denominated bonds. The bonds had tenors of 3 years and 5 years.

During the review period, a 4.8% share of the issuance of G3 currency bonds in emerging East Asia was from Singaporean issuers, who raised USD7.5 billion in US dollars and the equivalent of USD1.5 billion in euros. In August and September, two banks issued zero-coupon, 30-year callable bonds denominated in US dollars. United Overseas Bank's issuance in September was worth USD70.0 million, while that of DBS Bank's issuance in August was USD40.0 million.

Entities in Malaysia with G3 currency bond issuance comprised 2.6% of the total in emerging East Asia. USD-denominated bond issuance reached USD4.8 billion, while JPY-denominated bonds totaled the equivalent of USD0.2 billion. In August and September, the Bank Negara Malaysia issued four

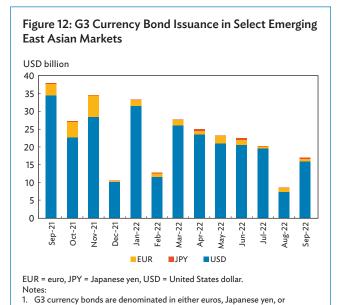
⁴ For the discussion on G3 currency issuance, data for ASEAN include Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

Bank Negara Interbank Bills totaling USD700.0 million. These are USD-denominated short-term securities used by the central bank to manage the economy's liquidity in the interbank market. Malayan Banking issued 5-year bonds denominated in US dollars in August and September. Totaling USD50.0 million, the bonds have periodic distribution rates of 3.620077% and 3.844122%.

Philippine issuers accounted for a 1.4% share of total emerging East Asian G3 currency bond issuance during the first 9 months of 2022. In terms of currency, entities from the Philippines issued USD2.3 billion worth of USD-denominated bonds and the equivalent of USD0.5 billion in Japanese yen. These amounts were raised in March and April.

During the January–September period, Thai issuers comprised a 1.3% share of all issuances of G3 currency bonds from emerging East Asia, with USD-denominated bonds raising USD2.4 billion. These fundraising activities occurred in March and June.

Figure 12 presents monthly G3 currency bond sales of emerging East Asia from September 2021 to September 2022, broken down by currency. Issuances picked up in September 2022 after falling in the previous month. Fundraising activities were slow in August as the region



- US dollars.
- Figures were computed based on 30 September 2022 currency exchange rates and do not include currency effects.

Source: AsianBondsOnline calculations based on Bloomberg LP data.

tempered its USD-denominated bond issuances due to the strong performance of the US dollar on account of the Federal Reserve tightening its monetary policy to combat inflationary pressure. Investors in the region resumed their US dollar issuance in September but at a slower pace than in July. The decline in August was driven by reduced issuance from the PRC; Hong Kong, China; the Republic of Korea; and Malaysia. Entities in Indonesia opted not to issue any G3 currency bonds in August. Even as issuance volumes increased in most economies in September, the regional total was dragged down by reduced issuance from the PRC. Meanwhile, there was zero G3 currency issuance from the Philippines and Thailand in Q3 2022.

Bond Yield Movements

Yields in most emerging East Asian markets rose as the Federal Reserve continued its aggressive monetary tightening.

Inflation continues to pressure the global economy, with advanced economies being the most affected. This has led to more aggressive monetary tightening by major central banks in advanced economies and by regional central banks as well.

The most aggressive among advanced economies was the US, where core consumer price inflation rose to a 40-year high in June. In response to persistent inflationary pressure, the Federal Reserve raised the federal funds target range by 75 bps during its 20–21 September meeting. The Federal Reserve also indicated that it intends to continue to raise rates: Its September federal funds rate forecast projects a cumulative 125 bps increase for November and December.

In its 1–2 November meeting, the Federal Reserve, as expected, raised the federal funds rate range by 75 bps. The Federal Reserve also said that the path of interest rates would go higher than expected but with a corresponding decrease in the size of each rate hike and an increase in the number of hikes. Inflation also moderated to 8.2% y-o-y in September and 7.7% y-o-y in October.

The European Central Bank (ECB) has also become more aggressive in its rate hikes as the euro area continued to battle rising inflation. The ECB announced a 75 bps rate

hike each on 8 September and 27 October. The central bank also indicated that it would continue to raise rates to ensure that inflation would trend downward toward its target.

The Bank of Japan remained the exception among advanced economy central banks, as it largely left monetary policy unchanged during its 20-21 September and 27-28 October meetings. While inflation has been rising in Japan, it is not near the levels seen in the US and the euro area. Inflation in Japan rose to 3.0% y-o-y in August and September from 2.6% y-o-y in July. The economy also remained weak as GDP contracted an annualized 1.2% in Q3 2022 from a growth of 4.6% in the previous quarter.

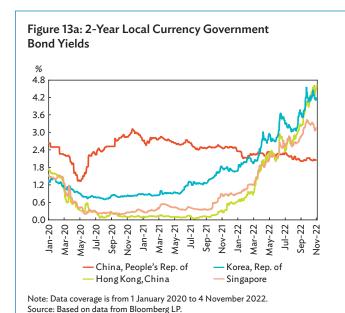
Emerging East Asia's LCY government bond yields have mostly followed suit, taking cues from the Federal Reserve as well as movements in domestic prices. The PRC, however, was the region's lone exception as its 2-year yield largely remained stable during the review period (Figure 13a), amid continued weakness in the economy that is further exacerbated by "zero-COVID" policies. The PRC was also the sole market in the region that engaged in monetary easing.

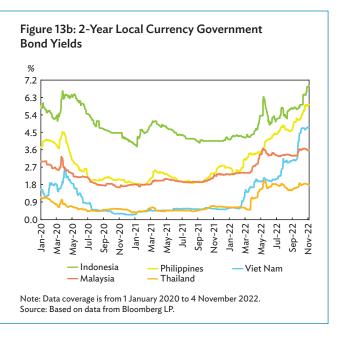
Other markets had steep increases in their 2-year yields, particularly in the last week of August, following the Federal Reserve chair's Jackson Hole speech. Another inflection point was on 13 September, after the release

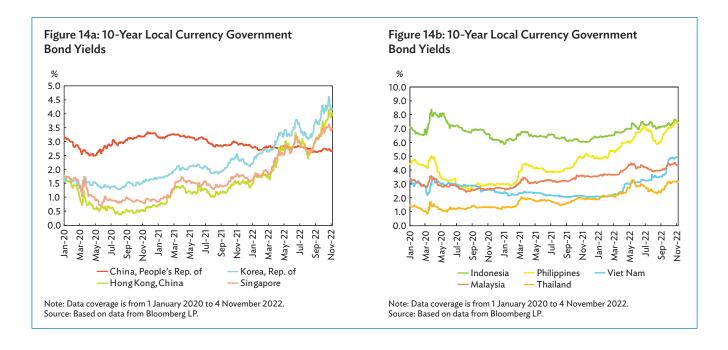
of August inflation data for the US that was higher than expected. This was particularly evident in the steep increase in the 2-year yield in Malaysia, which raised its policy rate for the second time in Q3 2022 on 8 September, and in Viet Nam, which hiked its policy rate for the first time in 2 years on 23 September (Figure 13b). Malaysia further raised rates by 25 bps in November, while Viet Nam hiked policy rates by another 100 bps in October.

The movements of 10-year yields in emerging East Asia were largely similar to those of 2-year yields, with the PRC as the only market showing relatively stable 10-year yield movement (Figure 14a). There was a slight downward trend in the Philippines' 10-year yield in the first half of August following speculation the Federal Reserve might ease its pace of tightening, but the Jackson Hole event completely reversed this sentiment (Figure 14b).

Emerging East Asia's yield curves shifted upward between 31 August and 4 November as the Federal Reserve continued its aggressive monetary tightening (Figure 15). The steepest rise was noted in Viet Nam, where the yield curve shifted upward by an average of 168 bps, following the SBV's 100 bps rate hikes on 23 September and 25 October. Economic weakness in the PRC has largely counteracted US yield movements, and the PRC's yield shifted slightly upward during the review period by an average of 7 bps.







As a result of the shifts in the yield curve, the 10-year versus 2-year yield spread rose in all markets except Hong Kong, China; Indonesia, the Republic of Korea, and Viet Nam (**Figure 16**).

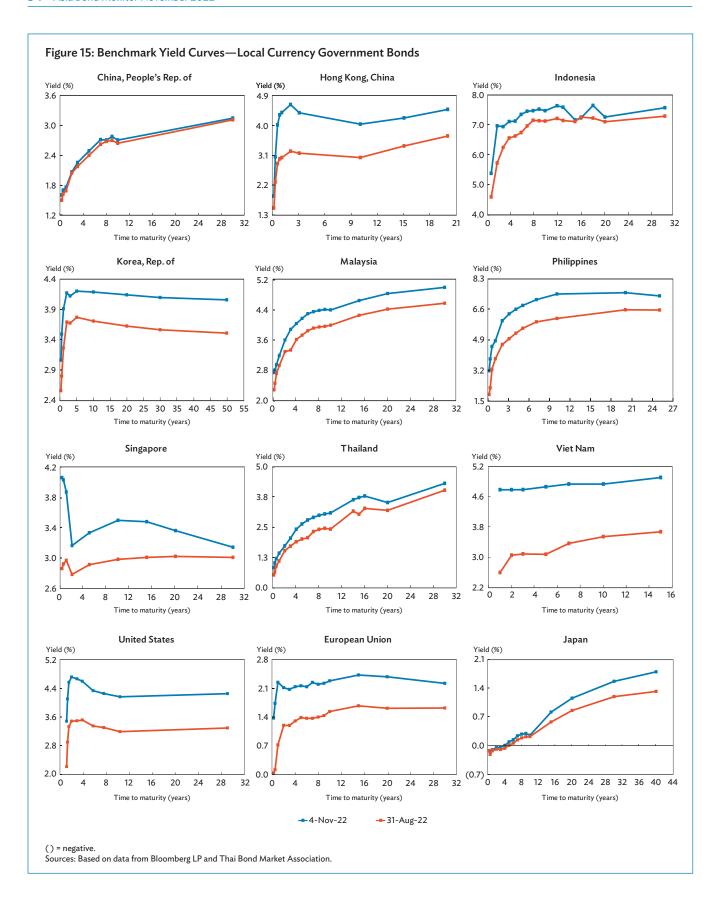
Both the slowdown in the PRC's economy and concerns over the US economy's trajectory have increased downside risks in emerging East Asian economies; however, so far the impact has been muted. A number of regional economies reported an acceleration in GDP growth from Q2 2022 to Q3 2022, including Indonesia (from 5.5% y-o-y to 5.7% y-o-y), the Republic of Korea (from 2.9% y-o-y to 3.1% y-o-y), Malaysia (from 8.9% y-o-y to 14.2% y-o-y), and Viet Nam (from 7.7% y-o-y to 13.7% y-o-y). The PRC reported 3.9% y-o-y GDP growth in Q3 2022, which was higher than Q2 2022's 0.4% y-o-y but still below the 2022 full-year target of 5.5%. Singapore's GDP growth fell slightly in Q3 2022 to 4.4% y-o-y from 4.5% y-o-y in the previous quarter, while Hong Kong, China's GDP contraction worsened to 4.5% y-o-y in Q3 2022 from 1.3% y-o-y in Q2 2022.

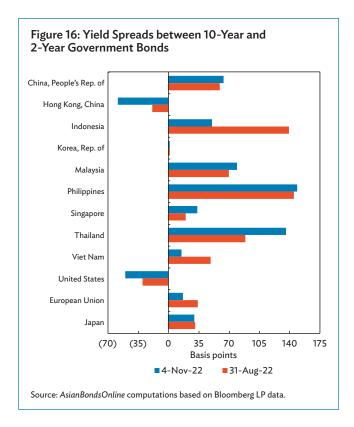
Following advanced economies, inflation in emerging East Asia continued to trend upward, but some economies registered slowing inflation following a decline in global oil prices. Thailand's consumer price inflation fell to 6.0 y-o-y in October from 6.4% y-o-y in September and 7.9% y-o-y in August, but it remained above the central bank's target of 1.0%–3.0% for full-year 2022 (**Figure 17a**). The Republic of Korea's inflation rate

has been broadly stable, rising to 5.7% y-o-y in October from 5.6% y-o-y in September and 5.7% y-o-y in August (**Figure 17b**).

The aggressive monetary hikes in the US placed heavy pressure on central banks in the region. During the review period, nearly all regional central banks raised their policy rates, with the exception of the PRC, which continued to suffer economic weakness (Table 5). The biggest movement was in Viet Nam, with the SBV raising its policy rate in September and October after previously being the sole central bank in the region that had left its policy rate unchanged. Indonesia's central bank also became more aggressive, raising the 7-day reverse repurchase rate by 50 bps each in September, October, and November, after previously raising policy rates by only 25 bps on 23 August. Both Malaysia and Thailand raised their policy rates by 25 bps on 8 September and 28 September, respectively. Malaysia's central bank raised its policy rate by another 25 bps on 3 November. The two economies' central banks have been among the least aggressive in the region, with Malaysia's central bank raising rates a total of 100 bps and Thailand's a total of 50 bps for the year.

On the other hand, the Bangko Sentral ng Pilipinas and the Bank of Korea remained the most aggressive central banks in the region this year through 18 November, with the SBV more recently catching up. The Philippines raised policy rates by 50 bps on 23 September and 75 bps on 17 November, while the Republic of Korea raised policy





rates by 50 bps on 12 October. Cumulative rate hikes in 2022 for the Philippines and the Republic of Korea reached 300 bps and 200 bps, respectively, through 18 November. In the Philippines, inflation continued to remain elevated. The Philippines' inflation rate for October rose to 7.7% y-o-y, the highest since December 2008 and the fastest so far among major regional markets that have released inflation data for the month.

Corporate spreads for higher-rated bonds fell in most markets.

The spread between AAA-rated yields and government yields fell in the PRC, Malaysia, and Thailand (Figure 18a). In contrast, the spread widened in the Republic of Korea, largely influenced by its aggressive monetary tightening stance.

Among lower-rated bonds, the spread rose in the PRC and Malaysia, while it fell in Thailand (Figure 18b). In the Republic of Korea, corporate spreads were unchanged.

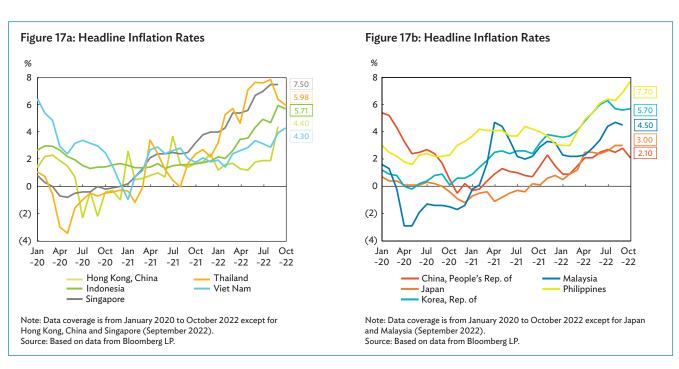


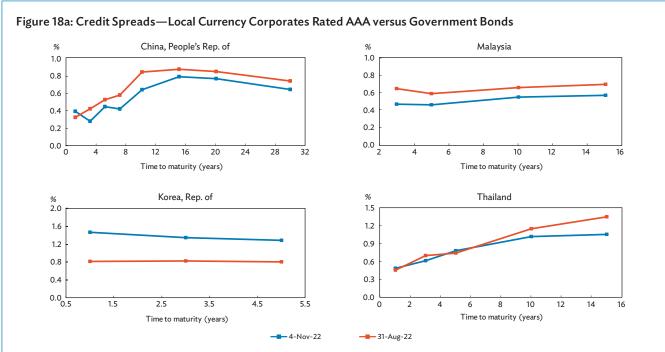
Table 5: Changes in Monetary Stances in Major Advanced Economies and Select Emerging East Asian Markets

	Policy Rate	Rate Change (%)							Policy Rate	Change in						
Economy	5-Nov-2021 (%)	Nov- 2021	Dec- 2021	Jan- 2022	Feb- 2022	Mar- 2022	Apr- 2022			Jul- 2022		Sep- 2022			4-Nov-2022 (%)	
United States	0.25					↑ 0.25		1 0.50	1 0.75	1 0.75		1 0.75		↑ 0.75	4.00	↑ 375
Euro Area	(0.50)									1 0.50		1 0.75		↑ 0.75	1.50	† 200
United Kingdom	0.10		1 0.15		† 0.25	† 0.25		† 0.25	† 0.25		1 0.50	† 0.50		1 0.75	3.00	1 290
Japan	(0.10)														(0.10)	
China, People's Rep. of	2.95			↓ 0.10							↓ 0.10				2.75	+ 20
Indonesia	3.50										1 0.25	1 0.50	† 0.50		4.75	125
Korea, Rep. of	0.75	† 0.25		1 0.25			† 0.25	† 0.25		1 0.50	1 0.25		† 0.50		3.00	† 225
Malaysia	1.75							† 0.25		1 0.25		1 0.25		† 0.25	2.75	1 100
Philippines	2.00							† 0.25	† 0.25	1 0.75	1 0.50	1 0.50			4.25	↑ 225
Singapore	-			†			†			†			†		-	-
Thailand	0.50										1 0.25	1 0.25			1.00	↑ 50
Viet Nam	4.00											1 .00	† 1.00		6.00	† 200

() = negative.

Notes:

Sources: Various central bank websites.

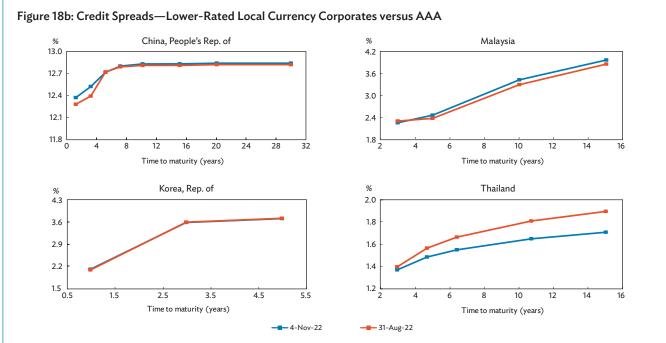


- 1. Credit spreads are obtained by subtracting government yields from corporate indicative yields.
- 2. Corporate yields for Malaysia are as of 30 August 2022 and 31 October 2022.
- Sources: People's Republic of China (Bloomberg LP), Republic of Korea (KG Zeroin Corporation), Malaysia (Fully Automated System for Issuing/Tendering Bank Negara Malaysia), and Thailand (Bloomberg LP).

^{1.} Data coverage is from 5 November 2021 to 4 November 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. The up (down) arrow for Singapore signifies monetary policy tightening (loosening) by its central bank. The Monetary Authority of Singapore utilizes the Singapore dollar nominal effective exchange rate (S\$NEER) to guide its monetary policy.



Notes:

- Notes:

 1. Credit spreads are obtained by subtracting government yields from corporate indicative yields.
 2. Corporate yields for Malaysia are as of 30 August 2022 and 31 October 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).