AsianBondsOnline Annual Bond Market Liquidity Survey

Introduction

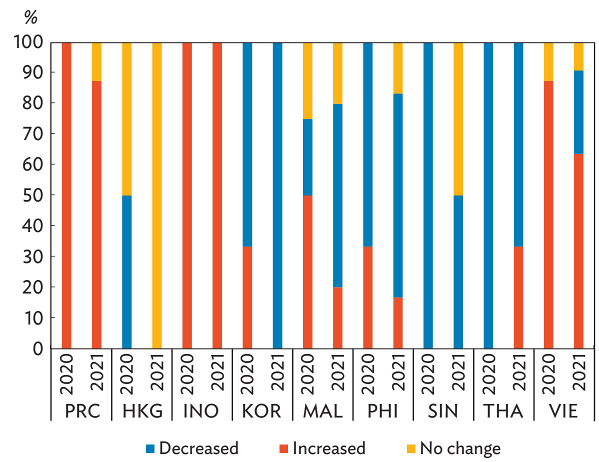
AsianBondsOnline conducts a bond market liquidity survey every year to better understand the evolving local currency (LCY) bond market environment in emerging East Asian economies and to provide a deeper assessment of the bond market's overall structure.[8] The survey's goal is to identify factors limiting the proper functioning of the region's bond markets in terms of liquidity. This assessment will help policy makers and regulators identify areas that help further deepen their respective bond markets.

The 2021 *AsianBondsOnline* bond market liquidity survey was conducted through email, due to the ongoing coronavirus disease (COVID-19) pandemic, and involved various bond market participants including financial institutions, financial market brokers, research houses, fund managers, rating agencies, and bond pricing agencies.

The survey contains a quantitative section and a qualitative section for both LCY government and corporate bonds. While the quantitative sections for each bond market segment contain metrics such as bid–ask spreads and typical transaction sizes, the qualitative sections gather the views of survey respondents regarding the degree of bond market development along identified structural factors.

In the most recent survey, 50% of respondents indicated an annual increase in bond market liquidity in 2021, compared to 53% of respondents in 2020, while 36% of participants indicated a decline in liquidity in 2021, compared to 38% in 2020. Meanwhile, 14% of respondents in 2021 noted that liquidity was unchanged, compared to 9% in 2020. Within the region, the Republic of Korea, Malaysia, and the Philippines had the highest levels of respondents indicating that liquidity had declined in 2021 (**Figure 23**).

Figure 23: Liquidity Conditions by Economy in Emerging East Asia, 2020 versus 2021

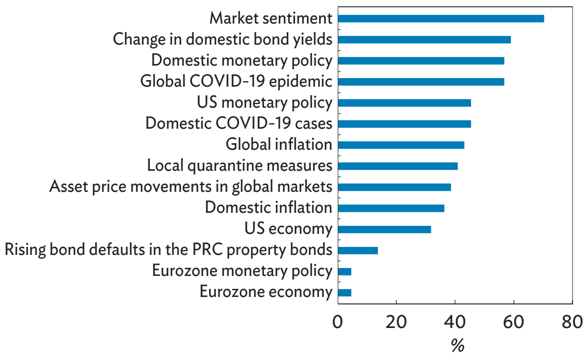


HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: Figures refer to the share of survey respondents indicating either "no change," "decreased," or "increased."
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Market sentiment was the most reported factor affecting bond market liquidity in 2021 (**Figure 24**). Over 70% of survey participants said that market sentiment was a factor driving bond market liquidity in 2021, a similar finding to that of the previous year's survey. Domestic bond yield movements, domestic monetary policy, and the pandemic also received relatively high shares of votes as factors affecting bond market liquidity. Consistent with current market conditions—marked by modest regional inflation and persistently high United States (US) inflation—market participants identified global inflationary pressure as a more significant factor than domestic inflation in 2021. Meanwhile, US monetary policy's relative impact on bond market liquidity rose from a ranking of seventh in 2020 to fifth in 2021.

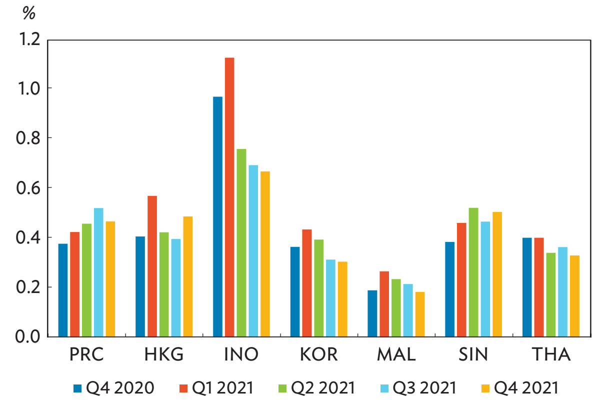
[8] In the context of the *AsianBondsOnline* 2021 Annual Bond Market Liquidity Survey, emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Figure 24: Factors Affecting Bond Market Liquidity in Emerging East Asia in 2021



COVID-19 = coronavirus disease, PRC = People's Republic of China, US = United States.
Note: Figures refer to the share of total responses for each factor.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Figure 25: Local Currency Government Bond Turnover Ratios



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PRC = People's Republic of China; Q1 = first quarter; Q2 = second quarter; Q3 = third quarter; Q4 = fourth quarter; SIN = Singapore; THA = Thailand.
Note: Turnover ratios are calculated as local currency trading volume (sales amount only) divided by average local currency value of outstanding bonds during each 3-month period.
Sources: People's Republic of China (CEIC Data Company); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Republic of Korea (The Bank of Korea and KG Zeroin Corporation); Malaysia (Bank Negara Malaysia); Singapore (Monetary Authority of Singapore and Singapore Government Securities); and Thailand (Bank of Thailand and Thai Bond Market Association).

Government Bonds

Liquidity

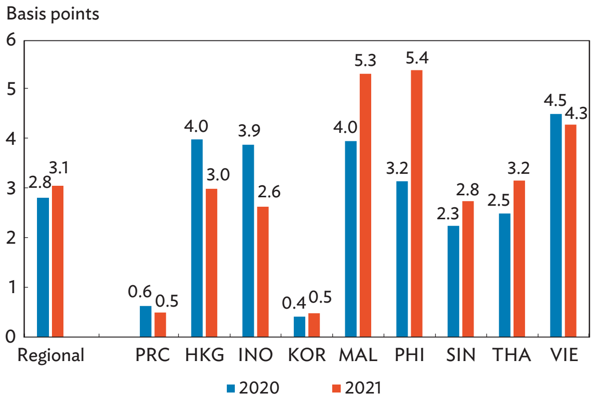
Trends in turnover ratios for government bonds varied across markets in 2021. Quarterly government bond turnover ratios declined from the previous year in Indonesia, the Republic of Korea, and Malaysia, while they rose in the People's Republic of China (PRC) and Singapore (**Figure 25**).

In the case of Indonesia, while survey participants perceived that liquidity conditions had improved in 2021, the turnover ratio in the LCY bond market fell as the amount of available bonds for trading was curtailed by increases in the holdings of central bank and domestic long-term investors who tend to pursue a buy-and-hold strategy. In nominal terms, however, annual trading volume increased between 2020 and 2021. Overall liquidity conditions also remained ample due to Bank Indonesia's accommodative monetary policy stance. In the Republic of Korea, liquidity was affected by monetary policy adjustments as the Bank of Korea tightened monetary policy in August, November, and (more recently) in January 2022. In Malaysia, investor sentiment soured due to political concerns.

On the other hand, the turnover ratios in the PRC and Singapore trended upward in 2021. For the PRC, the turnover ratio's steady rise in the first 3 quarters of the year was buoyed by increased interest from foreign investors. The ratio dipped in the fourth quarter (Q4) of 2021 due to concerns of an economic slowdown and negative investor sentiment over rising bond defaults in the property sector. This led the People's Bank of China to lower its reserve requirement ratio in December for a second time in 2021 following an earlier rate cut in July. In addition, the People's Bank of China reduced by 10 basis points (bps) its 1-year medium-term lending facility rate in January 2022. Monetary Authority of Singapore also engaged in tightening measures in October and again in January 2022.

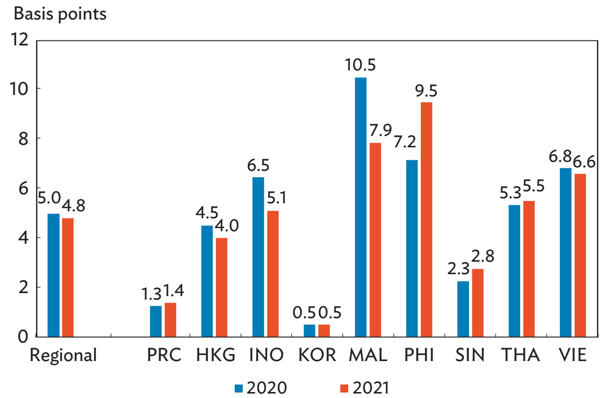
Survey results indicated a marginal uptick in the region's average bid–ask spread for government bonds in 2021 to 3.1 bps, compared with 2.8 bps in the prior year (**Figure 26**). Five out of nine regional markets had wider bid–ask spreads for government bonds in 2021 versus 2020. However, the increases were marginal (less than 1 bp) in the Republic of Korea, Singapore, and Thailand. On the other hand, Malaysia and the Philippines witnessed relatively larger increases in their respective spreads of 1.3 bps and 2.2 bps. Meanwhile, quoted bid–ask spreads for the PRC; Hong Kong, China; Indonesia; and Viet Nam were lower in 2021 than in 2020. In Hong Kong, China; Indonesia; and Viet Nam;

Figure 26: Average Bid–Ask Spreads for On-the-Run Government Bonds



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: The regional bid–ask spread refers to the average spread of the nine markets of emerging East Asia.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Figure 27: Average Bid–Ask Spreads for Off-the-Run Government Bonds



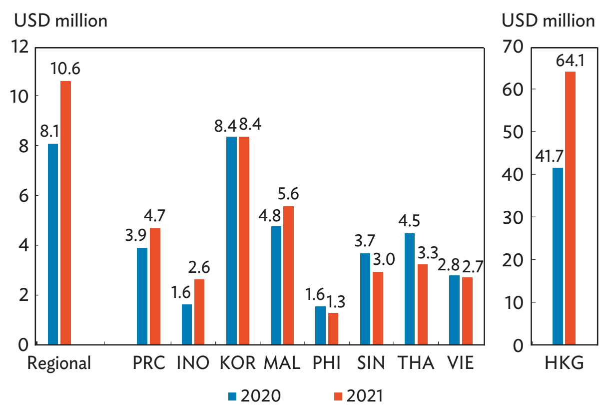
HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: The regional bid–ask spread refers to the average spread of the nine markets of emerging East Asia.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

narrowing bid–ask spreads resulted from abundant liquidity due to a relatively accommodative monetary policy environment. In the PRC, the decline also tracked increased foreign investor demand following the PRC's inclusion in global bond indices and given the continued pace of its economic recovery.

The regional average bid–ask spread for off-the run government bonds improved slightly to 4.8 bps in the 2021 survey from 5.0 bps in the 2020 survey (**Figure 27**). The lowest bid–ask spreads remained those of the Republic of Korea (0.5 bps) and the PRC (1.4 bps), while the Philippines (9.5 bps) and Malaysia (7.9 bps) had the widest spreads. Compared with 2020, survey participants in 2021 quoted lower spreads for off-the-run bonds in Hong Kong, China; Indonesia; Malaysia; and Viet Nam. In the PRC, the Philippines, Singapore, and Thailand, off-the-run bid–ask spreads rose, while the spread remained unchanged in the Republic of Korea.

The region's average single-trade transaction size for on-the-run government bonds climbed to USD10.6 billion in 2021 from USD8.1 billion in 2020 (**Figure 28**). The rise was largely fueled by the increased transaction size of a single trade in Hong Kong, China in 2021, which itself was driven by a high degree of liquidity in the banking system. The increased demand also led the Hong Kong Monetary Authority to raise its issuance

Figure 28: Typical Transaction Size for On-the-Run Government Bonds



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; USD = United States dollar; VIE = Viet Nam.
Note: The regional bid–ask spread refers to the average spread of the nine markets of emerging East Asia.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

volume of Exchange Fund Bills between September and December. To a lesser extent, growth in the average government bond transaction size in the PRC (from USD3.9 million in 2020 to USD4.7 million in 2021) and Indonesia (from USD1.6 million to USD2.6 million) also contributed to the higher regional average for 2021. Results from the 2021 survey showed that the average transaction size was the largest in Hong Kong, China (USD64.1 million) and the lowest in Indonesia (USD2.6 million) and the Philippines (USD1.3 million).

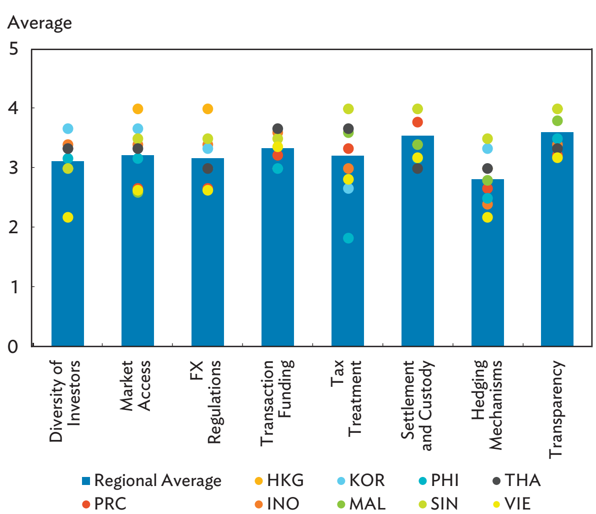
Market Development

The survey also includes the qualitative assessments of participants on a set of structural factors that describe developments in the region's government bond markets. There are eight structural factors that participants were asked to rate on a scale from 1 to 4. A higher rating indicates that the structural factor is either widely available or developed in that market, while a lower rating indicates its nonavailability or underdevelopment.

The 2021 qualitative survey results for emerging East Asian government bond markets showed improvement from the previous year on structural factors on average, with all factors having a regional average score above 3.0 except for hedging mechanisms (**Figure 29**).

Transparency received the highest average score in 2021 of 3.6, increasing from 3.4 in 2020. With most markets adapting technology, such as the use of online platforms, bond information is becoming more available and easily accessible. Hong Kong, China; the Republic of Korea; and Singapore—which are known to have well-developed bond markets—had scores of 4.0 each.

Figure 29: Local Currency Government Bond Market Structural Issues in Emerging East Asia



HKG = Hong Kong, China; FX = foreign exchange; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: 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.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Settlement and custody had an average score of 3.5 in 2021. While this was the second-highest rating among all structural factors, the score inched down from 3.7 in 2020. Nonetheless, the high rating reflects that the systems governing the region's bond markets are capable of facilitating the efficient settlement of bond trade transactions. All regional markets had a score of 3.0 or above, with the markets of Hong Kong, China; the Republic of Korea; and Singapore each scoring 4.0. In 2021, Hong Kong, China launched a delivery-versus-payment link for cross-currency securities transactions between the Hong Kong Dollar Clearing House Automated Transfer System and the Bank of Japan Financial Network System.

Transaction Funding scored an average of 3.3 in 2021, unchanged from the previous year, indicating that active and developed money and repurchase markets are present in individual emerging East Asian markets. The markets with the lowest scores in the region in 2021 were Hong Kong, China; Malaysia; and the Philippines at 3.0 each.

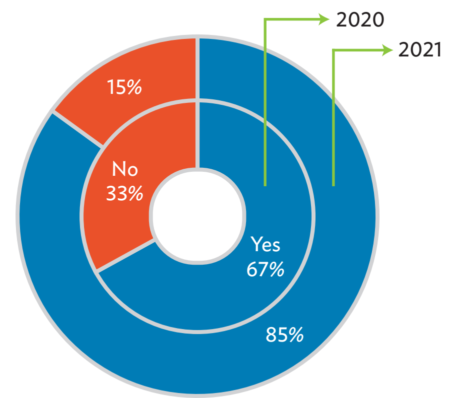
Tax Treatment obtained a regional average score of 3.2 in 2021. Markets like Hong Kong, China and Singapore with tax exemption on interest income from government bond investments were rated 4.0 by survey respondents, while the Philippines, which levies a 20% tax on interest income, had the region's lowest rating at 1.8. In Indonesia, the withholding tax on bond investments for both domestic and foreign investors was reduced in 2021 to 10% from 15% to encourage greater participation and enhance liquidity.

Market Access and Foreign Exchange Regulations were both given an average score of 3.2 in 2021, as regional bond markets continued to improve investor access to bonds. The Hong Kong Monetary Authority and the People's Bank of China announced the opening of the southbound leg of the Bond Connect scheme, which will allow residents in the PRC to buy bonds in Hong Kong, China. On foreign exchange regulations, the PRC and the Philippines both undertook liberalization measures in 2021 to facilitate foreign exchange transactions.[9]

Diversity of Investors had an average score of 3.1, the second-lowest rating among all structural factors, albeit an improvement compared to 2020's score of 2.9. All regional markets had a score of 3.0 or above except for Viet Nam, which had a score of 2.2, reflecting the small size of its bond market that is dominated by investors from the banking and insurance sectors.

Hedging Mechanisms remained the lowest-rated structural factor among survey participants. It scored an average of 2.8 in 2021, up slightly from 2.7 in 2020. Most markets had a score below 3.0. The Republic of Korea (3.3) and Singapore (3.5) had the highest scores in the region, owing to their developed markets. Though it posted the region's lowest score (2.2), Viet Nam added a hedging instrument in 2021 with the launch of a 10-year government bond future to provide another risk prevention tool for long-term government bonds.

Figure 30: Is There an Active Secondary Bond Market?



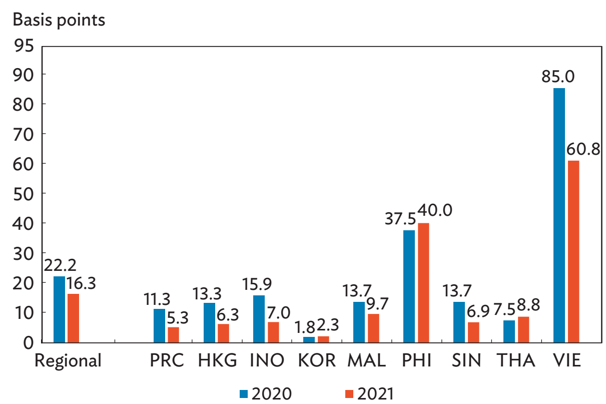
Note: Percentages refer to the share of survey respondents answering either "yes" or "no."
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Corporate Bond Markets

Liquidity

Corporate bond markets in emerging East Asia continued to be less liquid than government bond markets, as most corporate bonds in the region are held to maturity. For 2021, the region's corporate bond markets showed improved liquidity, with more survey participants noting an active secondary market in 2021 (85%) compared to 2020 (67%) (**Figure 30**). In the Philippines and Viet Nam, participants noted corporate bond trading activity in 2021 following inactivity in 2020.

Figure 31: Average Bid–Ask Spreads for Corporate Bonds



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: The regional bid–ask spread refers to the average spread of the nine markets of emerging East Asia.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

The improvement in liquidity in 2021 was supported by narrower bid–ask spreads for most markets in the region. The regional average declined to 16.3 bps from 22.2 bps in 2020 (**Figure 31**). Six markets posted lower bid–ask spreads in 2021, including the PRC; Hong Kong, China; Indonesia; Malaysia; Singapore; and Viet Nam. Viet Nam registered the largest decline in its average bid–ask spread, from 85.0 bps in 2020 to 60.8 bps in 2021, as market participants noted increased liquidity in the corporate bond market in 2021 compared to a lack of trading activity in 2020. Indonesia posted the second-largest decline, from 15.9 bps in 2020 to 7.0 bps in 2021, due to improved overall liquidity conditions in the market. Meanwhile, the Philippines and Thailand registered an increase in their bid–ask spreads but with only an average increment of 1.9 bps in each market. The Republic of Korea's average bid–ask spread barely changed between 2020 and 2021, with a marginal increase of less than 1 basis point. Viet Nam and the Philippines continued to post the region's widest corporate bid–ask spreads at 60.8 bps and

[9] For the PRC, see https://asia.nikkei.com/Spotlight/Caixin/China-tries-more-flexibility-for-multinational-currency-exchange. For the Philippines, see https://www.bsp.gov.ph/SitePages/MediaAndResearch/MediaDisp.aspx?ItemId=5892.

40.0 bps, respectively, as their corporate bond markets remained relatively underdeveloped with most investors holding their bonds until maturity.

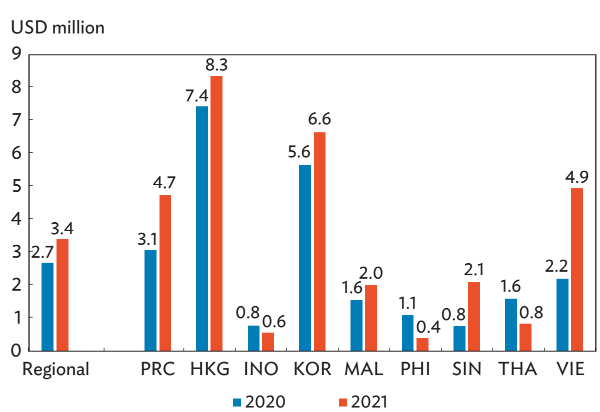
The region's average corporate bond market transaction size increased to USD3.4 million from USD2.7 million in 2020, with six out of nine markets posting larger average transaction sizes in the 2021 survey compared with a year earlier (**Figure 32**). Viet Nam's corporate bond market registered the largest increase in average transaction size, rising from USD2.2 million to USD4.9 million. The increase and the relatively large average transaction size in Viet Nam can be traced to the surge in corporate bond issuance in 2021 and may also be due to the few very large investors participating in trading. The PRC registered the second-largest increase from USD3.1 million in 2020 to USD4.7 million in 2021, which can also be attributed to increased corporate bond issuances in 2021 despite a rising number of bond defaults, as the domestic economy rebounded. The three markets with the smallest average transaction sizes include Thailand (USD0.8 million), Indonesia (USD0.6 million), and the Philippines (USD0.4 million). The corporate bond markets of Hong Kong, China and the Republic of Korea continued to have the largest average transaction sizes at USD8.3 million and USD6.6 million, respectively.

Between Q4 2020 and Q4 2021, changes in turnover ratios for the corporate bond markets in the region for which data are available were mixed (**Figure 33**). Corporate turnover ratios in the PRC rose the most, from 0.16 in Q4 2020 to 0.33 in Q4 2021, as both trading volume and average bonds outstanding posted annual increases, with trading volume doubling in size during the year. For the Republic of Korea and Malaysia, corporate turnover ratios showed increases in the first half of 2021, but then slightly declined in the second half of the year. For Thailand, the corporate turnover ratio remained relatively steady during the review period. Meanwhile, the corporate turnover ratio fell in Indonesia from 0.26 in Q4 2020 to 0.19 in Q4 2021, as trading volume fell at a faster pace than average bonds outstanding. The turnover ratio in Hong Kong, China fell from 0.15 to 0.08 during the review period due to a decline in trading volume.

Market Development

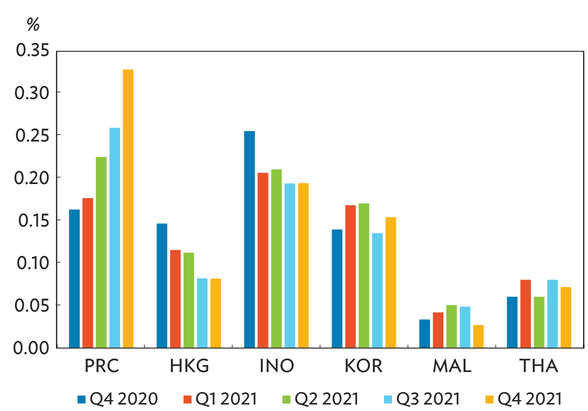
Compared to the 2020 liquidity survey, the development of the region's corporate bond market was generally similar in 2021. The corporate bond market of emerging East Asia continued to be well-developed when it comes to settlement and custody, transaction funding, foreign exchange regulations, market access, and transparency (**Figure 34**). Each of these categories had an average

Figure 32: Average Transaction Sizes for Corporate Bonds



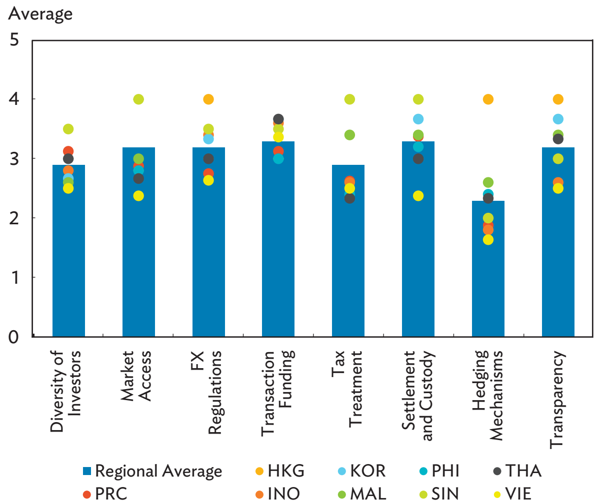
HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; USD = United States dollar; VIE = Viet Nam.
Note: The regional bid–ask spread refers to the average spread of the nine markets of emerging East Asia.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

Figure 33: Local Currency Corporate Bond Turnover Ratios



HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PRC = People's Republic of China; Q1 = first quarter; Q2 = second quarter; Q3 = third quarter; Q4 = fourth quarter; THA = Thailand.
Note: Turnover ratios are calculated as local currency trading volume (sales amount only) divided by average local currency value of outstanding bonds during each 3-month period.
Sources: People's Republic of China (CEIC Data Company); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Republic of Korea (The Bank of Korea and KG Zeroin Corporation); Malaysia (Bank Negara Malaysia); Singapore (Monetary Authority of Singapore and Singapore Government Securities); and Thailand (Bank of Thailand and Thai Bond Market Association).

Figure 34: Local Currency Corporate Bond Market Structural Issues in Emerging East Asia



HKG = Hong Kong, China; FX = foreign exchange; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; VIE = Viet Nam.
Note: 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.
Source: *AsianBondsOnline* 2021 Local Currency Bond Market Liquidity Survey.

score of 3.0 or above in the 2021 survey. On the other hand, survey participants deemed that improvements were needed in terms of diversity of the investor profile, tax treatment, and hedging mechanisms.

Emerging East Asia's corporate bond market received an average score of 3.3 in settlement and custody, with Viet Nam scoring the lowest among all markets. Transaction funding also scored a regional average of 3.3. Foreign exchange regulations, market access, and transparency in regional corporate bond markets scored relatively high at 3.2 each.

Two areas that need improvement in the corporate bond market of emerging East Asia are investor profile diversity and taxation, with both categories receiving a score of 2.9. (Except for Hong Kong, China, all markets in the region levy tax on interest income on corporate bonds.)

The structural factor with the lowest score for the region's corporate bond market in 2021 was hedging mechanisms, which logged an average score of 2.3. Almost all markets in the region lack the tools needed by investors to effectively manage risk.