

AsianBondsOnline Annual Bond Market Liquidity Survey

Introduction

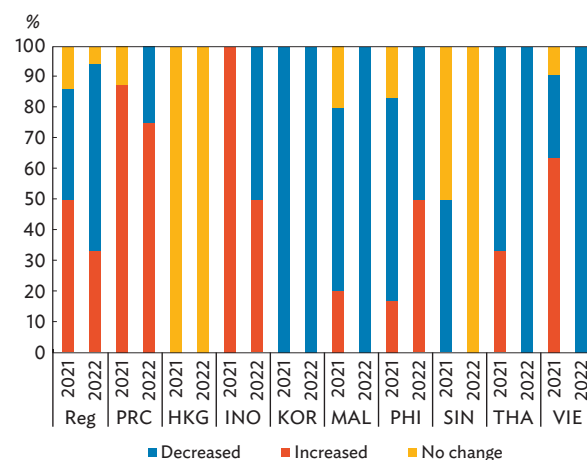
AsianBondsOnline conducts a local currency (LCY) bond market survey every year to assess overall liquidity conditions in emerging East Asia.¹⁰ The survey allows AsianBondsOnline to identify both short-term factors currently driving market liquidity and trading as well as structural factors that affect bond market liquidity in the longer run. The survey helps identify hindrances to the proper functioning of the region's LCY bond markets and assist policy makers and regulators to further develop regional LCY bond markets.

The 2022 liquidity survey was conducted online in December 2022 among a broad range of market participants including banks, market brokers, fund managers, investment companies, insurance companies, rating agencies, and bond pricing agencies. The survey consists of both a quantitative and qualitative assessment of the government and corporate LCY bond markets in emerging East Asia. Quantitative factors include metrics such as bid-ask spreads and transaction sizes, while the qualitative section attempts to assess structural factors and their corresponding degree of development. In addition, given increasing awareness and interest among investors and issuers in the sustainable finance market, the survey also includes a brief section on market interest in sustainable bonds to identify factors driving the trading of sustainable bonds.

Overall Liquidity Conditions

Overall liquidity conditions in emerging East Asian LCY bond markets weakened in 2022 from the previous year. As shown in **Figure 23**, nearly all Association of Southeast Asian Nations (ASEAN) markets and the Republic of Korea reported a decrease in overall liquidity, with 61.1% of respondents saying that liquidity decreased in 2022, compared with 36.4% noting decreased liquidity in 2021. This was largely due to tightening financial conditions in both global and domestic financial markets. In the international financial centers of Singapore and

Figure 23: Liquidity Conditions by Economy in Emerging East Asia



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

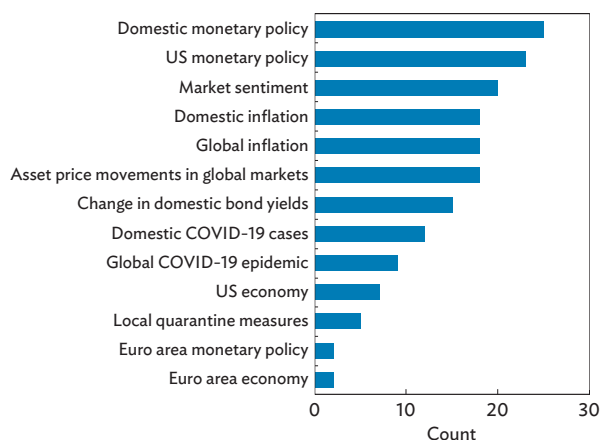
Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Hong Kong, China, survey participants observed that liquidity conditions remained unchanged from the prior year. In the People's Republic of China (PRC), which was the only emerging East Asian market that experienced monetary easing in 2022, more than 70% of survey participants noted an improvement in liquidity conditions in 2022.

Domestic and United States (US) monetary tightening were identified as the top two factors hampering market liquidity in 2022 (**Figure 24**). The region experienced an overall tightening of financial conditions in 2022, particularly during the second half of the year. Domestic monetary tightening was jointly driven by domestic inflationary pressures and measures to safeguard domestic financial stability amid aggressive monetary tightening in the US. Bond market liquidity was also significantly affected by market sentiment, which drives foreign portfolio investments and is very responsive to US monetary stances.

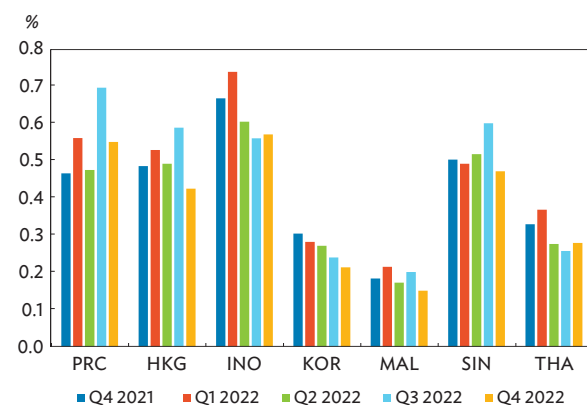
¹⁰ In the context of the AsianBondsOnline 2022 Annual Bond Market Liquidity Survey, emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Figure 24: Factors Affecting Bond Market Liquidity in Emerging East Asia in 2022



COVID-19 = coronavirus disease, US = United States.
 Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Figure 25: Local Currency Government Bond Turnover Ratios in Select Emerging East Asian Markets



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 the 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 Thailand (Bank of Thailand and Thai Bond Market Association).

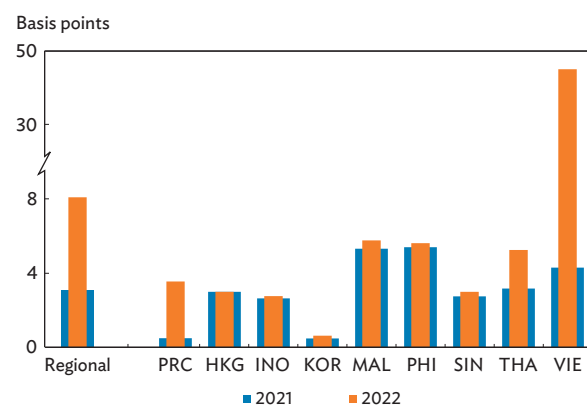
Government Bond Markets

Liquidity

The government bond turnover ratios in most ASEAN markets and the Republic of Korea trended down in much of 2022 amid tightening financial conditions. Consistent with Figure 23, such a declining trend was not that pronounced in financial centers like Singapore and Hong Kong, China, or in the PRC where an easing monetary stance was maintained (Figure 25). The People's Bank of China was not only the sole central bank in the region that lowered key reference rates in 2022, it also boosted liquidity through various fiscal measures such as tax cuts and rebates to support economic growth amid restrictive pandemic containment measures.

Bid-ask spreads widened in nearly all regional government bond markets in 2022 due to tightening financial conditions both internationally and domestically. Based on the survey, the region's average bid-ask spread for on-the-run and off-the-run government bonds, respectively, climbed to 8.1 basis points (bps) and 11.2 bps in 2022 from 3.1 bps and 4.8 bps in 2021 (Figure 26 and Figure 27). Most markets saw widening bid-ask spreads in 2022 for both on-the-run and off-the-run government bonds amid tightened financial conditions. Despite continued easing measures in the

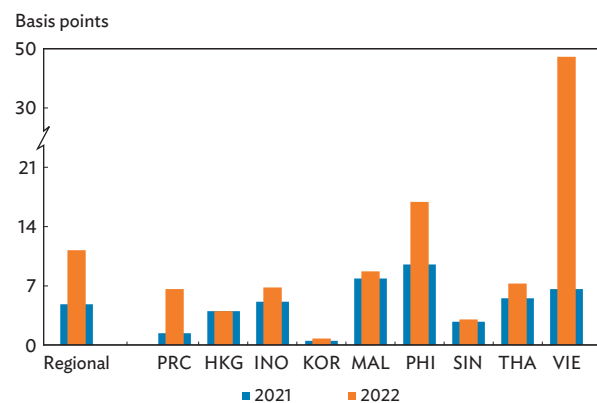
Figure 26: Average Bid-Ask Spreads for On-the-Run Government Bonds



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.

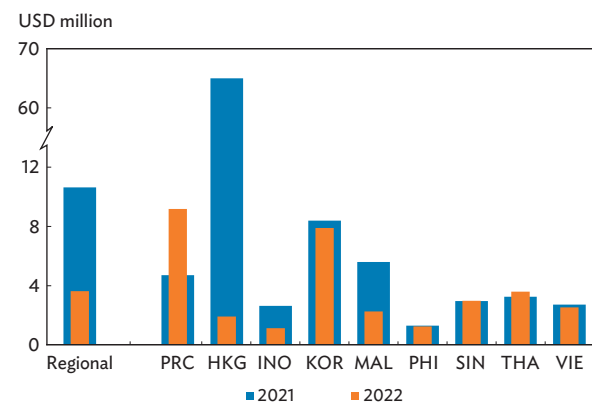
Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

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 2022 Local Currency Bond Market Liquidity Survey.

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 transaction size refers to the average transaction size of the nine markets of emerging East Asia.

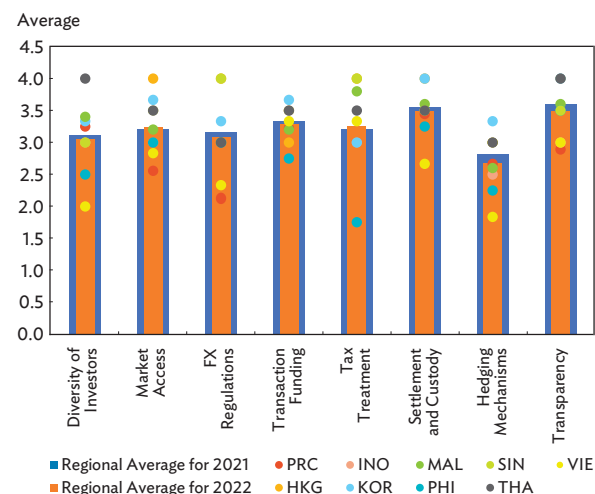
Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

PRC, the bid-ask spread for government bonds rose on concerns over the prolonged impacts of its pandemic containment measures. On top of that, the continued easing led to widened interest rate differentials between the PRC and other global and regional markets, making its bonds less attractive to international investors.

Amid tightened liquidity conditions, the typical transaction size for government bonds declined in most emerging East Asian markets. The region's average transaction size for on-the-run government bonds fell to USD3.6 million in the 2022 survey from USD10.6 million in 2021 (Figure 28). In most markets, a smaller transaction size was recorded in 2022 than in the previous year.

Market Development

The results of the 2022 survey indicated a slight weakening of the regional bond market's structural environment. The survey includes participants' qualitative assessments of the development of the region's government bond markets based on a set of key structural factors. The regional averages for six of the eight structural factors from the 2022 survey were marginally lower than the corresponding regional averages from the 2021 survey (Figure 29).

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

FX = foreign exchange; 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.

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

The most developed structural factors in the region’s government bond markets are transparency and settlement and custody. Government bond market information remains widely available across the region. Most markets have official online platforms that provide data on bond market activities such as auction results. All markets except for Viet Nam received a score above 3.0 for settlement and custody, indicating the presence of systems that allow the efficient settlement of bond market transactions.

Transaction funding, tax treatment, and market access are fairly developed in the region. The average score for transaction funding was unchanged from the previous year at 3.3, indicating the continued availability of diverse funding sources in the region’s government bond market. The average rating for tax treatment increased from 3.2 in 2021 to 3.3 in 2022. The Republic of Korea recorded a higher rating of 3.0 in 2022 compared with 2.7 in the previous year, as it removed taxes on foreign investors’ income from government bonds in October 2022 to promote capital flows into the local bond market. In Singapore and Hong Kong, China, interest income from government bonds is tax-exempt. The region’s average rating for market access increased to 3.3 in 2022 from 3.2 in the previous year. Hong Kong, China continued to have the region’s highest score for market access at 4.0.

The rating for foreign exchange regulations fell in 2022, while the score for diversity of investors was unchanged. Financial centers like Singapore and Hong Kong, China had the highest ratings of 4.0 for foreign exchange regulations, while relatively closed markets like Viet Nam (2.3) and the PRC (2.1) had the lowest scores. Thailand relaxed its rules on foreign exchange transactions in April 2022, while the PRC announced new rules relaxing restrictions on foreign exchange transactions effective January 2023. For diversity of investors, all markets had scores above 3.0 except for the smaller markets of the Philippines (2.5) and Viet Nam (2.0).

Hedging mechanisms remain the area where further development is needed. The average rating for hedging mechanisms, the lowest among all structural factors, declined to 2.7 in 2022 from 2.8 in the prior year. This indicates the limited availability of mechanisms to guard against bond market risks in the region. More than half of the markets had scores below 3.0, reflecting the need for more hedging products in the region’s bond

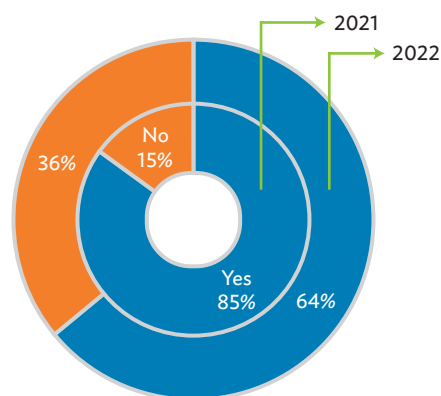
markets. Initiatives such as the planned “Swap Connect” between the PRC and Hong Kong, China, which will take effect in 2023, will provide additional hedging mechanisms for bond investors in the future.

Corporate Bond Markets

Liquidity

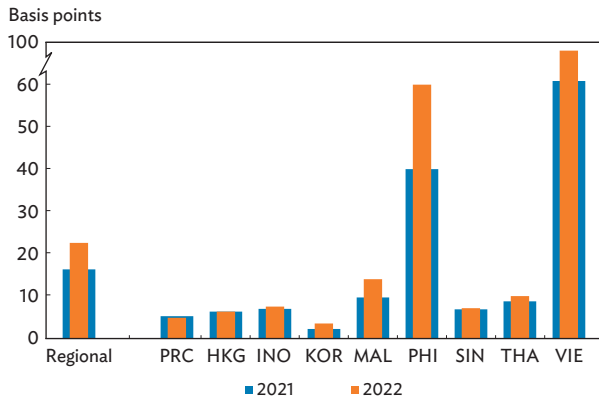
Emerging East Asia’s corporate bond market remains less liquid than the government bond market as most investors in corporate bonds continue to buy and hold until maturity. Survey results showed that more respondents noted the absence of an active secondary market for corporate bonds this year (36%) than in 2021 (15%) (Figure 30).

Figure 30: Is There an Active Secondary Bond Market for Corporate Bonds?



Note: Percentages refer to the share of survey respondents answering either “yes” or “no.”
Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Widening bid-ask spreads in almost all regional markets reflect decreased liquidity in corporate bond markets in emerging East Asia. For the 2022 survey, the average bid-ask spread for the region grew to 22.6 bps from 16.3 bps in 2021 (Figure 31). Only the PRC registered a lower bid-ask spread of 4.9 bps, compared with 5.3 bps in 2021, as the PRC sought to support economic activities through loose fiscal and monetary policies. Viet Nam and the Philippines witnessed larger increases in their respective corporate bid-ask spreads. Their corporate bond markets are relatively less developed than those of their ASEAN peers, and investors in the corporate

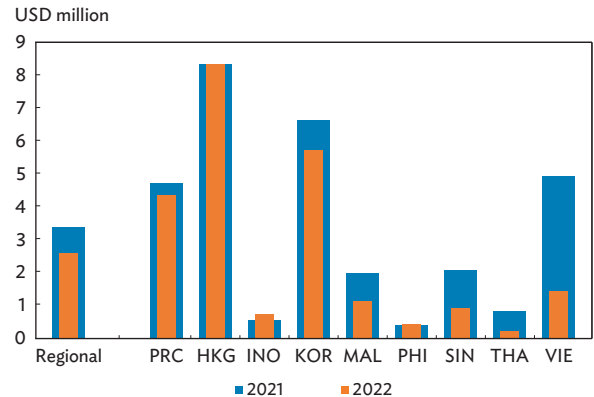
Figure 31: Average Bid-Ask Spreads for Corporate Bonds

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.

Notes:

1. The regional bid-ask spread refers to the average spread of the nine markets of emerging East Asia.
2. For the Philippines and Viet Nam, the bid-ask spreads quoted are for a newly issued corporate bonds.

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Figure 32: Average Transaction Sizes for Corporate Bonds

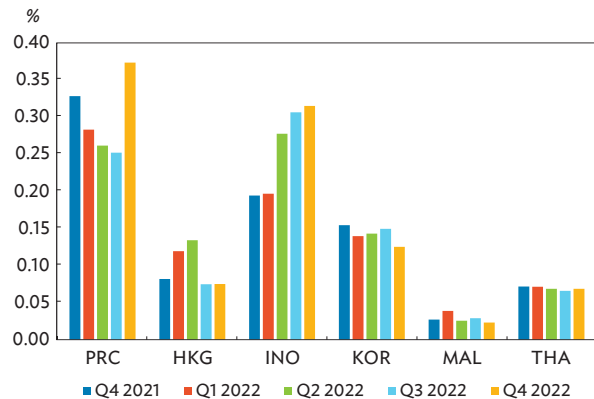
HKG = Hong Kong, China; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; USD = United States dollar; VIE = Viet Nam.

Note: The regional transaction size refers to the average transaction size of the nine markets of emerging East Asia.

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

bonds of Viet Nam and the Philippines tend to hold their fixed-income securities to maturity. Also, the quoted bid-ask spreads for both markets refer to newly issued bonds, as most participants noted an absence of an active secondary market for corporate bonds.

The average transaction size for the region's corporate bond market declined to USD2.6 million in 2022 from USD3.4 million in the previous year. Most markets in the region recorded a smaller average transaction size in 2022 (Figure 32). The largest contraction in average corporate bond market transaction size was recorded in Viet Nam where the mean transaction size dropped to USD1.4 million from USD4.9 million in 2021. Turnover ratios for corporate bonds declined between the fourth quarter of 2021 and the fourth quarter of 2022 in most emerging East Asian markets for which data are available. The PRC's turnover ratio rose significantly in the final quarter of 2022 when pandemic containment measures were lifted (Figure 33).

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.

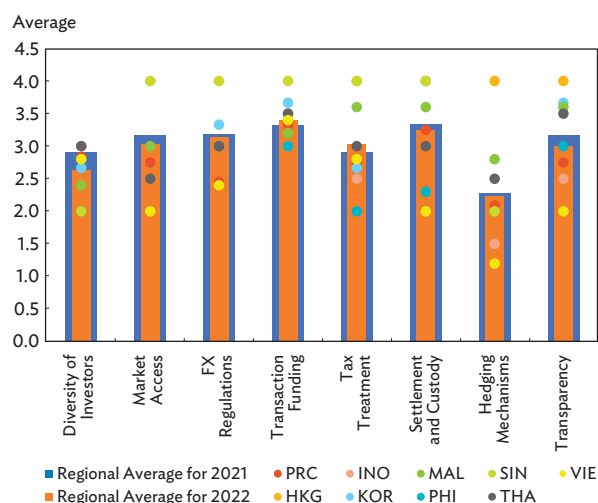
Sources: People's Republic of China (CEIC Data Company); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Republic of Korea (The Bank of Korea and KG Zeroin Corporation); Malaysia (Bank Negara Malaysia); and Thailand (Bank of Thailand and Thai Bond Market Association).

Market Development

The results of the 2022 liquidity survey on key structural factors in emerging East Asia’s corporate bond markets were largely the same as in 2021.

The 2022 survey showed that most structural factors scored an average of 3.0 or above and that regional corporate bond markets’ diversity of the investor profile and hedging mechanisms are areas that need further improvements (Figure 34). Transaction funding in the corporate bond markets of emerging East Asia had an average score of 3.4, while a regional average of 3.2 was recorded for settlement and custody. Market access, tax treatment, and transparency each reported a regional average rating of 3.0. Compared to the 2021 survey results, tax treatment marginally improved, reaching an average score of 3.0 from 2.9. Survey participants continued to express their desire for a more diverse investor profile in the corporate bond markets of emerging East Asia. Similar to 2021, the market structure category that recorded the lowest average score in the region in 2022 was hedging mechanisms, with an average of 2.2. Proper risk management tools continued to elude almost all markets in emerging East Asia.

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



FX = foreign exchange; 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.

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

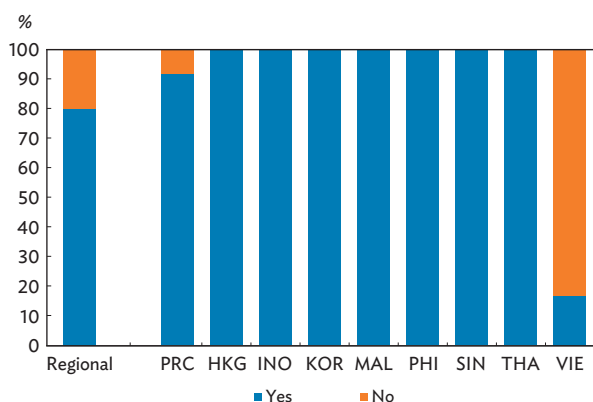
Sustainable Bond Markets

For the 2022 AsianBondsOnline liquidity survey, participants were queried to assess their level of interest in investments in sustainable bonds as well as the corresponding motivations or lack thereof. The goal is to guide policymakers and regulators in their creation of environmental, social, and governance (ESG) frameworks and initiatives to promote ESG investing.

There is a high level of investment interest in sustainable bonds in emerging East Asia, but in some markets investor education is still needed to boost awareness and interest.

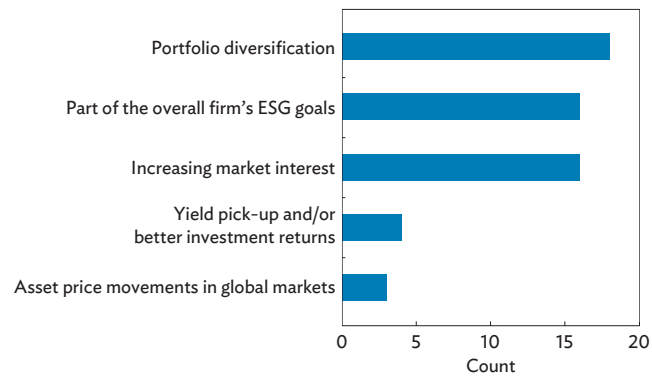
In 2022, 80% of participants in the region said that they or their organization have plans for trading and investing in sustainable bonds (Figure 35). Among these respondents, the most cited driving factor was portfolio diversification, followed by their respective organization’s inclusion of ESG criteria and mounting market interest (Figure 36, Panel A). This suggests that investors are becoming increasingly conscious of the importance of ESG investing and are applying ESG criteria in their investments. Among participants who stated they had no plans for trading and investing in sustainable bonds, a lack of market interest was cited as the biggest reason, followed by their respective firms having not yet adopted ESG criteria

Figure 35: Interest in Trading Sustainable Bonds across Markets



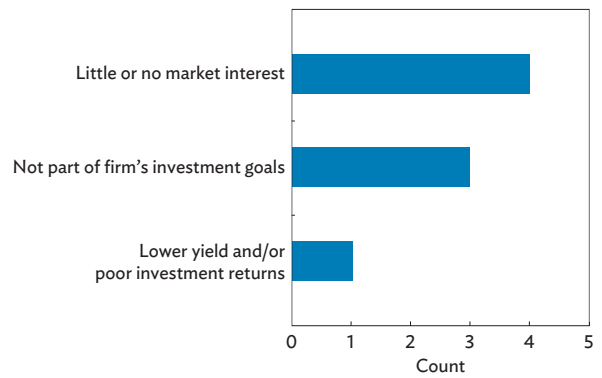
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Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Figure 36: Factors Affecting Sustainable Bond Investment**Panel A. Participants who answered “Yes” to investing in ESG**

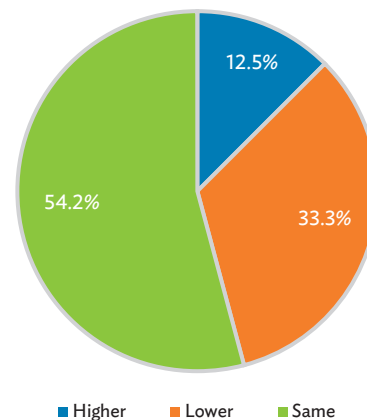
ESG = environmental, social, and governance.

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.

Panel B. Participants who answered “No” to investing in ESG

as part of their investment goals (**Figure 36, Panel B**). This suggests that promoting investor education and raising market awareness of the importance and benefits of ESG investing could be a viable strategy for improving investor interest.

When asked about liquidity, 54.2% of participants said that sustainable bond market liquidity was roughly comparable to that of conventional bond markets. However, 33.3% observed that ESG bonds were less liquid than conventional bonds (**Figure 37**). Considering the relatively smaller size of sustainable bond markets compared to conventional bond markets, and the fact that corporate bonds dominate sustainable bond markets in the region, the liquidity conditions of the region's sustainable bond markets are considered acceptable.

Figure 37: Sustainable Bond Market Liquidity

Source: AsianBondsOnline 2022 Local Currency Bond Market Liquidity Survey.