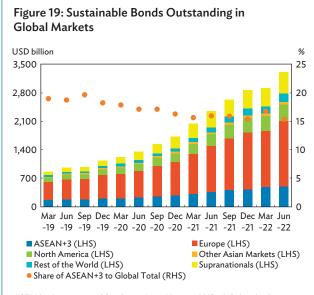
## Recent Developments in ASEAN+3 Sustainable Bond Markets

The expansion of ASEAN+3's sustainable bond market moderated in Q2 2022.<sup>6</sup> By the end of June, the outstanding amount of sustainable bonds in ASEAN+3 reached USD503.5 billion on growth of 35.9% year-onyear (y-o-y) in the second (Q2) of 2022, compared to 53.1% y-o-y in the first quarter (Q1).<sup>7</sup> Meanwhile, quarter-on-quarter (q-o-q) growth moderated to 4.0% in Q2 2022 from 10.8% in Q1 2022 (**Figure 19**). The slowdown in growth was largely due to increased headwinds to the economic outlook and tightening financial conditions both globally and in the region. Meanwhile, the global sustainable bond market reached a size of USD3.3 trillion at the end of June, posting growth of 40.9% y-o-y and 13.4% q-o-q in Q2 2022. With higher



ASEAN = Association of Southeast Asian Nations, LHS = left-hand side, RHS = right-hand side, USD = United States dollar. Notes:

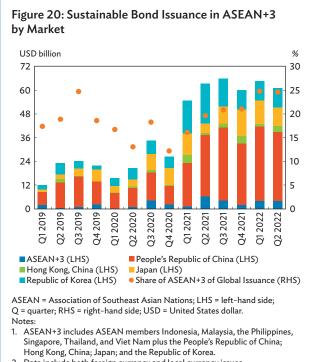
 ASEAN+3 includes ASEAN members Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.
Data include both local currency and foreign currency issues.
Source: AsianBondsOnline computations based on Bloomberg LP data. growth rates for the global sustainable bond market than those for ASEAN+3 during the quarter, ASEAN+3's share of the total global market declined from 16.7% at the end of March to 15.3% at the end of June. Although ASEAN+3 remains the second-largest regional sustainable bond market (excluding international organizations) after Europe, the gap with Europe in terms of bonds outstanding widened from USD894.5 billion at the end of March to USD1,095.1 billion at the end of June.

Issuance in ASEAN+3's sustainable bond market declined in Q2 2022, primarily on falling issuance in the People's Republic of China and Japan. Amid dimming growth prospects and accelerated monetary tightening, aggregate sustainable bond issuance in ASEAN+3 markets declined to USD61.0 billion in Q2 2022 from USD64.4 billion in Q1 2022, posting contractions of 3.4% y-o-y and 5.2% q-o-q (Figure 20). The slowdown in regional issuance was largely driven by reduced issuance in the People's Republic of China (PRC) and Japan in Q2 2022, where issuance dropped to USD34.8 billion and USD9.1 billion, respectively, from USD37.7 billion and USD11.6 billion in Q1 2022. Their respective shares of the region's total issuance also fell to 57.1% and 15.0% in Q2 2022 from 58.5% and 18.1% in Q1 2022. Meanwhile, ASEAN+3's share of global sustainable bond issuance slightly declined to 24.5% in Q2 2022 from 24.7% in Q1 2022.

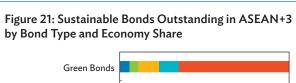
ASEAN is an active player in the regional sustainability and sustainability-linked bond markets. ASEAN member economies accounted for 7.5% of ASEAN+3's sustainable bond market with USD37.7 billion worth of outstanding bonds at the end of June. Despite the headwinds, ASEAN markets' issuance increased to USD4.2 billion during Q2 2022 from USD4.0 billion during Q1 2022, pushing up their aggregate share of the region's total issuance to 6.9% from 6.2% in Q1 2022. Moreover, in terms of bonds outstanding, ASEAN markets

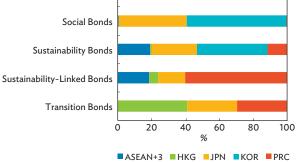
<sup>6</sup> For the discussion on sustainable bonds, ASEAN+3 includes Association of Southeast Asian Nations (ASEAN) members Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.

<sup>7</sup> Sustainable bonds include green, social, sustainability, sustainability-linked, and transition bonds.



2. Data include both foreign currency and local currency issues. Source: AsianBondsOnline computations based on Bloomberg LP data.





ASEAN = Association of Southeast Asian Nations; HKG = Hong Kong, China; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China. Notes:

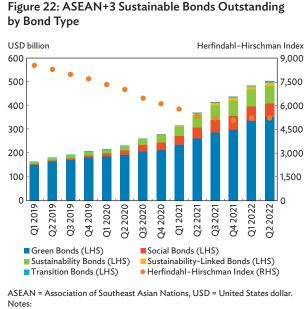
- ASEAN+3 includes ASEAN members Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.
- Data as of 30 June 2022 and include both foreign currency and local currency issues.

Source: AsianBondsOnline computations based on Bloomberg LP data.

have a significant presence in the regional sustainability bond market (19.2% of the ASEAN+3 total) and the sustainability-linked bond market (18.5% of the ASEAN+3 total). In terms of issuance, ASEAN accounted for 16.7% and 23.2%, respectively, of the region's sustainability and sustainability-linked bond issuance totals during Q2 2022. This represents a larger presence than its 12.0% share of ASEAN+3's total outstanding bonds at the end of June and 11.0% of total bond issuance during Q2 2022. Meanwhile, the PRC had the most sustainable bonds outstanding among all economies in ASEAN+3, accounting for 49.4% of the regional sustainable bond market at the end of June, though this was less than the PRC's 55.3% share of all ASEAN+3 bonds outstanding. Bonds outstanding from PRC issuers comprised a significant share of the regional green bond market (65.3%) and sustainability-linked bond market (60.2%) at the end of June (Figure 21). Outstanding bonds in the Republic of Korea (21.0%) and Japan (17.7%) comprised the next largest shares of the sustainable bond market and jointly accounted for nearly the entire regional social bond market at the end of June. As transition bonds are still at the very early development stage, only a few of the region's more advanced bond markets—the PRC; Hong Kong, China; and Japan-have shown activity in this market segment.

## Diversification has improved in ASEAN+3 sustainable

bond markets. The regional sustainable bond market has become less concentrated in recent quarters as evidenced by a decline in the Herfindahl-Hirschman Index, a common measure of market concentration (Figure 22). Green bonds continued to largely dominate ASEAN+3 sustainable bond markets. Outstanding green bonds increased to USD350.7 billion at the end of June, accounting for 69.7% of the region's sustainable bonds outstanding. However, the green bond share has declined in recent years as other types of sustainable bonds, especially sustainability-linked and transition bonds, continue to expand. The issuance of green and sustainability bonds declined in Q2 2022 to USD45.5 billion and USD5.4 billion, respectively, from USD50.0 billion and USD8.9 billion in Q1 2022. Meanwhile, on a q-o-q basis, issuance rose substantially for sustainability-linked bonds (175.1%), transition bonds (424.0%, albeit coming from a low base), and social bonds (37.5%) (Figure 23).



- ASEAN+3 includes ASEAN members Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.
- 2. Data include both foreign currency and local currency issues.
- The Herfindahl-Hirschman Index is a commonly accepted measure of market concentration and is calculated by summing the squared market share of each bond type competing in the market.

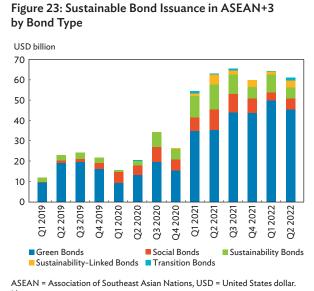
Source: AsianBondsOnline computations based on Bloomberg LP data.

The private sector dominates issuance in ASEAN+3 sustainable bond markets. The private sector

accounted for 89.0% of total regional sustainable bond issuance in Q2 2022 (**Figure 24**), with financial institutions accounting for the single-largest share of private sector issuance at 45.1%. The most diversified issuer profiles during Q2 2022 were in the green and sustainability-linked bond markets. The public sector's share of total ASEAN+3 sustainable bond issuance rose to 11.0% in Q2 2022 from 9.8% in Q1 2022, with public sector issuance mainly in the form of green bonds and sustainability bonds as regional governments sought to meet their climate commitments. Specifically, governments in Indonesia and Hong Kong, China issued green bonds in Q2 2022, while the Government of the Philippines issued sustainability bonds.

Short-term, local-currency-denominated financing comprises the majority of the ASEAN+3 sustainable bond market. Outstanding sustainable bonds in ASEAN+3 remained largely concentrated in shorter

tenors in Q2 2022; the average size-weighted tenor



Notes: 1. ASEAN+3 includes ASEAN members Indonesia. Malavsia. the Philippines.

- ASEAN+3 includes ASEAN members indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.
- 2. Data include both foreign currency and local currency issues.
- Source: AsianBondsOnline computations based on Bloomberg LP data.

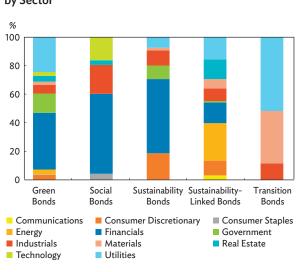
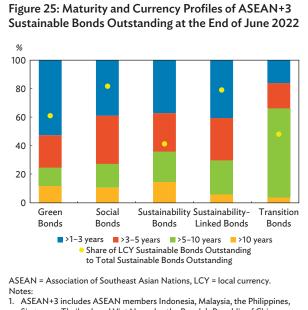


Figure 24: Sustainable Bond Issuance in ASEAN+3 by Sector

ASEAN = Association of Southeast Asian Nations. Notes:

- ASEAN+3 includes ASEAN members Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam plus the People's Republic of China; Hong Kong, China; Japan; and the Republic of Korea.
- Data reflect issuance for the period 1 April 2022 to 30 June 2022 and include both foreign currency and local currency issues.
- Source: AsianBondsOnline computations based on Bloomberg LP data.

of outstanding sustainable bonds at the end of June was 4.3 years. At the same time, 72.7% of outstanding sustainable bonds carried maturities of 5 years or less, while 61.1% of outstanding sustainable bonds in ASEAN+3 were denominated in local currencies (Figure 25). The use of local currency was most pronounced in the social (81.8%), sustainability-linked (79.1%), and green (61.1%) bond markets. The average



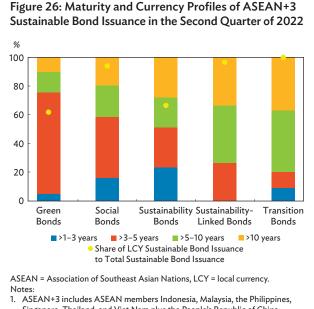
Singapore, Thailand, and Viet Nam plus the People's Republic of China;

Hong Kong, China; Japan; and the Republic of Korea.

2. Data include both foreign currency and local currency issues

Source: AsianBondsOnline computations based on Bloomberg LP data.

size-weighted tenor of sustainable bonds issued in ASEAN+3 during Q2 2022 was 4.6 years, with green bonds having the shortest average maturity at 3.7 years. During the guarter, 67.9% of regional sustainable bond issuance was denominated in local currency-with transition, sustainability-linked, and social bonds having the highest shares of local-currency-denominated issuance (Figure 26).



Singapore, Thailand, and Viet Nam plus the People's Republic of China;

Hong Kong, China; Japan; and the Republic of Korea.

2. Data include both foreign currency and local currency issues. Source: AsianBondsOnline computations based on Bloomberg LP data.