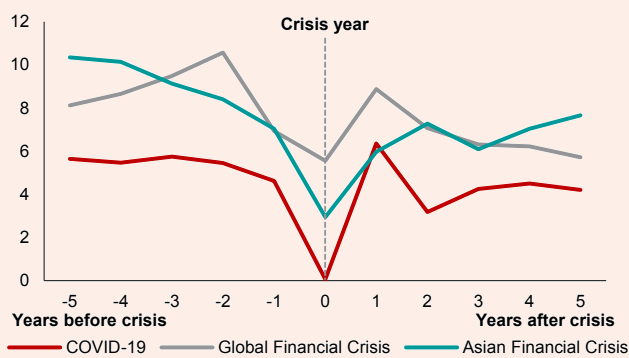


V. Special Feature: The Long Recovery from COVID-19

The COVID-19 pandemic caused the sharpest contraction in GDP growth for ASEAN+3 in the past three decades. The region narrowly avoided recession and registered flat growth in 2020 (Figure 1.52). COVID-19 occurred at a time when regional GDP growth had already slowed to 5 percent a year, from an average of about 9 percent leading up to both the Asian financial crisis and the global financial crisis (Figure 1.53). While the initial recovery from the COVID-19 pandemic was stronger than after previous crises, growth for ASEAN+3 has since plateaued at 4.5 percent—lower than the pre-crisis growth rate and among the lowest regional growth rates in the past 30 years. The sustained lower growth raises concerns about the possibility of a prolonged period of reduced growth due in part to economic scarring caused by the pandemic.

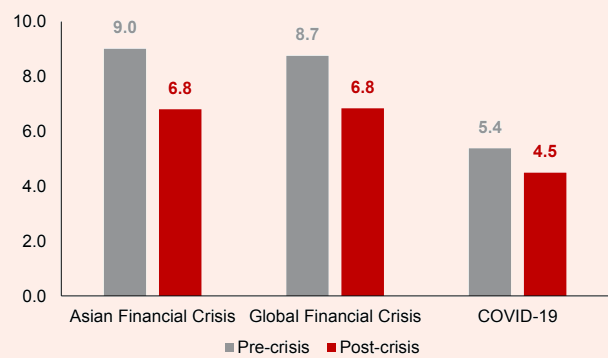
Despite the strong recovery in real GDP growth, ASEAN+3 is expanding at a slower rate than its pre-pandemic growth trend. Underlying growth of GDP, derived by removing the cyclical components, indicates that the region is growing at 3.5 percent a year, slower than the 4.2 percent growth recorded prior to the pandemic (Figure 1.54). Except Brunei and Japan, trend growth in most regional economies is lower by about one percentage point (Figure 1.55). This slower trend growth partly reflects ongoing post-pandemic adjustments, such as continuing efforts to rebuild businesses' balance sheets and the reconfiguration of labor dynamics. The series of shocks after 2020 and in the global economy and the sharp tightening of global monetary policy further dampened growth for the region. The pandemic's longer-term effect on productivity, due in part to learning losses, could further lower trend growth (AMRO 2022).

Figure 1.52. ASEAN+3: Real GDP Growth
(Percent, year-on-year)



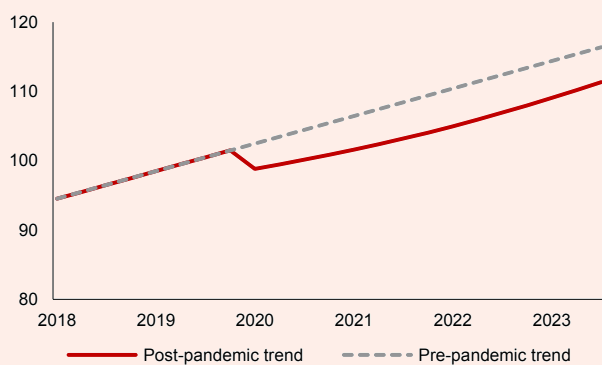
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: As most crises occur over one or two calendar years, the year with the lowest annual GDP growth among the affected years is used as reference year for the crises above. The reference year for the Asian financial crisis is therefore 1998; 2009 for the global financial crisis and 2020 for COVID-19.

Figure 1.53. ASEAN+3: Average Real GDP Growth
(Percent, year-on-year)



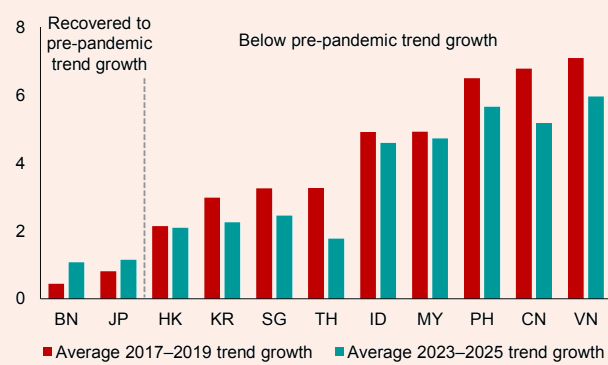
Source: National authorities via Haver Analytics; AMRO staff calculations and estimates.
Note: The pre-crisis (post-crisis) period refers to the simple average of GDP growth in the five years before (after) 1998 for the Asian financial crisis; 2009 for the global financial crisis and 2020 for COVID-19. 2024 and 2025 GDP growth refers to AMRO's forecast.

Figure 1.54. Selected ASEAN+3: Real GDP Trend
(Index, 2019 = 100)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: The pre-pandemic trend is estimated using a one-sided HP filter on quarterly data from Q1 2010 to Q4 2019 and extended to Q4 2023 using linear regression. The post-pandemic trend is estimated using a two-sided HP filter on quarterly data from Q1 2010 to Q4 2025, including AMRO-forecast GDP data. Aggregate trend is weighted using 2022 GDP. Cambodia, Lao PDR and Myanmar are excluded due to data unavailability.

Figure 1.55. Selected ASEAN+3: GDP Trend Growth
(Percent)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. GDP trend growth refers to the average year-on-year growth of HP-filter detrended GDP. Cambodia, Lao PDR and Myanmar are excluded due to data unavailability.

Investment: Picking Up from a Deep Trough

Investment in most ASEAN+3 economies has yet to return to the pre-pandemic trend, in contrast to private consumption. While growth in both private consumption and investment remain below pre-pandemic trend for regional economies besides China and Thailand, the private consumption slowdown is less severe than that of investment (Figure 1.56). The decline in investment from its pre-pandemic trend is deeper than the trend declines in GDP and consumption (Figure 1.57). Stringent containment measures at the onset of the pandemic in 2020, including workplace closures and mobility restrictions, weighed on both investment and consumption activities (Figure 1.58). However, swift and substantial income and liquidity support to households helped mitigate the decline in household spending. Investment, on the other hand, came to a standstill. Mobility restrictions halted structures investment, while the synchronized global slowdown weighed on exports and dampened capital expenditure for machinery and equipment.

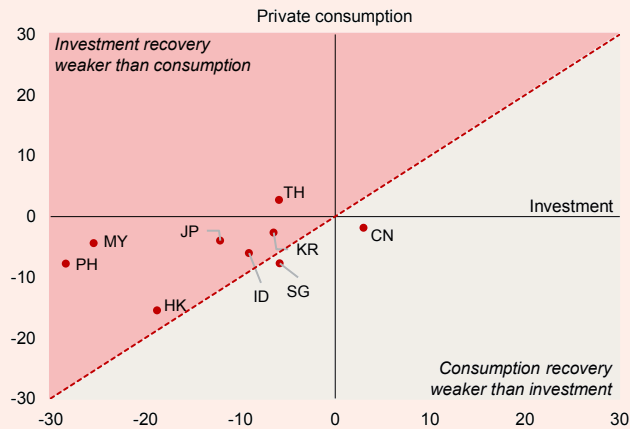
The pandemic impacted high-contact sectors, such as construction, disproportionately. Emphasis on physical distancing affected economic activities in high-contact sectors such as construction, retail trade, transportation and accommodation. The construction industry, vital for economic growth, was at a near-standstill due to mobility restrictions, remote working arrangements, disruptions in supply chains, delays in material deliveries, and prolonged project timelines. All these factors increased the cost of doing business and hampered new investments, while uncertainty about the pandemic recovery also eroded investor confidence. The slowdown in construction and social activities had cascading effects on related sectors, driving down demand for materials, labor, and services, and consequently generating spillover effects and simultaneous shocks (Das and others 2021).

Smaller firms were also more severely impacted by the pandemic. During the pandemic, smaller firms experienced a greater drop in sales revenue than large firms in the same sector and location (Adian and others 2020). These firms also have fewer financial buffers from

external financing or accumulated profits, limiting their ability to withstand prolonged shutdowns or demand shocks. Up to 70 percent of micro, small, and medium enterprises (MSMEs) in Indonesia, Lao PDR, the Philippines, and Thailand had to suspend their operations, and up to two-thirds encountered a shortage of working capital during the pandemic (ADB 2020). The multiple shocks post-pandemic—lower global growth, high commodity prices, heightened financial market volatility—further weakened the cash flow and balance sheet for MSMEs. With MSMEs forming over 90 percent of businesses and employing more than half of the workforce in the region (Ong, Wei and Wong 2024), the lingering challenges of post-pandemic recovery not only weighed on overall investments but could also impact private consumption and broader export competitiveness.

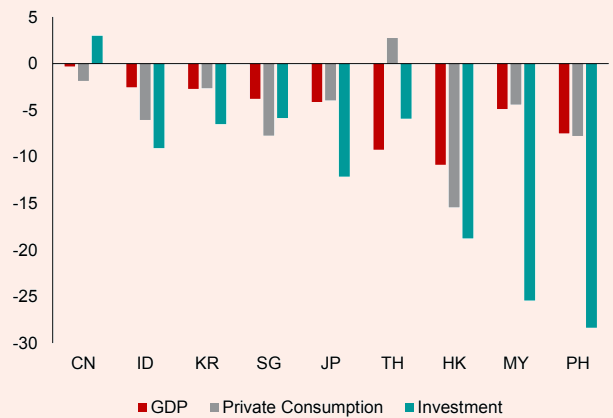
Investment activity recovered more slowly than after the global financial crisis. While the negative impact on investment and the subsequent recovery was not as severe as the Asian financial crisis, investment recovery has been weak, particularly in ASEAN, relative to the aftermath of the global financial crisis. During crises, large fiscal stimulus packages were often directed toward infrastructure investment, providing a quick boost to investment and GDP growth (Green 2010). This approach could not be implemented during the COVID-19 pandemic as physical distancing incapacitated infrastructure construction which is labor-intensive. In addition, containment measures were kept in place almost throughout 2020 and 2021, delaying a return to investment activity. The financial distress among firms further limited investment capacity (Li and others 2020). The decline in investment growth was consequently much deeper and the recovery path was more challenging after COVID-19. Investment activity in ASEAN-5 took 11 quarters to return to pre-crisis levels, compared to only 2 quarters during the global financial crisis (Figure 1.59). Meanwhile, investment growth recovered at a similar pace as it did during the global financial crisis for Japan and Korea, although investment remained sluggish for China and Hong Kong due to the drag from the real estate sector (Figure 1.60).

Figure 1.56. Selected ASEAN+3: Deviation of Investment and Private Consumption from Pre-pandemic Trend Level
(Percent of pre-pandemic trend, 2023)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand. Deviation is calculated as percentage difference between post-pandemic trend and pre-pandemic trend for 2023 average quarterly data (2023 yearly data for China). The pre-pandemic trend is estimated using a one-sided HP filter on quarterly data from Q1 2010 to Q4 2019 and extended to Q4 2023 using linear regression. The post-pandemic trend is estimated using one-sided HP filter on quarterly data from Q1 2010 to Q4 2023. Brunei, Cambodia, Lao PDR, and Myanmar are excluded due to data unavailability.

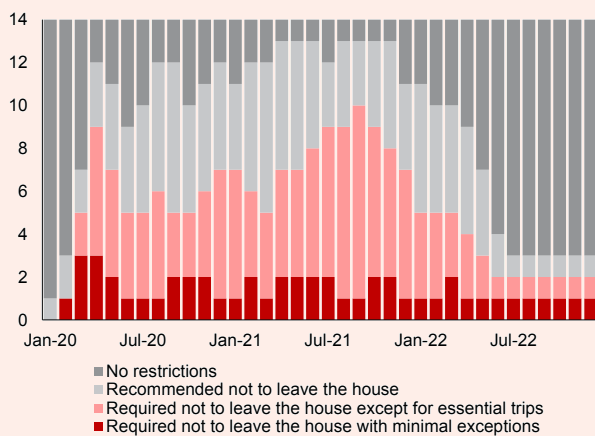
Figure 1.57. Selected ASEAN+3: Deviation of GDP, Investment and Private Consumption from Pre-pandemic Trend Level
(Percent of pre-pandemic trend, 2023)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand. Deviation is calculated as percentage difference between post-pandemic trend and pre-pandemic trend for 2023 average quarterly data (2023 yearly data for Investment and Private Consumption of China). The pre-pandemic trend is estimated using a one-sided HP filter on quarterly data from Q1 2010 to Q4 2019 and extended to Q4 2023 using linear regression. The post-pandemic trend is estimated using one-sided HP filter on quarterly data from Q1 2010 to Q4 2023. Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam are excluded due to data unavailability.

Figure 1.58. ASEAN+3: COVID-19 Containment Measures
(Number of economies)

Stay-at-home requirement



Source: Our World in Data; AMRO staff calculations.

Workplace closures

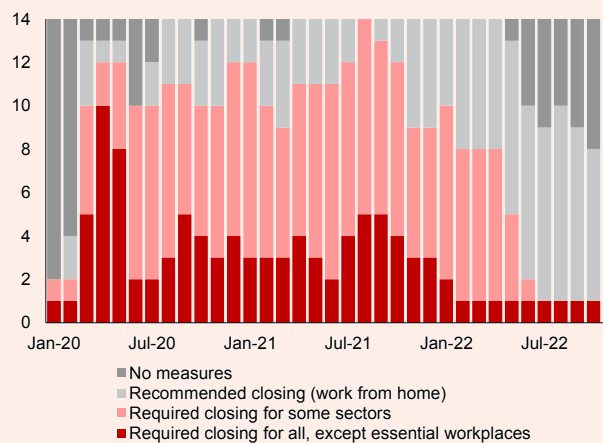
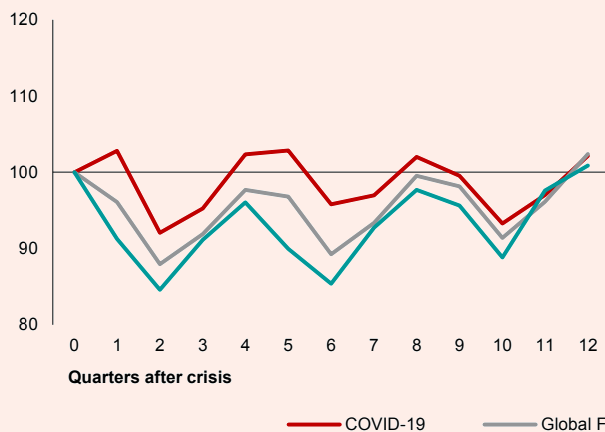
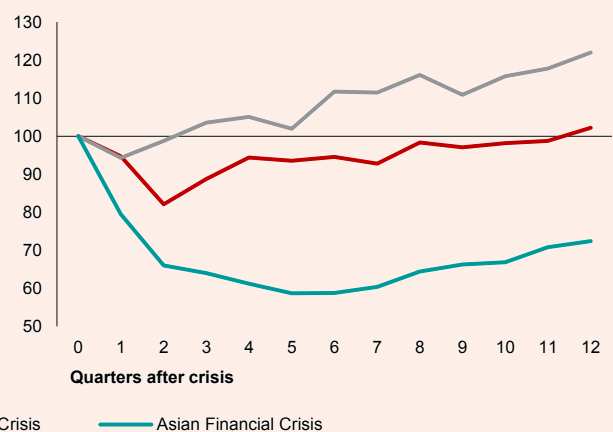


Figure 1.59. Selected ASEAN+3: Level of Investment after Crises
(Index, 1997 = 100; 2008 = 100; 2019 = 100)

Plus-3 ex China



ASEAN-5

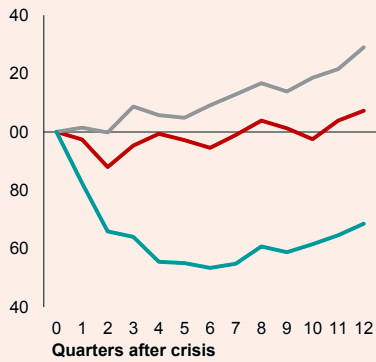


Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: As most crises occur over the span of one or two calendar years, the year with the lowest annual GDP growth among the affected years is used as reference year for the crises above. ASEAN-5 refers to Indonesia, Malaysia, Singapore, the Philippines, and Thailand. Brunei, Cambodia, China, Lao PDR and Vietnam are excluded due to data unavailability.

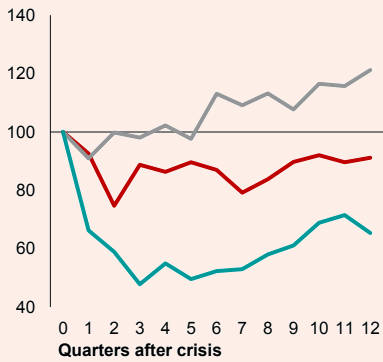
Figure 1.60. Selected ASEAN+3: Level of Investment after Crises, by Economy
(Index, 1997=100; 2008 = 100; 2019 = 100)

ASEAN-5

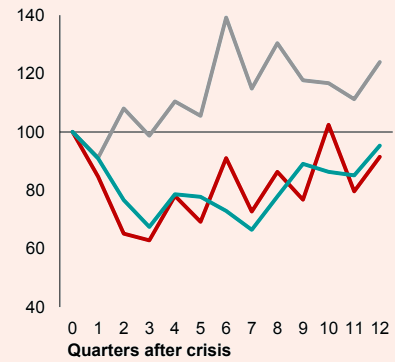
Indonesia



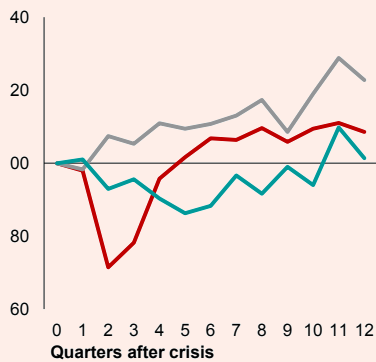
Malaysia



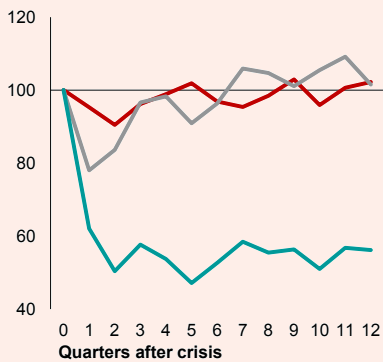
Philippines



Singapore

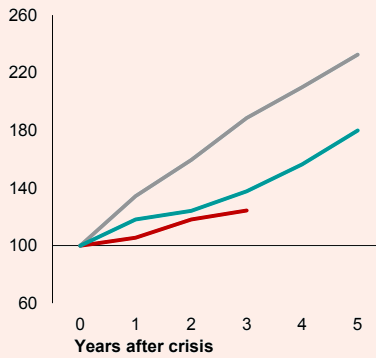


Thailand

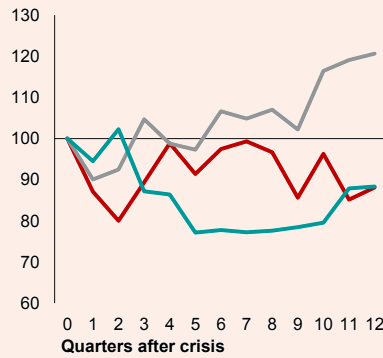


Plus-3

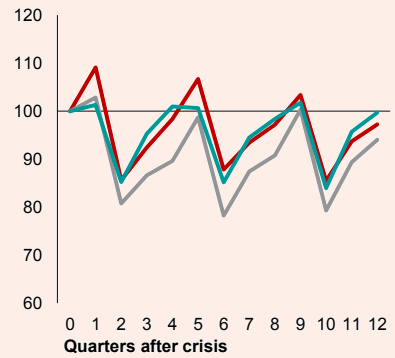
China



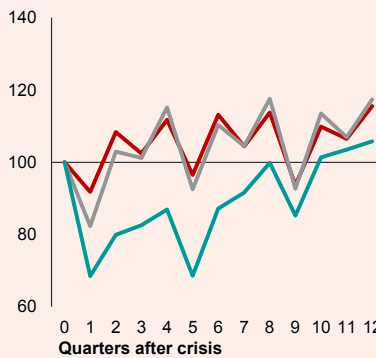
Hong Kong



Japan



Korea



— COVID-19 — Global Financial Crisis — Asian Financial Crisis

Source: National authorities via Haver Analytics; AMRO staff calculations.

Note: As most crises occur over the span of one or two calendar years, the year with the lowest annual GDP growth among the affected years is used as reference year for the crises above. Annual data is used for China, with index average 1996–1997 = 100, average 2007–2008 = 100 and average 2018–2019 = 100. Brunei, Cambodia, Lao PDR, and Vietnam are excluded due to data unavailability.

Private Consumption: Fast Recovery Aided by Policy Support

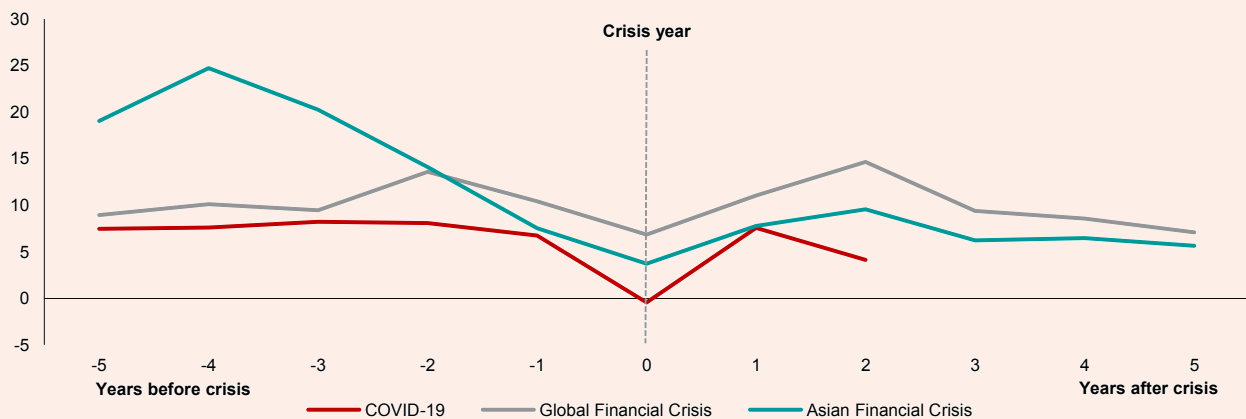
Private consumption contracted marginally in 2020, the first time in the past 30 years. Private consumption fell from an average of 8 percent annual growth to -0.4 percent in 2020, double the 4-percentage point decline during the Asian financial crisis and global financial crisis (Figure 1.61). Most regional economies underwent prolonged—sometimes multiple—rounds of stringent mobility restrictions throughout 2020 and 2021. International borders only began to be reopened in the second quarter of 2022 (AMRO 2023a). The loss of household income due to disrupted employment and weakened consumer sentiment amid heightened anxiety weighed on private consumption in 2020 and 2021. Mobility restrictions and bans on social gatherings also eliminated services consumption.

However, household spending rebounded faster than in past crises due in part to policy support. ASEAN+3 governments swiftly disbursed sizable financial assistance to households as part of their fiscal stimulus. The reduction in interest rates and the introduction of moratoriums and other concessions on debt repayment helped to support household disposable income during the pandemic. The shift to working from home preserved employment income for some households, while a concurrent

rise of the platform-based economy (e.g., private hire transportation, food delivery services, and e-commerce) provided alternative income for others. Platform-based economy and digital payments also enabled continued goods and services consumption during and after the pandemic. Collectively, these measures helped to smoothen income fluctuations during the pandemic and allowed for a more seamless recovery once the economies reopened.

The rebound in private consumption across the region, however, masks underlying disparities. Private consumption has rebounded firmly in ASEAN-5 after mobility restrictions were removed (Figure 1.62). The recovery was more muted in the Plus-3 subregion, mainly reflecting lower real income growth and subdued consumer sentiments in China, Hong Kong, and Japan. Although the financial assistance programs supported the rebound in private consumption, they did not fully offset the negative impacts on the low-income households. In 2021, while the incomes of the top 60 percent in the global income distribution began to recover, those in the lowest 40 percent income bracket continued to experience disproportionate challenges. The largest income improvements were observed within the highest 20 percent income group (Narayan and others 2022).

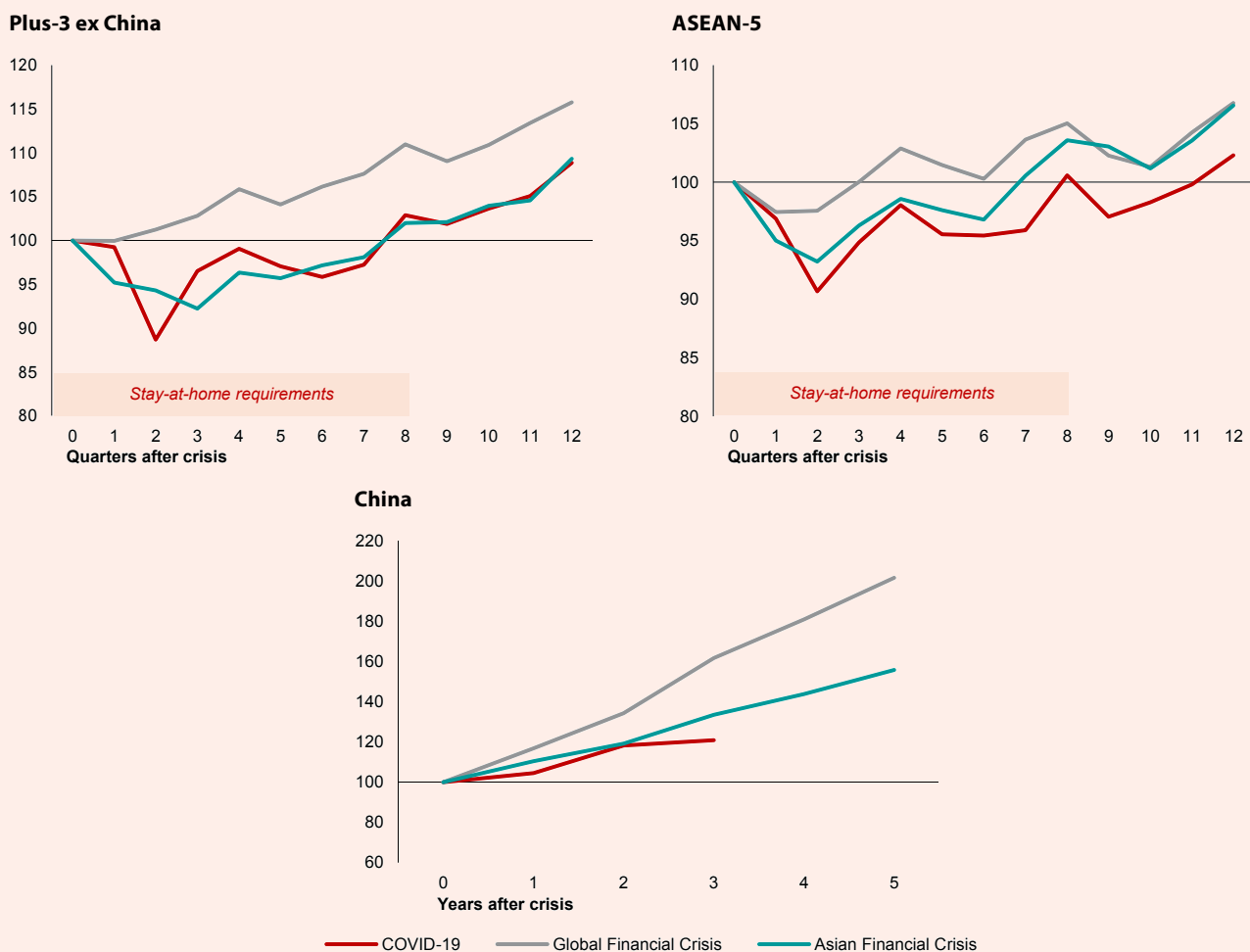
Figure 1.61. Selected ASEAN+3: Real Private Consumption Growth
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.

Note: Selected ASEAN+3 refers to Hong Kong, Japan, Korea, Malaysia, the Philippines, Singapore, and Thailand. All other economies were excluded due to data unavailability. The reference year for the Asian financial crisis is 1998; 2009 for the global financial crisis, and 2020 for COVID-19.

Figure 1.62. Selected ASEAN+3: Level of Private Consumption after Crises
(Index, start of crisis = 100)



Source: National authorities via Haver Analytics; AMRO staff calculations.

Note: As most crises occur over the span of one or two calendar years, the year with the lowest annual GDP growth among the affected years is used as reference year for the Asian financial crisis, global financial crisis and COVID-19. Stay-at-home requirements were implemented broadly across the region from the onset of the pandemic in Q1 2020 to Q4 2021, spanning eight quarters. Annual data is used for China, with index average 1996–1997 = 100, average 2007–2008 = 100 and average 2018–2019 = 100. Remaining economies are omitted due to data unavailability.

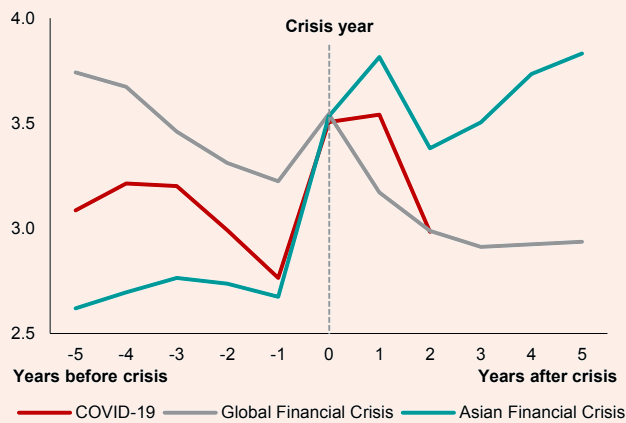
Labor Market: A Relatively Speedy—but Incomplete—Recovery

Labor markets have recovered quicker than in past crises. Unemployment rates peaked at 3.5 percent in 2020 due to lockdowns and workplace closures, lower than the 3.8 percent seen a year after the Asian financial crisis (Figure 1.63). Policy support measures, such as job retention schemes and wage subsidies, helped to mitigate employment losses during the pandemic. As a result, unemployment rates across most ASEAN+3 economies have broadly recovered to pre-pandemic levels since economies reopened. Notably, labor market tightness has emerged in most economies. In Japan, Korea, and Singapore, unemployment rates fell while the ratio of job vacancies to unemployed persons increased concurrently, indicating high demand for workers (Figure 1.64). Furthermore, a significant decrease in the number of migrant workers in Singapore

and Malaysia in 2020 and 2021 exacerbated existing labor market tightness (Box 1.1).

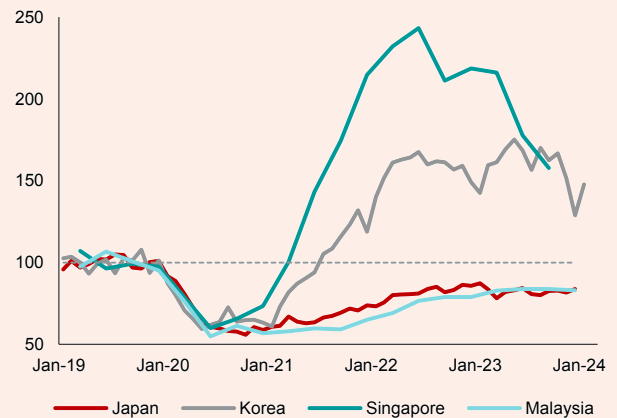
However, COVID-19 had a more severe impact on labor force participation compared to past crises. The labor force participation rate (LFPR) declined across the region in 2020 (Figure 1.65). For most economies, the effects appear to be short-lived—LFPRs for most economies in 2022 exceeded 2019 levels. However, the recovery is uneven. In Hong Kong and China, LFPRs remain below pre-pandemic levels (Figure 1.66). The decline is especially severe in Hong Kong, where LFPR has fallen by about 2 percentage points since 2019. This is mainly attributable to an increase in the proportion of elderly persons as Hong Kong's population ages (AMRO 2024d). Meanwhile, LFPR has increased for other regional economies.

Figure 1.63. ASEAN+3: Unemployment Rate (Percent)



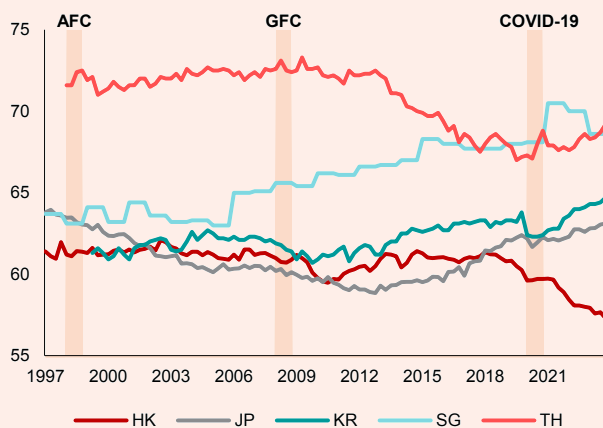
Source: World Bank via Haver Analytics; AMRO staff calculations.
 Note: Data refers to the average unemployment rate across the ASEAN+3 economies. The reference year for the Asian financial crisis (AFC) is 1998; 2009 for the global financial crisis (GFC), and 2020 for COVID-19.

Figure 1.64. Selected ASEAN+3: Job Vacancy to Unemployment Ratio (Index, 2019 = 100)



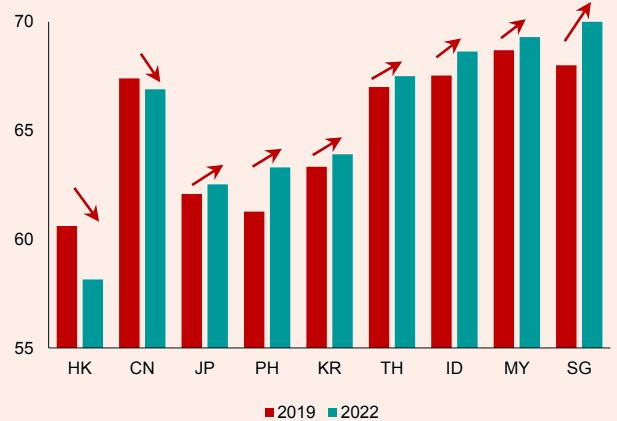
Source: Department of Statistics Malaysia; National authorities via Haver Analytics; AMRO staff calculations.

Figure 1.65. Selected ASEAN+3: Labor Force Participation Rate, 1997–2023 (Percent)



Source: National authorities via Haver Analytics.
 Note: AFC = Asian financial crisis; GFC = global financial crisis; HK = Hong Kong; JP = Japan; KR = Korea; SG = Singapore; TH = Thailand.

Figure 1.66. Selected ASEAN+3: Labor Force Participation Rate, 2019 versus 2022 (Percent)



Source: National authorities via Haver Analytics.
 Note: CN = China; HK = Hong Kong; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand.

The relatively fast labor market recovery is largely the result of extensive policy support measures implemented by regional economies. These measures include wage support for employers and employees in high-contact sectors, such as tourism, to reduce the necessity for layoffs. For example, Singapore’s Job Support Scheme provided SGD 26.9 billion in wage support for firms to retain their employees, preventing an estimated 0.9 percentage point increase in the resident unemployment rate in 2020 (AMRO 2021). Economies across the region also implemented various fiscal measures to stimulate job creation. For instance, in April 2020, Hong Kong announced plans to create 30,000 jobs in 2020–2021, while Thailand introduced

a program in September 2020 to facilitate the hiring of 260,000 new graduates. These measures helped mitigate potential scarring effects of the pandemic on the region’s labor force. At the same time, reducing job losses helped bolster household incomes, which supported the recovery in private consumption when economies reopened. However, while aggregate employment has broadly recovered, labor market scarring could still exist through lower job quality and underemployment, especially with the rapid growth of the gig economy during the pandemic. In the Philippines, for example, the share of occupations with low and irregular pay have risen to above pre-pandemic levels (World Bank 2023b).

Policy Priorities: Rebuilding for a Better Tomorrow

Four years after the pandemic began, the still highly shock-prone operating landscape calls for a careful balancing of rebuilding policy space and providing policy support. After an unprecedented scale of fiscal spending, ongoing fiscal consolidation should prioritize structural reforms, to offset the temporary contractionary impact of fiscal adjustments and structurally enhance long-term growth potential (Andriansyah and Hong 2022). Monetary policy normalization—while necessary—should strive to maintain investor confidence while anchoring inflation expectations. A stable macroeconomic environment will support the investment recovery momentum, crucial for steering growth back to its pre-pandemic trend without triggering adverse shocks.

Boosting investment in productive sectors would be crucial in raising GDP growth back to pre-pandemic trend growth. The impact of the pandemic on firms has been uneven, with smaller firms and businesses in the construction and services harder hit. Having in place policies that support the smaller firms to recover, restructure, or move to a more promising sector would be useful, especially for these firms to modernize such as by improving energy efficiency and adopting greater digitalization. Separately, policies directed at new sources of growth for the broader economy, and investment in productivity- and resilience-enhancing areas such as for climate change adaptation and the adoption of new technologies would also be key. This reinforces the pandemic's impact on remote working

and innovation trends, which have accelerated digitalization and automation (Njoroge and Pazarbasioglu 2020). Das and others (2021) highlighted the significance of considering amplification and transmission effects in policy design, especially those with sectoral emphasis. Positive spillovers are likely in scenarios such as the transition to a low-carbon economy or in allocating sector-specific public investments. A parallel commitment should also be made toward stimulating job creation and reskilling labor forces, laying the foundation for long-term sustainable growth.

Regional collaboration could strengthen the growth potential that was eroded by the pandemic. The disruption to cross-border trade and talent flows during the pandemic has increased resource misallocation, with regional economies unable to optimize operational costs and supply chain structures during the pandemic. The post-pandemic period therefore presents an opportunity for economies to tap their comparative strengths and leverage complementarities to raise collective growth potential. With rapid technological advancements, the pooling of resources and expertise would allow economies to accelerate the development and adoption of new technologies—from digitization, and automation to renewable energy. The collective approach would not only enhance each economy's technological capabilities but also foster a more inclusive and sustainable economic growth model.