Global and Regional Market Developments

Inflation concerns and shifts in monetary policy in advanced economies drove up bond yields.

Between 31 August and 5 November, 2-year and 10-year government bond yields rose in nearly all markets in advanced economies and emerging East Asia.[1] The rise in bond yields was largely driven by inflationary concerns and a shift in the monetary stance of the United States (US) Federal Reserve (**Table A**). Inflationary pressures and a potential change in global liquidity weighed against financial conditions in emerging East Asia, with most currencies weakening and risk premiums edging up during the review period.

Yields on 10-year government bonds have risen rapidly in major advanced economies since late August. Bond yields in the euro area, Japan, and the United Kingdom stood higher on 5 November than their respective pre-pandemic levels of January 2020. But bond yields in these advanced markets remained relatively low compared to average levels during the past decade (**Figure A**). The yield increases since August have largely reflected a robust economic recovery and inflationary pressures, although the momentum of the global economic recovery has slowed somewhat (**Box 1**).

The 2-year and 10-year yields in the US rose 19 basis points (bps) and 14 bps, respectively, during the review period from 31 August to 5 November, echoing a strong economic recovery, inflationary conditions, and an expected adjustment in monetary stance by the Federal Reserve. The US economic recovery remains strong, although annualized gross domestic product (GDP) growth slowed in the third quarter (Q3) of 2021 to 2.0% from 6.7% in the second quarter (Q2) as a rise in coronavirus disease (COVID-19) cases led to additional movement controls and delayed business reopenings. The unemployment rate fell to 4.6% in

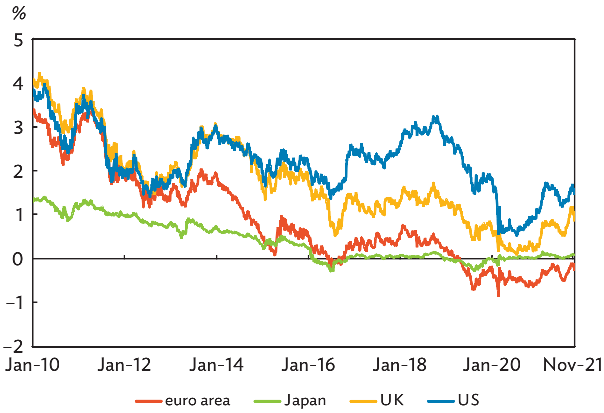
Table A: Changes in Global Financial Conditions

	2-Year Government Bond (bps)	10-Year Government Bond (bps)	5-Year Credit Default Swap Spread (bps)	Equity Index (%)	FX Rate (%)
Major Advanced Economies					
United States	19	14	–	3.9	–
United Kingdom	19	13	0.2	2.6	(1.9)
Japan	2	4	1	4.5	(3.0)
Germany	(2)	10	(0.5)	1.4	(2.0)
Emerging East Asia					
China, People's Rep. of	(2)	4	17	(1.5)	1.0
Hong Kong, China	13	39	–	(3.9)	(0.07)
Indonesia	4	(0.3)	13	7.0	(0.4)
Korea, Rep. of	52	44	1	(7.2)	(2.2)
Malaysia	33	37	12	(4.3)	(0.1)
Philippines	46	86	16	7.1	(1.2)
Singapore	46	36	–	6.1	(0.4)
Thailand	22	35	3	(0.8)	(3.1)
Viet Nam	1	4	8	9.4	0.4

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 31 August 2021 and 5 November 2021.
2. A positive (negative) value for the FX rate indicates the appreciation (depreciation) of the local currency against the United States dollar.
Source: Bloomberg LP and Institute of International Finance.

[1] 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 A: 10-Year Government Bond Yields in Major Advanced Economies (% per annum)



UK = United Kingdom, US = United States.
Note: Data coverage is from 1 January 2010 to 5 November 2021.
Source: Bloomberg LP.

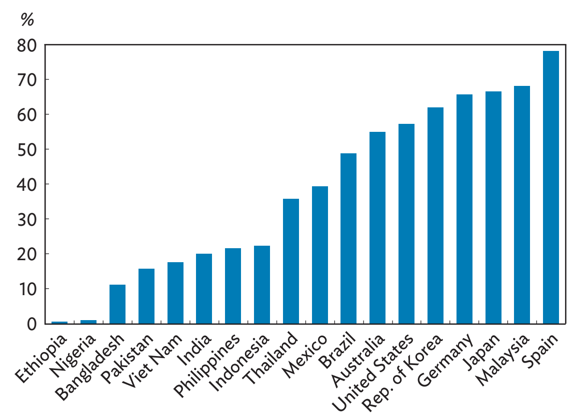
October from 4.8% in September and 5.2% in August. Inflation remained elevated, with September and October inflation at 5.4% year-on-year (y-o-y) and 6.2% y-o-y, respectively. The Federal Reserve upgraded its economic growth forecasts for 2022 and 2023 to 3.8% and 2.5%, respectively, from its June forecasts of 3.3% and 2.4%. While the Federal Reserve kept the federal funds rate and the current asset purchase program unchanged at its Federal Open Market Committee meeting in September, it implied that it might begin hiking rates in 2022, compared with a previously indicated start date in 2023. At its November meeting, while the Federal Reserve noted that the rise in COVID-19 cases earlier this year had delayed recovery, it said that the economy continues to progress. The widely expected tapering in the Federal Reserve's bond purchases formally starts in November. Concerns of another possible taper tantrum eased as the risk is much smaller this time than in 2013 (**Box 2**).

Box 1: Economic Outlook—Slightly Slower and Divergent Recovery

The global coronavirus disease (COVID-19) landscape has witnessed a major positive development as well as a major negative development.[a] On the positive side, vaccination campaigns are making steady headway across the world. As of 16 October, 2.8 billion people, or 36.2% of the global population, had been fully vaccinated. However, progress has been uneven, with developing markets generally lagging advanced economies (**Figure B1**). For instance, the full vaccination rate reached 78.2% in Spain, but it was only 1.1% in Nigeria. On the negative side, the spread of the Delta variant has laid to rest any hopes that the world will return to the pre-pandemic normal in the short term. The variant, which was first detected in December 2020, is less deadly than the original virus, but it is highly contagious and has spread across the world like a wildfire.

On balance, the negative economic impact of the Delta variant outbreak has outweighed the positive economic impact of the global progress on COVID-19 vaccination. In response to the outbreak, some economies reintroduced or strengthened community quarantines and social distancing restrictions, with adverse effects on domestic demand, especially private consumption. The spread of the Delta variant has also dampened business and consumer confidence, which had been surging on hopes of a return to the pre-pandemic normal. In addition, the emergence of the highly transmissible variant has created a lot of uncertainty about the timetable for such a return.

Figure B1: Fully Vaccinated Share of the Population in Select Economies (%)



Note: Vaccination rates as of 16 October 2021.
Source: Our World in Data. COVID Vaccinations. https://ourworldindata.org/covid-vaccinations?country=OWID_WRL (accessed 17 October 2021).

On a positive note, thanks to vaccination progress, governments are responding in ways that are less detrimental to economic activity in response to new outbreaks. Vaccines do not fully protect individuals from infection, but they are highly effective against severe illness and death. Analysis in the *Asian Development Outlook 2021 Update*, released in September, reveals a strong negative cross-country correlation between vaccination rate and COVID-19

[a] This box was written by Donghyun Park (principal economist) in the Economic Research and Regional Cooperation Department of the Asian Development Bank.

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Box 1: Economic Outlook—Slightly Slower and Divergent Recovery *continued*

mortality rate. That is, markets that vaccinate more of their population suffer relative fewer deaths from the virus. In recognition of this reality, which implies a significantly lower humanitarian cost of new outbreaks, governments around the world are imposing less stringent restrictions when there is a new outbreak. This suggests that the impact of the pandemic on economic growth will decline over time.

According to the forecasts of the International Monetary Fund's *World Economic Outlook* (WEO), released in October, the world economy will grow 5.9% in 2021 and 4.9% in 2022, following a contraction of 3.1% in 2020 (**Table B1**). Relative to the WEO's July forecasts, the global growth forecast for 2021 was downgraded by 0.1 percentage points, while there was no change for the 2022 growth forecast. World trade volume shrank by 8.2% in 2020, but it is projected to bounce back strongly to expand 9.7% in 2021 before moderating to 6.7% growth in 2022. Relative to July, the WEO downgraded its growth forecast for advanced economies by 0.4 percentage points to 5.2% and upgraded its 2022 forecast marginally by 0.1 percentage points to 4.5%. The 2021 downgrade largely reflects a substantial downgrade for the United States, which experienced inventory reductions due to supply chain disruptions and weakening consumption. Emerging markets and developing economies are forecast to recover strongly and grow 6.4% in 2021 and 5.1% in 2022, after shrinking 2.1% in 2020. The October forecasts were almost the same as the July forecasts, with a marginal upgrade of 0.1 percentage points for 2021 and a marginal downgrade of 0.1 percentage points for 2022. Inflation is projected to pick up in advanced economies from 0.7% in 2020 to 2.8% in 2021, before falling back to 2.3% in 2022. The corresponding figures for emerging markets and developing economies are 5.1%, 5.5%, and 4.9%.

Table B1: Gross Domestic Product Growth Rate of World, Advanced Economies, and Emerging Markets and Developing Economies in 2020, 2021, and 2022 (%)

	2020	2021		2022	
	Actual	October Forecast	July Forecast	October Forecast	July Forecast
World	(3.1)	5.9	6.0	4.9	4.9
Advanced economies	(4.5)	5.2	5.6	4.5	4.4
Emerging markets and developing economies	(2.1)	6.4	6.3	5.1	5.2

( ) = negative.
Source: International Monetary Fund. 2021. *World Economic Outlook October 2021*. Washington, DC.

The economic outlook for emerging East Asian economies is mixed and heavily dependent on pandemic containment. There is a dichotomy between East Asian economies such as the People's Republic of China (PRC) and Southeast Asian economies such as Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. While East Asian economies have effectively contained COVID-19, Southeast Asia was hit hard by the Delta variant in 2021. According to the *Asian Development Outlook 2021 Update*, the PRC is projected to grow 8.1% in 2021 and 5.5% in 2022, after growth had plummeted to 2.3% in 2020 due to the pandemic. The corresponding growth figures for the Republic of Korea and Hong Kong, China are 4.0% and 6.2% in 2021, 3.1% and 3.4% in 2022, and –0.9% and –6.1% in 2020. The 2021 growth forecast for the PRC released in September was unchanged from the April forecast, while the 2021 forecasts for the Republic of Korea and Hong Kong, China were upgraded by 0.5 and 1.6 percentage points, respectively. The *Asian Development Outlook 2021 Update* sharply downgraded its 2021 growth forecast for members of the Association of Southeast Asian Nations (ASEAN) from 4.4% to 3.1%, following a 4.0% contraction in growth in 2020. On the other hand, output in the ASEAN region is forecast to expand 5.0% in 2022.

Emerging East Asia's economic performance remains hostage to the trajectory of COVID-19 in the short term. This is evident in the downgrading of growth forecasts for ASEAN, which has suffered a tangible deceleration of growth momentum since April, when the Delta variant first emerged in the region. However, while there remains much pandemic-related economic uncertainty, progress in vaccination campaigns can significantly reduce the uncertainty. This is because vaccination reduces the need for draconian social distancing restrictions that crimp economic activity. Therefore, emerging East Asia's future economic performance will depend substantially on its progress in vaccination.

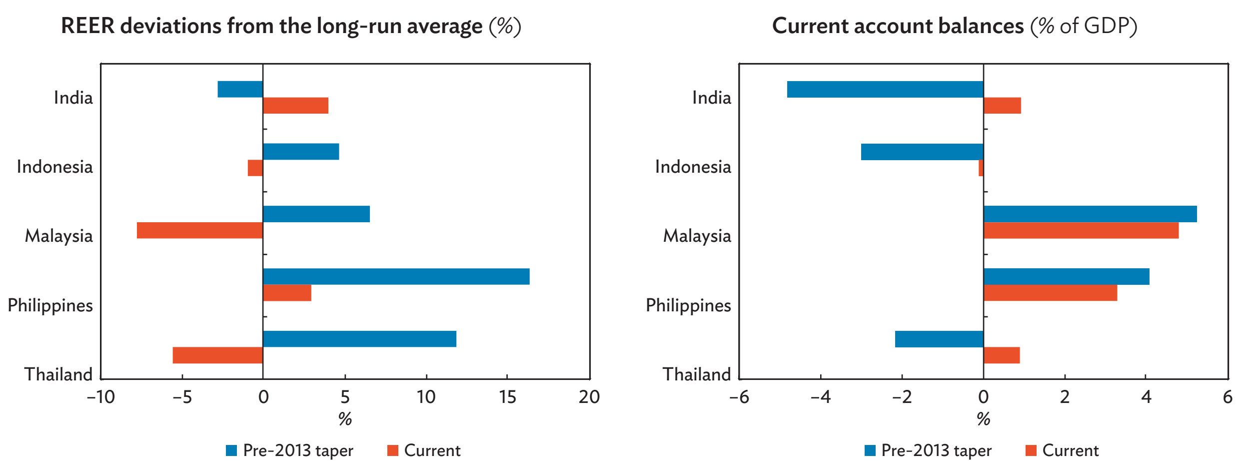
Box 2: How Big Is the Risk of Another Taper Tantrum?

On 22 October, United States (US) Federal Reserve Chair Jerome Powell said that the US central bank should start tapering its monthly USD120 billion purchases of Treasury bonds and mortgage-backed securities.[a] The Federal Reserve thus confirmed that it would begin to cut back on its asset purchases in November. An improving economic outlook and a worrisome rise in inflation is driving the shift in US monetary policy. The shift has triggered widespread concerns about a repeat of the taper tantrum episode of May 2013, when a similar announcement by the Federal Reserve that it would unwind its massive asset purchase program, known as quantitative easing, rocked the financial stability of several emerging markets with weaker fundamentals. In particular, emerging markets with large current account deficits—most notably Brazil, India, Indonesia, South Africa, and Turkey—suffered financial turbulence, sparking fears of a broader emerging market financial crisis. Given the similarity between the asset purchase tapering of 2013 and today, how big is the risk of another taper tantrum? Three factors suggest that the risk is more limited this time around.

First, the Federal Reserve has been much more transparent in signaling its expected monetary policy path. It has clearly communicated its intentions well in advance of major policy shifts, thus avoiding turbulence in financial markets. The Federal Reserve has emphasized that any scaling back of bond-buying this time would be carried out in a gradual and smooth manner. By contrast, the announcement in May 2013 came as a complete surprise to the market. In addition, the Federal Reserve has made it crystal clear that the tapering of asset purchases will not be accompanied by interest rate hikes, at least for the time being.

Second, emerging Asian markets have stronger economic fundamentals compared to 2013. One key fundamental is the real effective exchange rate (REER), which is an indicator of external competitiveness. An overvalued REER denotes weak external competitiveness, which increases the risk of capital outflows. The left-hand panel of **Figure B2**, which shows the REER prior to the 2013 taper tantrum and the current REER relative to historical averages, indicates that

Figure B2: Real Effective Exchange Rate Fundamentals and Current Account Balances in Selected Emerging Asian Markets



REER = real effective exchange rate.
Notes: Reported are the percentage deviations in the prevailing REER relative to an 8-year historical average using monthly data. Positive values denote an overvaluation; negative values denote an undervaluation. The pre-taper prevailing period is relative to April 2013, and the current prevailing period is relative to August 2021.
Source: Calculated using the Bank for International Settlements Statistics database.

GDP = gross domestic product.
Notes: "Pre-2013 taper" refers to the current account-to-GDP ratio in the first quarter of 2013. "Current" refers to the second quarter of 2021.
Source: Bloomberg, LP.

[a] This box is written by John Beirne. The content is based on Beirne, John. 2021. "Should Emerging Asia Worry about a "Taper Tantrum" Post-COVID-19?" *Asia Pathways Blog*. Asian Development Bank Institute. 20 September. https://www.asiapathways-adbi.org/2021/09/should-emerging-asia-worry-about-a-taper-tantrum-post-covid-19/.

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Box 2: How Big Is the Risk of Another Taper Tantrum? *continued*

the exchange rates of Indonesia, Malaysia, and Thailand are currently undervalued. The exchange rate remains overvalued in the Philippines but much less so than before the 2013 taper tantrum. India's currency has appreciated due to capital inflows, but the appreciation has been moderate. Overall, the region has not witnessed sharp currency appreciations this time around. This is significant because the emerging market currencies that appreciated sharply before the taper tantrum suffered the most in 2013.

Third, the right-hand panel in Figure B2 shows another key economic fundamental: the current account deficit. As noted earlier, countries with the largest current account deficits suffered the most financial instability during the taper tantrum. This explains why India and Indonesia were hit the hardest within emerging Asia. The chart shows that the current account balance of India is now positive while that of Indonesia is balanced. Malaysia, the Philippines, and Thailand are all running surpluses of varying magnitudes. The absence of large deficits renders the region less vulnerable to external shocks such as the Federal Reserve's tapering of asset purchases.

To sum up, the risk of another taper tantrum is quite limited although we cannot rule it out altogether. At a broader level, there are two major reasons for such optimism. First, the Federal Reserve is expected to signal its intentions about tapering with much greater clarity and transparency than was the case in 2013, thus greatly reducing the risk of surprising financial markets. Second, emerging Asian economies currently have stronger economic fundamentals than they did during the taper tantrum, as evidenced by key indicators such as REER and the current account balance. Nevertheless, the region's regulatory authorities should closely monitor other potential sources of financial instability, such as high debt levels, to protect financial stability.

In the euro area, the economy continues to rebound. Quarter-on-quarter GDP growth accelerated to 2.2% in Q3 2021 from 2.1% in Q2 2021. On a y-o-y basis, GDP growth slowed to 3.7% in Q3 2021 from 14.2% in the previous quarter. The European Central Bank (ECB) upgraded its 2021 economic growth forecast to 5.0% in September from 4.6% in June, while adjusting the 2022 GDP growth forecast to 4.6% from 4.7%. The ECB also revised upward its respective inflation forecasts for 2021, 2022, and 2023 to 2.2%, 1.7%, and 1.5% in September from 1.9%, 1.5%, and 1.4% in June. Given the strengthening economic recovery and an uptick in inflation, the ECB is gradually turning hawkish. While the ECB has yet to adjust its policy rates, during its October meeting the ECB indicated a slower pace in its asset purchases under the pandemic response program in the fourth quarter of 2021 compared with prior quarters. The ECB also confirmed that the pandemic asset purchase program would end in March 2022. The ECB also offered some pushback, implying that a rate hike in 2022 was unlikely and, while the inflationary pressures are still transitory, inflation might persist longer than expected.

Japan's annualized Q3 2021 GDP contracted 3.0% after posting growth of 1.5% in Q2 2021. At its September and October meetings, the Bank of Japan left unchanged its policy rate target and asset purchase program. The Bank of Japan also noted in its October meeting that in the near-term downward pressure remains. The 2021 GDP growth was revised to 3.4% from 3.8%, while the 2022 forecast was revised to 2.9% from 2.7%.

From 31 August to 5 November, 2-year and 10-year government bond yields rose in nearly all emerging East Asian economies, except for a marginal decline in the People's Republic of China's (PRC) 2-year yields and Indonesia's 10-year yields. This trend largely tracked rising bond yields in major advanced economies and inflationary concerns in many regional markets, as well as shifting monetary policy stances in advanced economies and in the region (**Table B**).

The region's largest increase in the 10-year yield was observed in the Philippines, with a gain of 86 bps. The rise was mainly driven by y-o-y inflation, which reached 4.9%, 4.8%, and 4.6% in August, September, and October, respectively, the highest monthly readings in the region. The Republic of Korea posted emerging East Asia's second-largest increase in the 10-year bond yield (44 bps) and the largest increase in the 2-year bond yield (52 bps). The Bank of Korea hiked the policy rate by 25 bps at its August meeting on the back of an improving economy and the need to prevent potential financial risks.

Table B: Inflation in Major Advanced Markets and Emerging East Asia

Economy	Inflation Rate (%)												
	Oct-2020	Nov-2020	Dec-2020	Jan-2021	Feb-2021	Mar-2021	Apr-2021	May-2021	Jun-2021	Jul-2021	Aug-2021	Sep-2021	Oct-2021
United States	1.20	1.20	1.40	1.40	1.70	2.60	4.20	5.00	5.40	5.40	5.30	5.40	6.20
Euro Area	(0.30)	(0.30)	(0.30)	0.90	0.90	1.30	1.60	2.00	1.90	2.20	3.00	3.40	4.10
Japan	(0.40)	(0.90)	(1.20)	(0.70)	(0.50)	(0.40)	(1.10)	(0.80)	(0.50)	(0.30)	(0.40)	0.20	0.10
China, People's Rep. of	0.50	(0.50)	0.20	(0.30)	(0.20)	0.40	0.90	1.30	1.10	1.00	0.80	0.70	1.50
Hong Kong, China	(0.40)	(0.30)	(1.00)	2.60	0.50	0.60	0.80	1.00	0.70	3.70	1.60	1.40	1.70
Indonesia	1.44	1.59	1.68	1.55	1.38	1.37	1.42	1.68	1.33	1.52	1.59	1.60	1.66
Korea, Rep. of	0.10	0.60	0.50	0.60	1.10	1.50	2.30	2.60	2.40	2.60	2.60	2.50	3.20
Malaysia	(1.50)	(1.70)	(1.40)	(0.20)	0.10	1.70	4.70	4.40	3.40	2.20	2.00	2.20	–
Philippines	2.50	3.30	3.50	4.20	4.70	4.50	4.50	4.50	4.10	4.00	4.90	4.80	4.60
Singapore	(0.20)	(0.10)	0.00	0.20	0.70	1.30	2.10	2.40	2.40	2.50	2.40	2.50	3.20
Thailand	(0.50)	(0.41)	(0.27)	(0.34)	(1.17)	(0.08)	3.41	2.44	1.25	0.45	(0.02)	1.68	2.38
Viet Nam	2.47	1.48	0.19	(0.97)	0.70	1.16	2.70	2.90	2.41	2.64	2.82	2.06	1.77

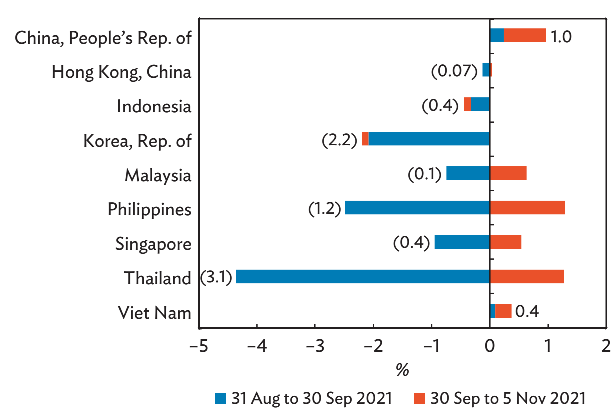
( ) = negative, – = not available.
Note: Data coverage is from October 2020 to October 2021 except for Malaysia.
Sources: Various local sources.

Subsequently, on 25 November, the Bank of Korea raised its policy rate again by 25 bps. Singapore also witnessed a relatively large increase in its 2-year and 10-year bond yields, which gained 46 bps and 36 bps, respectively. Monetary Authority of Singapore tightened monetary policy at its October meeting when it raised the slope of the exchange rate band.

Indonesia was the sole market in the region that saw a decline in its 10-year yield, albeit a marginal dip of 0.3 bps, while its 2-year yield gained 4 bps. Upward pressure on Indonesia's yields was curtailed by relatively low inflation. Investment sentiment also improved on a strengthened current account balance and revised tax regulations that are expected to generate more tax revenues and thus reduce the budget deficit.

Persistent inflation concerns and the tightening monetary stance of the Federal Reserve weighed down regional currencies and pushed up risk premiums. Most regional currencies depreciated in September following the Federal Reserve's discussion of unwinding its current asset purchase program as early as November. But sentiment gradually recovered in October and early November, supported by positive economic recovery prospects and accommodative policy stances (**Figure B.1**). The Thai baht posted the region's largest decline, falling 3.1% versus the US dollar from 31 August to 5 November due to a widening current account deficit. The Thai baht has also experienced the largest depreciation since January 2020 among all regional currencies (**Figure B.2**). The Korean won and the Philippine peso depreciated by 2.2% and 1.2%, respectively, during the review period. For the Republic of Korea, the weakening of the currency tracked concerns over a moderation in its export performance due to global supply chain disruptions. In the Philippines, inflationary concerns weighed down the currency.

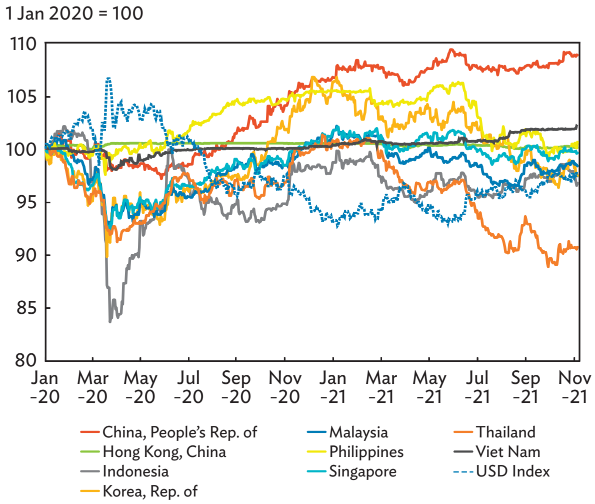
Figure B.1: Changes in Spot Exchange Rates versus the United States Dollar



Notes:
1. Changes from 31 August 2021 to 30 September 2021, and from 30 September 2021 to 5 November 2021.
2. Numbers on the chart refer to the net change between the two periods.
3. A positive (negative) value for the foreign exchange rate indicates the appreciation (depreciation) of the local currency against the United States dollar.

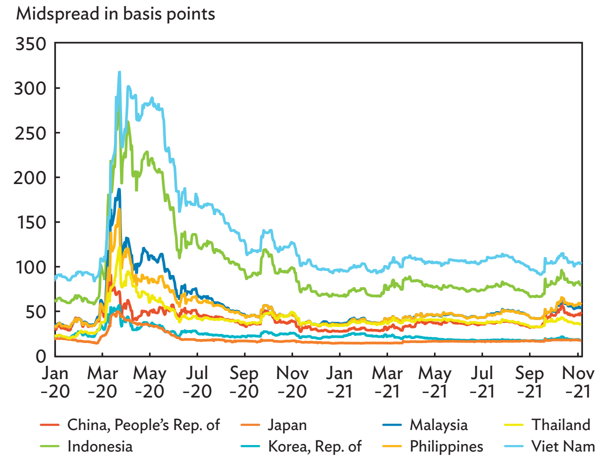
Source: *AsianBondsOnline* computations based on Bloomberg LP data.

Figure B.2: Currency Indexes in Emerging East Asia and the United States



USD = United States dollar.
Note: Data coverage is from 1 January 2020 to 5 November 2021.
Source: *AsianBondsOnline* computations based on Bloomberg LP data.

Figure C.1: Credit Default Swap Spreads in Select Asian Markets (senior 5-year)



Notes:
1. Based on United States dollar-denominated sovereign bonds.
2. Data coverage is from 1 January 2020 to 5 November 2021.
Source: Bloomberg LP.

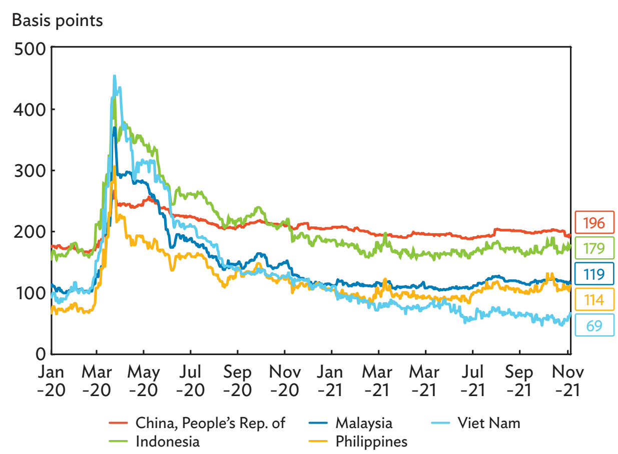
The Chinese yuan appreciated the most, gaining 1.0% during the review period. Next was the Vietnamese dong, which rose a marginal 0.4%.

Risk premiums, as proxied by credit default swap spreads and sovereign stripped spreads, steadily increased across the region's markets during the review period on heightened risk aversion largely due to global inflationary concerns (**Figures C.1** and **C.2**).

The region's equity markets witnessed net inflows of USD5.9 billion in September and USD3.1 billion in October (**Figure D.1**). However, equity markets in emerging East Asia posted mixed patterns between 31 August and 5 November (**Figure D.2**). Viet Nam reported the largest gain (9.4%), on reports that the Ministry of Planning and Investment intends to pass an economic recovery package worth VND800 trillion, while the Republic of Korea experienced the biggest decline (–7.2%), partly driven by investment outflows on the back of global supply chain disruptions.

Foreign capital flows into regional bond markets were negative in September in all Association of Southeast Asian Nations economies except Malaysia, amid rising bond yields and inflationary pressures (**Figures E.1**). As a result, the share of foreign holdings in most emerging East Asian markets declined in Q3 2021 (**Figure E.2**).

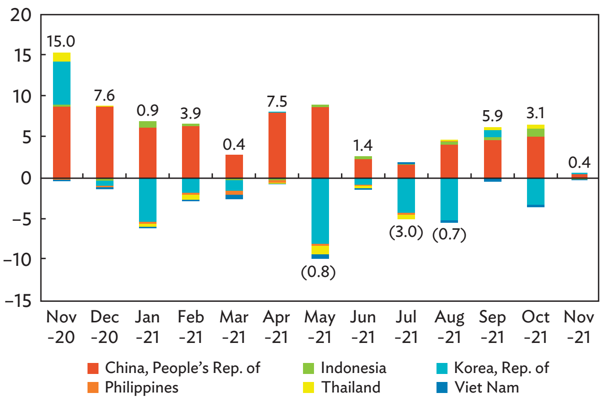
Figure C.2: JP Morgan Emerging Markets Bond Index Sovereign Stripped Spreads



Notes:
1. Based on United States dollar-denominated sovereign bonds.
2. Data coverage is from 1 January 2020 to 5 November 2021.
Source: Bloomberg LP.

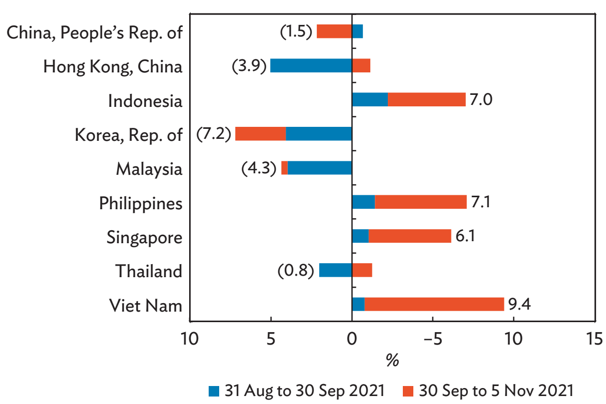
The PRC was the only market in the region that experienced an increase in its foreign holdings share, which rose slightly by 0.3 percentage points to reach 10.6% at the end of September. The PRC continued to open up its bond market and draw foreign investors with an attractive return profile, tax incentives, and the pending inclusion of its bond market in various global bond indices.

Figure D.1: Capital Flows into Equity Markets in Emerging East Asia



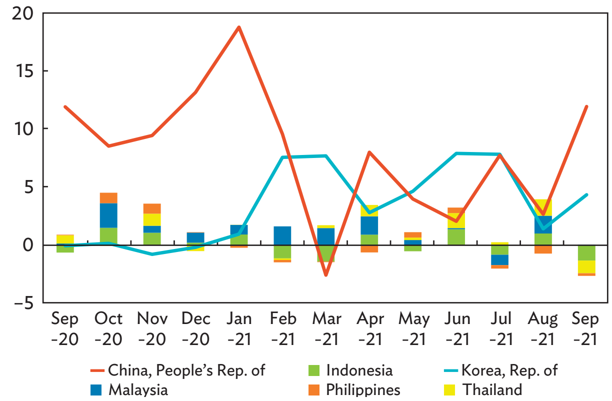
( ) = outflows, USD = United States dollar.
Notes:
1. Data coverage is from 2 November 2020 to 2 November 2021.
2. Numbers on the chart refer to net inflows (net outflows) for each month.
Source: Institute of International Finance.

Figure D.2: Changes in Equity Indexes in Emerging East Asia



( ) = negative.
Notes:
1. Changes from 31 August to 30 September 2021 and from 30 September to 5 November 2021.
2. Numbers on the chart refer to the net change between the two periods.
Source: *AsianBondsOnline* computations based on Bloomberg LP data.

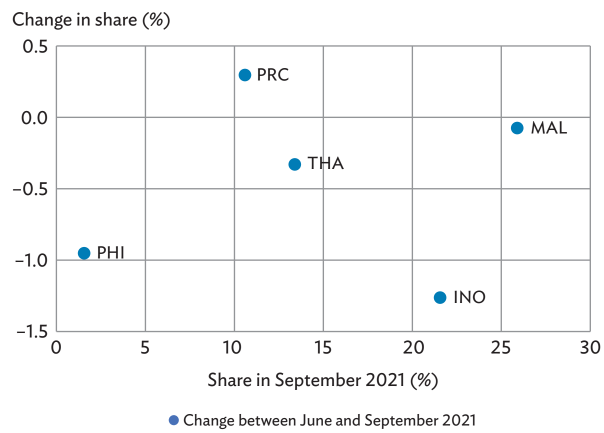
Figure E.1: Foreign Capital Flows in Local Currency Bond Markets in Emerging East Asia



USD = United States dollar.
Notes:
1. The Republic of Korea and Thailand provided data on bond flows. For the People's Republic of China, Indonesia, Malaysia, and the Philippines, month-on-month changes in foreign holdings of local currency government bonds were used as a proxy for bond flows.
2. Data are as of 30 September 2021.
3. Figures were computed based on 30 September 2021 exchange rates to avoid currency effects.

Sources: People's Republic of China (*Wind Information*); Indonesia (Directorate General of Budget Financing and Risk Management, Ministry of Finance); Republic of Korea (Financial Supervisory Service); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); and Thailand (Thai Bond Market Association).

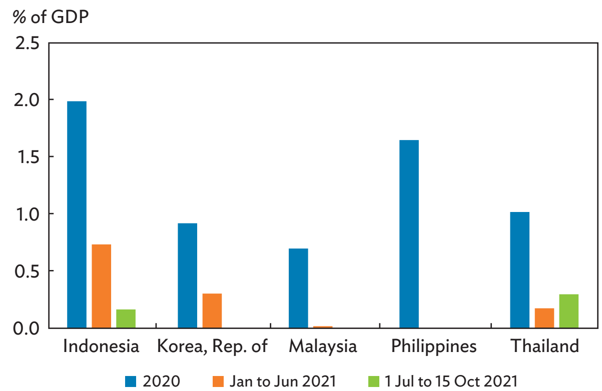
Figure E.2: Foreign Holdings Share in Local Currency Government Bond Markets in Select Emerging East Asian Economies



INO = Indonesia, MAL = Malaysia, PHI = Philippines, PRC = People's Republic of China, THA = Thailand.
Note: Data reflect change in foreign holdings between the end of June 2021 and the end of September 2021.
Source: People's Republic of China (Bloomberg and CEIC Data Company); Indonesia (Directorate General of Budget Financing and Risk Management, Ministry of Finance); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); and Thailand (Bank of Thailand).

Domestic financial institutions—particularly banks, pension funds, and insurance companies—remain the cornerstone of regional local currency (LCY) government bonds markets, especially in Association of Southeast Asian Nations markets where foreign holdings are declining (**Figure F.1**). A few central banks also continue to support bond market liquidity and facilitate government financing via LCY asset purchase programs (**Figure F.2**). Although these programs have been effective in preserving market capacity while keeping bond yields low, they pose challenges in how to smoothly reverse these positions in the future. Regional central banks also face pressure to adjust their policies when their monetary stances diverge from that of the Federal Reserve. Inflationary pressures are an additional concern in a few regional markets. Since risks to the regional economic outlook and financial stability remain largely tilted to the downside, authorities need to closely monitor financial markets to avoid large swings in asset prices and to maintain financial stability (**Box 3**).

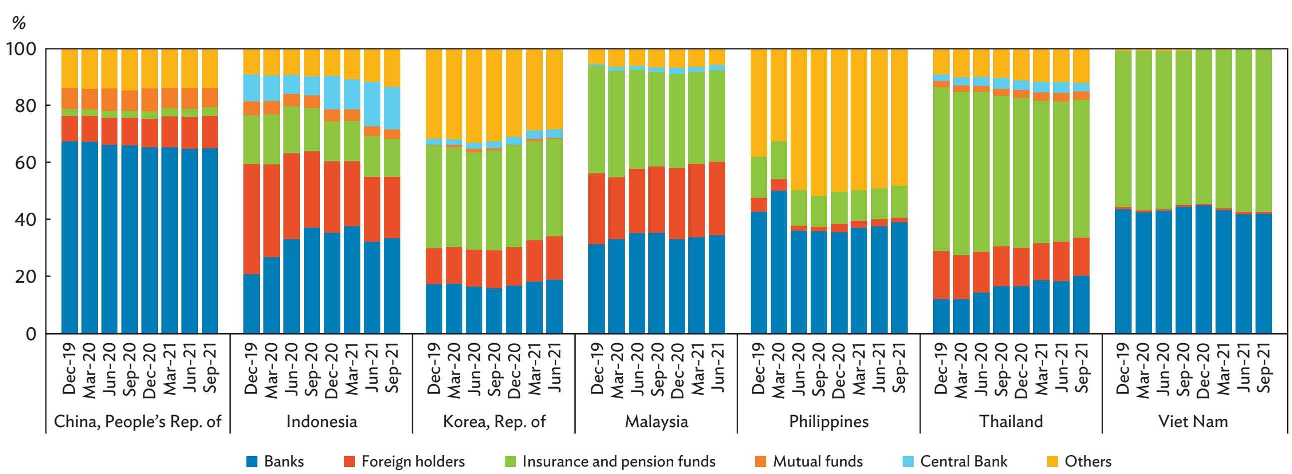
Figure F.2: Central Bank Purchases of Government Bonds



GDP = gross domestic product.
Notes:
1. Central bank purchases as a share of GDP for 2021 was computed based on June 2021 GDP.
2. For Indonesia, data cover the periods from 1 January 2021 to 15 June 2021, and from 16 June 2021 to 15 October 2021.
3. For the Republic of Korea, no additional purchases occurred from 1 July 2021 to 15 October 2021.
4. For the Philippines, data for 2021 are not available.
5. For Thailand, data cover the period from 1 January 2021 to 30 June 2021, and from 1 July 2021 to 18 October 2021.

Sources: CEIC Data Company, Haver Analytics, and various local sources.

Figure F.1: Investor Profiles of Local Currency Government Bonds in Select Emerging East Asian Markets



Notes:
1. Data coverage is from December 2019 to September 2021 except for the Republic of Korea and Malaysia (June 2021).
2. Data on central bank holdings are not available for the People's Republic of China, the Philippines, and Viet Nam.
3. Others include government institutions, individuals, securities companies, custodians, private corporations, and all other investors not elsewhere classified.

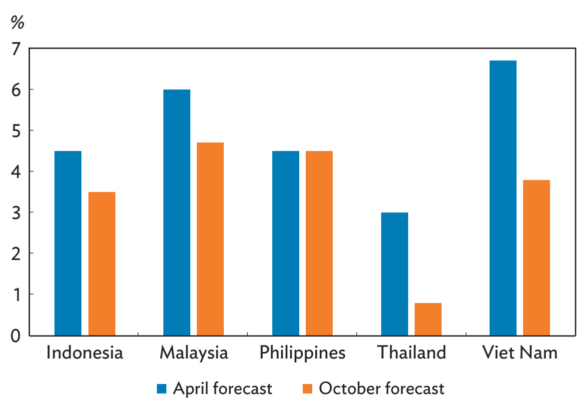
Source: *AsianBondsOnline* computations based on local market sources.

Box 3: Risks to Outlook—Downside Risks Outweigh Upside Risks

The short-term economic outlooks for the world and emerging East Asia remain positive, but downside risks continue to outweigh upside risks in the short term.[a] In particular, while vaccines offer the promise of an eventual return to something close to the pre-pandemic normal, the exact timetable for such a return remains highly uncertain. The global and regional economies are unsteadily but gradually regaining their footing after the unprecedented global health and economic shocks of the coronavirus disease (COVID-19) outbreak in early 2020. Nevertheless, a great deal of uncertainty remains about the trajectory of both the pandemic and its economic impact. Nowhere is this uncertainty more evident than among members of the Association of Southeast Asian Nations, which have been hit hard by a major Delta variant outbreak since April (**Figure B3**). Although the pandemic situation has improved in recent weeks, the unwelcome wave triggered new restrictions that dampened economic growth across the region.

The upshot is that notwithstanding the steady progress in vaccination, uncertainty surrounding COVID-19 is still the overarching risk to economic growth and financial stability in both emerging East Asia and the world. Just as the emergence of the Delta variant slowed the Association of Southeast Asian Nations' strong growth momentum, the future emergence of Lambda, Omega, and other variants with similarly significant economic impacts cannot be ruled out. This lack of complete knowledge about COVID-19 and its containment suggests that the cycle of oscillation between hope and despair, between optimism and pessimism, will continue to beset the world economy and global financial markets.

Figure B3: April versus October Forecasts for 2021 GDP Growth in Select ASEAN Economies



ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product.
Source: Asian Development Bank. 2021. *Asian Development Outlook 2021 Update*. Manila.

Progress on vaccination is by far the single most important positive development in the world's fight against the pandemic. As noted earlier, vaccination reduces the humanitarian and economic costs of the disease. Vaccines weaken the link between COVID-19 outbreaks—be they Delta, Lambda, or Omega—on one hand, and social distancing restrictions and thus economic activity on the other. However, vaccines themselves are also a source of uncertainty. In particular, slower-than-expected rollouts of vaccines could trigger renewed COVID-19 waves and dampen the regional and global recovery. Vaccination progress has been noticeably slower in developing markets than in advanced economies. But given the contagious nature of the disease, which can easily spread across borders, all markets remain vulnerable unless all vaccinate their populations and bring the virus under control. Another major uncertainty related to vaccines is whether and for how long they are effective, especially against new variants.

A highly significant economic consequence of COVID-19, global supply chain disruptions, poses another major downside risk for global economic prospects. The International Monetary Fund's downgrading of its forecast for United States (US) gross domestic product growth in 2021 by a full percentage point—from 7.0% in July to 6.0% in October—was ultimately due to supply disruptions, which accelerated inventory drawdowns. The manufacturing sector of Germany, another large economy, has been affected by the lack of key inputs. These disruptions also contribute to softer consumption, for example, by limiting the availability of new cars amid the global semiconductor shortage.

A primary cause of the global supply disruptions, which have persisted longer than initially expected, are COVID-19 outbreaks in key links of global supply chains. These outbreaks have contributed to shortages of key parts and components such as semiconductors, which in turn have become a drag on manufacturing activity. Global supply chain disruptions have been exacerbated by global logistical challenges, as evidenced by congestion of epic proportions at US Pacific ports and skyrocketing trans-Pacific shipping freight rates.

[a] This box was written by Donghyun Park (principal economist) in the Economic Research and Regional Cooperation Department of the Asian Development Bank.

continued on next page

Box 3: Risks to Outlook—Downside Risks Outweigh Upside Risks *continued*

Emerging East Asian economies, which are heavily dependent on trade and manufacturing, will be hit hard by the global supply disruptions.

Global supply chain disruptions are giving rise to another downside risk: increasing inflationary pressures. Negative supply shocks not only cause shortages but also higher prices. What is worse, under the current circumstances, is that the strengthening of demand will further exacerbate inflationary pressures. There are signs that the global demand that had been pent up due to social distancing restrictions needed to contain COVID-19 outbreaks is being unleashed as those restrictions are eased and economic activity recovers. The perfect storm of lower supply and higher demand is pushing up prices in both advanced economies and developing markets.

Growing inflationary pressures, in turn, are changing the calculus of global central banks regarding the trade-off between supporting economic growth versus containing inflation. In particular, global financial markets are closely monitoring whether the monetary policy actions of the US Federal Reserve signal a shift toward tightening. At its 2-day meeting in September, the Federal Reserve indicated that it would soon begin to unwind its monthly USD120 billion purchases of US Treasuries and mortgage-backed securities. However, global and emerging East Asian financial markets have remained calm so far in response to the prospective tapering. Another potential shock to the region's financial stability is the ongoing liquidity crisis at Evergrande Group, one of the largest property developers in the People's Republic of China (PRC). Despite widespread concerns, Evergrande's financial problems have not yet affected the financial stability of the PRC or the region.

Overall, the balance of risks remains negative. The paramount risk to the world economy and global financial stability is the emergence of more intractable COVID-19 variants before the world achieves global herd immunity through vaccination. Yet, there are substantial upside risks too. Above all, rapid global vaccination can loosen the link between new outbreaks and economic growth sooner than expected. Another cause for optimism is the planned virtual meeting between the leaders of the PRC and the US, which may help to reduce the tension between the world's two giants. Any easing of the tension would significantly benefit the region and the world.