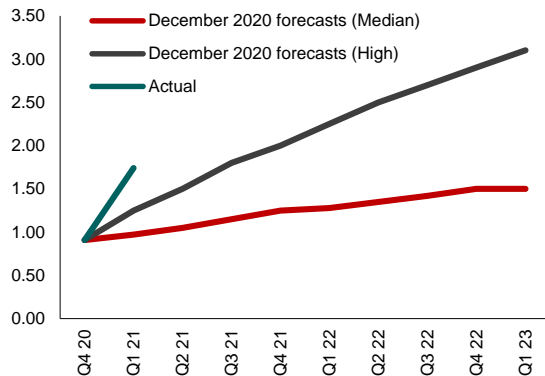


## Are Rising US Treasury Yields the “Real” Issue for the ASEAN+3 Region?<sup>1</sup>

April 16, 2021

1. **The unexpected rise in US Treasury yields in Q1 2021 caught markets by surprise and also had spillover effects on other asset classes and markets.** At the end of 2020, the broad market consensus around the trajectory of US Treasury (UST) yields (also referred to as “nominal yield”) was that of a gradual and consistent rise. But the strong pick up, which started in January, exceeded the expectations of even the most hawkish forecasters (Figure 1). The rise in yields has led to US dollar strength and some loss in momentum in the equity rally seen after Q1 2020 (Figure 2). In the ASEAN+3 region, interest rates rose, currencies weakened, and major equity indices stagnated amid slowing capital inflows (Brooks and Fortun, 2021).

**Figure 1. US 10-Year Yields, Quarterly Forecasts (Percent)**



Sources: Bloomberg L.P.; and author’s calculations.  
 Note: The forecasts for December were collated by Bloomberg on December 11, 2020.

**Figure 2. Quarterly Changes in Key Rates and Benchmarks**

	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
UST 10yr yield (bp)	-42	-69	-4	21	45
Dollar Index* (percent)	2.7	-1.7	-3.7	-4.3	3.6
MSCI US Index (percent)	-22.4	19.2	8.8	11.9	5.0
EM Asia Local Bond returns** (percent)	-6.3	7.2	1.8	6.4	-5.6
Asia Dollar Index*** (percent)	-3.7	1.5	2.4	3.7	-1.4
MSCI EM Asia Index (percent)	-20.2	15.7	10.5	17.0	1.9
EM Asia Equity flows (ex China, \$ bn)	-20.8	-13.9	-8.7	2.6	-10.7
EM Asia Debt flows (ex China, \$ bn)	-6.7	18.6	16.6	10.8	5.4
China Equity flows (\$ bn)	-10.6	27.3	-2.3	17.4	19.9
China Debt flows (\$ bn)	8.9	38.7	76.3	78.6	23.0

Sources: Haver Analytics; Bloomberg Finance L.P.; and author’s calculations.  
 Note: bp = basis points; \$ bn = billions of US dollars; EM = emerging markets.  
 \* The exchange rate of US Dollar against major world currencies published by Intercontinental Exchange.  
 \*\* Calculated using Bloomberg Barclays EM Asia Local Currency Government Bond Index (unhedged USD).  
 \*\*\* Published by JP Morgan using weights a basket of major EM Asia currencies.

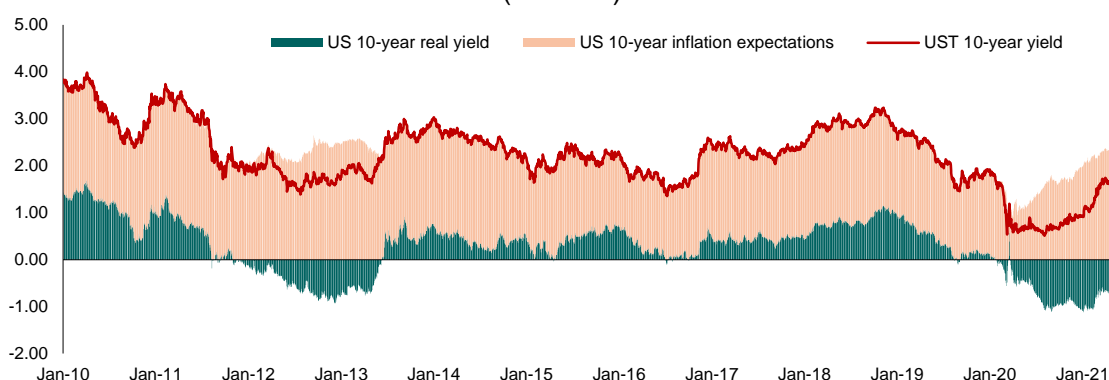
<sup>1</sup> Prepared by Prashant Pande (Financial Surveillance); reviewed by Li Lian Ong (Financial and Regional Surveillance); authorized by Hoe Ee Khor (Chief Economist). The views expressed in this note are the author’s and do not necessarily represent those of the AMRO or AMRO management. The author would like to thank Diana del Rosario for her useful comments.

2. **There are several factors behind the rising yields and spillovers vary depending on which factor is driving the increase.** The nominal yield may be broken down into two components—inflation expectations and real yields (Federal Reserve Bank of San Francisco, 2004):

- The major reasons behind the rise in US inflation expectations over recent quarters are an improving US economic outlook and expectations of inflation pick up attributable to improved mobilization of vaccinations (Engler, Piazza and Sher, 2021), and large fiscal support through the Biden American Rescue Plan.
- The rise in real yields, which bottomed out in January 2021, is broadly driven by expectations of monetary policy tightening. Nominal yields had been inching higher since August 2020, but the pace remained muted until January 2021, when real yields started rising from depressed levels (Figure 3).

Using simple correlations between daily changes, we observe that the rise in inflation expectations tends to have a positive impact on US risk assets (for example, equity markets) and negative impact on the US dollar. The correlation between real rates and risk assets is weaker, while rising real rates also leads to a stronger US dollar (Figure 4).

**Figure 3. United States: Breakdown of 10-Year Nominal Yields**  
(Percent)



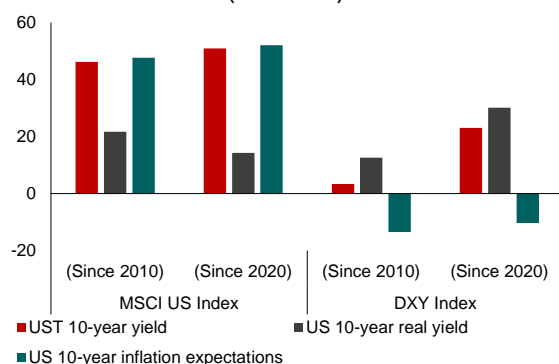
Sources: Bloomberg Finance L.P.; and author's calculations.

3. **The aforementioned relationships also holds for ASEAN+3 assets.** Rising inflation expectations in the United States tend to have a positive impact on ASEAN+3 assets but higher US real yields have historically hurt regional markets. The broad indicators of regional equity, exchange rate, and bond returns have had stronger positive correlations with inflation expectations while registering negative correlations with real rates (Figure 5):

- Typically, positive growth surprises in the United States also improve the outlook for emerging markets (EMs), which may benefit EM Asia through trade as well as portfolio investment channels to varying extent, depending on idiosyncratic factors.
- On the other hand, expectations of monetary tightening tend to adversely impact EM assets through worsening interest rate differentials, as well as a potential tightening in liquidity conditions, leading to a rise in real yields. These developments can trigger portfolio outflows from EMs, as experienced in EM Asia during the taper tantrum in 2013 and US Presidential election outcome in 2016 (Figure 6). Outflows could also be accompanied by a sharp fall in inflation expectations as seen during the market

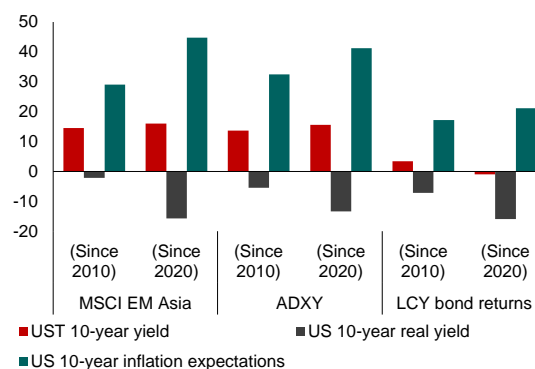
volatility and risk aversion events in 2015 (Chinese renminbi depreciation) and 2020 (COVID-19 pandemic) (Figure 7).

**Figure 4. United States: Correlations between US Yield Components and Equities, Dollar (Percent)**



Sources: Bloomberg Finance L.P.; and author's calculations.  
Note: Correlation calculated on daily changes in yields and indices since January 1, 2010 and January 1, 2020.

**Figure 5. EM Asia: Correlations between US Yield Components and Risk Assets (Percent)**



Sources: Bloomberg Finance L.P.; and author's calculations.  
Note: Correlation calculated on daily changes in yields and indices since January 1, 2010 and January 1, 2020.

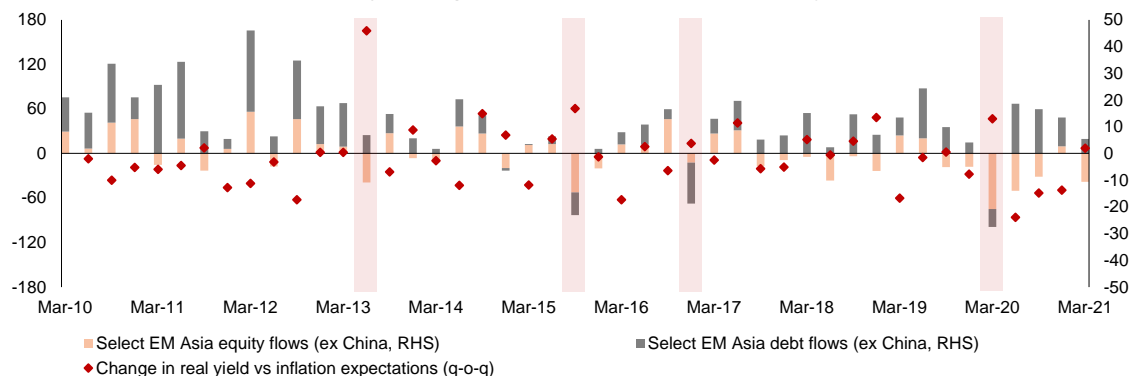
**4. A closer examination reveals some divergence in the relationships between individual ASEAN+3 markets and US real yields and inflations expectations. Based on recent data:**

- The Korean won and Indonesian rupiah are best positioned (high correlation, high sensitivity) to gain from rising inflation expectations but the won, along with Malaysian ringgit, also has relatively strong negative correlation with real yields (Appendix 1).
- The Japanese yen exchange rate against the US dollar is driven to a large extent by interest rate differentials and, irrespective of the underlying drivers, tends to depreciate when US rates rise.
- Regional bond yields are usually susceptible to a sharper rise if higher US rates are driven by real rates instead of inflation expectations. Indonesian yields stand out as they typically fall when US inflation expectations rise, supported by improved foreign investor sentiment and demand. EM Asia's dollar bloc (Singapore and Hong Kong, China) and Thai bonds tend to exhibit higher correlations and sensitivity to changes in US nominal yields.
- Equities across the region demonstrate a strong positive correlation with US inflation expectations, especially in Japan, while Korea is relatively more vulnerable when real rates rise (increased negative correlation, most negative sensitivity).

**5. Capital flows have also shown greater sensitivity to US inflation expectations than real rates.** EM Asia's debt inflows tend to increase when US inflation expectations rise and recede when real rates rise. At the same time, most regional equity market flows have been less sensitive to rising US inflation expectations as compared to debt flows (Appendix 2). The converse is true for Korea, where debt flows are negatively correlated with rising US rates and equity flows have a much higher sensitivity. Korean debt markets have

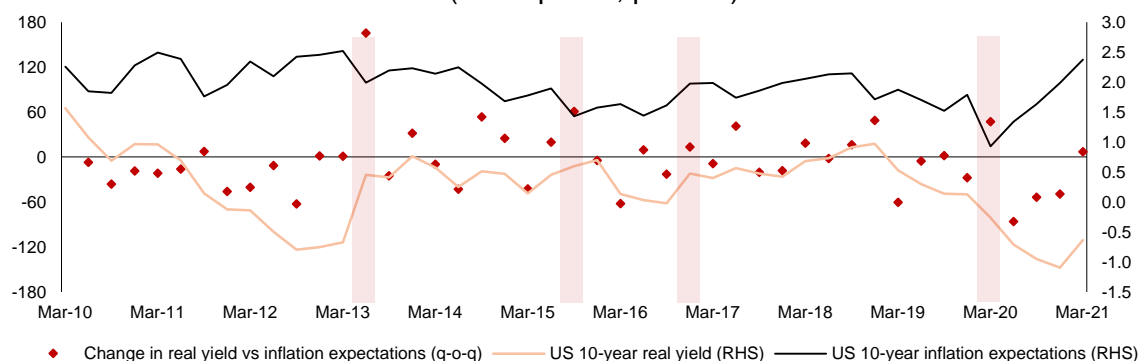
received inflows even during periods of market stress but have a slightly higher propensity for outflows when US rates rise, likely reflecting some safe haven characteristics (Appendix 3). A possible explanation is that Korea's equity market constituents comprise a higher weighting of large export firms that gain whenever the US economic outlook improves.

**Figure 6. Selected ASEAN+3: Portfolio Flows**  
(Basis points, billions of US dollars)



Sources: Bloomberg Finance L.P.; Haver Analytics; Institute for International Finance; and author's calculations.  
Note: q-o-q = quarter on quarter. Portfolio flows include debt and equity flows to Indonesia, Malaysia, the Philippines, Korea, and Thailand; e. Equity flows also include data for Vietnam. Highlighted periods represent key episodes of increased market volatility and capital outflows from regional markets post global financial crisis.

**Figure 7. United States: Quarterly Changes in Real Yields, Inflation Expectations, and Their Spread**  
(Basis points; percent)

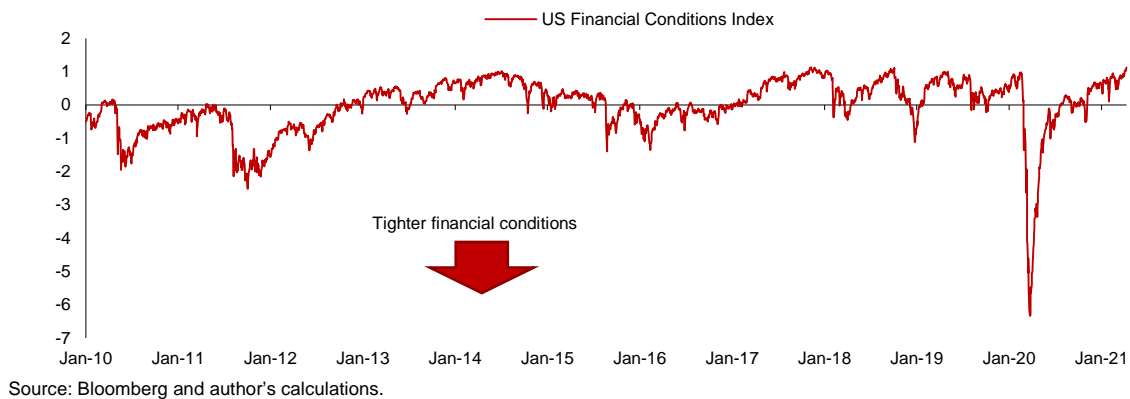


Sources: Bloomberg Finance L.P.; Haver Analytics; Institute for International Finance; and author's calculations.  
Note: q-o-q = quarter on quarter. The portfolio flows include debt and equity flows to Indonesia, Malaysia, Philippines, Korea and Thailand. Equity flows also include data for Vietnam. Highlighted periods represent key episodes of increased market volatility and capital outflows from regional markets post global financial crisis.

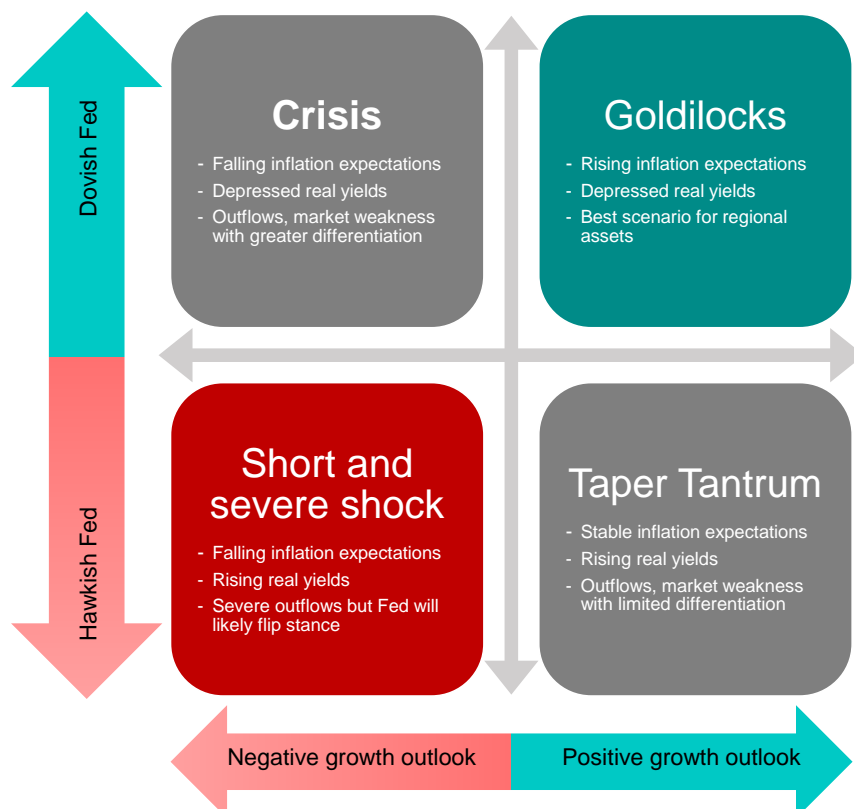
**6. Although historical statistical relationships suggest a more benign outlook for ASEAN+3 assets against the backdrop of rising US inflation expectations, the risks should not be underestimated.** Risk sentiment could change as a result of any perceived hawkishness in the stance of the US Federal Reserve (“Fed”), similar to the taper tantrum episode in 2013. However, the greater risk stems from any sizable fall in US inflation expectations, which is typically seen in times of crises and could lead to large outflows from EM assets. Such a situation would be further aggravated by the elevated US bond issuance to fund the stimulus packages, which would then cause a rise in real yields. In such a scenario, the Fed would likely step up policy support through quantitative easing to keep any rise in real and nominal yields in check. Finally, idiosyncratic factors remain relevant and could cause asset price and capital flow behavior to diverge from their historical relationships with US rates.

7. **US fiscal support, a dovish Fed, and measures to contain the growth impact of the pandemic are key to market stability.** As long as US growth prospects are strong (driven by fiscal support and a successful vaccination campaign) and the Fed maintains an accommodative stance, the environment for most ASEAN+3 assets should remain positive. Despite the recent rise in Treasury yields, US financial conditions continue to be very accommodative (Figure 8), confirming the absence of stress in financial markets. Within the ASEAN+3 region, the policy measures enacted to support the recovery have thus far sustained the confidence of investors, against a benign global backdrop. The turning points would be increased hawkishness in the Fed stance or a notable downgrade to the US growth outlook, either of which could trigger regional financial market volatility (Figure 9).

**Figure 8. US Financial Conditions Index**



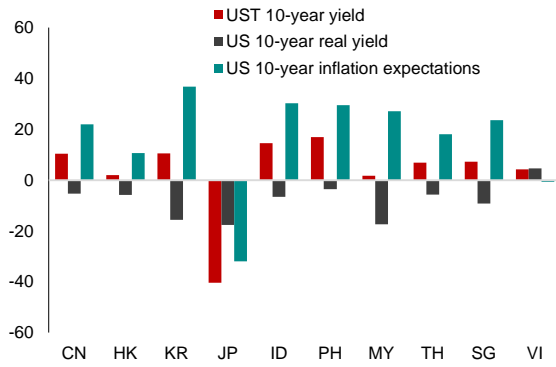
**Figure 9. Likely Scenarios for Fed Stance and US Growth and Implications for ASEAN+3 Financial Markets**



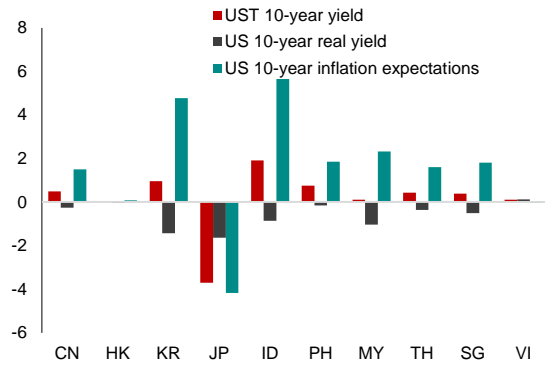
Source: Author.

## Appendix 1. ASEAN+3: Correlation and Sensitivity of Select Asset Classes to US Yields

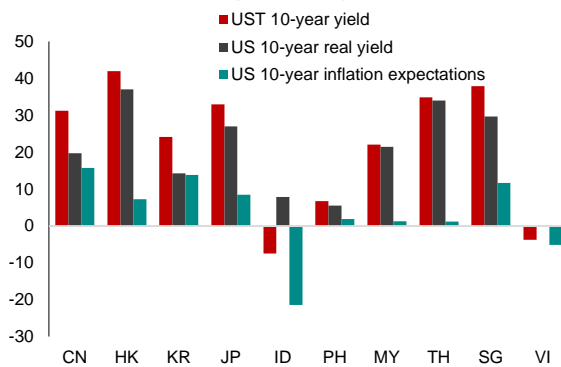
**Figure A1.1 Exchange Rate: Correlations with US Yields (Percent)**



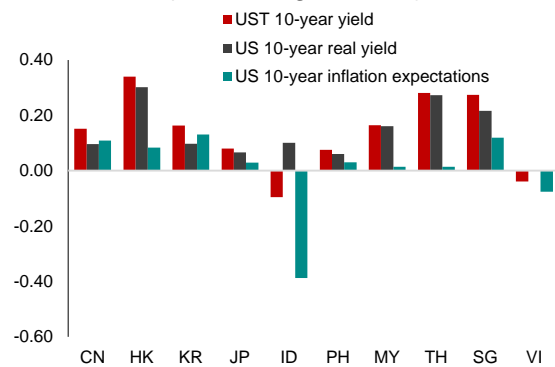
**Figure A1.2 Exchange Rate: Sensitivity to US Yields (Percent)**



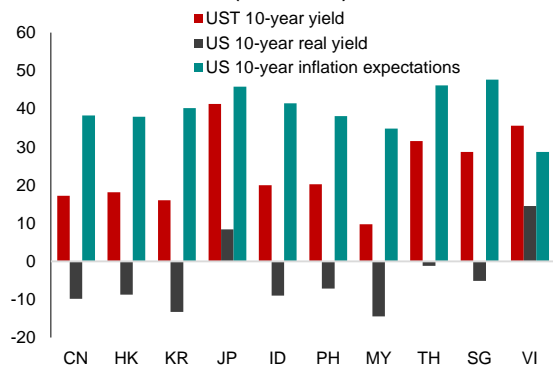
**Figure A1.3 Bond Yields: Correlations with US Yields (Percent)**



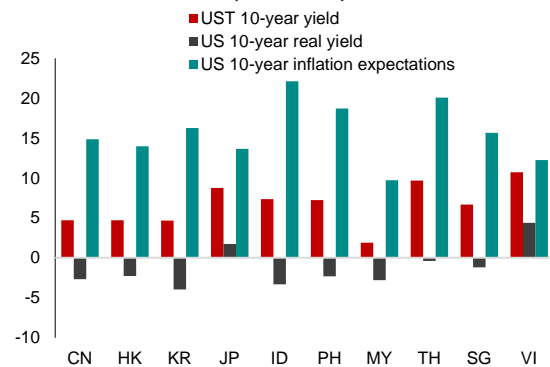
**Figure A1.4 Bond yields: Sensitivity to US Yields (Percentage Points)**



**Figure A1.5 Equities: Correlations with US Yields (Percent)**



**Figure A1.6 Equities: Sensitivity to US Yields (Percent)**

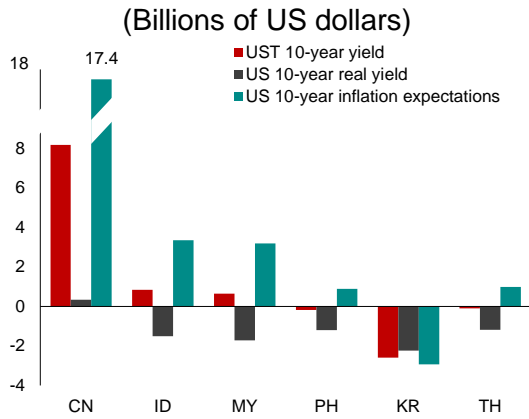


Sources: Bloomberg Finance L.P.; and author's calculations and estimates.

Note: Correlations are calculated using daily changes since January 1, 2020. Sensitivities are estimated by regressing daily changes in US yields on exchange rates/bond yields/equity indices since January 1, 2020, and represent the expected change in exchange rates/bond yields (in percentage points)/equity indices against the US dollar for a 1 percentage point change in yields.

## Appendix 2: ASEAN+3: Impact of US Yields on Portfolio Flows to Selected Markets

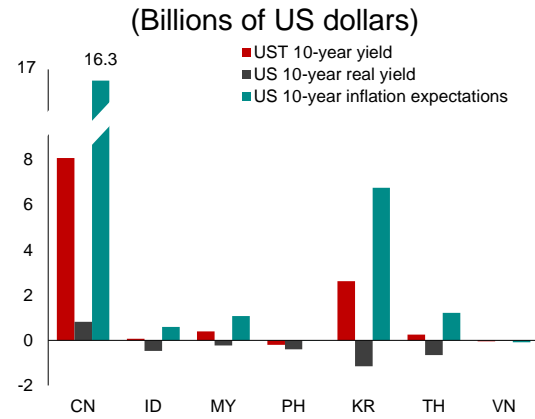
**Figure A2.1 Sensitivity of Debt Flows to US Yields**



Sources: Bloomberg Finance L.P.; Institute for International Finance; and author's estimates.

Note: Sensitivities are calculated on monthly debt flows to monthly changes in yields and represent expected debt flows from a 1 percentage point change in yields. Calculations are based on monthly data from January 2015.

**Figure A2.2 Sensitivity of Equity Flows to US Yields**

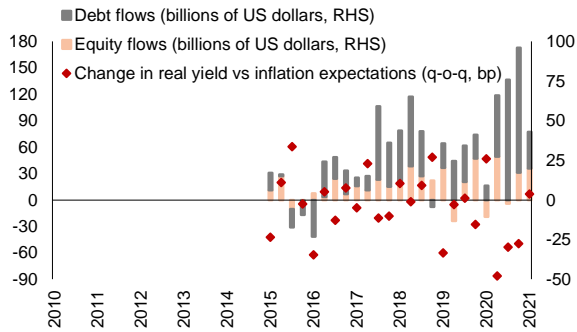


Sources: Bloomberg Finance L.P.; Institute for International Finance; and author's estimates.

Note: Sensitivity calculated on monthly debt flows to monthly changes in yields and represents expected equity flow from a 1 percentage point change in yields. Calculations are based on monthly data from January 2015.

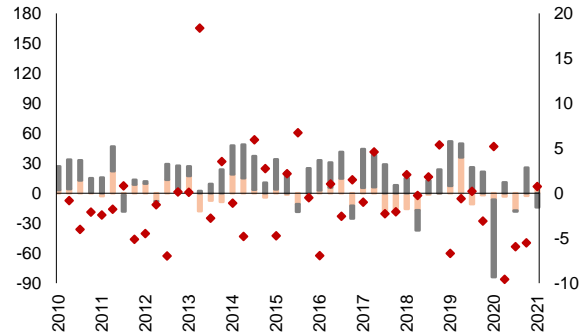
## Appendix 3: ASEAN+3: Trends in Portfolio Flows to Selected Markets vis-à-vis Changes in Spreads between Real Rates and Inflation Expectations

**Figure A3.1 China: Portfolio Flows**

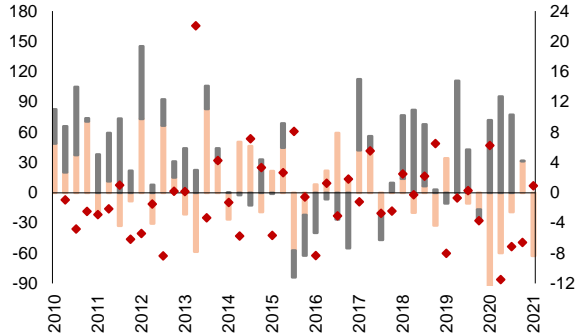


Note: China's monthly flows data are available only from 2015.

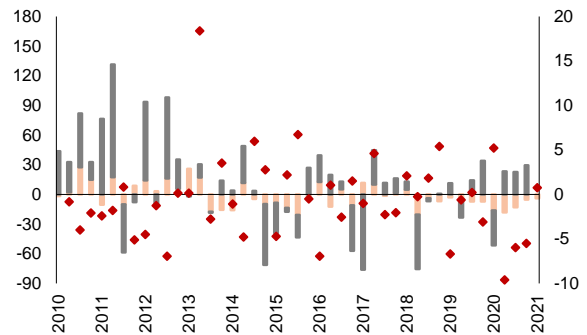
**Figure A3.2 Indonesia: Portfolio Flows**



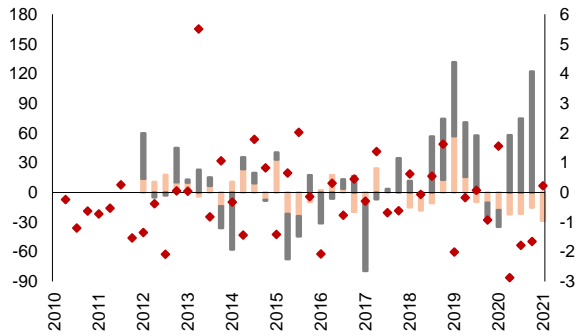
**Figure A3.3 Korea: Portfolio Flows**



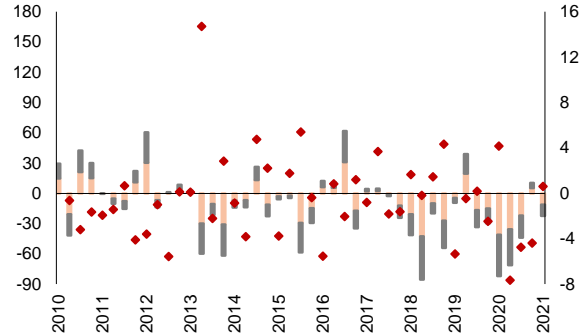
**Figure A3.4 Malaysia: Portfolio Flows**



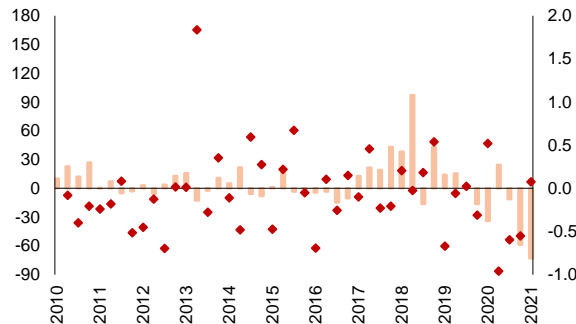
**Figure A3.5 Philippines: Portfolio Flows**



**Figure A3.6 Thailand: Portfolio Flows**



**Figure A3.7 Vietnam: Equity flows**



Sources: Bloomberg Finance L.P.; Institute for International Finance; and author's calculations.  
Note: bp = basis point.



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