Introduction: Emerging East Asian Bond Yields Decline

Local currency (LCY) bond yields generally declined in emerging East Asia between 1 June and 15 August.[3] Yields on 2-year and 10-year LCY government bonds were down for all emerging East Asian markets with the exception of Thailand's 2-year yield, which gained 2 basis points (bps), and Viet Nam's 10-year yield, which inched up 1 bp **(Table A)**. The fall in yields was fueled by expectations of new or additional monetary easing in some markets, including the People's Republic of China, Indonesia, the Republic of Korea, and Malaysia. Stronger foreign demand for the region's LCY bonds due to low global interest rates also contributed to the drop in yields, as did the subdued global economic outlook.

The United Kingdom's (UK) vote on 23 June on whether to remain in the European Union (EU) was a major shock to global financial stability. The unexpected result in favor of leaving the EU, which has come to be known as "Brexit," initially caused tremors in markets around the world before they quickly recovered and stabilized. The same pattern was evident in emerging East Asian markets where some currencies weakened in the immediate aftermath of the Brexit vote **(Figure A)**. The Brexit shock initially lifted the region's bond yields too, although bond markets have since remained calm. The overall impact of Brexit on emerging East Asia is likely to remain muted **(Box 1)**.

Due to safe-haven demand for dollar assets, yields in the United States (US) declined in the immediate aftermath of the Brexit vote before eventually rising again. However, bond yields were down overall in the US during the review period. Among several major advanced economies, the UK—somewhat paradoxically as the epicenter of Brexit—

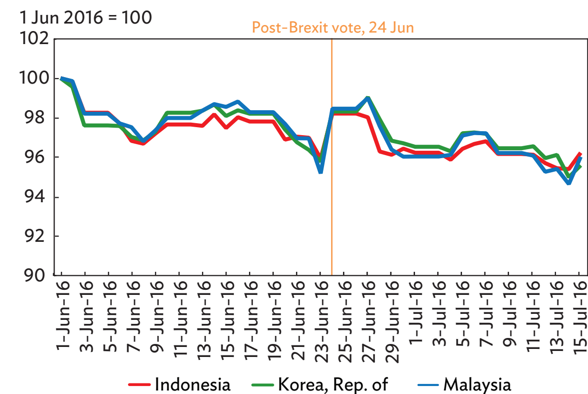
Table A: Changes in Global Financial Conditions

	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	(17)	(28)	–	4.3	–
United Kingdom	(27)	(84)	2	12.1	(10.7)
Japan	6	3	(2)	(2.8)	7.6
Germany	(10)	(21)	(2)	5.2	(0.04)
Emerging East Asia					
China, People's Rep. of	(16)	(34)	(23)	7.3	(0.9)
Hong Kong, China	(21)	(35)	–	10.5	0.2
Indonesia	(75)	(104)	(52)	9.9	4.2
Korea, Rep. of	(21)	(36)	(16)	3.4	7.7
Malaysia	(43)	(45)	(39)	3.9	3.5
Philippines	(44)	(114)	(24)	6.1	0.3
Singapore	(19)	(49)	–	2.7	2.5
Thailand	2	(27)	(34)	9.4	3.1
Viet Nam	(3)	1	(43)	6.4	0.6
Select European Markets					
Greece	(26)	80	43	(10.7)	(0.04)
Ireland	(5)	(43)	(5)	(6.1)	(0.04)
Italy	(4)	(39)	0.02	(4.6)	(0.04)
Portugal	(6)	(41)	(14)	(0.7)	(0.04)
Spain	(4)	(52)	(51)	(2.2)	(0.04)

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 1 June and 15 August 2016.
2. A positive (negative) value for the FX rate indicates the appreciation (depreciation) of the local currency against the US dollar.
Sources: *AsianBondsOnline*, Bloomberg LP, and Institute of International Finance.

[3] 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: Local Currency vs. the US Dollar in Select Emerging East Asian Economies



US = United States.
Note: An increase (decrease) in the value means depreciation (appreciation) of the local currency against the US dollar.
Source: Based on data from Bloomberg LP.

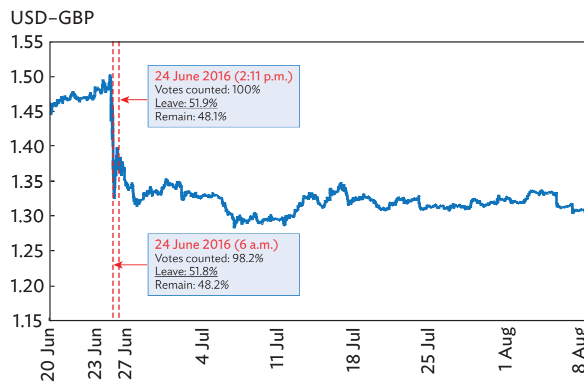
saw the largest drop in yields following stimulus measures launched by the Bank of England to calm market nerves. These measures included a 25 bps reduction in the bank rate and an expansion of the asset purchase program. Nevertheless, the effects of Brexit are still being felt, with the pound sterling down more than 10% against the US dollar between 1 June and 15 August. In other advanced economies, however, the markets see Brexit as having minimal impact.

The global economic outlook remains subdued and the world economy still awaits a robust turnaround. According to the International Monetary Fund's latest July forecasts, global output is projected to expand 3.1% in 2016 and 3.4% in 2017, both of which are down 0.1 percentage points from April forecasts. Among the advanced economies, where sluggish growth persists, the US

Box 1: Brexit—What Does It Mean for Asia?

The United Kingdom (UK) voted to leave the European Union (EU) on 23 June 2016. The "Brexit" vote was greeted with negative reactions in global financial markets. The pound sterling immediately fell against the US dollar to a level not seen since the mid-1980s and stock markets also declined **(Figure B1)**. However, the short-term damage from this unexpected outcome does not appear to be catastrophic. Critically, unlike with the global financial crisis, Brexit does not reflect a fundamental weakness in the global financial system.

Figure B1: Pound Sterling vs. the US Dollar



GBP = British pound, USD = United States dollar.
Note: All times are British Summer Time (GMT+1).
Source: Bloomberg LP.

Furthermore, the fact that the UK will remain inside the EU for at least 2 years will allow time for the UK to sort out its future relationships with the EU, which will ultimately determine the magnitude of the damage.

While Brexit has often been cited as a potential risk to global growth, the economic costs of Brexit are likely to be borne primarily by the UK. Many analysts are predicting that post-Brexit political and economic uncertainty will push the UK into recession. Estimates of the impact on gross domestic product (GDP) in 2016/17 typically range from −4.0% to −1.0%. Long-term impact estimates vary widely from a GDP contraction of 9.7% to a gain of 4.0%.

Brexit may also affect the EU to the extent that it recasts the dynamics of trade, investment, and financial sector relationships between the EU and UK. The effects on the EU's GDP growth are likely to be much smaller than the impact on the UK's. Exports to the UK accounted for only about 6.4% of the EU's total merchandise exports in 2015. According to the Bertelsmann Foundation, Brexit could lower the eurozone's GDP growth by between 0.01 and 0.03 percentage points per year. Following the referendum, Goldman Sachs reduced its average annual growth projection for the EU in 2016 and 2017 from 1.5% to 1.25%.

A more immediate concern for the EU are the implications of the vote for Europe's regional integration project. Calls

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Box 1: Brexit—What Does It Mean for Asia? *continued*

for similar referendums in other markets are testing the EU's credibility and creating uncertainty in financial markets in Europe and beyond. As mentioned, global financial markets suffered a large correction in response to Brexit. The correction was partly an overreaction, especially since the outcome was an unexpected shock in light of growing market expectations. While markets stabilized after a few days, some international coordination for safeguarding global financial stability may be warranted.

The direct trade implications of Brexit for emerging Asia are expected to be small. The region's exports to the UK accounted for only about 2.0% of its total merchandise exports in 2015. Therefore, a slowdown in the UK is unlikely to significantly affect Asia via the trade channel. However, Brexit will affect free trade agreements between Asian economies and the EU since the composition of the EU's membership will change when the UK leaves. Currently, there are 16 Asia–EU free trade agreements at various stages of implementation.

There is a dearth of estimates of Brexit's impact on Asia's growth. Based on the Goldman Sachs estimates of Brexit's impact on the EU, the spillover effect in Asia is expected to generate an average annual decline in GDP of less than 0.1 percentage points in 2016 and 2017. On the other hand, Nomura slashed its Asia (ex-Japan and Australia) growth forecast for 2016 from 5.9% to 5.6% due to Brexit's expected impacts via the trade, financial, and confidence channels.

In addition to trade, financial spillovers such as capital flow reversals can adversely affect emerging Asia. If Brexit-induced uncertainties in global financial markets turn out to be large, it could destabilize the region's financial markets. Asia may then face capital flow and exchange rate volatility which, in turn, would adversely affect financial and economic stability. While Asian currencies fell on 24 June due to investors' flight to safety, the fall was not nearly as large as the plunge in the pound sterling. Furthermore, the region's markets recovered a few days later in tandem with global markets.

Overall, there is little cause for undue concern about the economic effects of Brexit on emerging Asia. The limited relative importance of the UK to the region as an export market means that the direct trade effects are limited. While financial spillovers pose a potential risk, their impact is likely to be limited. Nevertheless, Brexit is a timely reminder of the need for the region to maintain its resilience against external shocks through macroeconomic stability and structural reforms.

remains the sole bright spot. The prospects for emerging markets are mixed, with growth upgrades for Brazil and the Russian Federation, and downgrades for Nigeria and South Africa. Mirroring the sluggish world economy, global trade is projected to grow 2.7% in 2016 and 3.9% in 2017. Against the backdrop of a difficult global outlook, developing Asia continues to lead the world in growth.[4] According to the Asian Development Bank's July forecast, developing Asia will grow 5.6% in 2016 and 5.7% in 2017, while the People's Republic of China will grow a healthy 6.5% in 2016 and 6.3% in 2017 as it transitions to a more sustainable and balanced growth trajectory.

Overall, tepid global growth has pushed down bond yields in emerging East Asia, as has monetary easing in some markets. The benign inflation outlook has given central banks greater scope to support growth, though inflation may begin to pick up due to a rise in oil prices stemming from talks among oil-producing economies to freeze production to boost prices. However, this rise may be limited as the price increase will be supply-driven and oil inventories remain high. According to the Asian Development Bank's July forecasts, inflation in developing Asia will remain moderate at 2.8% in 2016 and 3.0% in 2017.

Notwithstanding that there is some scope for monetary easing, most emerging East Asian central banks adopted a wait-and-see attitude during the 1 June–15 August review period and kept their policy rates unchanged. A few pursued monetary expansion to help boost growth. Bank Indonesia further cut its benchmark interest rate by 25 bps in June, resulting in a cumulative 1 percentage point reduction year-to-date through 18 August.[5]

[4] Developing Asia comprises the 45 regional developing member economies of the Asian Development Bank.
[5] Bank Indonesia shifted its policy rate from the reference rate (6.50%) to the 7-day reverse repurchase rate (5.25%) effective 19 August.

The Bank of Korea (1.25%) in June and Bank Negara Malaysia (3.00%) in July lowered their key interest rates by 25 bps. All three central banks have indicated that there is still room for further easing.

Emerging East Asia's equity and currency markets recorded gains as well. Equity markets were up for all emerging East Asian markets during the review period. The biggest gainer was the stock market in Hong Kong, China, which was up 10.5% on plans to link it to Shenzhen's stock market. (The connection will allow investors on the Hong Kong Stock Exchange to trade stocks on the Shenzhen Stock Exchange, and vice versa, opening up both stock markets to new investors.) The Indonesian and Thai stock markets also posted strong growth, rising 9.9% and 9.4%, respectively. In Thailand, sentiment was boosted by the approval of a new constitution by voters in August, which restored a measure of political stability. A major positive for all of the region's markets was improving US economic data. In addition, all emerging East Asian currencies appreciated vis-à-vis the US dollar during the review period except for the Chinese renminbi, which fell 0.9%. The Korean won appreciated the most, climbing 7.7% due to its safe-haven status and its ratings upgrade by S&P Global Ratings to AA in August. The Indonesian rupiah and Malaysian ringgit rose 4.2% and 3.5%, respectively, buoyed by strong inflows into their bond markets.

Credit default swap (CDS) spreads across emerging East Asia rose during the week of the Brexit vote before subsequently falling, indicating Brexit's limited impact on the region to date **(Figure B)**. Rising CDS spreads the day after the Brexit vote were most evident in Indonesia and Malaysia among emerging East Asian economies. As expected, the immediate impact was more pronounced in Europe, where spreads significantly increased in Ireland, Italy, Portugal, and Spain. However, spreads trended downward by the end of June **(Figure C)**. Similar to the pattern observed for CDS spreads, the volatility index declined after the initial Brexit shock wore off; better US economic data also contributed to the decline **(Figure D)**. Given the immediate adverse impact on investment sentiment and rising uncertainty following Brexit, bond yields shot up temporarily in a number of other economies **(Figures E1, E2, and F)**.

Foreign holdings of LCY government bonds rose in major emerging East Asian markets during the review period. Indonesia and Malaysia continued to attract overseas funds into their LCY government bond markets. At the end of June, foreign investors were the largest sovereign bondholders in Indonesia and Malaysia with shares of 39.1% and 34.5%, respectively **(Figure G)**. This finding is consistent with the recent broader trend of increased demand for emerging market assets by foreign investors in search of higher returns.

The overall environment for emerging East Asian LCY bond markets remains benign, notwithstanding the Brexit shock. However, a number of downside risks loom on the horizon:

The prospect of an interest rate hike by the US Federal Reserve, which would prompt capital withdrawals from emerging markets, has reappeared as the effects of Brexit fade. Concerns about global financial stability in the wake of Brexit influenced the Federal Reserve's decision to keep rates steady. But now that a measure of stability has returned to global markets, the Federal Reserve will be guided primarily by domestic factors. However, there is still considerable uncertainty regarding the timing of the US rate hike. While Federal Reserve Chair Janet Yellen, during the annual Jackson Hole Summit on 26 August, strengthened the case for raising rates, the disappointing nonfarm payroll data in August (151,000 versus 275,000 in July), lowers the likelihood of a Federal Reserve rate hike.

Brexit is still unfolding and remains a significant source of uncertainty for global financial markets. The initial storm of market instability in the immediate aftermath of the 23 June vote has passed and a measure of calm has been restored. However, negotiations between the UK and the EU on the specific terms of the UK's exit have yet to start and are subject to a great deal of uncertainty. A disorderly and contentious exit is likely to rattle markets in Europe and elsewhere. The Brexit risk is magnified by legacy balance sheet problems that still plague the European banking system. In particular, Italian banks are saddled with a dangerous amount of nonperforming loans that are equivalent to almost one-fifth of its GDP. Europe's financial fragility is compounded by the weakness of the real economy, which has yet to find a firm footing since the global financial crisis.

Negative and low interest rates in advanced economies pose a risk to financial stability in emerging markets. While the world is currently fixated on the Federal

Figure B: Credit Default Swap Spreads[a, b] (senior 5-year)

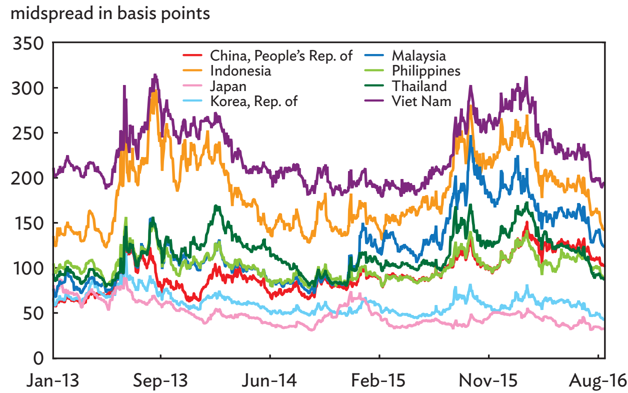


Figure C: Credit Default Swap Spreads for Select European Markets[a, b] (senior 5-year)

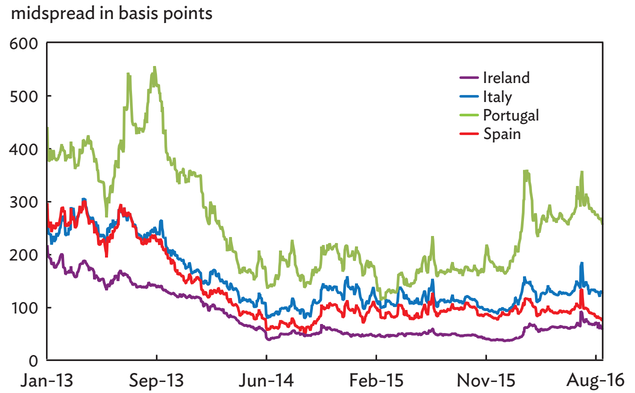


Figure D: United States Equity Volatility and Emerging Market Sovereign Bond Spreads[b] (% per annum)

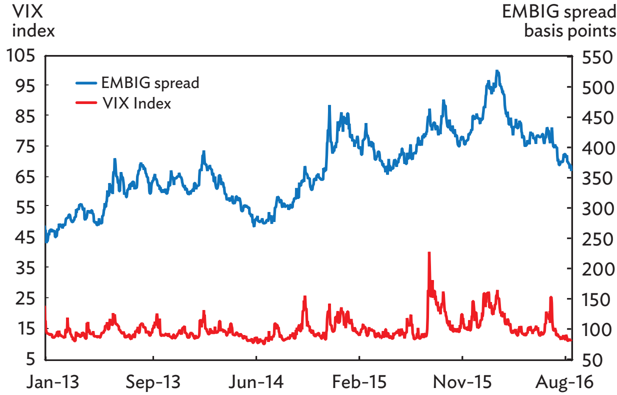


Figure E1: 10-Year Government Bond Yields[b] (% per annum)

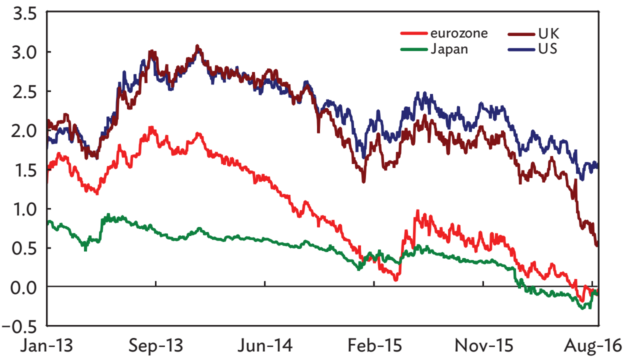


Figure E2: 10-Year Government Bond Yields[b] (% per annum)

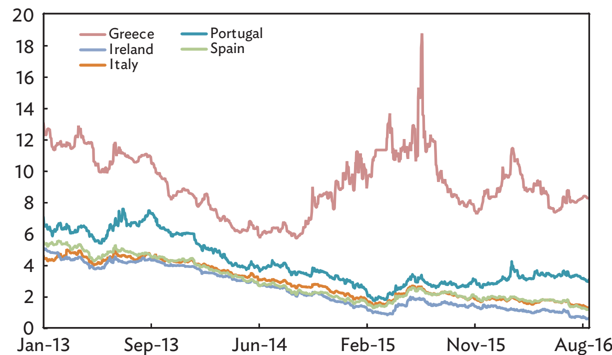
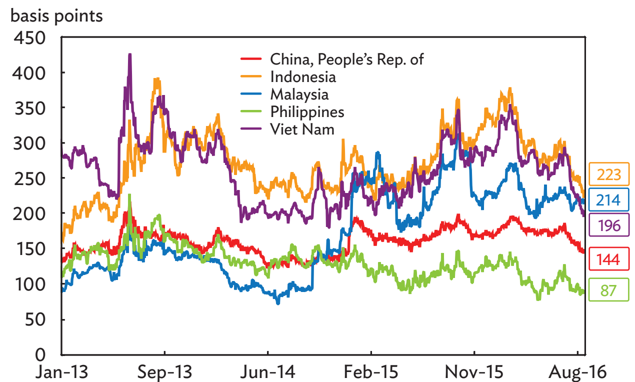


Figure F: JPMorgan Emerging Markets Bond Index Sovereign Stripped Spreads[a, b]



EMBIG = Emerging Markets Bond Index Global, UK = United Kingdom, US = United States, VIX = Chicago Board Options Exchange Volatility Index.

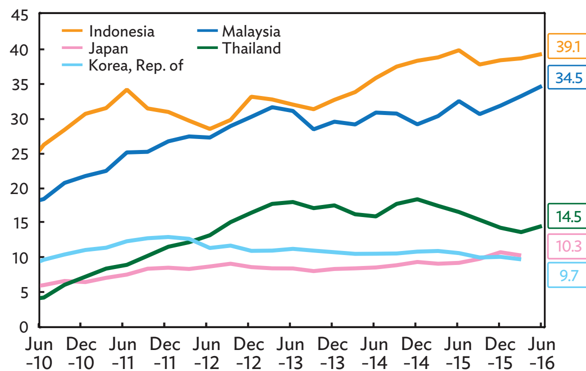
Notes:

[a] In United States dollar and based on sovereign bonds.

[b] Data as of 15 August 2016.

Sources: *AsianBondsOnline* and Bloomberg LP.

Figure G: Foreign Holdings of Local Currency Government Bonds in Select Asian Economies (% of total)



Note: Data as of end-June 2016 except for Japan and the Republic of Korea (end-March 2016).
Sources: *AsianBondsOnline*.

Reserve's interest rate hike decision, the exceptionally loose monetary policies pursued by central banks in advanced economies since the global financial crisis have encouraged potentially volatile capital flows into emerging markets. Some advanced economy central banks, including the European Central Bank and Bank of Japan, have set rates below zero. This has reduced room for additional monetary easing in these advanced economies should another shock occur. Furthermore, negative interest rates can impair the profitability of banks and the soundness of the banking sector as a whole, which may have spillover effects abroad. They can also affect emerging markets more directly, for example, by amplifying capital inflows **(Box 2)**.

Box 2: Negative Interest Rates—What Are the Implications for Emerging Asia?

Since Sweden experimented with the first negative interest rate policy (NIRP) in July 2009, a number of other advanced economies have followed suit. As of June 2016, these included Denmark, Hungary, and Switzerland; and most significantly, the eurozone and Japan. As a supplement to quantitative easing, NIRPs aim to raise inflation, and thus mitigate potentially harmful deflationary pressures, and revive investment and consumption via credit expansion. In the cases of Denmark and Switzerland, a major motivation for a NIRP was to stop rapid currency appreciation and stabilize exchange rates. In the short-term, NIRPs have lowered interest rates as intended, but inflation has not picked up as much as expected due to stagnant growth and anemic demand. A NIRP also partly mirrors the low return on capital in a low-growth economic environment.

Although a NIRP directly and immediately affects the banking system of the implementing economy, it can also influence emerging Asian markets through indirect channels. All other things being equal, a NIRP can have the following potential effects:

1) Capital flows and currency appreciation

Negative interest rates may encourage financial institutions in advanced economies to seek opportunities elsewhere. In light of the uncertain growth prospects of the advanced economies, relatively fast-growing emerging markets with solid fundamentals become tempting destinations for global investors. Many of those emerging markets are in developing Asia, a region comprising the 45 developing member economies of the Asian Development Bank, which forecasts growth in developing Asia to reach 5.6% in 2016 and 5.7% in 2017.

A NIRP complicates the global economic climate by increasing the volatility of capital flows in emerging markets. These capital flows are sensitive to uncertainty in the global economic environment (e.g., the prospect of a Federal Reserve rate hike being heightened by developments at the Jackson Hole Summit and subsequently lowered by the release of August nonfarm payroll data in the US, which came in below market expectations). As shown in **Figure B2.1**, during the early years of near-zero interest rates in the United States (US) in 2009–2011, capital inflows, particularly in the form of portfolio and other investment, surged in emerging Asia. Outflows became evident starting in mid-2014 when the prospect of a US interest rate hike increased. There is a risk that volatile capital flows in search of higher short-term returns can jeopardize the financial stability of emerging Asian markets, especially those that have more open capital accounts. A wide range of external shocks—including US interest rate normalization, a disorderly Brexit process, or heightened global risk aversion due to a great deal of uncertainty—can exacerbate such risk. Therefore, emerging market policy makers must closely monitor capital flows.

Low and negative interest rates also widen the interest rate gap between advanced markets and emerging Asian markets, which can typically lead to local currency appreciation.

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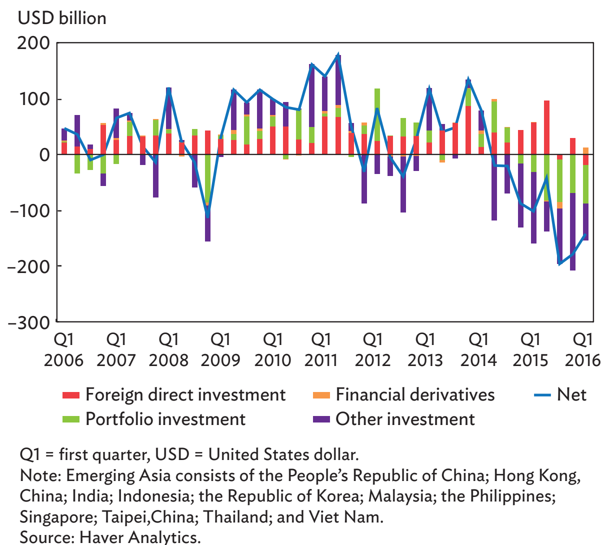
Box 2: Negative Interest Rates—What Are the Implications for Emerging Asia? *continued*

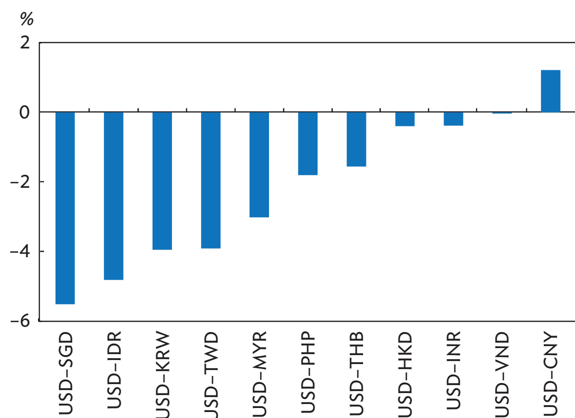
Figure B2.1: Net Capital Flows in Emerging Asia



Q1 = first quarter, USD = United States dollar.
Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.
Source: Haver Analytics.

During the first half of 2016, many major Asian currencies strengthened against the US dollar, albeit moderately **(Figure B2.2)**. A stronger currency hampers the growth of the region's export-oriented economies. It also contributes to deflationary pressures, which are evident in some countries and pose a risk to financial stability.

Figure B2.2: Appreciation (Depreciation) of US Dollar against Major Asian Currencies



CNY = Chinese yuan, HKD = Hong Kong dollar, IDR = Indonesian rupiah, INR = Indian rupee, KRW = Korean won, MYR = Malaysian ringgit, PHP = Philippine peso, SGD = Singapore dollar, THB = Thai baht, TWD = NT dollar, USD = United States dollar, VND = Vietnamese dong.
Note: A positive (negative) value indicates the appreciation (depreciation) of the US dollar against the local currency.
Source: *Wind Info*.

2) Low-interest rate contagion and low-yield bond markets

Negative and low interest rates in advanced economies give emerging Asian economies greater scope to cut their own interest rates against the backdrop of slowing growth and muted inflation. During the first half of 2016, several emerging Asian economies sequentially reduced their interest rates to spur growth and fend off deflationary pressures **(Table B2)**. As long as global monetary easing continues, including NIRPs in advanced economies, there is the chance of further interest rate cuts in emerging Asian markets. However, when a number of central banks pursue monetary expansion at the same time, its effectiveness can be compromised. For example, currency depreciation will not provide a competitive advantage when other currencies are also weakening vis-à-vis the US dollar.

Table B2: Interest Rate Cuts in Emerging Asian Markets

17 March 2016	Indonesia	Reference rate lowered from 7.00% to 6.75%
5 April 2016	India	Repo rate lowered from 6.75% to 6.50%
9 June 2016	Republic of Korea	7-day repo rate reduced from 1.50% to 1.25%
16 June 2016	Indonesia	Reference rate and 7-day repo rate lowered from 6.75% and 5.50% to 6.50% and 5.25%
30 June 2016	Taipei,China	Discount rate cut from 1.50% to 1.375%

Source: *AsianBondsOnline*.

Financial markets also feel the effects of NIRPs, which have a significant impact on global asset allocation, especially with regard to debt vehicles. In global bond markets, yield curves generally shift downward and become flat, or even inverted as in the cases of Japan and the United Kingdom. Low long-term interest rates signal market expectations of a gradual economic recovery.

Negative yields on sovereign and corporate bonds increase the difficulty of maintaining long-term asset management products such as insurance products, corporate annuities, and pension funds. Such asset management products are typically mandated to invest a significant portion of their portfolios in debt instruments and hold them to maturity in order to receive stable coupon and principal payments. But negative interest rates make this trading strategy less profitable. As a result, some of their investments are reallocated to high-yield debt instruments in emerging markets, driving down yields in these markets. Indeed, major emerging Asian bond markets witnessed a drop in bond yields in the first half of 2016 **(Figure B2.3)**.

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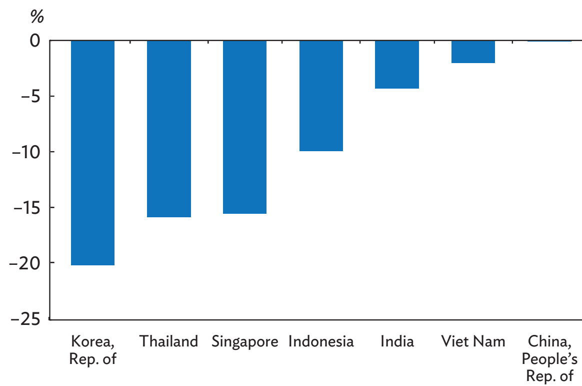
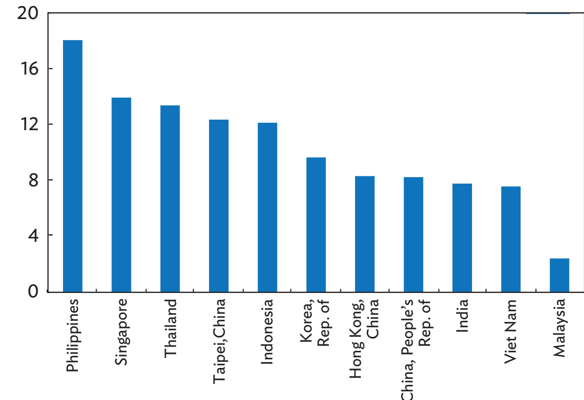
Box 2: Negative Interest Rates—What Are the Implications for Emerging Asia? *continued*

Figure B2.3: Changes in Month-End Yields-to-Maturity on 10-Year Sovereign Bonds in Major Emerging Asian Markets, January–June 2016



Source: *Wind Info*.

Figure B2.4: Price Changes in Month-End MSCI Equity Market Indices in Major Emerging Asian Markets, January–June 2016



MSCI = Morgan Stanley Capital International.
Source: *Wind Info*.

3) Booming financial markets and potential assets bubbles

In the climate of low global interest rates, asset prices will increase given lower discount rates on future cash flows. In fact, global real estate markets and commodity markets rose during the first half of the 2016. Higher valuations and the prospect of capital gains also attract more investment into stock markets. Major emerging Asian stock markets have surged during the first half of 2016 **(Figure B2.4)**.