Introduction: Bond Yields Rise Amid Uncertainties on United States Economic Policy

Bond yields trended upward in advanced economies and in emerging East Asia between 31 October and 18 November (**Table A**; **Figures A1, A2**).[4] Global bond yields have sharply risen since the conclusion of the United States (US) presidential election in reaction to uncertainty over the direction of the US economy policy under a new administration. While markets expect that the incoming administration will boost economic growth, the impact on markets outside of the US is less certain.

A solid consensus among market participants and observers that the US Federal Reserve is likely to raise rates in December has also placed upward pressure on yields. While the Federal Reserve held off raising the federal funds rate at its most recent meeting in November, subsequent testimony by Federal Reserve Chair Janet Yellen indicated that a hike could occur soon if the data suggest it. The Federal Reserve noted in its last meeting that while US employment levels were stable in October, job gains had been solid. Inflation has also picked up in the latter part of the year, although it is still below the Federal Reserve's long-term target.

While the Federal Reserve noted stable monthly job gains, the August and September increases in nonfarm payrolls of 176,000 and 191,000, respectively, were below June's 271,000 and July's 252,000. At the same time, the average monthly increase in nonfarm payrolls

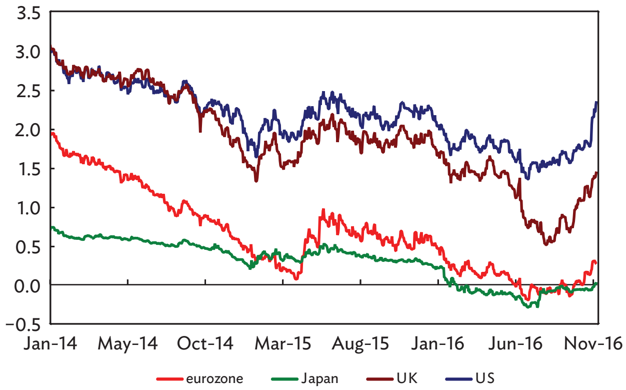
Table A: Changes in Global Financial Conditions

	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	23	53	–	2.6	–
United Kingdom	(6)	21	1	(2.6)	0.8
Japan	7	9	(0.3)	2.5	(5.8)
Germany	(5)	11	4	(0.004)	(3.6)
Emerging East Asia					
China, People's Rep. of	0	16	12	3.0	(1.6)
Hong Kong, China	21	31	–	(2.6)	(0.02)
Indonesia	72	59	27	(4.7)	(2.9)
Korea, Rep. of	22	46	10	(1.7)	(3.4)
Malaysia	92	80	48	(2.9)	(5.3)
Philippines	28	61	17	(4.6)	(2.7)
Singapore	26	47	–	0.9	(2.5)
Thailand	0.1	47	(2)	(1.5)	(1.5)
Viet Nam	63	2	23	(0.4)	(0.8)
Select European Markets					
Greece	(125)	(116)	(23)	3.5	(3.6)
Ireland	2	35	1	6.5	(3.6)
Italy	10	43	22	(5.0)	(3.6)
Portugal	20	48	8	(5.0)	(3.6)
Spain	7	40	12	(5.7)	(3.6)

( ) = negative, – = not available, bps = basis points, FX = foreign exchange.
Notes:
1. Data reflect changes between 31 October and 18 November 2016.
2. A positive (negative) value for the FX rate indicates the appreciation (depreciation) of the local currency against the United States dollar.
Sources: *AsianBondsOnline*, Bloomberg LP, and Institute of International Finance.

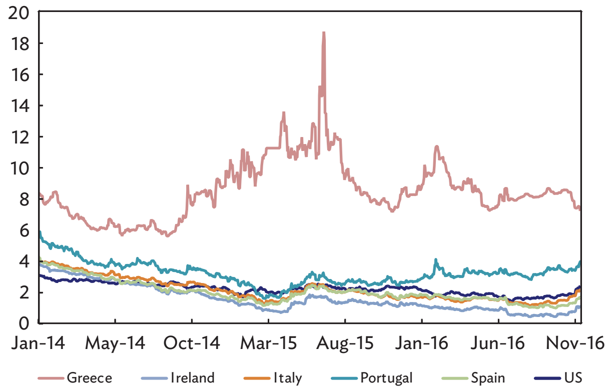
[4] Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Figure A1: 10-Year Government Bond Yields
(% per annum)



UK = United Kingdom, US = United States.
Note: Data as of 18 November 2016.
Source: Bloomberg LP.

Figure A2: 10-Year Government Bond Yields
(% per annum)



US = United States.
Note: Data as of 18 November 2016.
Source: Bloomberg LP.

was 206,000 in the third quarter (Q3) of 2016, up from 146,000 per month in the second quarter. Increase in nonfarm payrolls in October came in at 161,000.

Other economic data suggest that a December rate hike is likely. Gross domestic product growth in the US accelerated to an annualized rate of 2.9% in Q3 2016 from 1.4% in the previous quarter, buoyed by strong export growth.

The monetary policies of other advanced economies paint a mixed picture. While markets have anticipated US policy tightening, the European Central Bank (ECB) is maintaining several of its policies. For example, the ECB kept policy rates unchanged and left intact its asset purchase program during its September and October meetings. The asset purchases are scheduled to end on March 2017 even though market participants prefer an extension of this program. Therefore, the ECB leaving its current plan unchanged was viewed as policy tightening. Inflation in the European Union also crept upward, with October inflation rising to 0.5% year-on-year (y-o-y) from 0.4% y-o-y in September.

In contrast to the ECB and Federal Reserve, the Bank of Japan intensified its monetary easing in September by adopting a New Framework for Strengthening Monetary Easing, which involves yield curve control measures that target both short-term and long-term interest rates. The Bank of England eased monetary policy in August by cutting the bank rate by 25 basis points (bps) to 0.25% and adding an asset purchase program. In its September meeting, the Bank of England maintained its existing monetary policy.

Nearly all markets in emerging East Asia saw an uptick in 2-year and 10-year local currency (LCY) government bond yields between 31 October and 18 November, driven by expectations of a Federal Reserve rate hike and market volatility following the conclusion of the US presidential election. Most of the region's central banks have adopted a wait-and-see position given the looming rate hike in the US and other economic uncertainty. A notable exception was Bank Indonesia, which eased monetary policy by reducing its 7-day reverse repurchase rate by 25 bps in both September and October for a cumulative reduction of 50 bps since it began using this rate as a benchmark policy rate in August. In its November meeting, Bank Indonesia held steady its policy rate in response to global market volatility.

The overall regional trend has been toward higher yields as LCY government bond yields rose in nearly all markets between 31 October and 18 November. The only exception was in the People's Republic of China (PRC) where the yield for the 2-year bond was unchanged. The largest increases occurred in Malaysia, where the yield for 2-year bonds rose 92 bps and the yield for 10-year bonds climbed 80 bps. Indonesian bond yields also gained 72 bps and 59 bps for the 2-year and 10-year maturities, respectively. Indonesia and Malaysia were most affected as their bond markets are vulnerable to foreign capital outflows due to large shares of foreign investor holdings that exceeded 35% in both markets at the end of September.

Currencies in all emerging East Asian markets fell against the US dollar between 31 October and 18 November. The decline in the region's currencies was mostly due to the rise in US yields and declines in the region's equity markets. Outflows are expected from the region's bond markets as the rise in US yields makes US assets more attractive. The steepest currency declines were in Malaysia (–5.3%) and the Republic of Korea (–3.4%).

Equity markets throughout the region stumbled in the wake of the US elections, except in the PRC and Singapore. The declines came despite gains in US equity prices as market participants factored in the possibility that protectionist campaign rhetoric could be reflected in the new administration's policies. Equity markets in the PRC gained 3.0% between 31 October and 18 November as investors awaited the declaration of the Shenzhen–Hong Kong stock exchange link. Recently announced property curbs are also expected to shift funds into the PRC's stock market. In Singapore, the stock market was up 0.9% during the review period as it has traditionally been deemed a safe haven relative to its regional peers.

Credit default swap (CDS) spreads in emerging East Asia picked up in all regional markets except in Thailand during the review period **(Figure B)**. CDS spreads in Malaysia climbed the most at 48 bps, followed by Indonesia where spreads gained 27 bps. CDS spreads in peripheral European markets were broadly stable **(Figure C)**. The Volatility Index spiked in the period leading up to the US presidential election due to political uncertainty before declining after the conclusion of the elections **(Figure D)**. EMBI spreads have also risen amid uncertainty over the direction of US economic policy **(Figure E)**.

Indonesia, Malaysia, and Thailand experienced sustained increases in the share of foreign holdings in their respective LCY government bond markets in Q3 2016 despite a looming Federal Reserve rate hike **(Figure F)**. In Indonesia and Malaysia, foreign investors remained the largest investor group. The low global interest rate environment has attracted foreign fund flows into Indonesia's high-yield bond market. In Malaysia, foreign holdings were buoyed by relatively stable macroeconomic fundamentals, which rendered Malaysian bonds a relatively sound investment in the regional context.

In Thailand, the share of foreign holdings inched up amid expectations of a stable economy in Q3 2016. However, capital outflows from these bond markets were observed in November.

The prospective interest rate hike by the Federal Reserve is a major source of uncertainty for emerging East Asian bond markets (Box). Concerns over a Federal Reserve rate hike, which is widely expected before the end of the year, hover over nervous global financial markets. Although markets have largely priced in a December rate hike by the Federal Reserve and are expecting a steeper rise in policy rates than they did prior to the US election, the actual path will be data driven. A faster-than-expected pickup in inflation could still surprise markets.

The unexpected outcome of the US presidential election has created uncertainty in global financial markets. Although markets seemed to have settled down relatively quickly after a sharp initial reaction to the outcome of the US presidential election, volatility has returned in subsequent days. To a large extent, the volatility reflects widespread uncertainty about the future direction of US economic policy. Another question is whether the protectionist rhetoric voiced during the election campaign will be put into practice. While markets are anxiously waiting, it will take some time for the new administration to put together its economic policy team. Therefore, in the short term, a cloud of uncertainty will hang over global financial markets until details of US economic policy become clearer.

A "hard Brexit" would have serious repercussions. The initial bout of instability and volatility in global and regional financial markets wrought by the UK referendum on leaving the European Union, which has come to be known as "Brexit," passed quickly. However, the recent weakness of the pound sterling underlines the vulnerability of the UK's economy to Brexit **(Figure G)**. A "hard Brexit," a disorderly and disruptive departure of the UK from the European Union (e.g., if the UK were to lose access to the European common market), would have serious repercussions. Furthermore, Brexit's impact may include the erosion of London's status as a global financial center and Europe's main financial hub. Even though emerging East Asia's trade exposure to the UK is relatively limited, the region has substantial financial linkages and borrows heavily from UK-based banks **(Table B)**. Therefore, the adverse medium-term impacts of Brexit might be felt mainly through financial channels if,

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

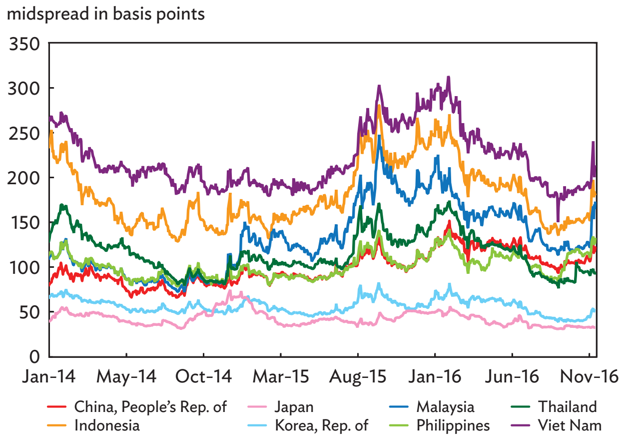


Figure C: Credit Default Swap Spreads for Select European Markets[a, b] (senior 5-year)

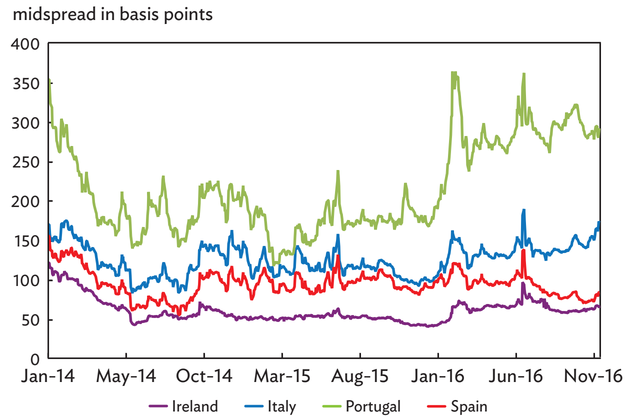


Figure D: United States Equity Volatility and Emerging Market Sovereign Bond Spreads[b] (% per annum)

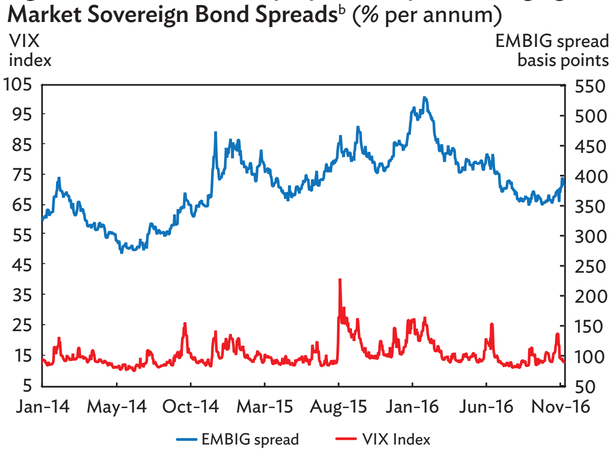


Figure E: JPMorgan Emerging Markets Bond Index Sovereign Stripped Spreads[a, b]

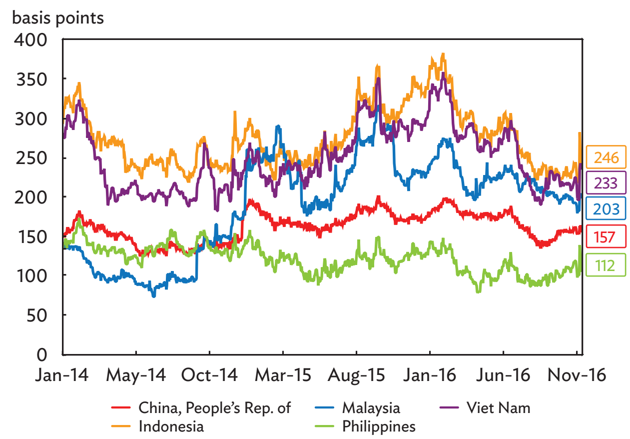


Figure F: Foreign Holdings of Local Currency Government Bonds in Select Asian Economies[c] (% of total)

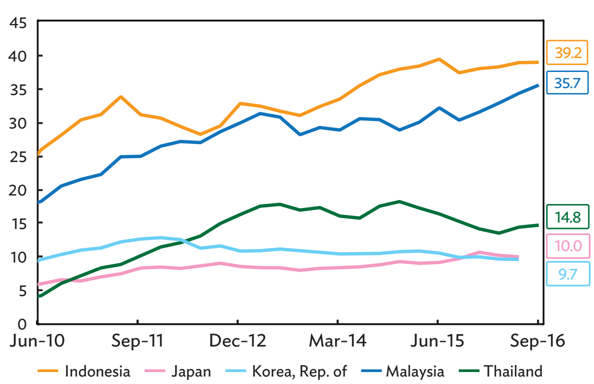
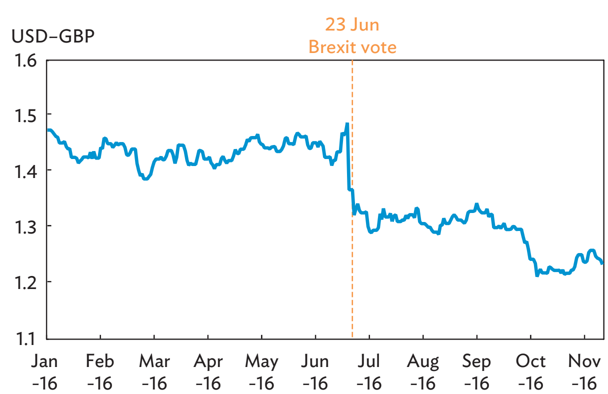


Figure G: Pound Sterling vs. the United States Dollar



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

Notes:

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

[b] Data as of 18 November 2016.

[c] Data as of end-September 2016 except for Japan and the Republic of Korea (end-June 2016).

Sources: *AsianBondsOnline* and Bloomberg LP.

Box: The Potential Impact of a United States Interest Rate Hike on Emerging Asia

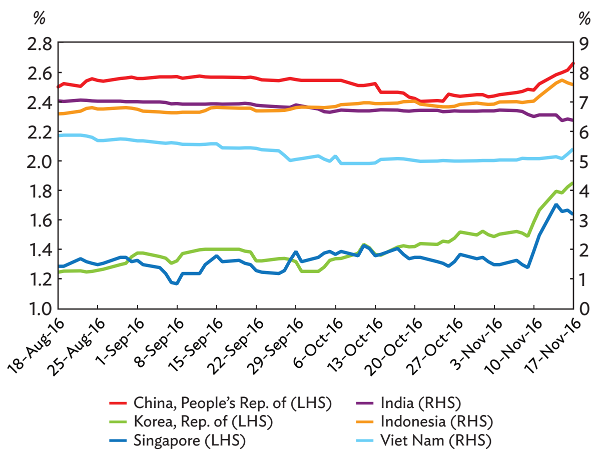
The United States (US) Federal Reserve has remained cautious since it initiated a new round of interest rate hikes at the December 2015 Federal Open Market Committee meeting. The steady recovery of the US economy, as evidenced most recently by the slight improvement in inflation and an uptick in average hourly earnings,[a] points to an about 90% probability of a federal funds rate hike of 25 basis points (bps) in December 2016.[b]

Despite looming uncertainties, including the economic policies of the new US administration, the strengthening US dollar has continued to exert downward pressure on major emerging Asian currencies through the middle of November **(Table B.1)**.[c] Since the middle of October, bond yields have risen in many emerging Asian markets **(Figure B.1a)**, while major stock indexes and sovereign bond yields have experienced increased volatility since November, partly in anticipation of rising US interest rates and the subsequent impact this could have on the global liquidity environment **(Figures B.1b, B.1c)**. Even so, the impact of a US rate hike on emerging Asia may be limited in the short term.

Divergence in global monetary policies may abate liquidity tension

Divergent business cycles are giving rise to divergent monetary policies in major industrial economies. The steady pickup in the US economy has been accompanied by a fragile recovery in the eurozone and Japan, and growth moderation in emerging markets.[d] It is unlikely that industrial economies with accommodative monetary policies will suddenly shift their stance.[e] Thus, the tightening of liquidity triggered by a US rate hike would be offset to some extent by the current accommodative global policy stance.

Figure B.1a: Yields on 5-Year Government Bonds in Major Emerging Asian Markets



LHS = left-hand side, RHS = right-hand side.
Source: *Wind Info.*

Table B.1: Exchange Rate Changes of Major Emerging Asian Currencies

Price change (%)	USD index	USD–CNY	USD–HKD	USD–INR	USD–IDR	USD–KRW	USD–MYR	USD–PHP	USD–SGD	USD–TWD	USD–THB	USD–VND
Last week	2.204	1.189	0.014	2.233	2.035	2.199	3.222	1.120	1.323	0.883	1.190	0.263
Last 2 weeks	3.910	1.779	0.031	1.824	2.567	3.185	4.813	1.589	2.370	1.271	1.573	0.377
Last 3 weeks	2.065	1.411	0.030	1.533	2.748	2.923	4.925	1.898	1.716	0.730	1.147	0.313
Last 4 weeks	2.674	2.052	(0.010)	1.752	2.969	4.293	5.026	2.150	2.068	1.072	1.596	0.436
Last two months	5.329	2.854	(0.001)	1.551	1.679	5.169	6.221	3.128	3.834	1.329	1.806	0.647
Last three months	7.189	3.650	0.049	1.672	2.066	6.205	9.864	6.137	5.748	1.458	2.630	1.116

( ) = negative, CNY = Chinese renminbi, HKD = Hong Kong dollar, INR = Indian rupee, IDR = Indonesian rupiah, KRW = Korean won, MYR = Malaysian ringgit, PHP = Philippine peso, SGD = Singapore dollar, TWD = NT dollar, THB = Thai baht, USD = United States dollar, VND = Vietnamese dong.
Note: Data as of 18 November 2016.
Source: *Wind Info*.

[a] For more details, please refer to http://www.bls.gov/news.release/pdf/cpi.pdf and http://www.bls.gov/news.release/empsit.nr0.htm

[b] The probability was 90.6% on 18 November 2016. For more details, please refer to http://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html

[c] Emerging Asia comprises 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.

[d] The Asian Development Bank's forecast for aggregated growth in the US, eurozone, and Japan in 2016 was adjusted downward from 1.8% to 1.4% in the September edition of the *Asian Development Outlook*. Economic growth in Asia is projected to slow down from 5.9% in 2015 to 5.7% in 2016.

[e] The Bank of Japan launched a new form of monetary easing in September. At its policy meeting on 20 October the European Central Bank decided to maintain the current interest rate level and sustain its quantitative easing program until March 2017. In emerging Asia, the Reserve Bank of India trimmed the policy rate by 25 bps on 4 October and Bank Indonesia cut the 7-day reverse repurchase rate by 25 bps each on 22 September and 20 October.

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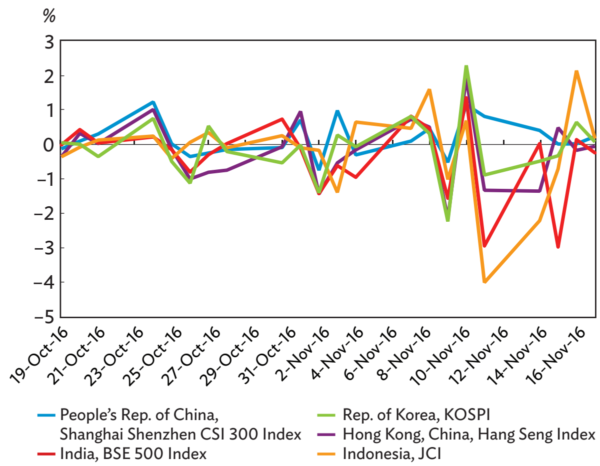
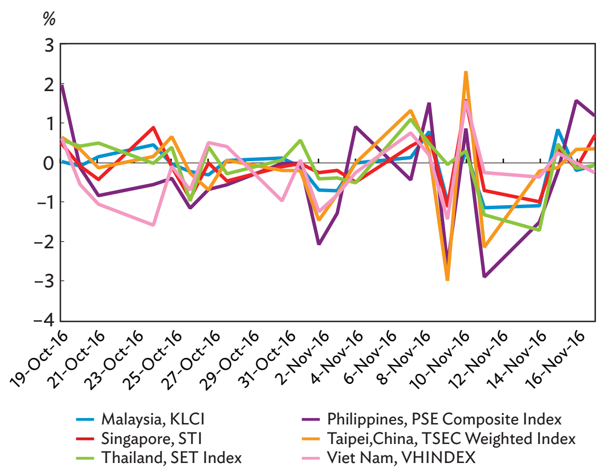
Box: The Potential Impact of a United States Interest Rate Hike on Emerging Asia *continued*

Figure B.1b: Daily Price Changes in Major Emerging Asian Stock Indexes

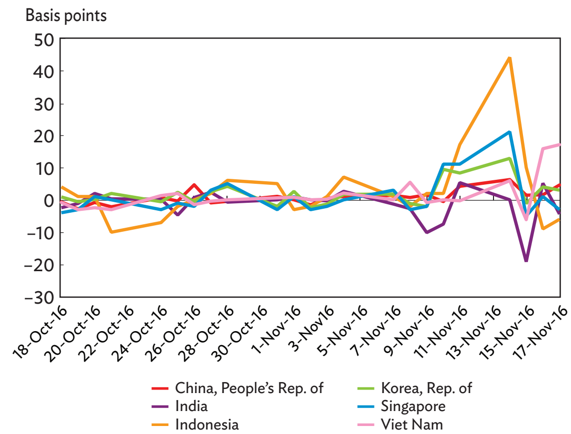


BSE = Bombay Stock Exchange, CSI = China Securities Index, JCI = Jakarta Composite Index, KOSPI = Korea Composite Stock Price Index.
Source: *Wind Info*.



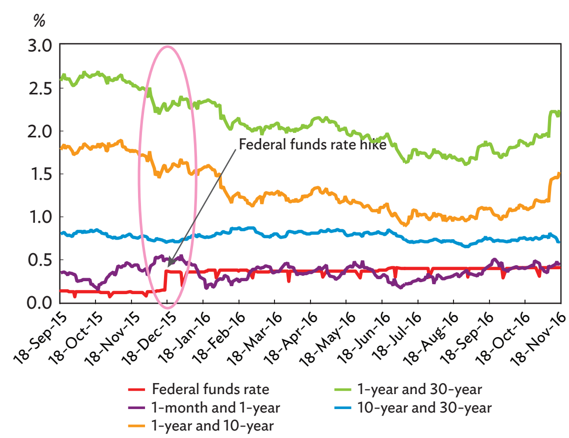
KLCI = Kuala Lumpur Composite Index, PSE = Philippine Stock Exchange, SET = Stock Exchange of Thailand, STI = Straits Times Index, TSEC = Taiwan Stock Exchange Corporation, VHINDEX = Vietnam Hanoi Stock Exchange Equity Index.
Source: *Wind Info*.

Figure B.1c: Daily Changes in 5-Year Government Bond Yields



Source: *Wind Info*.

Figure B.2: Yield Spreads of United States Treasuries



Source: *Wind Info*.

In addition, a hike in the federal funds rate by itself may only have a limited impact on long-term capital flows. Increases in short-term interest rates alone do not necessarily drive up medium- and long-term interest rates, which are more relevant to asset prices in capital markets and are more sensitive to improvements in economic outlook. Since the last US rate hike in December 2015, the term spreads between US Treasuries have narrowed, flattening the yield curve **(Figure B.2)**. These spreads have only started to increase since September 2016 when data releases implied a steady recovery for the US economy.

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Box: The Potential Impact of a United States Interest Rate Hike on Emerging Asia *continued*

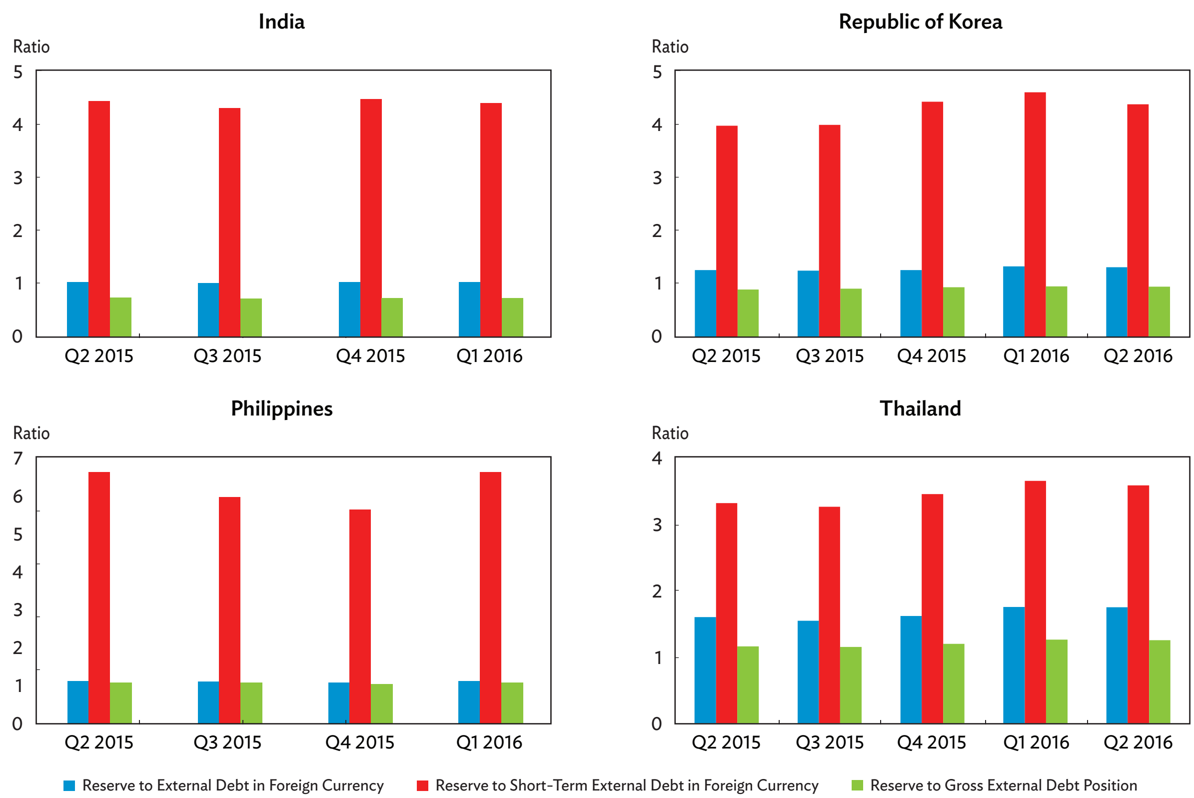
Emerging Asia could withstand the impacts of a US rate hike in the short term

Many emerging Asian economies have a high level of foreign reserves, which enhances their resilience to external shocks. Sufficient foreign reserves serve as a cushion against currency depreciation and net capital outflows by stabilizing the exchange rate and thus mitigating capital account shocks, such as exacerbated external debt burdens and the sudden withdrawal of capital. In many emerging Asian economies, the ratio of foreign reserves to short-term external debt comfortably exceeds the Greenspan–Guidotti adequacy threshold of 100%. The reserves-to-gross domestic product ratio and reserves-to-M2 ratio in many emerging Asian economies are also higher than the optimal level of 0.15 and the proposed range of 5%–10%, respectively, as suggested by the International Monetary Fund **(Figures B.3a, B.3b, B.3c)**.[f]

Leverage and financial stability: midterm outlook for Emerging Asia

A potential midterm risk in emerging Asia is the combination of growing leverage and moderating growth. The global low interest rate environment has encouraged borrowing. During the past 5 years, emerging Asia experienced a steady expansion of leverage, unlike the major industrial economies where leverage levels have remained stable **(Figures B.4a, B.4b)**. The private sector credit-to-gross domestic product gap, a key determinant of the countercyclical capital buffer and an early indicator of a banking crisis as identified by the Basel Committee, is much higher in emerging Asia than in major industrial economies, suggesting an accumulation of leverage.[g] Slowing growth, which might adversely affect corporate balance sheets, and high leverage levels could challenge the stability of regional banking systems, especially if US interest rates were to rise further in the future.

Figure B.3a: Foreign Reserves-to-External Debt Ratio in Selected Emerging Asian Markets



Q1 = first quarter, Q2 = second quarter, Q3 = third quarter, Q4 = fourth quarter.
Source: ADB calculations based on data from *Wind Info* and the World Bank's Quarterly External Debt Statistics.

[f] International Monetary Fund. 2011. Assessing Reserve Adequacy. IMF Policy Papers. Available at https://www.imf.org/external/np/pp/eng/2011/021411b.pdf
[g] For more details, please refer to http://www.bis.org/publ/bcbs187.pdf and http://www.bis.org/bcbs/publ/d339.pdf

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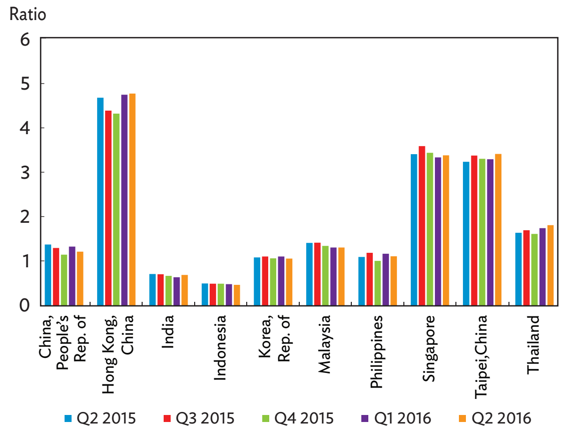
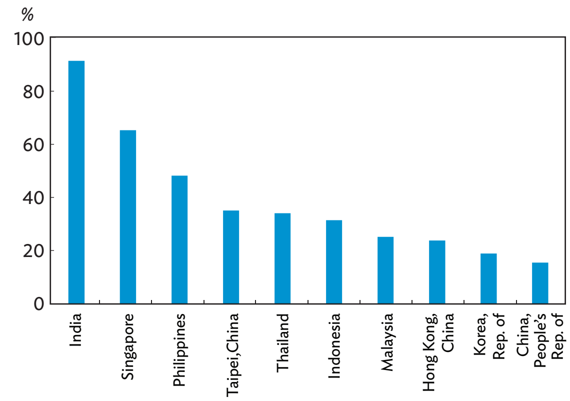
Box: The Potential Impact of a United States Interest Rate Hike on Emerging Asia *continued*

Figure B.3b: Foreign Reserve-to-Gross Domestic Product Ratio in Selected Emerging Asian Markets



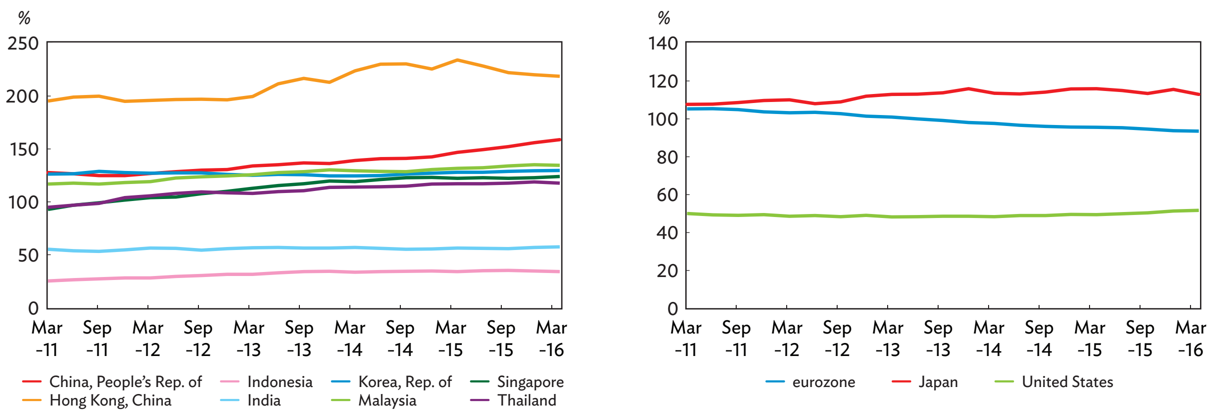
Source: Author's calculation based on data from Wind Info and World Bank's Quarterly External Debt Statistics.

Figure B.3c: Foreign Reserves-to-M2 Ratio in Selected Emerging Asian Markets (monthly averages between September 2015 and August 2016)



Source: Author's calculation based on data from Wind Info and World Bank's Quarterly External Debt Statistics.

Figure B.4a: Bank Private Nonfinancial Credit-to-Gross Domestic Product Ratios



Source: Bank for International Settlements.

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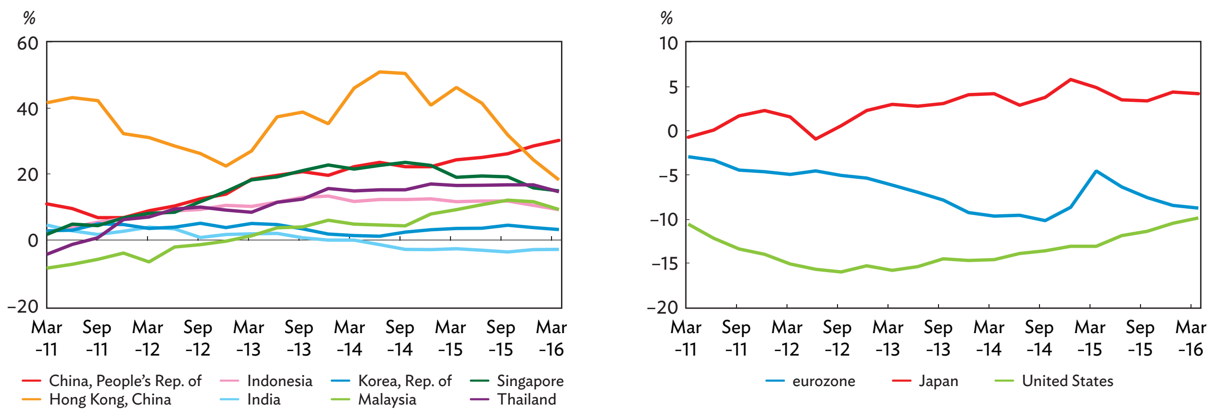
Box: The Potential Impact of a United States Interest Rate Hike on Emerging Asia *continued*

Figure B.4b: Private Nonfinancial Sector Credit (All Sectors)-to-Gross Domestic Product Gaps



Source: Bank for International Settlements.

Table B: Emerging Asia's Borrowings from Banks in the United Kingdom

Economy	Amount Outstanding (USD million)
China, People's Rep. of	140,909
Hong Kong, China	390,017
Singapore	101,288
Korea, Rep. of	59,348
India	58,657
Taipei,China	43,521
Malaysia	38,090
Indonesia	16,949
Thailand	12,156
Philippines	6,426
Total	**867,361**

Notes:
1. As of end-June 2016.
2. Data refer to total claims of banks with headquarters in the United Kingdom that reside in Asian economies.

Source: Bank for International Settlements. Table B4, Immediate counterparty basis, Consolidated banking statistics.

for example, UK banks were forced to withdraw from the region in order to strengthen balance sheets weakened by a deep domestic recession precipitated by Brexit.

In addition to the risks mentioned earlier, other medium-term risks lurk on the horizon. In light of fragile global financial market conditions, which have been exacerbated by the specter of higher US interest rates, **a generalized global risk aversion toward emerging markets cannot be ruled out**. While emerging East Asian markets possess generally solid fundamentals, emerging markets in other parts of the world with weaker fundamentals may buckle under the stress of higher US rates. Under current conditions, a crisis in a major emerging market could encourage global investors to pull back from all emerging markets, including fundamentally sound markets in emerging East Asia. **A worrying global trend, especially evident in advanced economies, is the rise of protectionism and economic nationalism.** One highly visible symptom of this trend is the emergence of anti-free trade, anti-immigrant sentiments among political forces in Europe and the US. The growing anti-globalization mood in many countries is likely to be detrimental to international trade and capital flows.