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Connecting Markets East & West

Global Markets Research

Asia ex-Japan's economic outlook:
Hope for the best, prepare for the worst

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See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

Any authors named on this report are research analysts unless otherwise indicated.

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Asia 2017 Outlook – Sailing into the storm

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ANCHOR REPORT

Asia 2017 outlook: Sailing into the storm

8 December 2016

- Trying to stay on an even keel will be more challenging than in 2016 as Asia's structurally slowing economies, many in a late-stage credit cycle, are vulnerable to more inward-looking US policies and geopolitical risks. We see a major decoupling of Asia monetary policy from the Fed.
- FX strategy: Short CNH against USD and CFETS as well as long USD/SGD should see the highest total returns into Q1 2017. We remain long USD/HKD and have a basket of long INR, PHP and THB versus CNH, KRW and TWD. From around Q2 2017, South/Southeast Asia may outperform Northeast Asia.
- Rates strategy: We prefer steepeners in KRW, THB, TWD and INR. We also like long bonds in India, HKD payers and AUD front-end receivers.
- Equity strategy: we are cautious and expect the MSCI Asia ex-Japan to end 2017 slightly below current levels; our top overweight is India.

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EM's struggle with 'America First' policies

27 January 2017

- We explain the challenges but illustrate in our risk scenario the peril of lumping all of EM together. Mexico's economy is the most vulnerable, but once starting positions and policy responses are considered, Turkey is the hardest hit. Asia is likely to be more vulnerable than most people think, but is cushioned by large fiscal stimulus. The only EM that could benefit is Russia.
- Prepare for major divergence in EM monetary policy this year. In our risk scenario we have five EM rate hikers, led by Turkey (400bp) and Mexico (175bp), and seven EM rate cutters, led by Brazil (-325bp), Russia (-150bp) and Colombia (-100bp).
- FX strategy: We expect broad USD strength amid higher volatility. We recommend long USD/CNH and short CNH versus an abridged CFETS basket, long CAD/MXN and short TRY/ZAR.
- Rates strategy: We prefer steepeners in Korea, Thailand, India and Singapore. We also like outright payers in HK IRS and Mexico; receive SGD IRS versus pay USD IRS.
- Check out the hot-off-the-press results of our investor survey.

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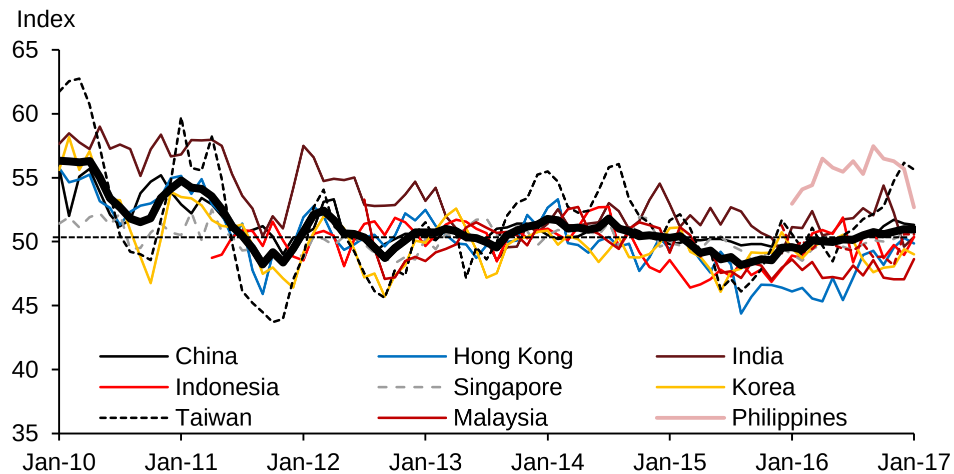
Asia's cyclical recovery, but big structural headwinds

Export-led recovery, but we doubt it will be sustained

- Asian exports are recovering, led by volumes, and businesses are more optimistic. However, driving the export recovery are shipments to China (China's exports are still weak) and we expect Chinese demand to cool. Asian business optimism could flag if hopes for large US fiscal stimulus are superseded by US trade protectionism.

- There are numerous long-term structural headwinds to Asian growth:
  - Ongoing growth slowdown in China with downside risks
  - High and /or rising debt-servicing costs across much of Asia
  - Cheap credit has misallocated resources (e.g., property market speculation) and kept zombie companies afloat
  - Benefits from cross-country supply chains largely exhausted
  - Demographic headwinds in at least half of Asia
  - Lack of supply-side reforms, slowing productivity growth

Asia's manufacturing PMIs – averaging 50.9



Asia's export pulse

Asia's export pulse	% m-o-m (s.a.)			% 3m-o-3m (s.a.) annualised			% y-o-y		
	Nov	Dec	Jan	Nov	Dec	Jan	Nov	Dec	Jan
China	3.7	1.8	n.a.	-5.9	7.0	n.a.	-1.5	-6.2	n.a.
Hong Kong	7.3	2.8	n.a.	15.0	22.0	n.a.	8.1	10.1	n.a.
India	-5.0	4.3	n.a.	0.0	12.9	n.a.	2.3	5.7	n.a.
Indonesia	10.2	-3.1	n.a.	39.1	59.3	n.a.	21.4	15.6	n.a.
Malaysia	11.8	n.a.	n.a.	18.8	n.a.	n.a.	7.8	n.a.	n.a.
Philippines	1.0	n.a.	n.a.	36.8	n.a.	n.a.	-7.5	n.a.	n.a.
Singapore	13.0	1.0	n.a.	8.3	25.9	n.a.	11.5	9.4	n.a.
Korea	7.0	0.8	-1.2	-4.7	12.6	23.5	2.3	6.4	11.2
Taiwan	0.4	3.0	n.a.	17.0	24.8	n.a.	12.1	14.0	n.a.
Thailand	12.5	-2.8	n.a.	9.4	4.5	n.a.	10.2	6.2	n.a.
Asia ex-Japan	**2.8**	**n.a.**	**n.a.**	**1.8**	**n.a.**	**n.a.**	**2.3**	**n.a.**	**n.a.**

Asia's industrial production pulse

Asia's industrial production pulse	% m-o-m (s.a.)			% 3m-o-3m (s.a.) annualised			% y-o-y		
	Oct	Nov	Dec	Oct	Nov	Dec	Oct	Nov	Dec
China	0.5	0.7	0.3	5.7	5.4	5.9	6.1	6.2	6.0
India	-1.3	1.3	n.a.	-1.3	-0.6	n.a.	-1.8	5.7	n.a.
Indonesia	-2.2	-0.2	n.a.	-11.2	-20.0	n.a.	-2.2	-2.3	n.a.
Malaysia	0.8	0.8	n.a.	1.0	0.7	n.a.	4.2	6.2	n.a.
Singapore	0.0	6.1	6.4	0.1	21.3	42.6	1.3	11.8	21.3
Korea	-1.2	3.6	-0.5	-6.6	-1.2	2.1	-1.2	5.3	4.3
Taiwan	1.3	2.2	-0.9	7.5	8.1	10.1	3.4	9.1	6.2
Thailand	0.1	2.0	-0.6	9.4	7.0	8.6	0.0	3.9	0.5
Asia ex-Japan	**-0.2**	**1.1**	**n.a.**	**2.1**	**1.9**	**n.a.**	**2.9**	**5.5**	**n.a.**

Notes: Top right: For China we use the official PMI, for Singapore we use the headline PMI published by Singapore's Institute of Purchasing & Materials Management. For other countries we use Markit headline PMIs. Asia ex-Japan is a simple average of the PMIs of the nine displayed countries. Bottom left: For Singapore we use NODX.

Source: Top right: Markit, CEIC and Nomura. Bottom: CEIC and Nomura

Asia ex-Japan's real GDP: the consensus has consistently been too optimistic

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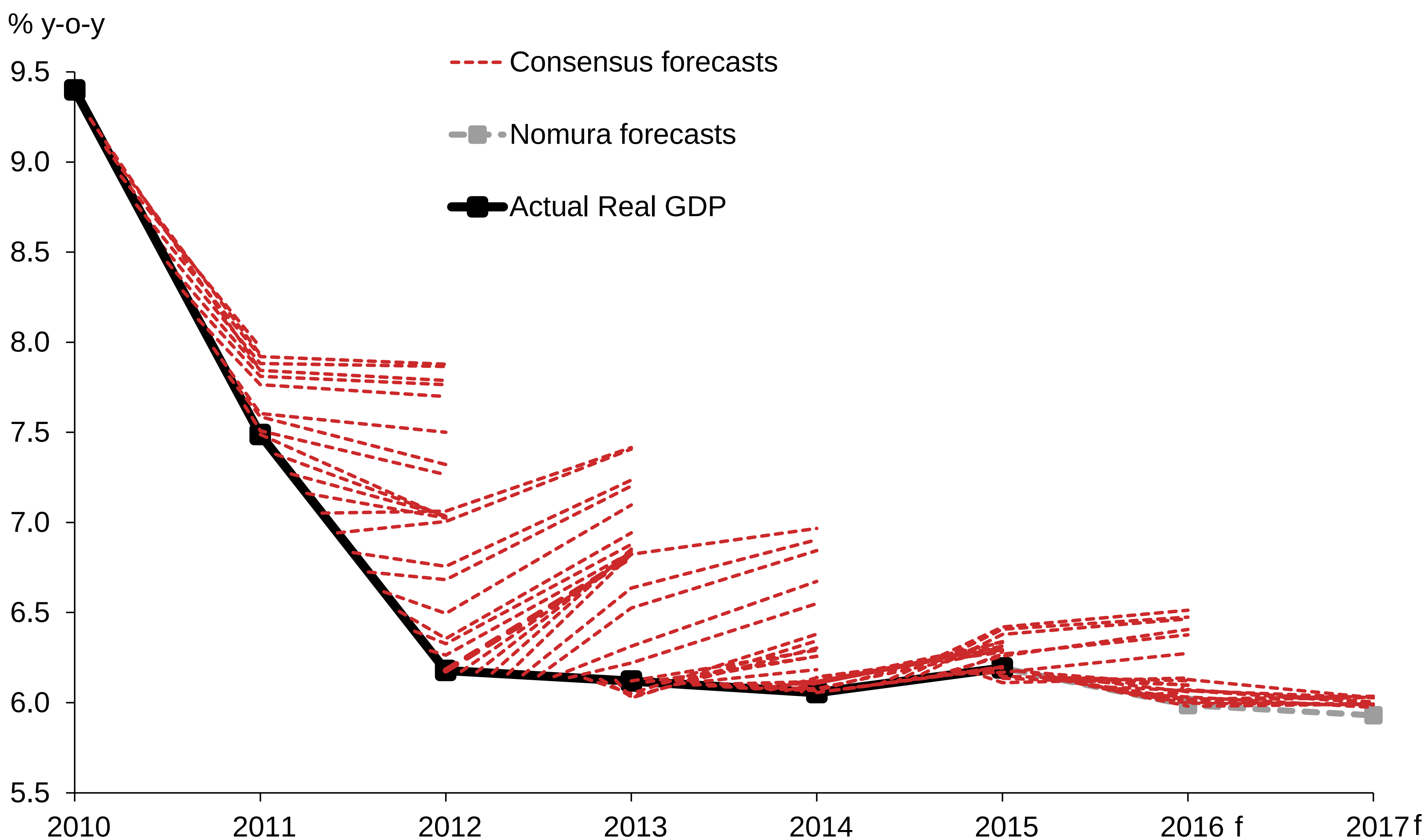

Note: We take the one-year- and two-year-ahead consensus forecasts for China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. For India we use fiscal year (FY16 = Apr 2016-Mar 2017). Asia ex-Japan growth is a GDP (in PPP terms)- weighted average of these forecasts. Source: Consensus Economics Inc., CEIC and Nomura Global Economics estimates.

Asia's demographic deadweight is hitting now: Growth in working-age (15-64) populations

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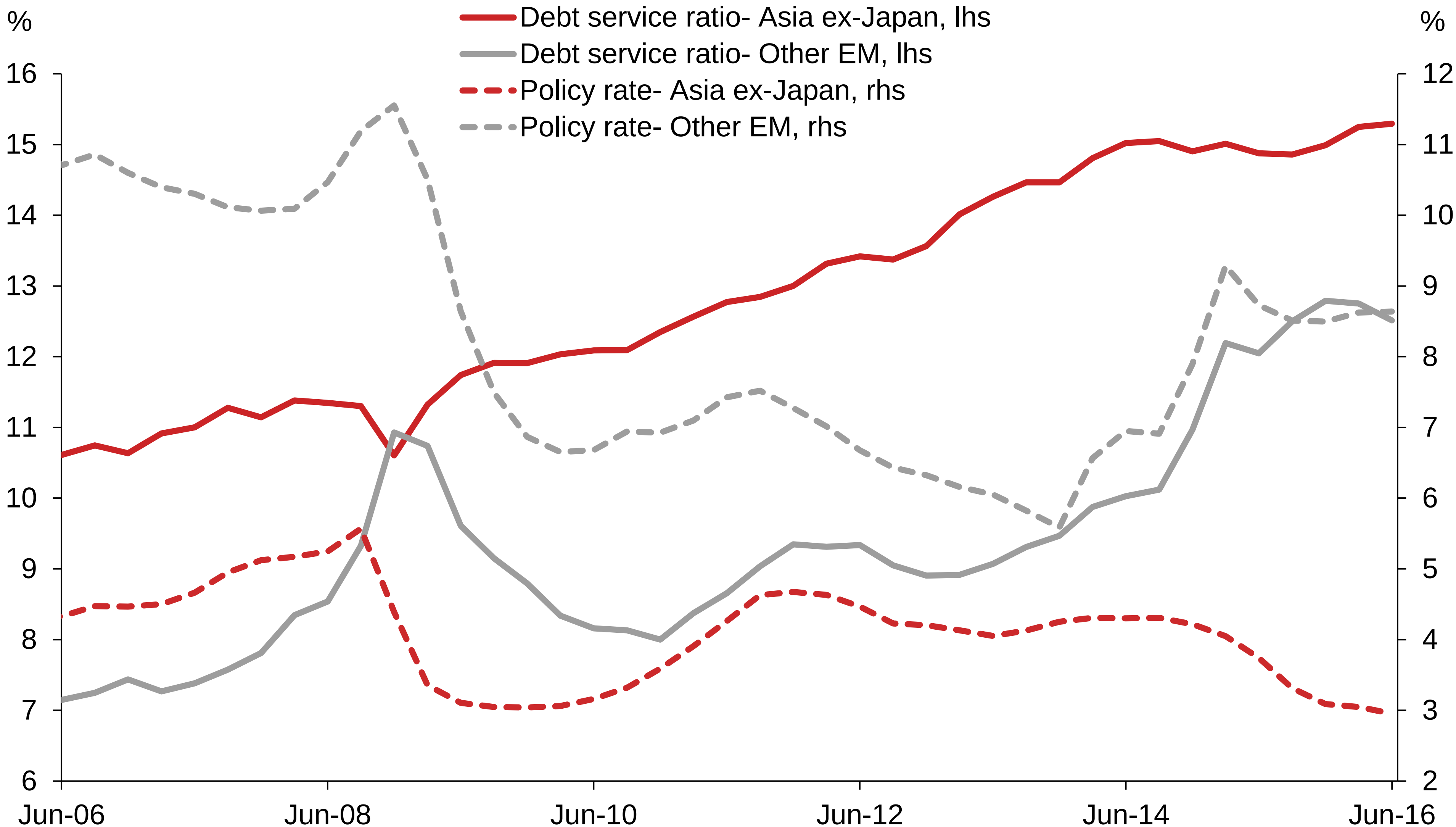
	Japan	China	Hong Kong	Taiwan	Korea	Thai	Sing	Indo	India	Malay	Phil
2008-12 average	**-0.7**	0.6	0.9	0.9	0.8	0.5	2.5	1.6	1.9	2.4	2.3
2013	**-1.5**	0.2	0.1	0.2	0.4	0.4	1.7	1.5	1.8	1.9	2.0
2014	**-1.5**	**-0.1**	0.0	0.1	0.3	0.3	1.6	1.5	1.7	1.9	1.9
2015	**-0.7**	**-0.1**	**-0.2**	0.1	0.3	0.2	1.3	1.6	1.7	1.9	1.9
2016	**-1.0**	**-0.2**	**-0.2**	**-0.4**	0.2	0.1	1.2	1.3	1.6	1.5	1.8
2017	**-0.9**	**-0.3**	**-0.2**	**-0.4**	**-0.1**	**0.0**	1.0	1.4	1.5	1.6	1.7
2018	**-0.9**	**-0.3**	**-0.3**	**-0.6**	**-0.2**	**-0.1**	0.9	1.4	1.4	1.5	1.7
2019	**-0.8**	**-0.3**	**-0.5**	**-0.7**	**-0.4**	**-0.2**	0.5	1.3	1.4	1.4	1.7
2020	**-0.8**	**-0.3**	**-0.5**	**-0.9**	**-0.6**	**-0.4**	0.4	1.1	1.4	1.2	1.6

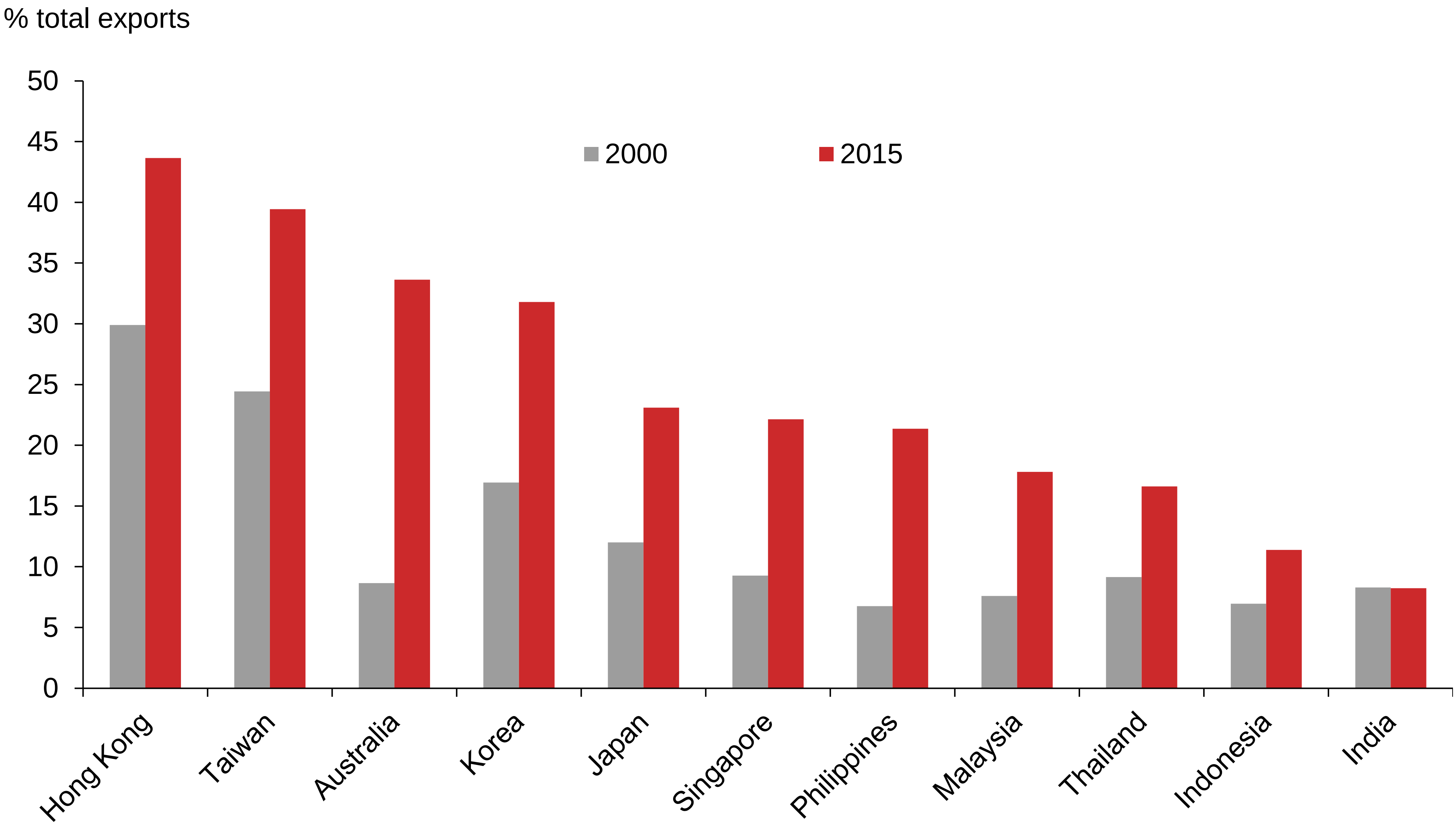
Note: United Nations Population Division, China National Bureau of Statistics, Hong Kong Census and Statistical Department, Taiwan Ministry of the Interior, Taiwan National Development Council, Statistics Korea and Nomura.

Asia is feeling the weight of its debt burden: Private debt-service ratios and policy rates: Asia vs other EM



Note: Debt service ratios of household and non-financial corporate sectors combined) and policy rates are nominal GDP (based on purchasing power parity) - weighted averages. Asia ex-Japan includes China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, Korea, Taiwan and Thailand. Other EM includes Brazil, Chile, Colombia, Mexico, Hungary, Poland, Russia, South Africa and Turkey. Source: BIS, IMF, CEIC and Nomura.

Asia is very exposed to a slowing China: Exports to China (and HK), 2000 vs 2015



Note: For Hong Kong we refer to domestic exports to China as a share of total domestic exports; for Singapore we refer to non-oil domestic exports. Source: CEIC and Nomura.

China's incredible five-ball juggling act

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China is borrowing growth from the future

1 **New normal** China needs to adjust to the new normal of a persistent slowing of potential growth, as the working population shrinks and the low-hanging fruit of easy productivity gains is largely over.

2 **Debt and property overhangs are eroding growth.** China has reached the point where the rubber hits the road: The problems of property and debt overhangs and keeping zombie companies afloat have become so large that they are bearing down on growth via falling returns on capital and rising debt-servicing costs. Monetary and fiscal stimulus to achieve unrealistic growth targets is not the answer; they are losing efficacy and risk fueling more bubbles and misallocating more resources.

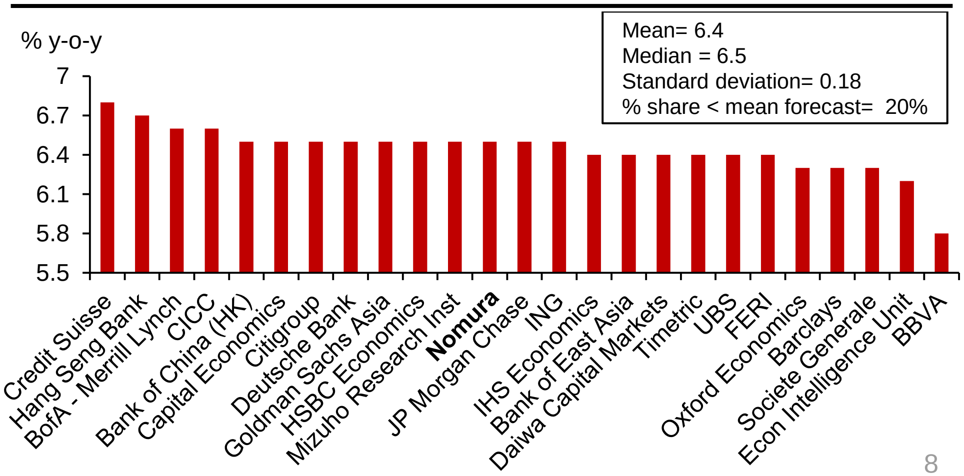
3 **Supply-side reforms are needed but entail short-term pain.** The solution is restructuring SOEs, deleveraging and banks properly pricing credit risk but they will result in short-term pain for long-term gain. Unsurprisingly, the hardest supply-side reforms have been left to last.

4 **Rebalancing to consumption will likely slow growth.** Calibrating a smooth internal rebalancing from investment to consumption is challenging when growth is slowing, investment makes up more than two-fifths of GDP and growth in consumption - by China's own standards and in comparison to other countries - is already extraordinarily strong. International experience shows that for countries that have achieved such large rebalancings, it is rare for consumption growth to remain strong.

5 **Freeing market forces entails short-term volatility and uncertainty.** For new engines of growth, the economy must be opened up to market forces. But as China is discovering, this is hard at the best of times, let alone when economic fundamentals are weak. History in EM shows that financial and capital account liberalisation often precedes credit crunches, banking crises and capital flight.

China economists provide their modal, or 'most likely', forecast and ~6.5% GDP growth in 2017-18 is a reasonable modal forecast, but push them harder and most would acknowledge that the risks around their forecasts are skewed to the downside with fatter tail risks of a China crash than five years ago. Unlike economists, the job of investors is to think in terms of risk-adjusted returns, weighing up the probabilities of all scenarios, and so it is reasonable for investors to have noticeably weaker growth forecasts than economists.

China 2017 GDP growth forecasts made in January 2017



Sources: Consensus Economics and Nomura.

Nomura's China forecasts

% y-o-y growth unless otherwise stated	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	2016	2017	2018
Real GDP	**6.7**	**6.7**	**6.7**	**6.8**	6.6	6.6	6.5	6.4	**6.7**	6.5	6.2
Contributions to GDP (pp):											
Final consumption									4.6	4.4	4.3
Gross capital formation									2.4	2.1	2.0
Net exports (goods & services)									-0.3	0.0	-0.1
CPI	**2.1**	**2.1**	**1.7**	**2.2**	2.4	2.8	2.8	2.6	**2.0**	2.6	1.9
PPI	**-4.8**	**-2.9**	**-0.8**	**3.3**	6.7	5.6	4.5	1.0	**-1.3**	4.4	-1.0
Retail sales (nominal)	**10.3**	**10.2**	**10.5**	**10.6**	9.6	9.6	9.8	9.9	**10.4**	9.7	9.5
Fixed-asset investment (nominal, ytd)	**10.7**	**9.0**	**8.2**	**8.1**	7.9	7.9	7.8	7.7	**8.1**	7.7	7.2
Industrial production (real)	**5.8**	**6.1**	**6.1**	**6.1**	5.9	5.9	5.8	5.6	**6.0**	5.8	5.3
Exports (value)	**-12.9**	**-6.4**	**-7.0**	**-5.2**	4.8	3.4	5.6	2.5	**-7.7**	4.0	2.3
Imports (value)	**-13.9**	**-7.0**	**-4.6**	**2.1**	4.1	1.2	1.8	2.1	**-5.6**	2.2	2.5
Trade surplus (US$bn)	**110.1**	**129.6**	**139.5**	**139.6**	117.8	142.6	163.1	138.7	**518.9**	562.1	639.4
Current account (% of GDP)	**1.6**	**2.2**	**2.5**	2.2	1.6	2.0	2.2	2.4	2.2	2.1	1.9
Fiscal balance (% of GDP)									-4.0	-4.0	-4.0
New RMB loans (CNY trn)	**4.6**	**2.9**	**2.6**	**2.5**	3.5	3.1	2.7	2.2	**12.6**	11.5	10.5
Aggregate financing (CNY trn)	**6.7**	**3.1**	**3.7**	**4.3**	4.6	4.1	3.5	2.9	**17.7**	15.0	14.0
Money supply M2 growth	**13.4**	**11.8**	**11.5**	**11.3**	10.7	10.1	10.3	10.6	**11.3**	10.6	10.3
1-yr bank lending rate (%)	**4.35**	**4.35**	**4.35**	**4.35**	4.35	4.35	4.35	4.35	**4.35**	4.35	4.10
1-yr bank deposit rate (%)	**1.50**	**1.50**	**1.50**	**1.50**	1.50	1.50	1.50	1.50	**1.50**	1.50	1.25
Reserve requirement ratio (%)	**17.0**	**17.0**	**17.0**	**17.0**	17.0	17.0	16.5	16.5	**17.0**	16.5	15.5
Exchange rate (CNY/USD)	**6.45**	**6.65**	**6.67**	**6.95**	7.13	7.24	7.27	7.29	**6.95**	7.29	7.39

Notes: Numbers in bold are actual values; others forecast. Interest rate and currency forecasts are end of period; other measures are period average. The CNY/USD forecast is for the spot rate. All forecasts are modal forecasts (i.e., the single most likely outcome). Table reflects data available as of 23 January 2017. Source: CEIC, WIND and Nomura.

Nomura's China growth pulse – stronger for now

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	Unit	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Direction
December													
Industrial output	% y-o-y	5.4	6.8	6.0	6.0	6.2	6.0	6.3	6.1	6.1	6.2	6.0	Down
Fixed asset investment	% y-o-y ytd	10.2	10.7	10.5	9.6	9.0	8.1	8.1	8.2	8.3	8.3	8.1	Down
Floor space sold (real)	% y-o-y ytd	28.2	33.1	36.5	33.2	27.9	26.4	25.5	26.9	26.8	24.3	22.5	Down
Exports	% y-o-y	-27.9	7.9	-5.5	-6.9	-6.6	-6.5	-3.8	-10.5	-7.9	-1.6	-6.1	Down
Imports	% y-o-y	-13.7	-8.0	-11.0	-0.5	-8.9	-12.7	1.6	-1.9	-1.9	4.7	3.1	Down
Ordinary imports, excl. key commodities	% y-o-y	-9.4	-2.3	-4.4	4.8	-2.7	-3.6	7.8	-0.6	3.6	13.0	1.6	Down
Passenger car sales	% y-o-y	-1.4	9.9	6.6	11.4	18.0	26.5	26.6	29.5	21.0	17.9	9.4	Down
Official manufacturing PMI	%	49.0	50.2	50.1	50.1	50.0	49.9	50.4	50.4	51.2	51.7	51.4	Down
Coal utilised by 6 major power plants	% y-o-y	-19.7	-1.9	-7.2	-9.7	2.1	7.1	8.7	9.2	13.2	8.7	8.3	Down
Railway freight (real)	% y-o-y	-10.7	-6.4	-4.6	-7.0	-6.4	-5.8	1.0	7.0	11.2	13.9	9.8	Down
Retail sales	% y-o-y	10.2	10.5	10.1	10.0	10.6	10.2	10.6	10.7	10.0	10.8	10.9	Up
Land sales (real)	% y-o-y ytd	-19.4	-11.7	-6.5	-5.9	-3.0	-7.8	-8.5	-6.1	-5.5	-4.3	-3.4	Up
Property investment	% y-o-y ytd	3.0	6.2	7.2	7.0	6.1	5.3	5.4	5.8	6.6	6.5	6.9	Up
MNI business sentiment index	%	49.9	49.9	50.5	50.0	54.5	55.5	54.1	55.8	52.2	53.1	55.9	Up
Steel prices	% y-o-y	-20.0	-8.2	12.1	4.9	1.1	17.4	14.2	19.5	27.7	49.3	76.5	Up
Caixin manufacturing PMI	%	48.0	49.7	49.4	49.2	48.6	50.6	50.0	50.1	51.2	50.9	51.9	Up
November													
Electricity consumption (real)	% y-o-y	4.0	5.6	1.9	2.1	2.6	8.2	8.3	6.9	7.0	7.0	n.a.	Flat
# of indicators data available		**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**16**	
% of indicators with improvement		**0.2**	**0.9**	**0.4**	**0.3**	**0.5**	**0.5**	**0.6**	**0.6**	**0.7**	**0.6**	**0.4**	

Note: Table reflects data available as of 23 January 2017.
Source: CEIC, Wind and Nomura.

“Unstable, unbalanced, uncoordinated and unsustainable” – Former Premier Wen Jiabao, 2007

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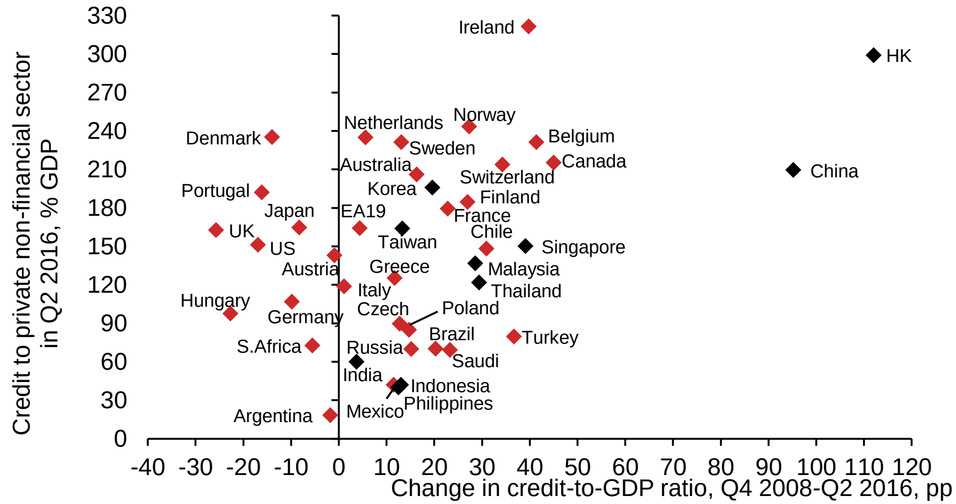
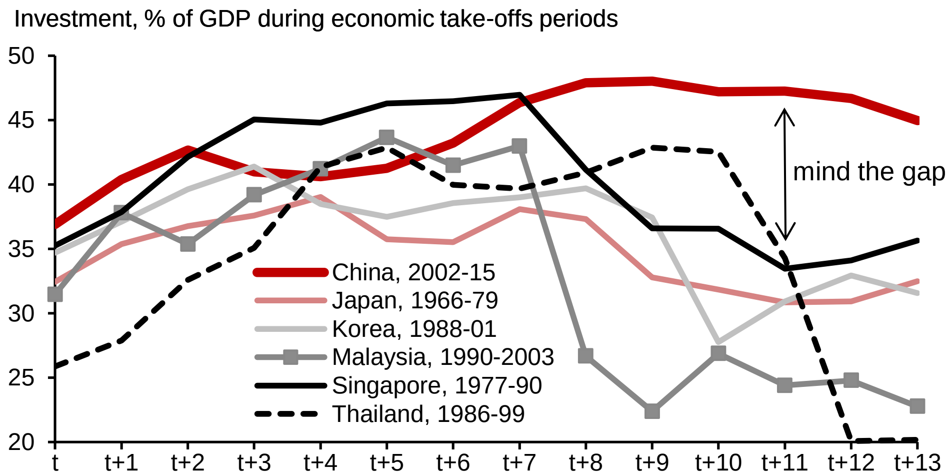
China is an outlier in terms of the speed and level of its debt build-up



Property investment overhang is massive…

… the duration of China’s high investment rate is unprecedented…



… leaving China with very challenging GDP arithmetic (nominal data)

Assumption: I/GDP falls 5pp over 2017-18, from 44.2% to 39.2%			
	2016	2017	2018
I/GDP	44.2	41.7	39.2
Stable consumption growth, GDP growth cools			
C growth	9.5	9.5	9.5
I growth	5.5	-1.6	-1.8
GDP growth	7.4	4.3	4.5
Stable GDP growth, consumption growth rises			
C growth	9.5	12.9	12.6
I growth	5.5	1.4	1.0
GDP growth	7.4	7.4	7.4

Notes: Top left: Asian countries are in black. All countries’ private credit data are from BIS except Taiwan (CEIC) and the Philippines (IMF). Bottom left: t=numbers of years from the starting year (e.g., China’s starting year is 2002). Data are in nominal terms and investment is the sum of public and private gross capital formation. Sources: Top left: BIS and Nomura. Top right: CEIC and Nomura. Bottom left: China Statistical Yearbook, CEIC and Nomura. Bottom right: Nomura.

Examples of how structural imbalances are now so large that they are bearing down on growth

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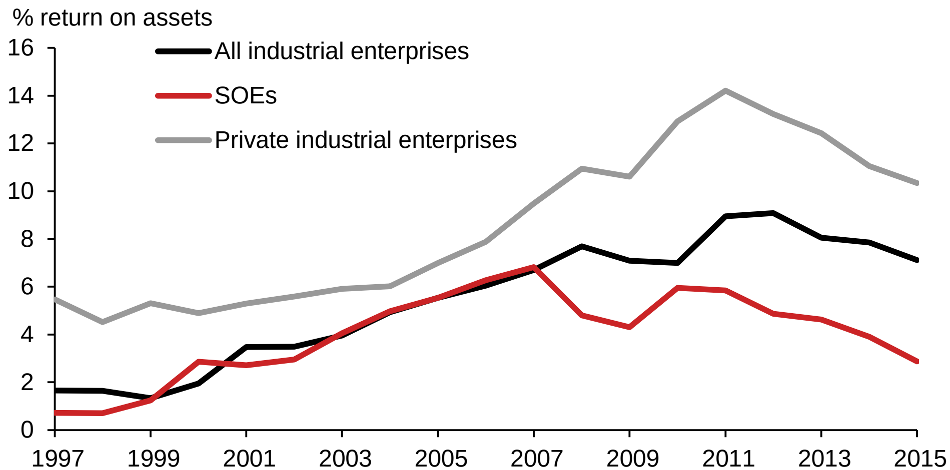
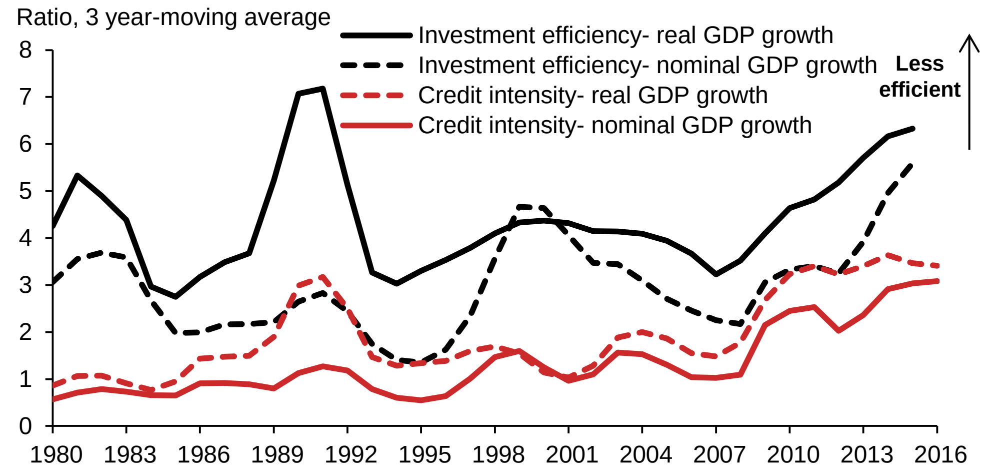
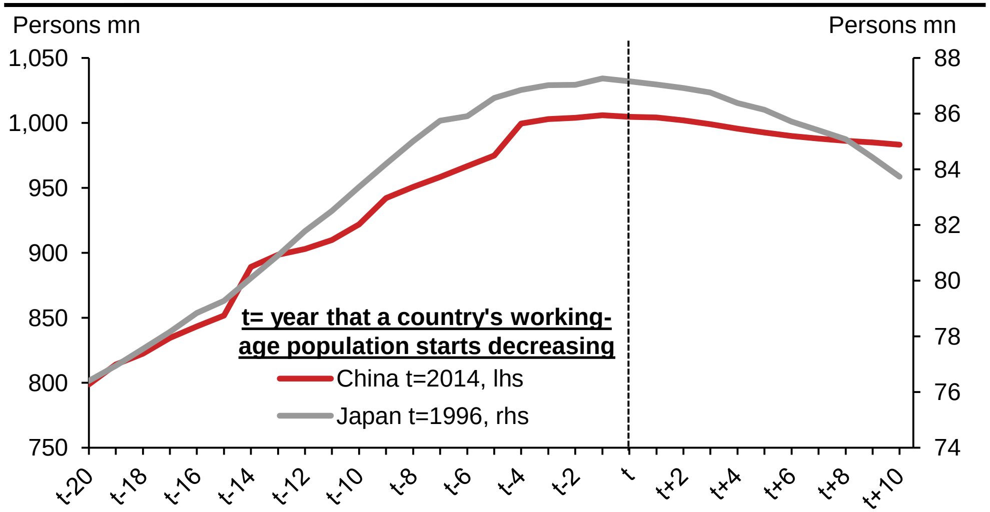
With overcapacity the return on assets is falling, especially at SOEs



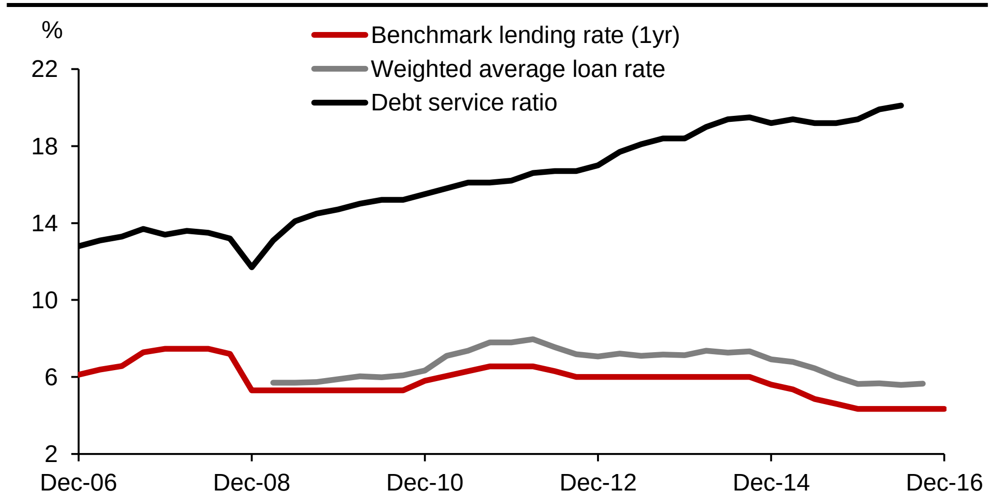
Measures show declining investment and financing efficiency



The labour force has started to fall, subtracting from growth



Despite lower interest rates, the debt-servicing ratio has risen



Notes: Top left: Return on assets is measured as total profits as a percentage of total assets. Top right: Investment efficiency is measured by the incremental capital output ratio of {(GCF/GDP)/real or nominal GDP growth} and credit intensity is measured by {(annual increase in total social financing/GDP)/real or nominal GDP growth}. Bottom left: We use Unitec Nations population division's projections of population growth for China after 2015.

Sources: Top left, Top right: CEIC and Nomura. Bottom left: United Nations Population division World Population Prospects 2015 revision, National Bureau of Statistics (China) and Nomura. Bottom right: BIS, CEIC and Nomura.

Major rebalancing from investment to consumption – past episodes

NOMURA

Historically, a major rebalancing away from investment rarely involves an increase in consumption growth

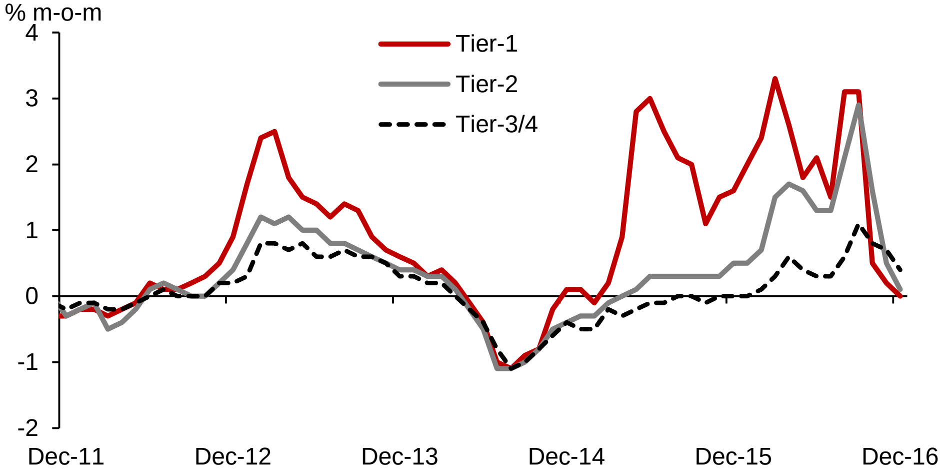
%	Gross Capital Formation				Household Consumption			
	Share of GDP*		Growth**		Share of GDP*		Growth**	
	Before	After	Before	After	Before	After	Before	After
Angola (1995-2004)[(a)]	33.2	12.2	10.9	-14.5	31.5	42.4	5.1	19.5
Brunei (1979-88) [(a)]	7.0	11.7	16.7	-0.5	6.3	20.6	16.2	11.7
Congo (1981-90) [(a)]	40.6	19.8	8.5	-16.1	40.2	56.3	12.7	-2.3
Gabon (1984-93) [(a)]	35.4	21.2	-3.6	-7.8	33.2	38.3	-2.4	3.1
Japan (1970-79) [(b)]	37	31.6	6.9	2.7	49.8	53.7	4.9	5.0
Philippines (1979-87) [(b)]	33.8	19.9	5.4	-10.4	62.1	69.4	3.5	2.3
Qatar (1979-88) [(a)]	20.6	16.7	-7.6	-2.4	19.6	28.0	-5.8	-1.5
Saudi Arabia (1976-85) [(a)]	29.1	26.9	12.8	-2.4	26.4	40.9	16.1	10.9
South Korea (1993-2002) [(b)]	36.6	28.7	6.8	1.7	52.6	54.3	7.2	3.9
Thailand (1993-2002) [(b)]	40.1	21.8	2.2	-9.1	51.9	54.1	5.5	2.4
Uruguay (1966-75) [(a)]	48.6	19.7	19	2.2	46.4	71.5	3.6	1.3
Venezuela (1978-86) [(a)]	46.1	25.3	-9.1	-4.9	40.1	46.6	4.3	2.6
Memo item: China (2009-15) [(c)]	**46.9**	**?**	**8.5**	**?**	**50.0**	**?**	**9.0**	**?**

*Notes * Five-year cumulative share. ** Five-year real annualised average. (a) Period refers to five years on either side of a year ('before' and 'after') in which the five-year cumulative investment share of GDP fell below the five-year cumulative consumption share. In a sample of 167 economies between 1950 and 2011, there are 10 cases of rebalancing on this definition. (b) Period refers to five years on either side of a year ('before' and 'after') that saw a substantial reduction in the investment share (c) For China we use final consumption expenditure from the national accounts in place of household consumption and data are over 2009-2015.*
Source: "A Rebalancing Chinese Economy: Challenges and International Implications", Guonan Ma, Ivan Roberts and Gerard Kelly, 2016, CEIC and Nomura.

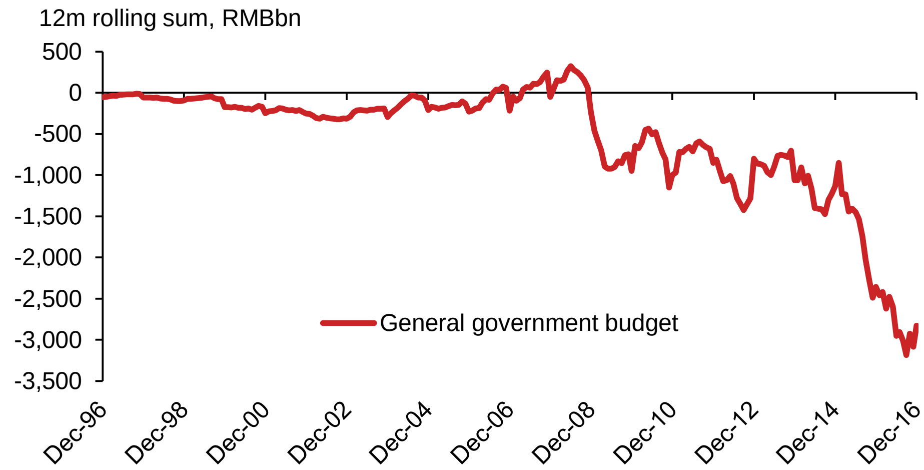
Demand-side stimulus is not the long-term solution

NOMURA

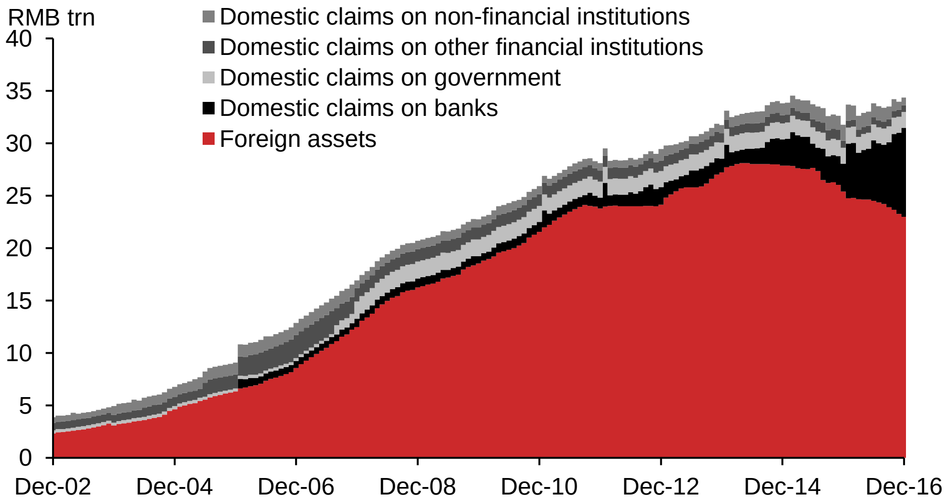
Demand stimulus feeds real estate speculation



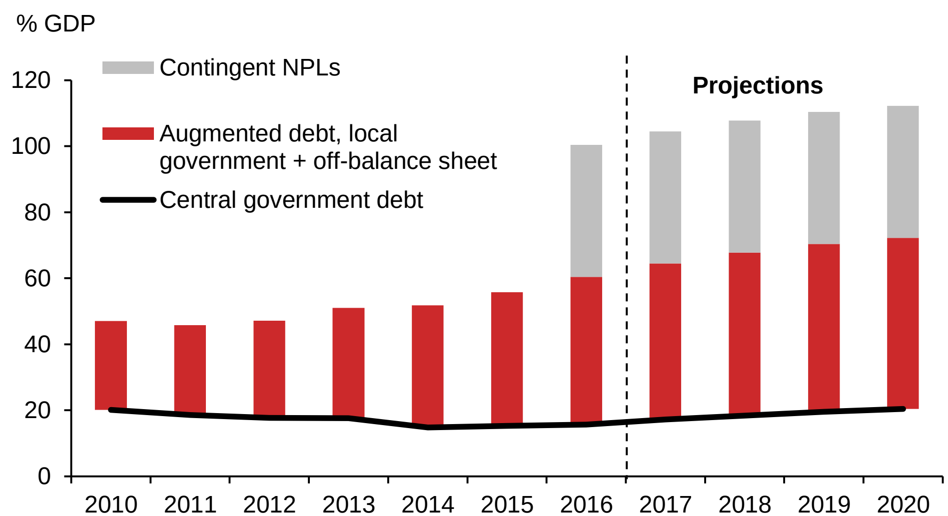
The overall fiscal stance has quickly turned more expansionary…



… fueled by PBoC backdoor financing…



… China's low central government debt is somewhat misleading

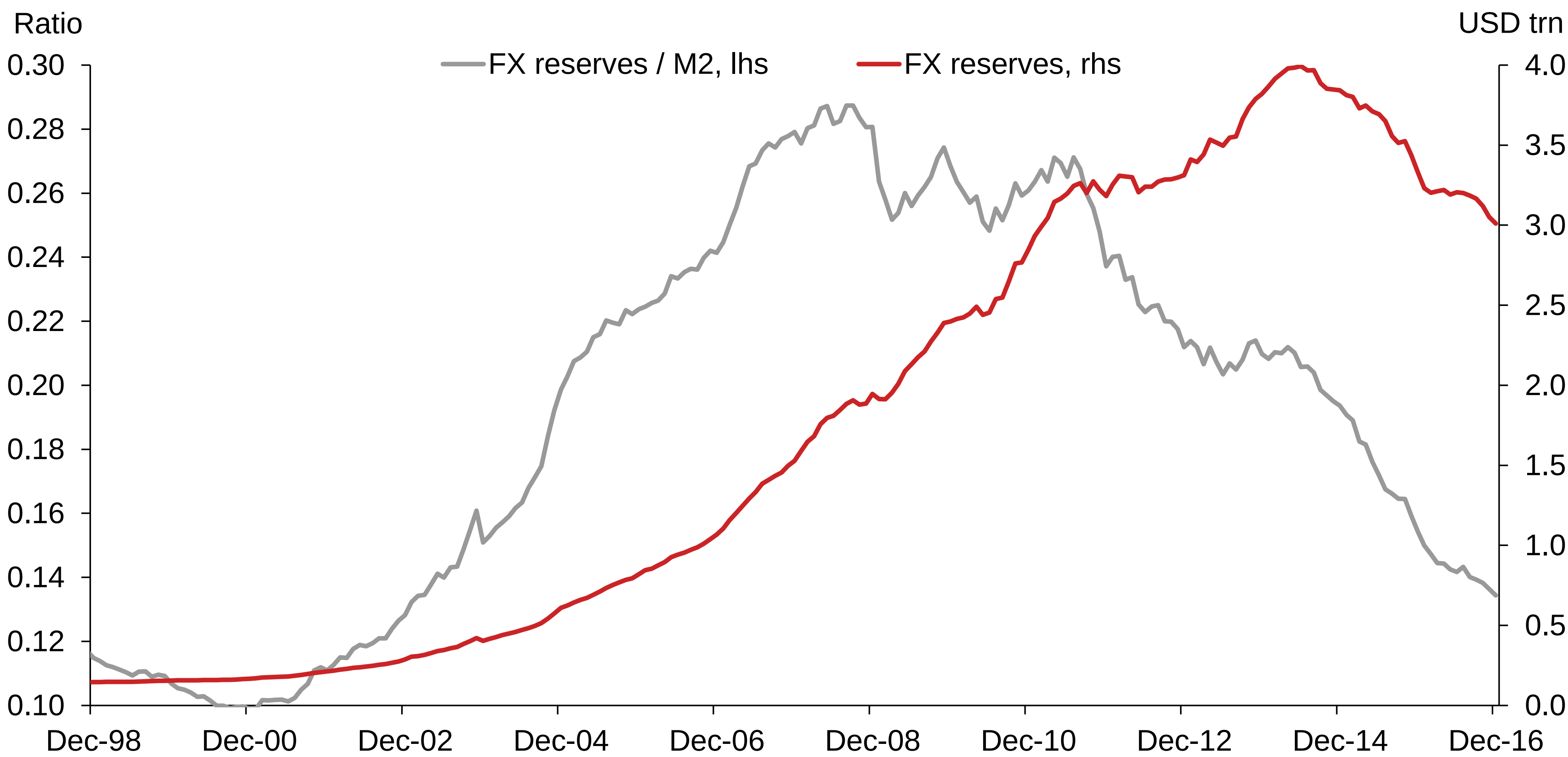


Notes: Bottom right- IMF treats net proceeds from land sales as a financing item, akin to privatization, so the net land sales revenue (land sales revenue minus land acquisition cost) is excluded from fiscal revenue.
Sources: Top left- Wind, Sofun and Nomura. Top right, bottom left: CEIC and Nomura. Bottom right: IMF 2016 Article IV Consultation Report for People's Republic of China, CEIC and Nomura estimates.

China's capital outflow risk: FX reserves to M2 is a key gauge to monitor

NOMURA

Carmen Reinhart:"Very seldom have central banks been able to maintain a fixed exchange rate over an extended period of time while providing liquidity to troubled banks and an ailing economy...History shows that when an economy starts to sputter, central banks find it extremely difficult to resist domestic calls for action. This is especially true when the emergence of systemic banking problems calls for support from a lender of last resort. In our academic work, Graciela Kaminsky and I have shown how, as financial markets have been liberalized and become globally integrated, banking-sector problems have regularly set the stage for currency crashes", Project Syndicate, 22 March 2016



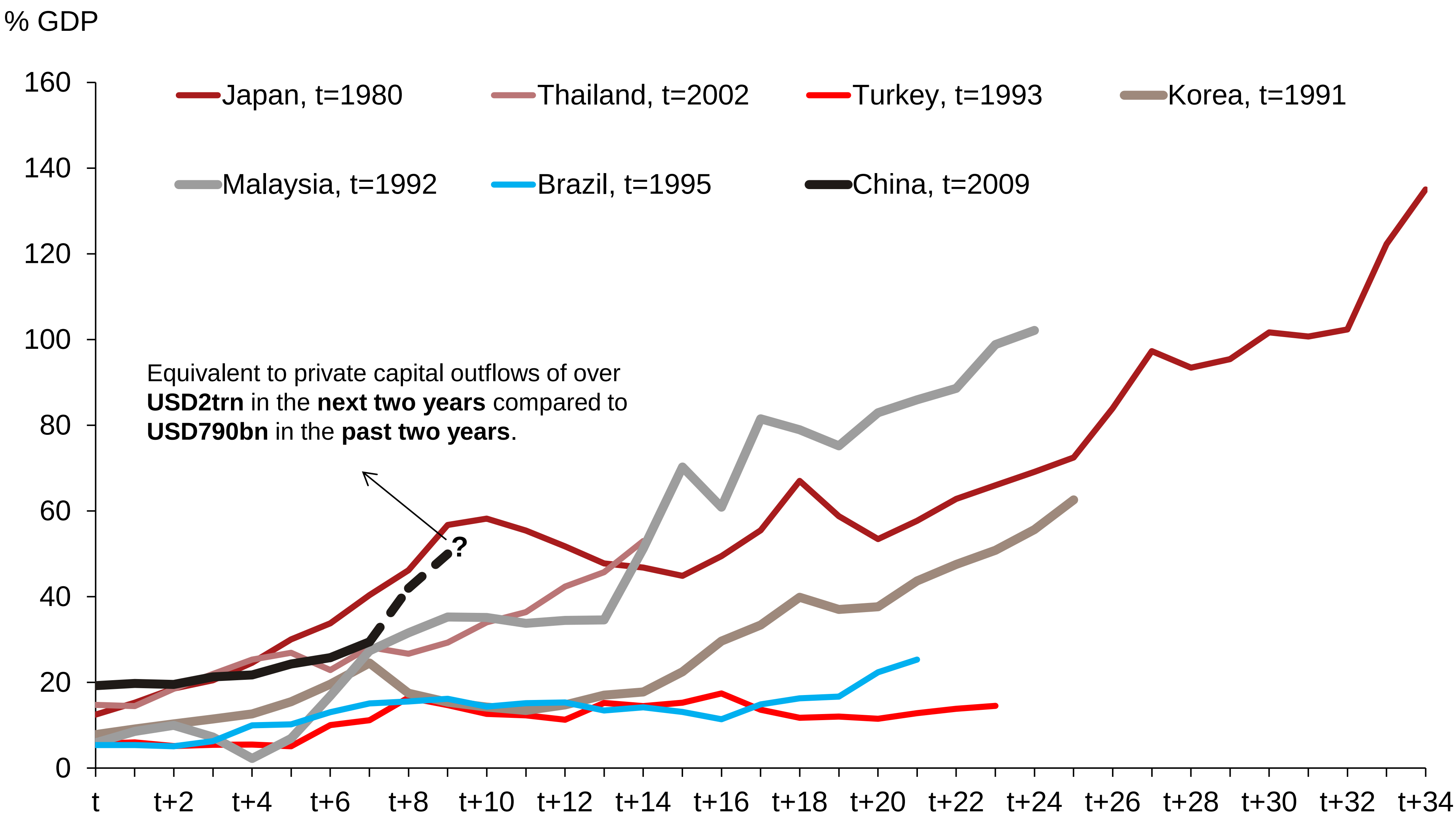
Source: CEIC and Nomura.

China's impossible trinity has started to bind

China's net international investment position														
	USDbn							% of GDP						
	2010	2011	2012	2013	2014	2015	Q3 2016	2010	2011	2012	2013	2014	2015	Q3 2016
Foreign assets	4,119	4,735	5,213	5,986	6,438	6,219	6,491	67.5	62.5	60.9	61.8	61.6	57.0	59.3
Offical reserve assets	2,914	3,256	3,388	3,880	3,899	3,406	3,264	47.8	43.0	39.6	40.1	37.3	31.2	29.5
Private foreign assets	1,205	1,479	1,825	2,106	2,539	2,813	3,227	19.7	19.5	21.3	21.7	24.3	25.8	29.5
Direct investment	317	425	532	660	883	1,129	1,310	5.2	5.6	6.2	6.8	8.4	10.4	12.0
Portfolio investment	257	204	241	259	263	261	341	4.2	2.7	2.8	2.7	2.5	2.4	3.1
Financial Derivatives	0	0	0	0	0	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	630	850	1,053	1,187	1,394	1,419	1,572	10.3	11.2	12.3	12.3	13.3	13.0	14.4
Foreign liabilities	2,431	3,046	3,347	3,990	4,836	4,623	4,744	39.8	40.2	39.1	41.2	46.3	42.4	43.3
Direct investment	1,570	1,907	2,068	2,331	2,599	2,842	2,961	25.7	25.2	24.1	24.1	24.9	26.1	27.0
Portfolio investment	224	249	336	387	796	811	795	3.7	3.3	3.9	4.0	7.6	7.4	7.3
Financial Derivatives	0	0	0	0	0	5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other investment	637	891	943	1,272	1,440	964	983	10.4	11.8	11.0	13.1	13.8	8.8	9.0
Net foreign assets	1,688	1,688	1,866	1,996	1,603	1,597	1,747	27.7	22.3	21.8	20.6	15.3	14.6	15.9

Source: CEIC and Nomura.

Private foreign assets: China versus other countries during a similar stage of economic development



Note: t = the year when GDP per capita in purchasing power parity terms (PPP) of the country first exceeds 8,000 IMF current international dollars. Data is up to latest available for all countries .
Source: IMF World Economic Outlook Database, CEIC and Nomura.

Nomura's heat-map on EM vulnerability to President Trump's 'America First' policies

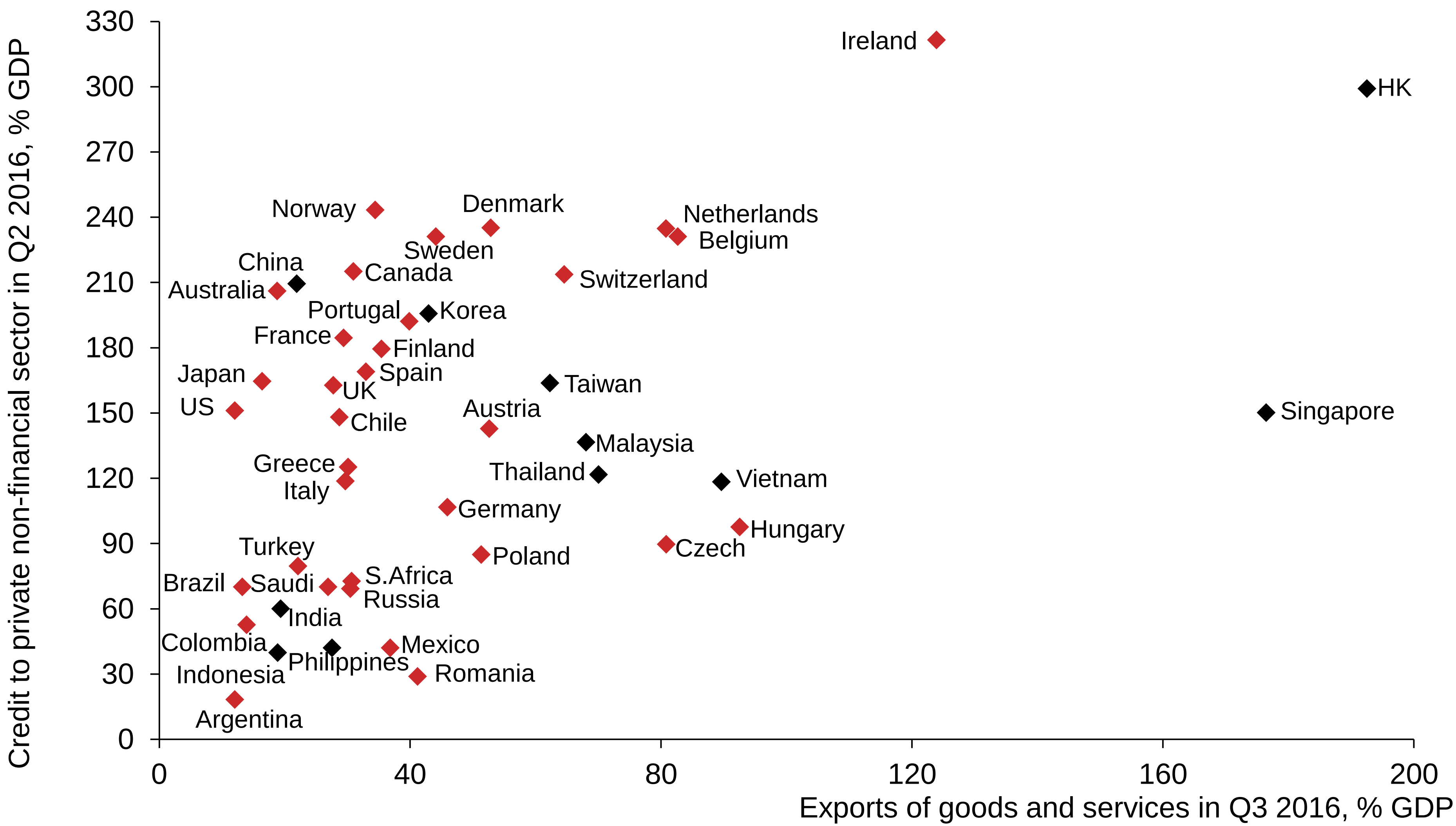
NOMURA

Legend:	High vulnerability (red)	Medium vulnerability (grey)	Low vulnerability (black)

	US fiscal stimulus	Rising US interest rates	USD appreciation	US Trade protectionism / wars	US immigration curbs	US foreign policy confrontation	US energy independence	Repatriation of foreign profits by US firms
Asia ex-Japan								
China	Low	Medium	High	High	Low	High	Low	Low
Hong Kong	Medium	High	High	High	Low	High	Low	Medium
India	Low	Medium	Medium	Medium	High	Low	Low	Low
Indonesia	Medium	High	High	High	Low	Medium	Medium	Medium
Malaysia	Medium	High	High	High	Low	Medium	High	Medium
Philippines	Medium	Medium	High	High	High	High	Low	Medium
Singapore	Medium	High	High	High	Low	High	Medium	High
Korea	Medium	High	High	High	Low	High	Low	Low
Taiwan	Medium	Medium	Medium	High	Low	High	Low	Low
Thailand	Medium	Medium	Medium	High	Low	Medium	Low	Low
EEMEA								
Hungary	Low	Low	Low	High	Low	Low	Low	Low
Israel	Low	Low	Low	Medium	Medium	Low	Low	Low
Russia	Low	Low	Low	Low	Low	High	High	Low
Poland	Medium	Medium	Medium	High	Low	High	Low	Low
South Africa	Medium	High	High	Medium	Medium	Low	Low	High
Turkey	Medium	High	High	Low	Low	Medium	Medium	Low
LatAm								
Brazil	Low	High	High	Medium	Low	Low	Medium	Low
Mexico	Medium	High	High	High	High	Medium	High	High
Chile	Low	Medium	Low	High	Medium	Low	Low	Low
Peru	Low	Medium	Low	High	Low	Low	Low	Low
Colombia	Low	High	High	Low	Medium	Medium	Medium	Low

Note: Vulnerability to US fiscal stimulus refers to the inability of an economy to benefit from US fiscal stimulus. High vulnerability here reflects an economy that enjoys little or no benefit from US fiscal stimulus while low vulnerability reflects significant benefits. Source: Nomura.

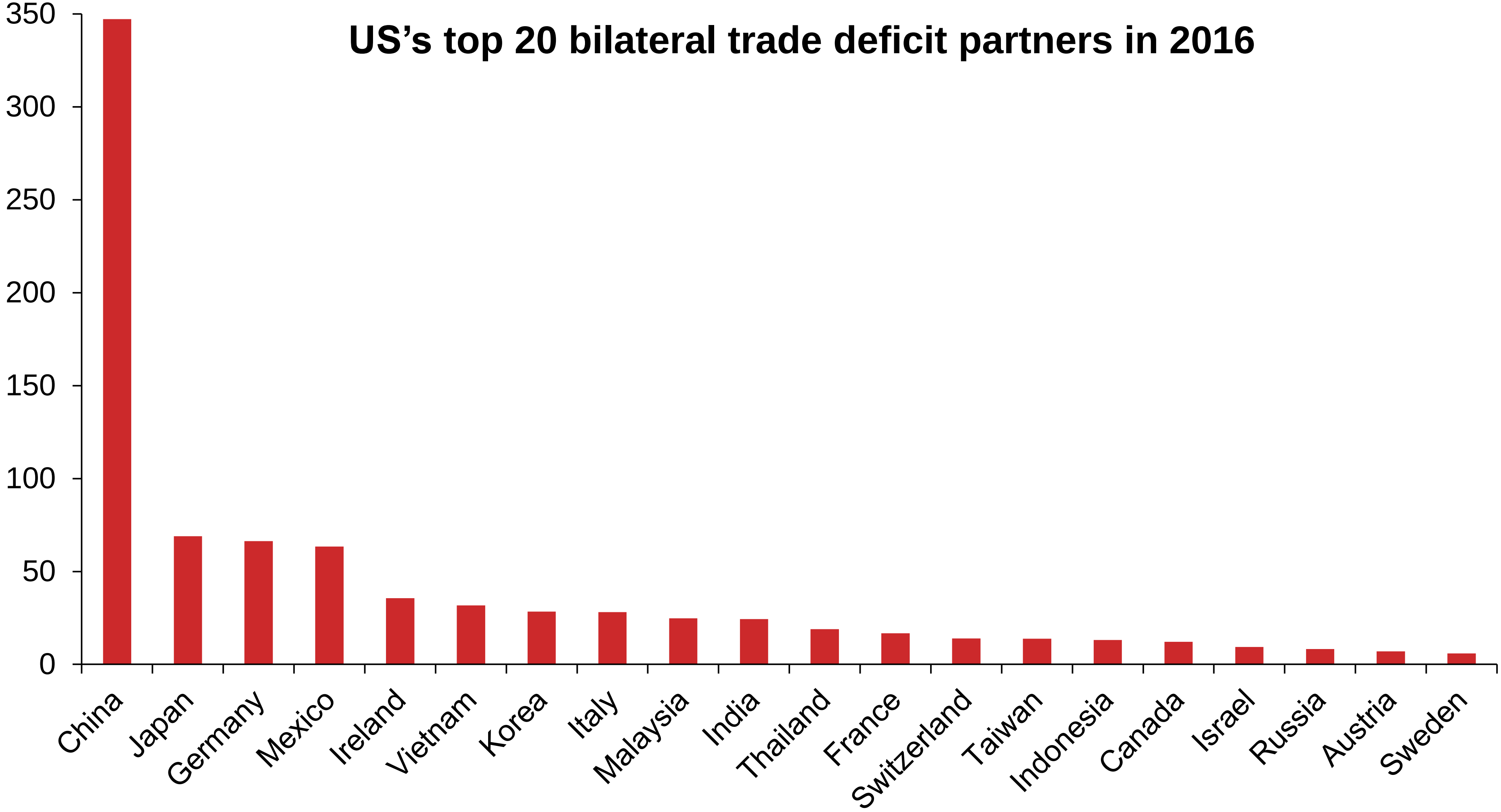
Aside from Mexico, Asia is most exposed to Trumponomics



Note: Asia countries denoted in black. Exports of goods and services (% GDP) are the 4 quarter rolling sum to Q3 2016 for most countries. For Ireland, exports of goods and services are the 4 quarter rolling sum to Q2 2016; for China, Singapore and Vietnam, exports of goods and services are for 2015. Credit to private nonfinancial sector data are Q2 2016, except for Philippines, Romania and Vietnam (Q3). For Philippines, Romania, Colombia and Vietnam, we use claims on private sector data from the IMF IFS. For Taiwan, we use loans to private sector + private sector bonds from CEIC. Sources: BIS, IMF, CEIC and Nomura.

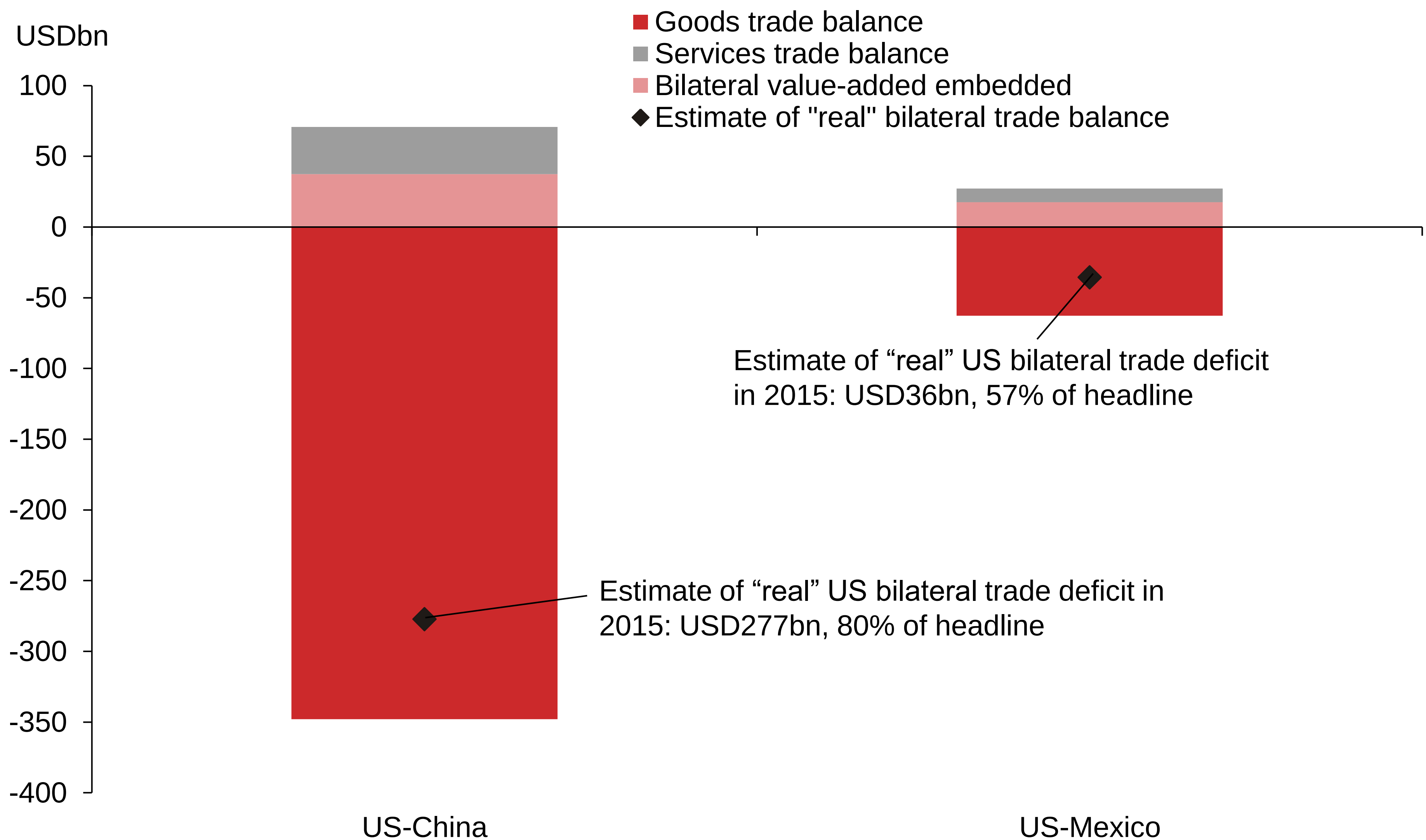
China is a much bigger fish to fry

USD bn, 12m rolling sum



Note: 12-month rolling sum up to November 2016. Source: CEIC and Nomura.

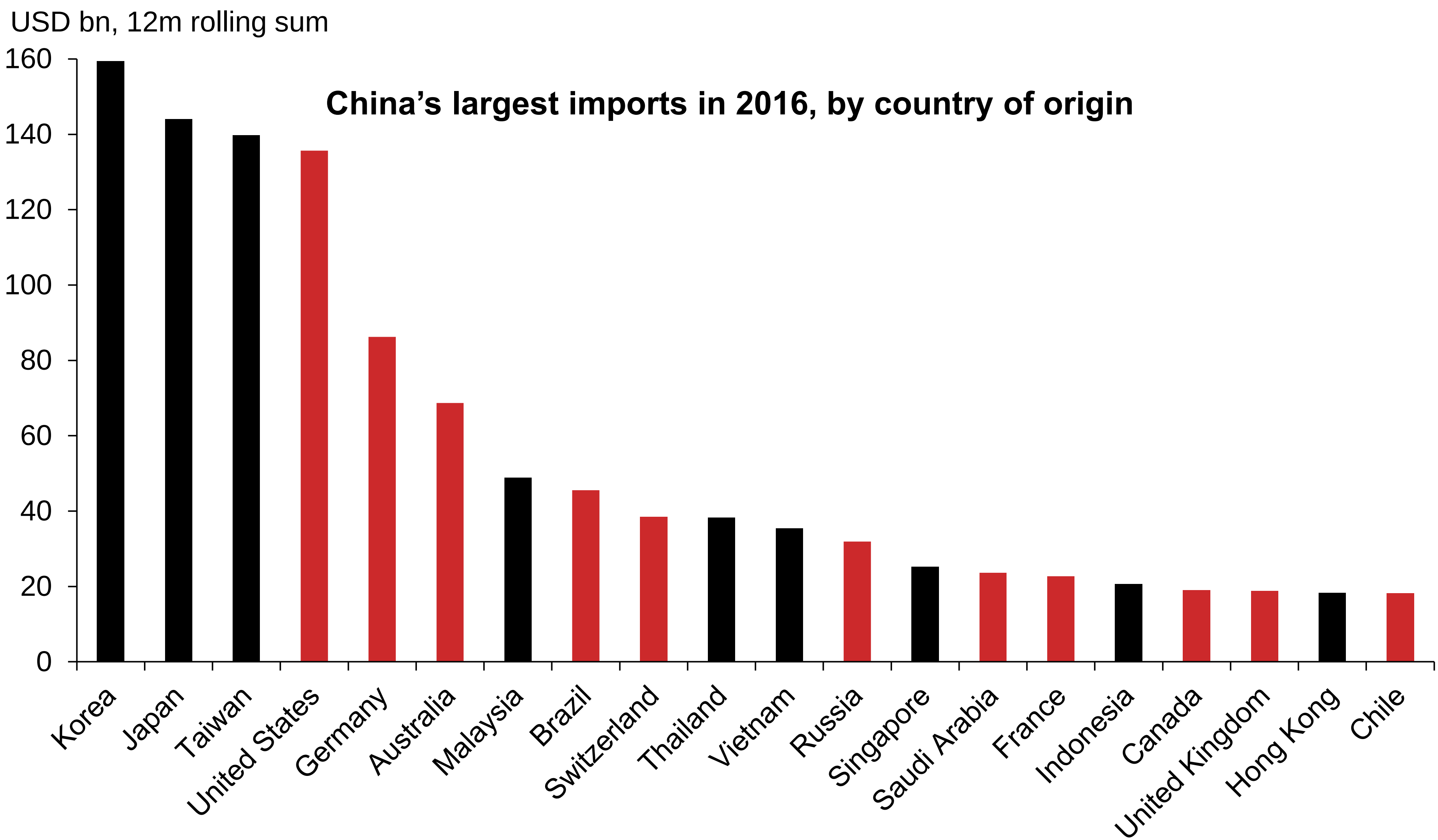
America's true trade with China and Mexico, 2015



Note: We assume the share of foreign value-added in a country's exports remain the same in 2015 as in 2011. The estimated “real” bilateral trade balance between two countries is the sum of the bilateral goods, services and value-added trade balances between the countries.
Source: OECD Tiva database, CEIC and Nomura.

American trade protectionism against China will quickly spread to the rest of Asia…

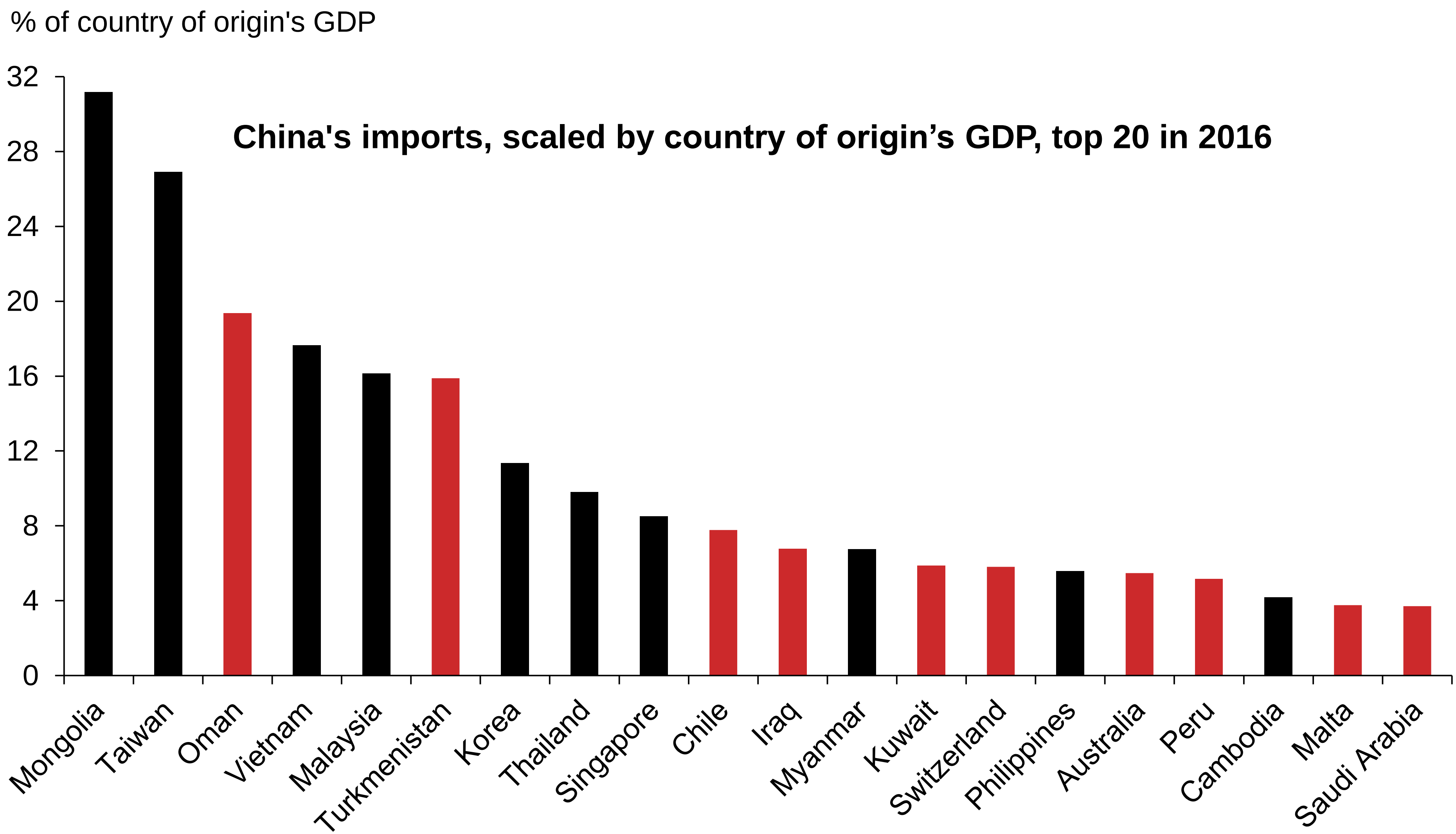
NOMURA



Note: 12-month rolling sum up to November 2016. Asian countries in black.

Source: CEIC and Nomura.

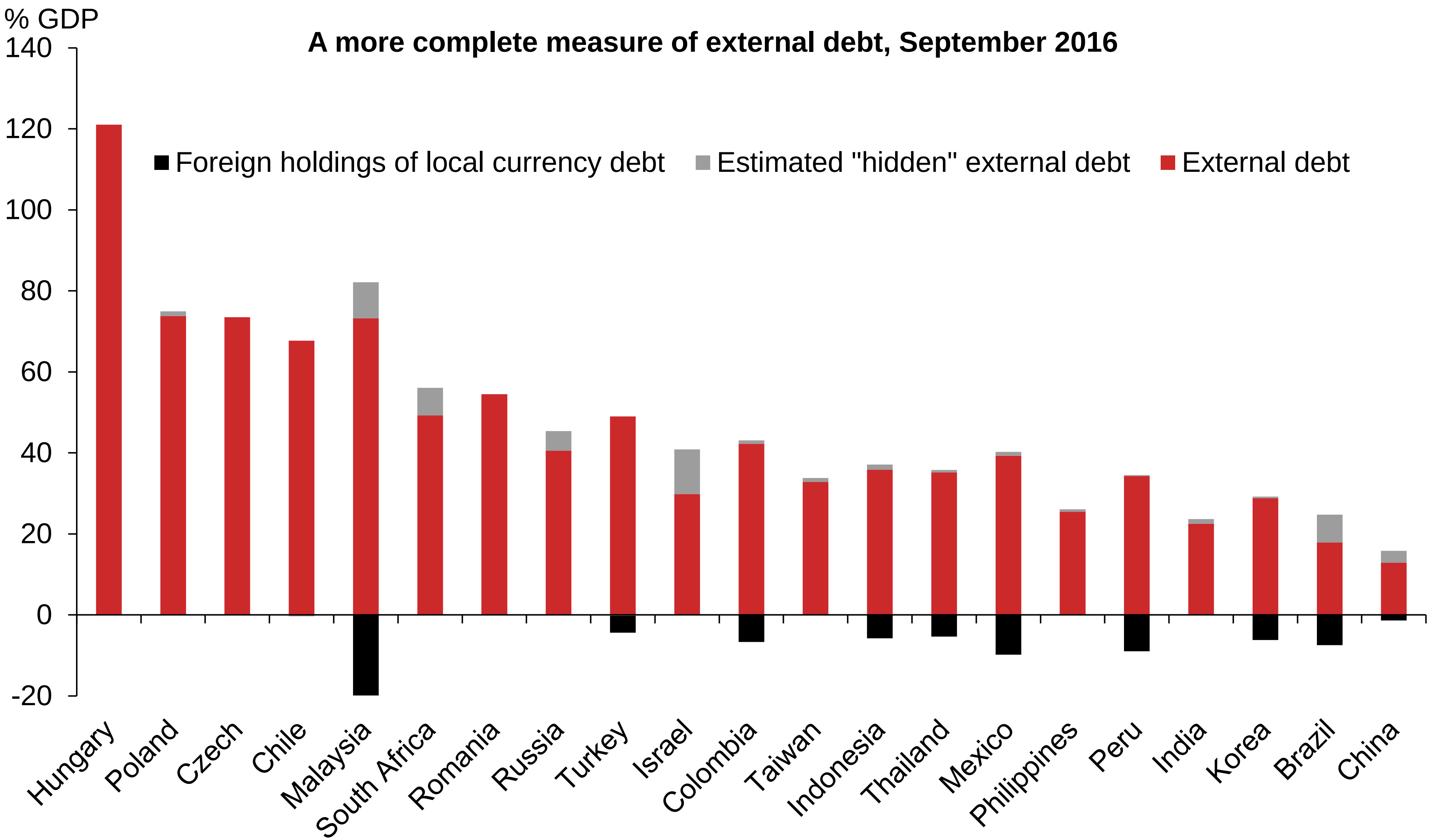
… as the region is highly integrated in value-supply chains



Note: Imports are 12-month rolling sum to November 2016, and GDP are IMF estimates for 2016. Asian countries in black.
Source: CEIC, IMF and Nomura.

Further USD appreciation could spark FX debt mismatch problems…

NOMURA



Note: Estimated "hidden" external debt is our estimate of the debt issued by offshore subsidiaries of EM companies. Not all countries have data for "hidden" external debt or foreign holdings of local currency debt- we have included data for countries where it was available.

Source: BIS, Haver, CEIC and Nomura.

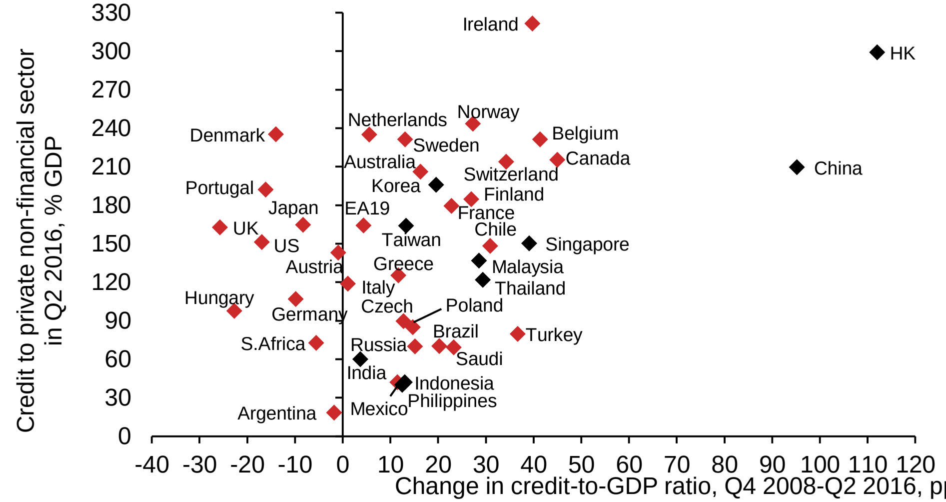
… which could quickly expose Asia's outsized financial cycle…

NOMURA

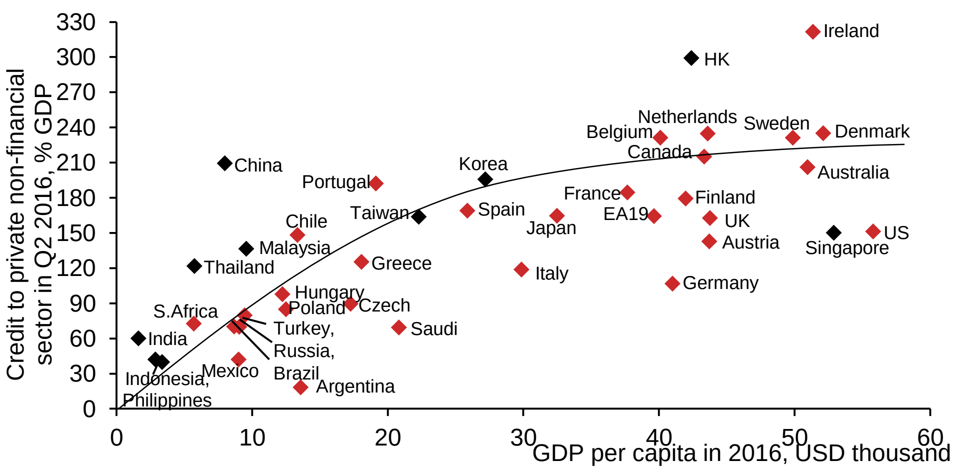
There is a high risk of a credit crunch in Asia

- The combination of rapid private debt build-up and elevated property prices is worrying: as they inevitably reverse, the negative feedback loops can activate financial decelerator effects.
- Cheap credit has weakened productivity by misallocating capital (e.g., property speculation), reducing pressure for supply-side reforms and kept zombie companies alive.
- Debt-service ratios are high and rising in many countries, incredibly at a time when interest rates are at, or close to, record lows.
- Potential triggers: faster than expected Fed rate hikes; sharp USD appreciation; large RMB devaluation; a major EM corporate default prompting global asset managers to pull out from the region *en masse*, causing market liquidity to evaporate; inflation shock in Asia; geopolitics.

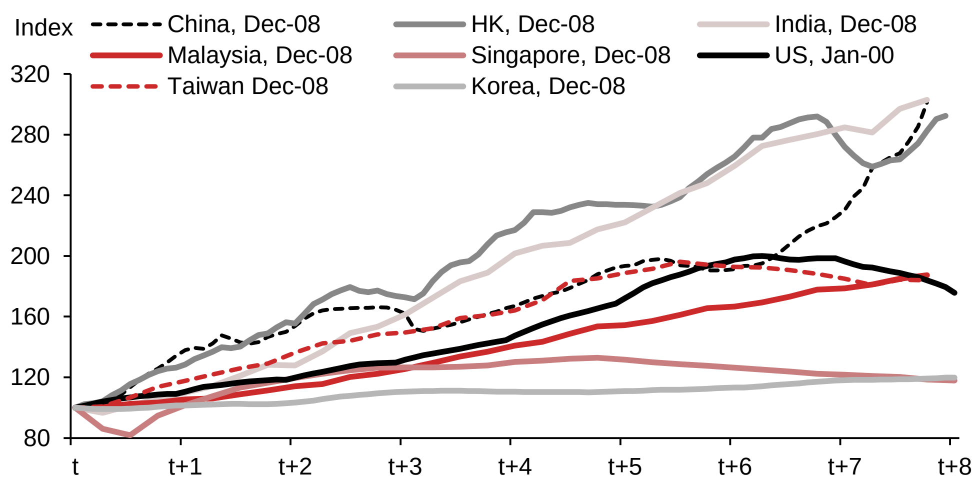
More worrying than the level is the speed of the private debt build-up



Relative to GDP per capita, private credit in Asia is notably high



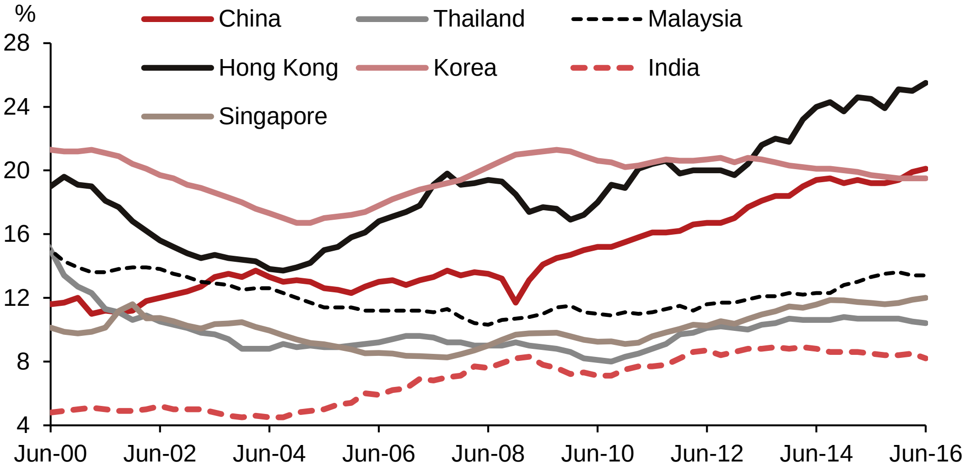
Asia house prices – some tracking well above the US housing bubble



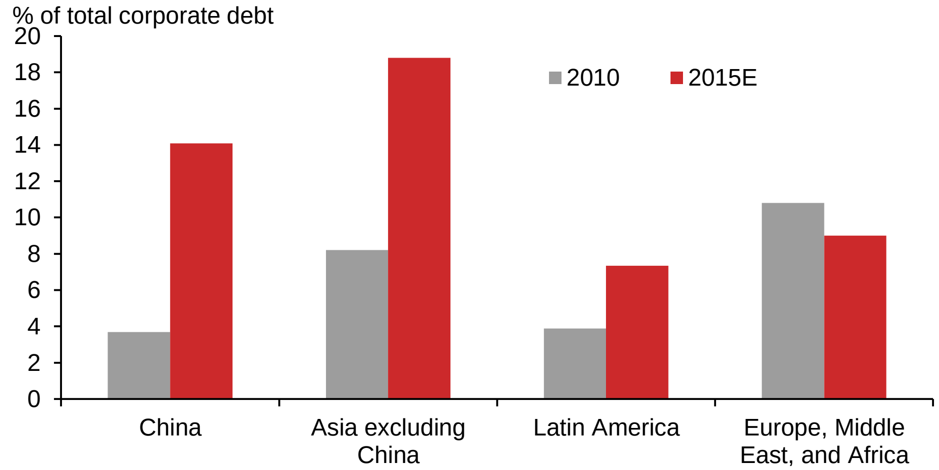
Notes: Top right and bottom left: Asia ex-Japan countries are in black. For Taiwan we use loans to the private sector + debt securities issued by non-financial corporates. For the Philippines we use "claims on private sector" from the IMF International Financial Statistics. 2016 GDP per capita are estimates from the IMF World Economic Outlook Database. Bottom right: t=number of years from the starting date (Jan 2000 for the US and Dec 2008 for Asia). China's index is the average of Shanghai, Beijing, Shenzhen, Guangzhou and Tianjin; India's is the average of all major cities; Taiwan's is the average of Taipei, New Taipei, Taoyuan, Hsinchu area, Taichung and Kaohsiung city; Malaysia is the weighted average of all states; Korea's is the average of all major cities; the US index covers 898 counties.
Sources: Top right, bottom left: BIS; IMF, CEIC and Nomura. Bottom right: Centa Property, US CoreLogic, CEIC and Nomura.

… and credit crunch risks

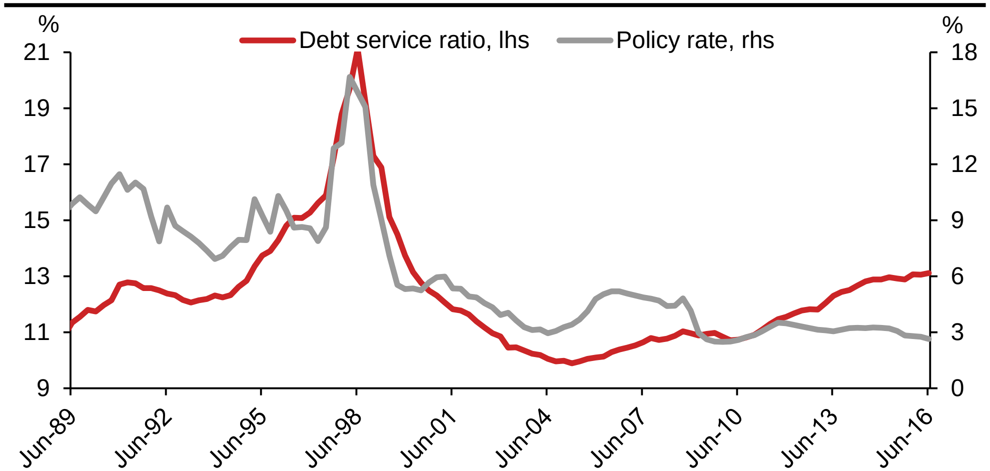
Debt-service ratios of private non-financial sector



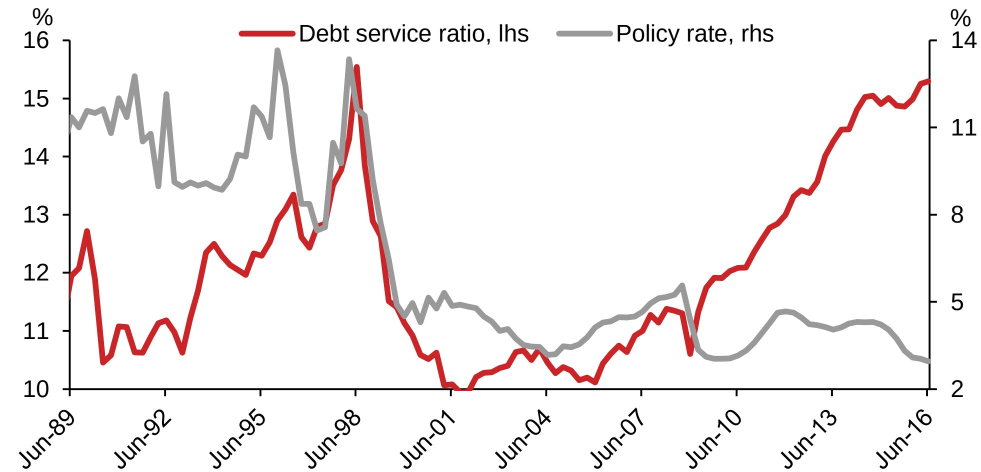
IMF proxy of debt-at-risk of EM corporates (interest coverage ratio <1)



Asia's debt-service ratio and policy rate (simple average)



Asia's debt-service ratio and policy rate (GDP-weighted average)



Notes: Top right: Debt-at-risk is the share of debt held by firms that do not earn enough to cover their interest payments (i.e. interest coverage ratio below 1), as a percentage of total debt held by firms in the sample. The sample for China contains 3550 firms consisting of primarily listed firms. The sample of firms for Asia excluding China are firms in Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore and Thailand containing a total of 7615 firms. Bottom left, bottom right: Asia ex Japan's comprises of the following countries: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, Korea, Taiwan and Thailand. Money market rates are used as a proxy for policy rates for the following countries: India (before 2001), Indonesia (before 2005), Malaysia (before 2004), Korea (before 1999), and Thailand (before 2000).
Sources: Top left: BIS and Nomura. Top right: IMF and Nomura. Bottom left, bottom right: BIS, IMF, CEIC and Nomura.

Asia's maturing financial cycle – constructing early warning indicators (EWIs) of financial crises

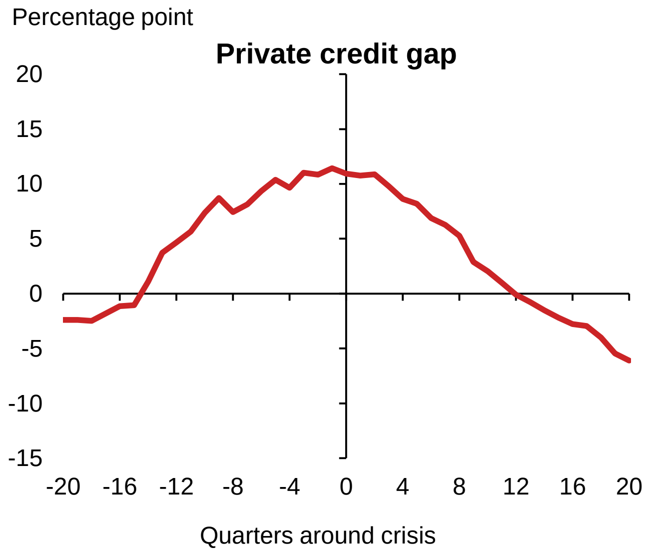
NOMURA

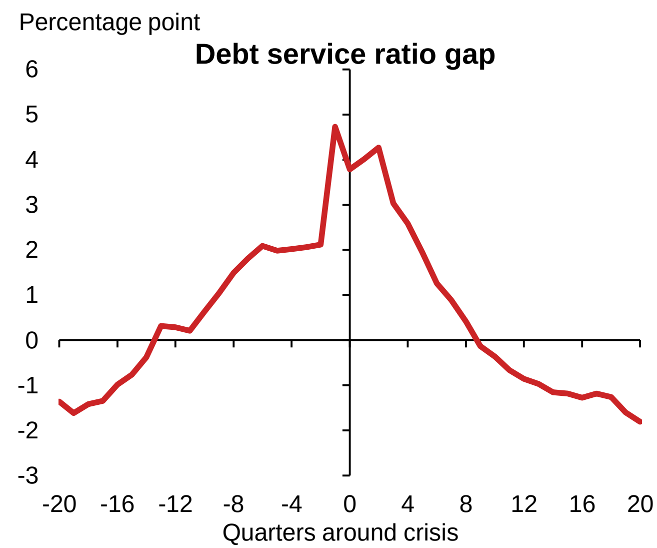
- We constructed early warning indicators (EWIs) to gauge the risk of financial crises in 30 countries:
  - 10 in Asia ex-Japan
  - 10 in other EM
  - 10 in DM
- Drawing on the vast literature on EWIs of financial crises we used five tried and tested variables:
  - Private credit (household and corporate)
  - Debt (household and corporate) service ratio
  - Real property prices
  - Real equity prices
  - Real effective exchange rate
- EWIs are constructed as "gaps"- deviation from their long-term trend using data back to the early 1990s
- We also constructed combined EWIs
- We use the literature to date past financial crises, and add our own measure of domestic demand crises
- We set the maximum interval of time between the signal and the crisis at 12 quarters
- An EWI issues a signal of a crisis when it breaches a predefined vulnerability threshold
- We use noise-to-signal methodology to determine the optimal thresholds
- Our constructed EWIs can reliably predict two-thirds of the past 50 financial crises in our 30 country sample
- We also try an alternative probit model approach

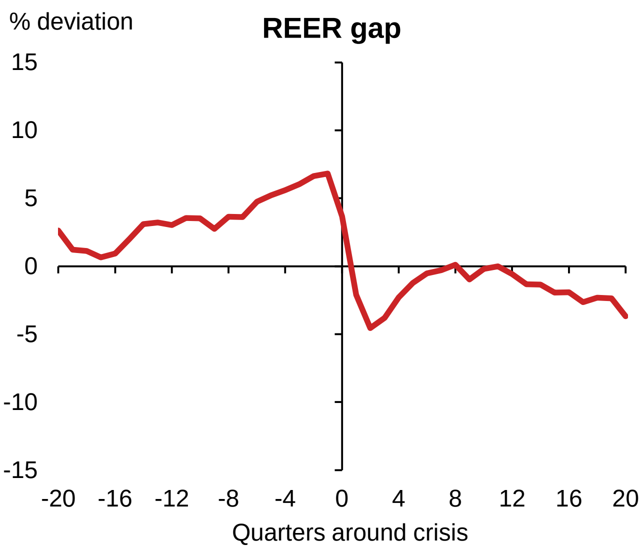
Asia's maturing financial cycle – behaviour of EWIs around crises

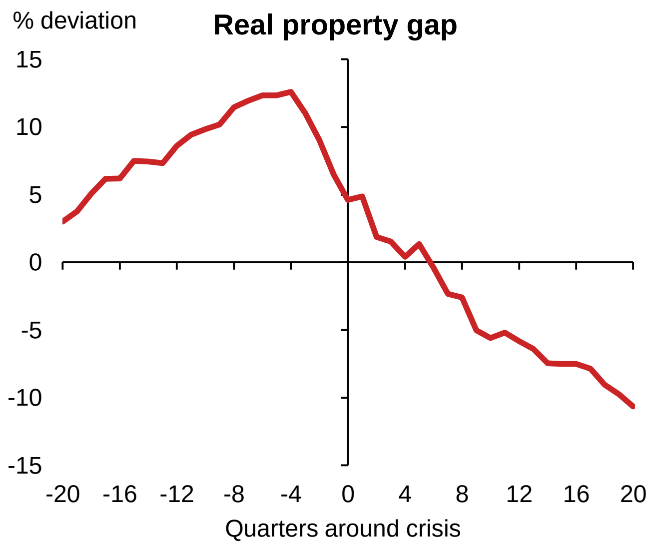
NOMURA

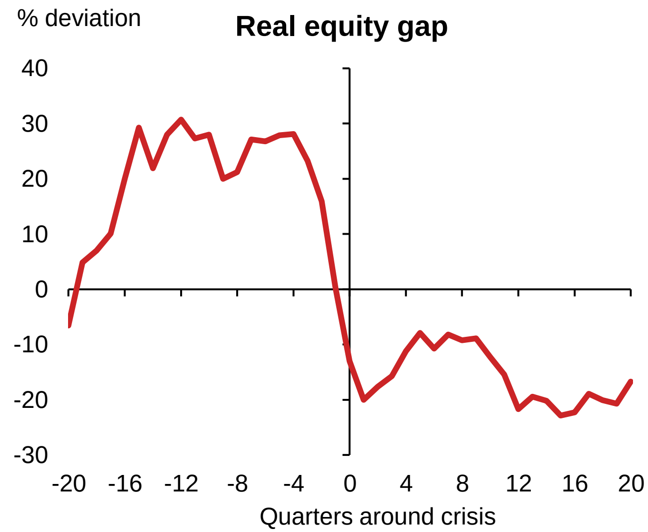
In our global sample of 30 countries containing 50 crises since the early 1990s EWIs rise to elevated levels in the lead-up to crises











Note: Early warning indicators are expressed as "gaps" - deviation from long-term trend, Private credit refers to credit to the private non-financial sector expressed as a percentage of GDP; property and equity are price indexes in real terms and indexed to December 2008=100; debt service ratio refers to the debt service burden for the private non-financial sector while REER is the real effective exchange rate. Sources:BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

Asia's maturing financial cycle – signals approach (I)

Signals approach - Best early warning indicators differ between Asia, EM and DM

	Single EWIs					Joint EWIs					Triple EWIs	
Asia-ex Japan-10 economies	Credit (9)	REER (8)	Debt service ratio (DSR) (2)	Property (0)	Equity (46)	Credit(3), DSR(1)	Credit(10), REER(5)	REER(4), DSR(2)	DSR(0.5) Equity(17)	REER(5), Equity(26)	Credit(10), REER(5), DSR(1)	DSR(0.5), REER(5), Equity(13)
Number of crises	14	11	14	11	14	14	11	11	14	11	11	11
% of crisis signalled	71.4	72.7	71.4	63.6	71.4	71.4	72.7	72.7	71.4	72.7	72.7	72.7
Noise to signal ratio	**0.17**	**0.19**	**0.10**	**0.65**	**0.25**	**0.13**	**0.02**	**0.02**	**0.10**	**0.08**	**0.01**	**0.02**

	Single EWIs					Joint EWIs					Triple EWIs	
Emerging-20 Economies	Credit (5)	REER (10)	Debt service ratio (DSR) (2)	Property (4)	Equity (40)	Credit(3), DSR(1)	Credit(2), REER(1)	REER(4), DSR(1.5)	REER(1), Equity(25)	REER(4), Prop(4)	Credit(0.5), REER(0.5), DSR(1)	Credit(1), REER(0.5), Equity(3)
Number of crises	31	25	30	17	29	30	25	24	24	17	24	24
% of crisis signalled	67.7	72.0	73.3	70.6	69.0	66.7	68.0	66.7	66.7	70.6	66.7	66.7
Noise to signal ratio	**0.27**	**0.36**	**0.15**	**0.49**	**0.32**	**0.17**	**0.18**	**0.10**	**0.19**	**0.21**	**0.12**	**0.18**

	Single EWIs					Joint EWIs					Triple EWIs	
Developed-10 Economies	Credit (9)	REER (5)	Debt service ratio (DSR) (1.5)	Property (14)	Equity (21)	Credit(8) , DSR(1)	Credit(6) REER(3)	Credit(8), Prop(3)	DSR(1), Prop(3)	REER(1), Prop(14)	Credit(8), DSR(1), Prop(3)	DSR(0.5), REER(3), Prop(4)
Number of crises	19	12	19	15	18	19	12	15	15	12	15	12
% of crisis signalled	68.4	66.7	68.4	66.7	66.7	68.4	66.7	66.7	66.7	66.7	66.7	66.7
Noise to signal ratio	**0.20**	**0.61**	**0.27**	**0.05**	**0.55**	**0.17**	**0.17**	**0.03**	**0.05**	**0.05**	**0.02**	**0.05**

	Single EWIs					Joint EWIs					Triple EWIs
Global-30 Countries	Credit (6)	REER (8)	Debt service ratio (DSR) (2)	Property (6)	Equity (29)	Credit(3), DSR(1)	Credit(3), REER(1)	Credit (3), Prop(2)	REER(5), DSR(1)	REER(4), Prop(4)	Credit(0.5), REER(0.5), DSR(0.5)
Number of crises	50	37	49	32	47	49	37	32	36	29	36
% of crisis signalled	68.0	67.6	67.3	68.8	68.1	67.3	67.6	68.8	66.7	69.0	66.7
Noise to signal ratio	**0.23**	**0.38**	**0.18**	**0.39**	**0.42**	**0.18**	**0.16**	**0.17**	**0.11**	**0.22**	**0.17**

Notes: All Indiators listed above are measured as gaps: the deviation of actual data from a two-sided Hodrick-Prescott filtered trend (lambda =400,000). A positive gap indicates that actual data is above trend, while a negative gap indicates that actual data is below trend. The numbers in parentheses are critical threshold levels for each variable. If the gap for that variable rises above the threshold, a signal will be given. A signal is considered correct if a financial crisis occurs anytime within 12 quarters from the time the signal is given, otherwise the signal will be considered a false alarm. The noise to signal ratio of a variable indicates the accuracy of that variable in signaling financial crises, and is calculated as [Type 2 error/(1-Type1 error), where type 1 error is the percentage of crises observations which are not signaled, and Type 2 error is the percentage of non-crisis observations where a signal was incorrectly given. The lower the N/S ratio, the more accurate the indicator is. Joint and triple indicators only issue signals when both/all three of its indicators' thresholds are breached at the same time. Credit refers to private credit to non-financial sector; property and equity are price indexes in real terms and indexed to December 2008=100; debt service ratios indicates the debt service burden for the private non-financial sector while REER is the real effective exchange rate. Sources: BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

Asia's maturing financial cycle – signals approach (II)

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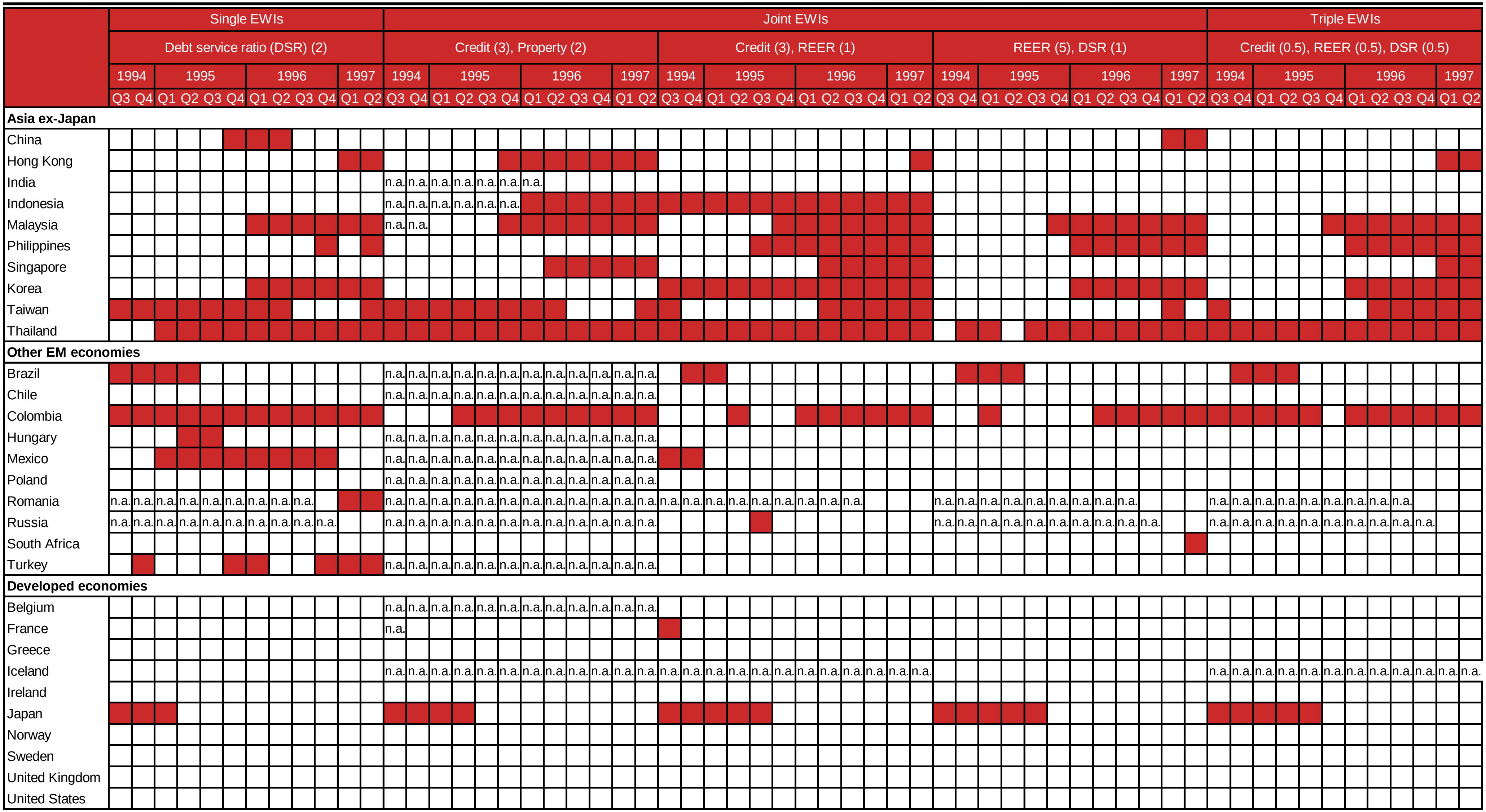
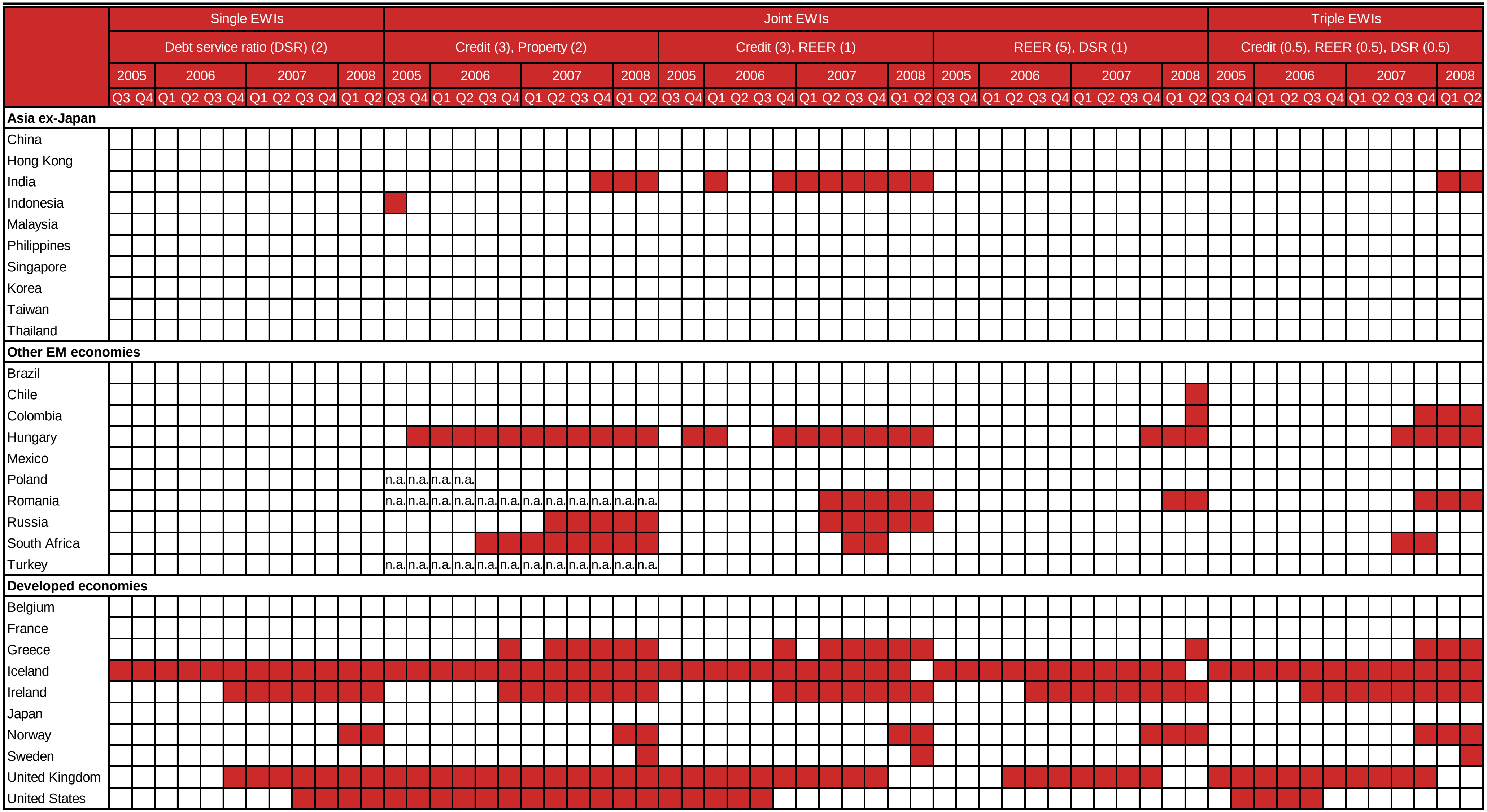
Heatmap before the 1997 Asian crisis (using the five best EWIs from the global sample) red cell = signal given by EWI



Notes: EWIs are expressed as "gaps"-deviation from trend. The number (in brackets) beside each EWI is the critical threshold that the indicator has to breach for a signal to be issued. A signal is issued for joint and triple EWIs if, and only if, the thresholds are simultaneously breached. Red cell= Early warning indicator signals a financial crisis within the next 12 quarters for the country in the row of that cell. We define financial crises as banking crises plus domestic demand crises where domestic demand for a country falls 2 standard deviations below average for 2 consecutive quarters. Sources: BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

Asia's maturing financial cycle – signals approach (III)

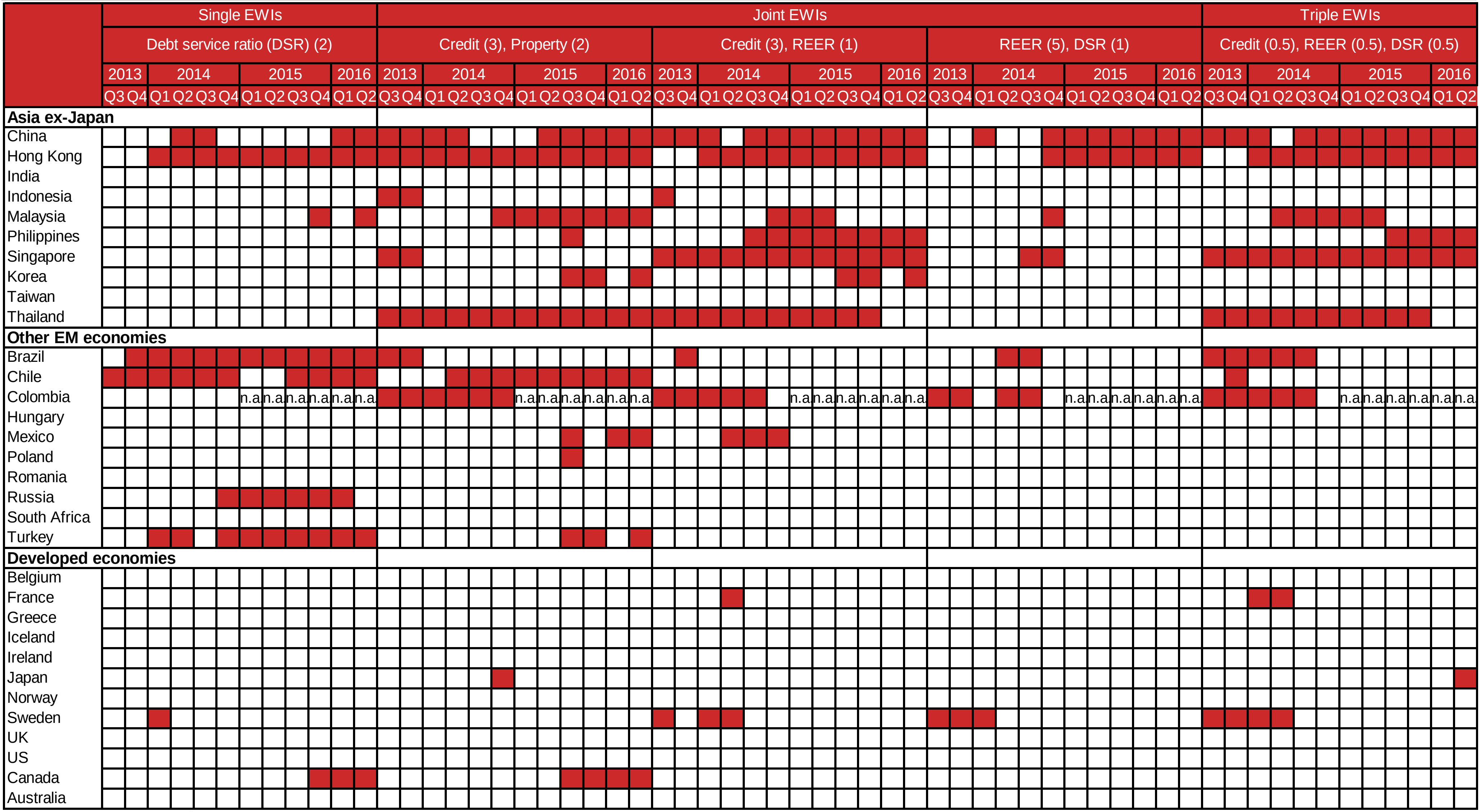
Heatmap before the 2008 global financial crisis (using the five best EWIs from the global sample) red cell = signal given by EWI



Notes: EWIs are expressed as "gaps"-deviation from trend. The number (in brackets) beside each EWI is the critical threshold that the indicator has to breach for a signal to be issued. A signal is issued for joint and triple EWIs if, and only if, the thresholds are simultaneously breached. Red cell= Early warning indicator signals a financial crisis within the next 12 quarters for the country in the row of that cell. We define financial crises as banking crises plus domestic demand crises where domestic demand for a country falls 2 standard deviations below average for 2 consecutive quarters. Sources: BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

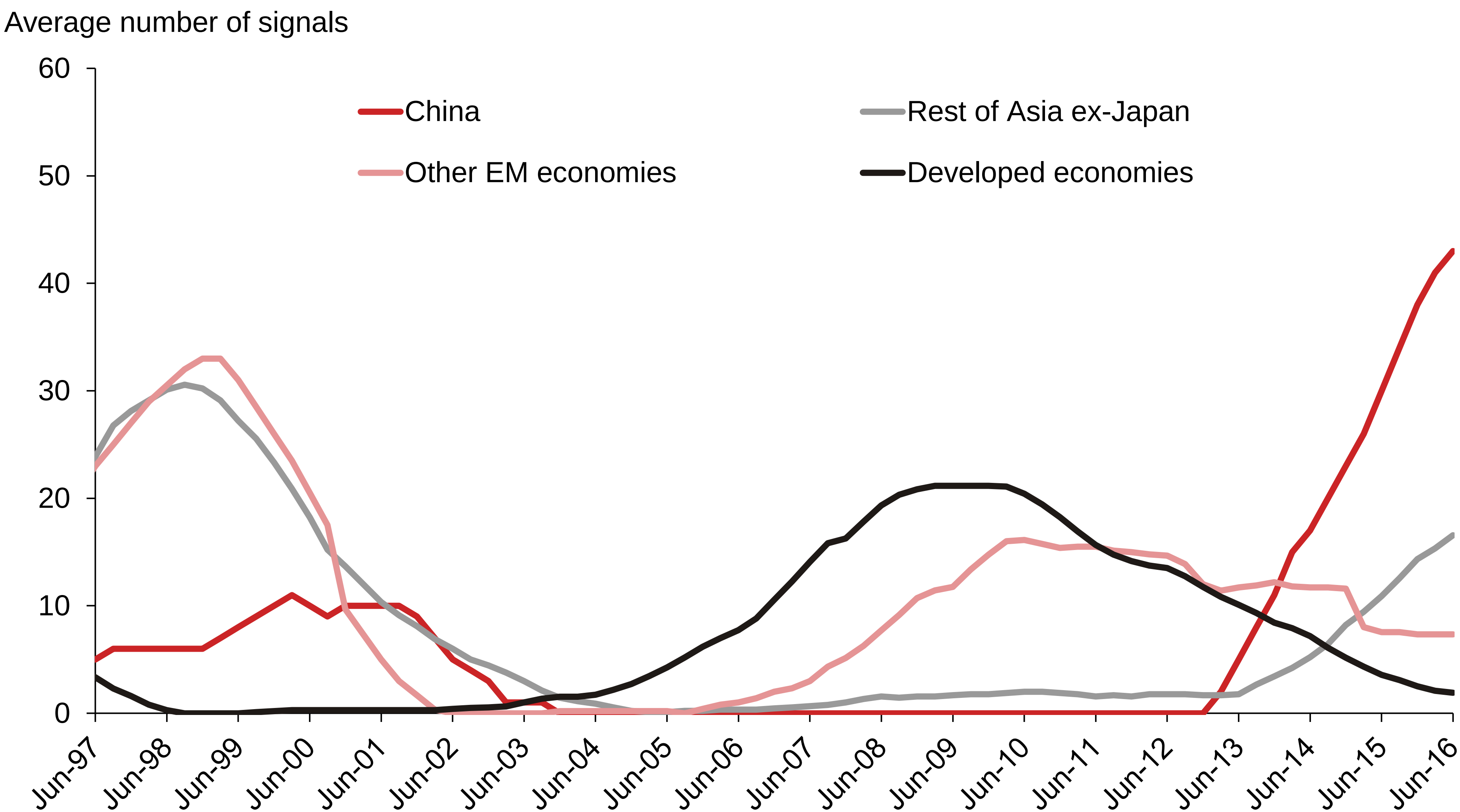
Asia's maturing financial cycle – signals approach (IV)

Heatmap up to Q2 2016, for the most recent 12 quarters (using the five best EWIs from the global sample) red cell = signal given by EWI



Notes: EWIs are expressed as "gaps"- deviation from trend. The number (in brackets) beside each EWI is the critical threshold that the indicator has to breach for a signal to be issued. A signal is issued for joint and triple EWIs if, and only if, the thresholds are simultaneously breached. Red cell= Early warning indicator signals a financial crisis within the next 12 quarters for the country in the row of that cell. We define financial crises as banking crises plus domestic demand crises where domestic demand for a country falls 2 standard deviations below average for 2 consecutive quarters. Sources: BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

Risk of financial crisis: China stands out



Note: "Rest of Asia ex-Japan" includes Hong Kong, India, Indonesia, Malaysia, the Philippines, Singapore, Korea, Taiwan and Thailand. "Other EM" includes Brazil, Chile, Colombia, Hungary, Mexico, Poland, Romania, Russia, South Africa and Turkey. "Developed economies" include Australia, Belgium, Canada, France, Greece, Iceland, Ireland, Japan, Norway, Sweden, the UK and the US. Source: BIS, IMF, Bloomberg, CEIC and Nomura. In a major study this year we developed five parsimonious early warning indicators– combining gap measures of the private credit-to-GDP ratio, debt service ratio, real effective exchange rate, real property prices and equity prices – that reliably signalled at least two-thirds of the past 50 financial crises in 30 countries since the early 1990s (see Anchor report: Asia's maturing financial cycle, 19 July 2016).

Source:BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

Nomura's 3-30 Rule: change in domestic demand growth 3 years before and after 30 or more EWI signals are given

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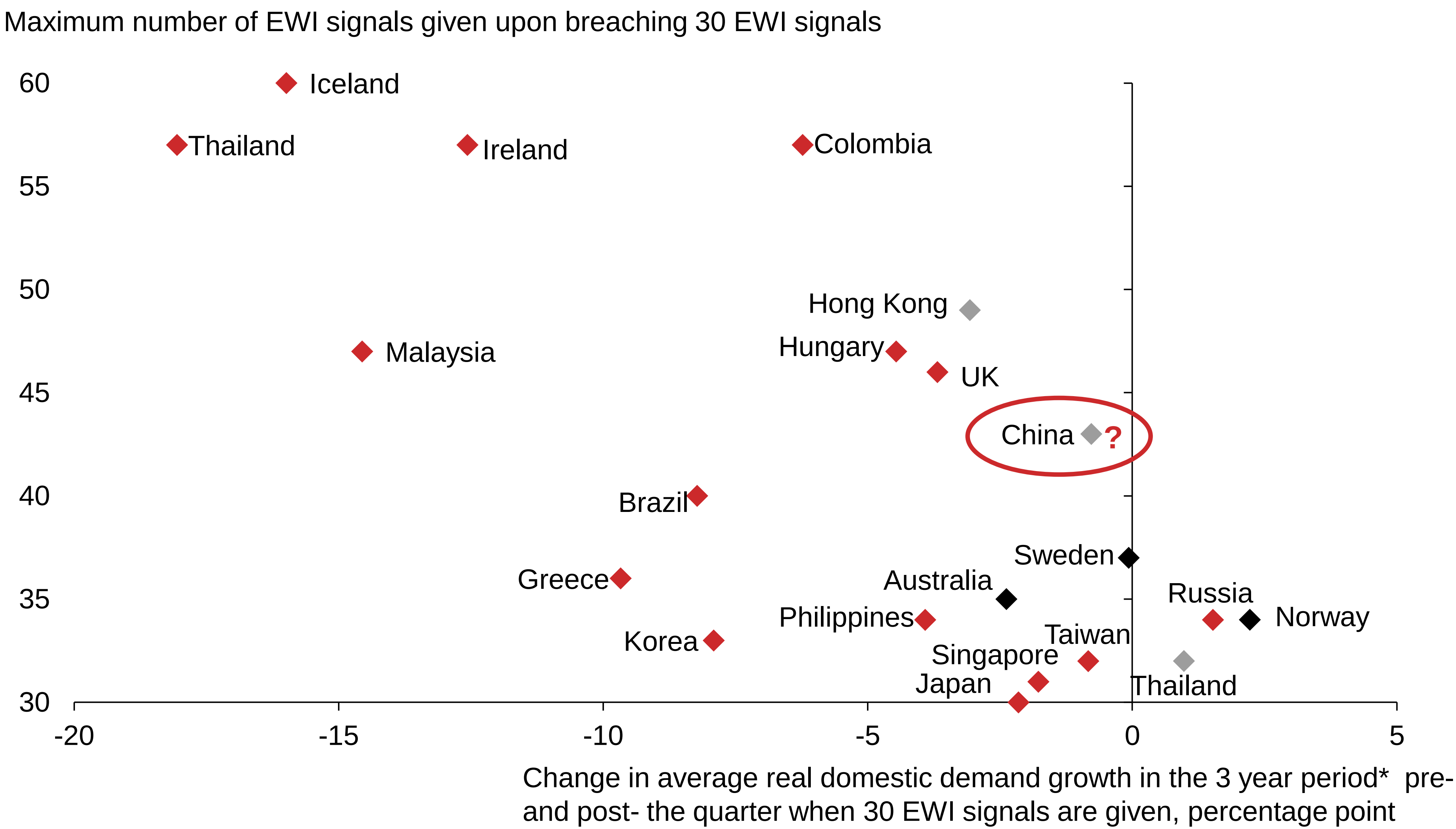

Note: Red cells are countries that were experiencing or would go on to experience a financial crisis after 30 EWI signals are given; Black cells refer to countries which did not experience a crisis after 30 EWI signals were given; Grey cells are for countries where Nomura's 3-30 Rule is in play; i.e. they are currently giving 30 or more EWI signals and have not yet passed the three year mark: China (Q2 2015), Hong Kong (Q2 2015) and Thailand (Q1 2016).

Source: BIS, IMF, Bloomberg, Haver, CEIC and Nomura.

IMF’s 5-30 rule: Change in credit/GDP ratio of more than 30pp over a 5-year period

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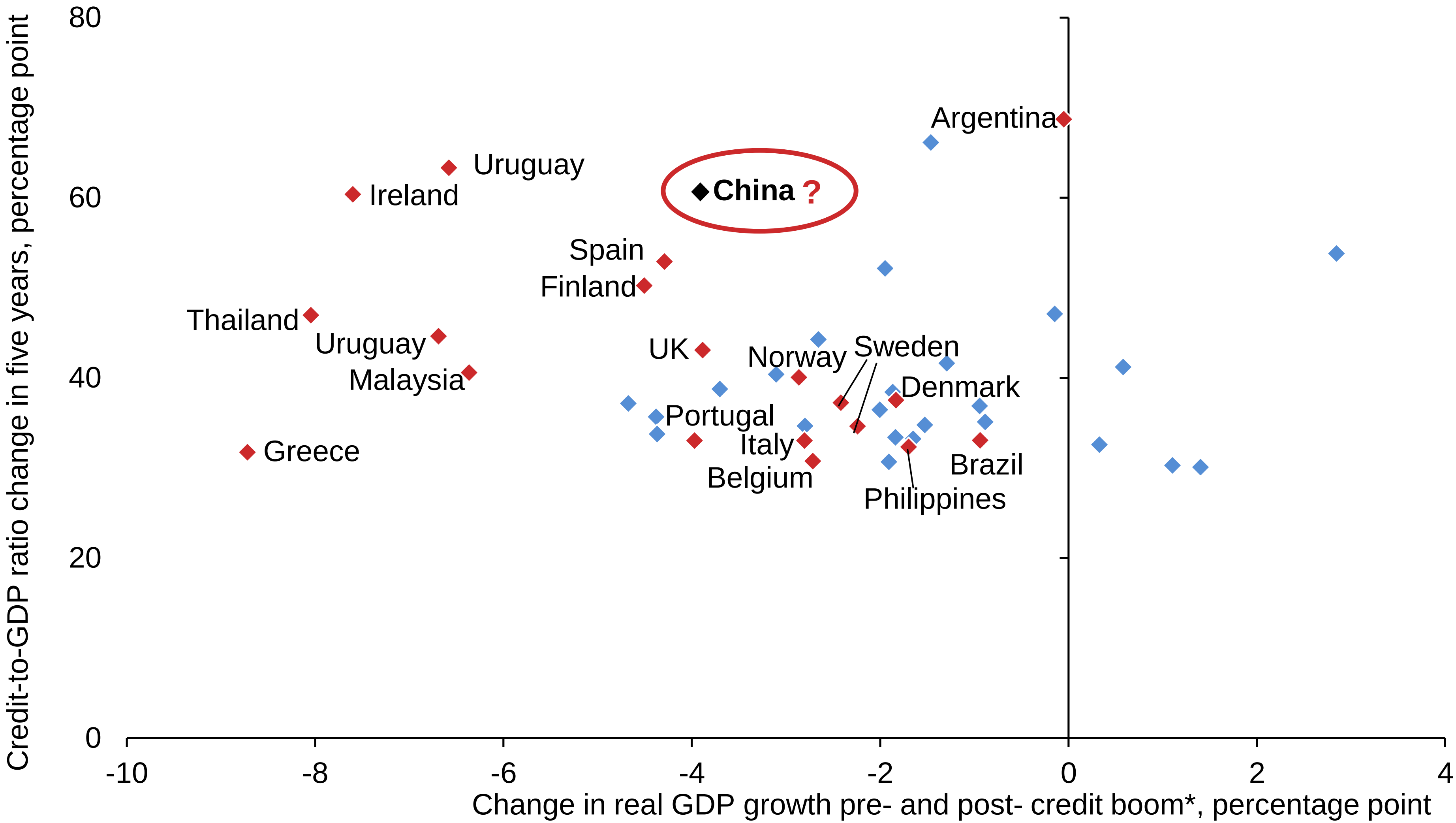

*Note: Banking crisis is identified following Laeven and Valencia (2012). * Change in real GDP growth pre- and post- credit boom refers to the growth differential between the five-year period after the peak of a country’s credit boom, and the five-year period leading up to the peak of the boom. China's credit boom has not ended, thus the change in real GDP growth is based on the differential between China’s average 2011-15 real GDP growth and 2016’s real GDP growth of 6.7%.*
Source: IMF and Nomura.

Asia's striving cubs and ageing tigers – the widening gulf between opportunities and vulnerabilities

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Opportunities

	GDP per capita (USD)			Median age (Years old)			Old-age dependency ratio (Age>64) / (Age 15 to 64)			Urbanisation rate (%)			Favored investment destination of Japan firms (response rate, %)			Mean years of schooling (Years)			Ease of doing business (Rank)		
	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020	2011	2015	2020	2010	2014	2020	2010	2015	2020
China	4478	7990	11457	35.2	37.0	38.7	11.1	13.0	17.1	49.2	55.6	61.0	67.9	53.7	n.a.	7.3	7.5	n.a.	89	83	n.a.
Hong Kong	32421	42390	51747	41.1	43.2	45.1	17.2	20.6	26.5	100.0	100.0	100.0	14.2	14.2	n.a.	11.2	11.2	n.a.	3	5	n.a.
Korea	22151	27195	30317	37.8	40.6	43.1	15.3	18.0	22.2	81.9	82.5	83.1	18.8	16.5	n.a.	11.8	11.9	n.a.	19	4	n.a.
Singapore	46569	52888	58452	37.3	40.0	42.5	12.2	16.1	21.3	100.0	100.0	100.0	14.0	16.1	n.a.	10.2	10.6	n.a.	1	1	n.a.
Taiwan	19262	22288	24632	37.4	39.9	42.5	14.7	16.4	21.9	74.7	76.9	78.8	18.5	21.6	n.a.	10.7	10.7	n.a.	46	11	n.a.
India	1430	1617	2402	25.1	26.6	28.1	8.0	8.6	9.8	30.9	32.7	34.8	21.8	20.1	n.a.	5.4	5.4	n.a.	133	134	n.a.
Indonesia	3178	3362	4738	27.2	28.4	29.4	7.5	7.7	8.6	49.9	53.7	57.2	24.7	31.8	n.a.	7.4	7.6	n.a.	122	120	n.a.
Malaysia	8920	9557	14172	26.3	28.5	30.6	7.2	8.4	10.0	70.9	74.7	77.7	12.2	15.5	n.a.	10.0	10.0	n.a.	23	17	n.a.
Philippines	2155	2858	4226	23.3	24.2	25.4	6.7	7.2	8.0	45.3	44.4	44.3	5.1	11.3	n.a.	8.2	8.9	n.a.	144	97	n.a.
Vietnam	1297	2088	2855	28.5	30.4	32.6	9.4	9.6	11.6	30.4	33.6	36.8	20.3	32.4	n.a.	7.5	7.5	n.a.	93	78	n.a.
Asian tigers	**5619**	**9227**	**12700**	**37.8**	**40.1**	**42.4**	**14.1**	**16.8**	**21.8**	**81.2**	**83.0**	**84.6**	**26.7**	**24.4**	**n.a.**	**10.2**	**10.4**	**n.a.**	**32**	**21**	**n.a.**
Asian cubs	**1847**	**2103**	**3079**	**26.1**	**27.6**	**29.2**	**7.7**	**8.3**	**9.6**	**45.5**	**47.8**	**50.2**	**16.8**	**22.2**	**n.a.**	**7.7**	**7.9**	**n.a.**	**103**	**89**	**n.a.**

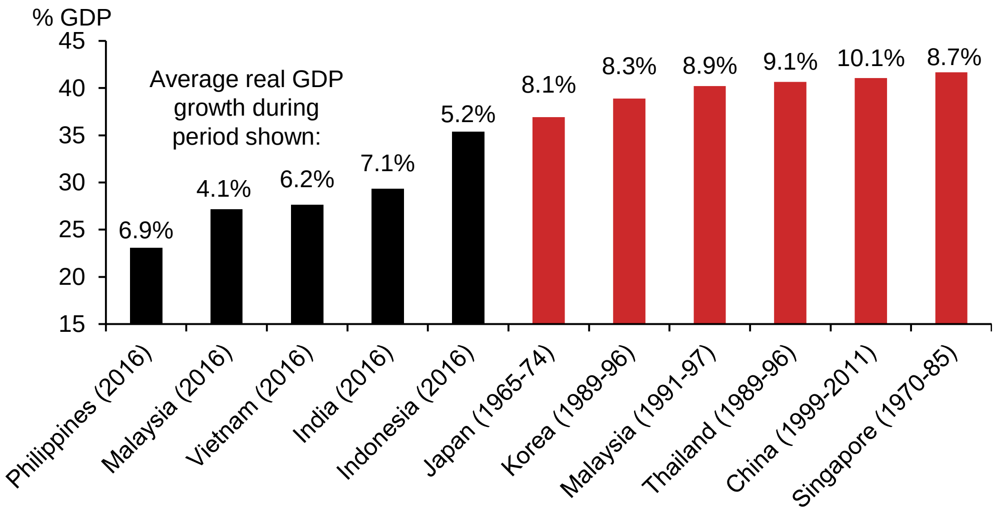
Vulnerabilities

	Exports to China + HK (% of total exports)			Current account (% GDP)			Gross public debt (% GDP)			Private credit (% GDP)			FX reserves, import cover (no. of months)			External debt (% GDP)			Sovereign credit rating (score)		
	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020
China	n.a.	n.a.	n.a.	3.9	3.0	0.7	35.1	43.9	53.1	151.9	210.4	n.a.	24.5	23.8	n.a.	9.0	13.0	n.a.	19.7	19.7	n.a.
Hong Kong	52.7	53.7	n.a.	7.0	3.1	3.5	n.a.	n.a.	n.a.	221.4	280.9	n.a.	7.1	8.0	n.a.	n.a.	n.a.	n.a.	22.3	22.3	n.a.
Korea	30.5	31.8	n.a.	2.6	7.7	5.9	30.8	35.9	35.3	176.0	194.4	n.a.	8.1	9.9	n.a.	32.5	28.7	n.a.	18.7	19.7	n.a.
Singapore	22.1	25.2	n.a.	23.9	19.8	18.6	n.a.	n.a.	n.a.	105.5	142.7	n.a.	8.6	9.9	n.a.	n.a.	n.a.	n.a.	23.0	23.0	n.a.
Taiwan	41.8	39.4	n.a.	8.9	14.4	14.0	36.7	38.3	32.4	147.9	164.2	n.a.	17.9	21.6	n.a.	22.6	30.2	n.a.	19.7	19.7	n.a.
India	11.9	8.2	n.a.	-3.2	-1.1	-2.5	67.5	67.2	61.5	59.2	60.6	n.a.	9.2	10.0	n.a.	18.5	24.0	n.a.	14.0	14.0	n.a.
Indonesia	11.5	11.4	n.a.	0.7	-2.1	-3.0	24.5	27.3	30.4	27.0	39.7	n.a.	7.9	8.4	n.a.	26.8	36.0	n.a.	12.3	13.7	n.a.
Malaysia	17.6	17.7	n.a.	10.0	3.0	1.6	51.9	57.4	50.1	120.0	138.7	n.a.	7.0	5.9	n.a.	52.9	72.1	n.a.	17.0	17.0	n.a.
Philippines	19.5	21.4	n.a.	3.6	2.9	1.8	43.5	37.1	28.6	29.6	41.8	n.a.	11.7	11.9	n.a.	36.8	26.5	n.a.	11.7	14.7	n.a.
Vietnam	12.7	14.9	n.a.	-3.7	0.5	0.5	48.1	58.3	67.5	114.7	111.9	n.a.	1.7	2.0	n.a.	40.2	38.8	n.a.	10.3	10.7	n.a.
Asian tigers	**36.8**	**37.5**	**n.a.**	**9.3**	**9.6**	**8.5**	**34.2**	**39.4**	**40.3**	**160.5**	**198.5**	**n.a.**	**13.3**	**14.6**	**n.a.**	**21.4**	**24.0**	**n.a.**	**20.7**	**20.9**	**n.a.**
Asian cubs	**14.7**	**14.7**	**n.a.**	**1.5**	**0.6**	**0.0**	**47.1**	**49.4**	**47.6**	**70.1**	**78.5**	**n.a.**	**7.5**	**7.7**	**n.a.**	**35.0**	**39.5**	**n.a.**	**13.1**	**14.0**	**n.a.**

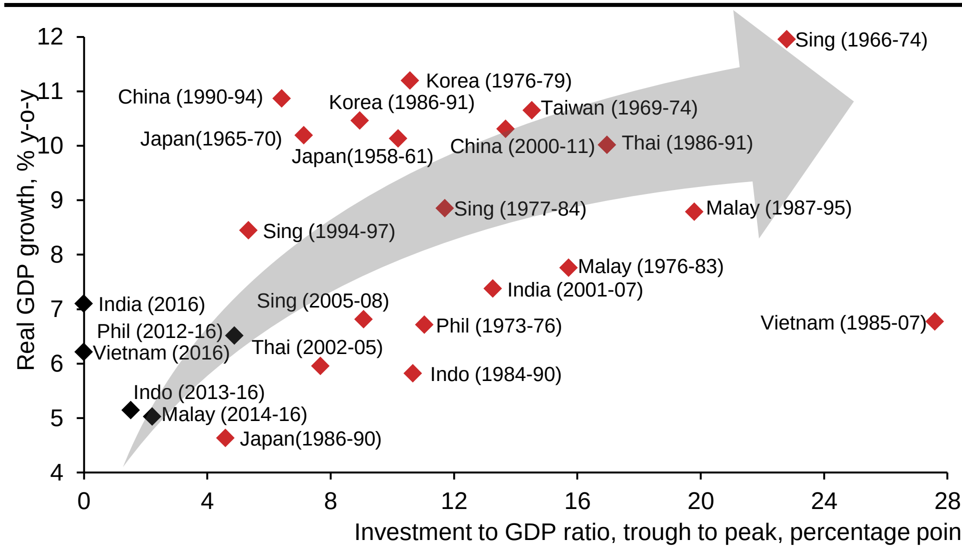
Note: Asian tigers refer to China, Hong Kong, Korea, Singapore and Taiwan, while Asian cubs refer to India, Indonesia, Malaysia, Philippines and Vietnam. For most variables, aggregates for Asian tigers and Asian cubs are the simple average of its constituent countries. Urbanization rate refers to the percentage of population in a country residing in urban areas; Popularity as an investment destination to Japan firms refers to the relative attractiveness of each country as an investment destination to 895 Japanese corporates which are planning to expand overseas operations in the next 3 years; Ease of doing business refers to the World Bank Distance to Frontier score where 0 represents lowest overall ease of doing business and 100 represents the highest overall ease of Doing Business based on 36 indicators; Import cover refers to the number of months of imports that the existing stock FX reserves can cover; Private credit refers to the loans and debt securities extended from all sources to the household and private non-financial sector; Sovereign credit rating score is calculated based on the long-term foreign currency ratings assigned by S&P, Moody's and Fitch for each country, numerically scaled such that highest rating (Aaa, AAA, AAA) has the highest numerical value - which happens to be 23 - while the lowest rating has a value of 0. Based on this scale, Investment grade ratings range from 14 to 23 and non-investment grade ratings range from 0 to 13.5. The three rating scores are then averaged to get the credit rating score for that particular country. Sources: IMF, BIS, UN, JETRO, World Bank, Bloomberg, CEIC and Nomura.

Asia's striving cubs are ripe for an investment boom

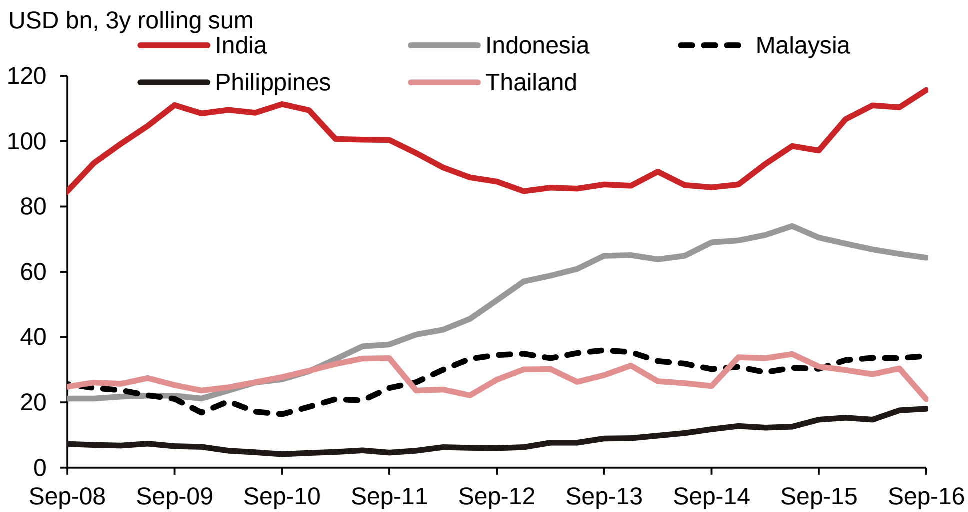
Investment share in GDP – lots of upside for Asia's cubs



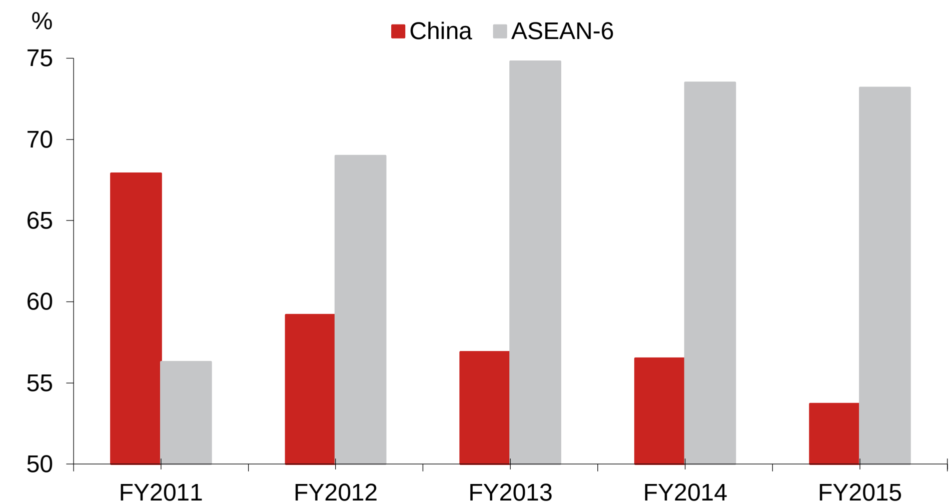
Real GDP growth during periods of investment-GDP take-offs



FDI inflows into Asia's cubs



Japanese corporates' preferred FDI destinations in next three years



Notes: Top left- Asian cubs in black. 2016 average real GDP growth for Philippines, Malaysia, India and Indonesia are Nomura forecasts. Top right- Black dots represent the current level of real GDP growth and investment acceleration level of the Asian cubs (India, Indonesia, Malaysia, the Philippines and Vietnam). Bottom right- ASEAN-6 refers to the percentage of companies surveyed that intend to expand business operations in Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam in the next three years. Sources: Top left- World Bank, CEIC and Nomura. Top right- World Bank, CEIC and Nomura. Bottom left- CEIC and Nomura. Bottom right- JETRO and Nomura.

Five risk buckets – Asia differs from other EM

	Financial imbalances			China exposure			Idiosyncratic factors			Balance of payments resilience			Room for policy response		
	Private credit	Private credit gap	Real property price gap	Exports to China	Non-food commodity exports	Equity & FX correlation with China	Real GDP growth	Real GDP growth deviation from 5yr average	CPI inflation	Current account	External debt	FX reserves /imports	Fiscal balance	Public debt	Policy rate
	% of GDP	pp difference	% deviation	% of GDP	% goods exports	Ratio	% y-o-y	pp	% y-o-y	% of GDP	% of GDP	Ratio	% of GDP	% of GDP	%
China	209.4	28.7	29.2				6.7	-1.1	1.9	2.2	15.9	22.8	-3.0	46.3	1.50
HK	299.1	35.0	8.3	81.2	5.9	0.6	1.5	-1.4	2.4	2.7		8.8	1.5	0.0	1.02
India	60.0	-4.4	5.7	0.4	33.0	-0.1	7.1	0.4	5.1	-0.4	23.7	11.3	-6.7	68.5	6.25
Indonesia	39.9	0.4	14.8	1.7	36.5	-0.1	5.2	-0.3	3.6	-2.2	37.1	9.4	-2.5	27.5	4.75
Malaysia	136.6	8.5	12.5	11.6	25.7	0.3	4.1	-1.2	2.1	1.8	82.1	6.3	-3.4	56.6	3.00
Philippines	42.1	7.4	0.4	3.7	9.0	0.5	6.9	1.0	1.7	1.3	26.1	10.8	-0.4	33.4	3.00
Singapore	150.2	19.7	-7.7	17.8	16.5	0.8	1.1	-2.9	-0.5	23.0		10.5	2.4	0.0	0.97
Korea	195.7	3.1	5.7	11.2	16.4	0.0	2.7	-0.3	0.9	7.3	29.2	10.8	0.8	38.9	1.25
Taiwan	163.8	-1.3	5.6	20.3	15.0	0.6	1.3	-1.2	1.3	13.3	33.8	22.8	-1.6	35.7	1.38
Thailand	121.7	13.4	14.4	8.0	14.8	0.4	2.8	-0.1	0.2	10.6	35.8	9.3	-0.4	43.7	1.50
Brazil	70.1	-4.8	-25.1	2.0	42.5	0.2	-3.3	-4.3	6.8	-1.1	25.6	30.9	-10.4	78.3	13.75
Chile	148.1	13.4	5.0	6.8	62.3	-0.2	1.7	-2.2	3.2	-1.5	67.5	8.3	-3.2	20.4	3.50
Colombia	52.6	6.8	19.1	0.7	72.0	-0.1	1.8	-2.8	5.5	-5.0	43.1	12.2	-2.9	47.5	7.50
Hungary	97.6	-26.5	5.4	1.5	8.5	0.0	2.1	0.4	0.4	4.5	121.0	3.5	-2.0	75.3	0.90
Mexico	42.0	8.4	3.1	0.4	12.8	-0.1	2.2	-0.6	3.7	-3.1	40.2	5.2	-3.0	56.0	5.75
Poland	84.9	2.1	9.1	0.4	16.6	-0.2	2.8	-0.2	-0.6	-1.0	74.9	6.7	-2.8	52.4	1.50
Romania	29.0	-11.6	27.8	0.3	15.9	-0.1	5.0	2.6	-1.5	-2.6	54.5	6.0	-2.8	39.7	1.75
Russia	70.0	1.3	-29.6	2.3	77.3	0.0	-1.0	-2.2	7.3	3.0	45.4	21.2	-3.9	17.1	10.00
S.Africa	72.7	-1.7	-8.9	2.4	48.0	-0.1	0.5	-1.6	6.3	-4.2	56.1	6.4	-3.9	51.7	7.00
Turkey	79.6	10.6	3.8	0.3	19.2	-0.1	2.7	-1.7	7.7	-4.8	48.7	5.9	-1.9	31.7	8.00
Asia average	**141.8**	**11.1**	**8.9**	**17.3**	**19.2**	**0.3**	**3.9**	**-0.7**	**1.9**	**6.0**	**35.5**	**12.3**	**-1.3**	**35.1**	**2.5**
Other EM average	**74.7**	**-0.2**	**1.0**	**1.7**	**37.5**	**-0.1**	**1.5**	**-1.3**	**3.9**	**-1.6**	**57.7**	**10.6**	**-3.7**	**47.0**	**6.0**

Note: Private credit refers to the latest loans and debt securities outstanding of private non-financial corporations and households; Private credit gap and real property price gap are the percentage point difference and % deviation of the most recent quarterly data from its long-run average calculated recursively using a HP filter (lambda 400,000) respectively; Exports to China are for 2015 and include re-exports via Hong Kong; Non-food commodity exports are the exports of metals, crude materials, coal, gas, petroleum and petroleum products in 2015; Correlation of equity and FX markets are the average daily correlations of a country's stock market and exchange rate with the Shanghai Composite Index and the RMB respectively, from 2005-2016; Real GDP growth, CPI inflation and current account are Nomura's forecasts for 2016; Real GDP growth deviation refers to the percentage point deviation of a country's 2016 real GDP from its 2011-2015 average; External debt are the latest available and include estimates of non-financial corporate offshore debt; External debt are excluded for Hong Kong and Singapore because they are largely trade finance related; Import cover are the latest FX reserves divided by the rolling 12-month average imports; Fiscal balance and public debt are IMF estimates for 2016; Policy rates are latest available, for Hong Kong and Singapore we use the 3-month HIBOR and SIBOR rate. Data as of 9 January 2016.

Source: BIS, IMF, National sources, UN Comtrade, Haver, CEIC and Nomura.

Five risk buckets – Asia differs from other EM: Scorecard

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	Financial imbalances				China exposure				Idiosyncratic factors				Balance of payments resilience				Room for policy response				
	Private credit	Private credit gap	Real property price gap		Exports to China	Non-food commodity exports	Equity & FX correlation with China		Real GDP growth	Real GDP growth deviation from 5yr average	CPI inflation		Current account	External debt	FX reserves /imports		Fiscal balance	Public debt	Policy rate		**Total Score**
China	3	2	2	**10**					0	2	0	**2**	0	0	0	**0**	1	0	2	3	**15**
HK	3	2	1	**6**	3	0	3	**7**	1	2	0	**3**	0	0	0	**0**	0	0	2	2	**18**
India	0	0	1	**1**	0	2	0	**2**	0	0	1	**1**	1	0	0	**1**	3	2	0	5	**10**
Indonesia	0	0	2	**2**	0	2	0	**2**	0	0	0	**0**	2	1	0	**3**	1	0	0	1	**8**
Malaysia	2	1	2	**5**	3	1	1	**5**	0	2	0	**2**	0	3	1	**4**	1	1	0	2	**18**
Philippines	0	1	0	**1**	1	0	3	**4**	0	0	0	**0**	0	0	0	**0**	0	0	0	0	**5**
Singapore	3	2	0	**5**	3	1	3	**8**	1	3	0	**5**	0	0	0	**0**	0	0	3	3	**21**
Korea	3	0	1	**4**	3	1	0	**4**	0	0	0	**0**	0	0	0	**0**	0	0	2	2	**10**
Taiwan	3	0	1	**4**	3	0	3	**7**	1	2	0	**3**	0	1	0	**1**	0	0	2	2	**17**
Thailand	1	2	2	**8**	2	0	2	**4**	0	0	0	**0**	0	1	0	**1**	0	0	2	2	**15**
Brazil	0	0	0	**0**	0	2	1	**3**	3	3	1	**8**	1	0	0	**1**	3	3	0	6	**18**
Chile	2	2	0	**4**	2	3	0	**5**	1	3	0	**5**	1	3	0	**4**	1	0	0	1	**19**
Colombia	0	1	2	**3**	0	3	0	**3**	1	3	1	**6**	3	2	0	**5**	1	0	0	1	**18**
Hungary	0	0	1	**1**	0	0	0	**0**	0	0	0	**0**	0	3	3	**6**	0	3	3	7	**14**
Mexico	0	1	0	**1**	0	0	0	**0**	0	1	0	**1**	2	2	2	**6**	1	1	0	2	**10**
Poland	0	0	1	**1**	0	1	0	**1**	0	0	0	**0**	1	3	1	**5**	1	1	2	4	**11**
Romania	0	0	2	**2**	0	1	0	**1**	0	0	0	**0**	2	3	2	**7**	1	0	2	3	**13**
Russia	0	0	0	**0**	0	3	0	**3**	3	3	1	**8**	0	2	0	**2**	1	0	0	1	**14**
S. Africa	0	0	0	**0**	0	2	0	**2**	2	2	1	**5**	3	3	1	**7**	1	1	0	2	**16**
Turkey	0	2	0	**2**	0	1	0	**1**	0	2	1	**3**	3	2	2	**7**	0	0	0	0	**13**
Asia average				**4.6**				**4.8**				**1.6**				**1.0**				2.2	**13.7**
Other EM average				**1.4**				**1.9**				**3.6**				**5.0**				2.7	**14.6**

Note: Vulnerability scores are calculated as follows: For each indicator, countries are assigned scores of 1, 2 or 3 if that country's indicator breaches certain thresholds; 0 otherwise. The higher the score, the more vulnerable a country is. Scores are determined as follows: Private credit 100-130%=1, 130-150%=2, >150% =3; Credit gap and property price gap of 5-10%=1, >10%=2; Exports to China of 3-6%=1, 6-10%=2, >10%=3; Non-food commodity exports of 15-30%=1, 30-50%=2, >50%=3; equity and FX correlation of 0.2-0.4=1, 0.4-0.5=2, >0.5=3; Real GDP growth of 1-2%=1, 0-1%=2, <0%=3; GDP growth deviation from 5y average of -0.5 to-1.0pp=1, of -1 to -2pp=2, <-2pp=3; CPI inflation of 5-10%=1, 10-15%=2, >15%=3; Current account of 0 to -2%=1, -2 to -4%=2, <-4%=3; external debt of 30-40%=1, of 40-50%=2, >50%=3; Import cover of 6-7=1, 5-6=2, <5=3; Fiscal balance of-2 to -4%=1, -4 to -6%=2, <-6%=3; Public debt of 50-60%=1, 60-70%=2, >70%=3; Policy rate of 2-3%=1, 1-2%=2, <1%=3. The bolded scores for each risk category is the sum of the individual indicator scores, with the following additional conditions: For financial imbalances, if the score for both private credit gap and real property price gap=2, the joint score will be 7; For china exposure if the score for both exports to China and equity & FX correlation with China=3, an additional point is added to the joint score; For idiosyncratic factors if the score for real GDP growth>0 and the score for deviation of real GDP growth from 5y average=3, an additional point is added to the joint score; For balance of payments resilience if both the scores for current account and external debt=3 and the score for import cover>1, an additional point is added to the joint score; For room for policy response if the scores for both public debt and policy rate >1, an additional point is added to the joint score. Source: BIS, IMF, National sources, UN Comtrade, Haver, CEIC and Nomura.

Nomura's Asia league table

Leaders (strong growth outlook; sound fundamentals/ moving in that direction)

India: Demonetisation is short-run negative but positive in the long run; prudent macro policies and progress on reforms sets the stage for rising potential growth. We see a V-shaped recovery: by Q4, 7.7% y-o-y GDP growth and 6.0% CPI inflation.

Indonesia: Domestic-led growth to rise to 5.6% in 2017; there is space for fiscal stimulus and infrastructure implementation; external risks are motivating even more reforms to build resilience.

Philippines: Domestic demand is the strongest in Asia; healthy fiscal account, low leverage, and a young population; an investment boom is currently underway; the only Asia central bank we expect to hike in 2017.

Laggards (weak or deteriorating growth outlook; poor fundamentals)

China: Needs SOE restructuring and deleveraging but this will hurt growth. The growth-financial stability trade-off is becoming more acute. Beijing will do what it takes to keep growth at ~6.5%, but vulnerabilities are festering.

Hong Kong: Property bubble, straightjacketed by HKD peg and political risks. Stuck between a rock (Fed hikes) and a hard place (slowing China).

Malaysia: Protectionism undermines exports and narrows the current account; risk of global LPG supply glut; large foreign bond holdings and limited FX reserves; political risk from elections clash with needed fiscal austerity.

Korea: Its large current account surplus is a symptom of demographics, high household debt; high political uncertainty, very exposed to Trump, little fiscal space.

Singapore: So far unsuccessful in its bid to raise productivity; potential growth is slowing and the ultra-open economy is very exposed to myriad downside external risks.

Taiwan: Debt is high; cross-strait relations have deteriorated and could be left out of any new regional free trade agreements; US-Sino relations could indirectly impact its regional supply-chain.

Thailand: High household debt; large overcapacity; shrinking working-age population; lack of supply-side reforms, it is hampered further by politics under military rule.

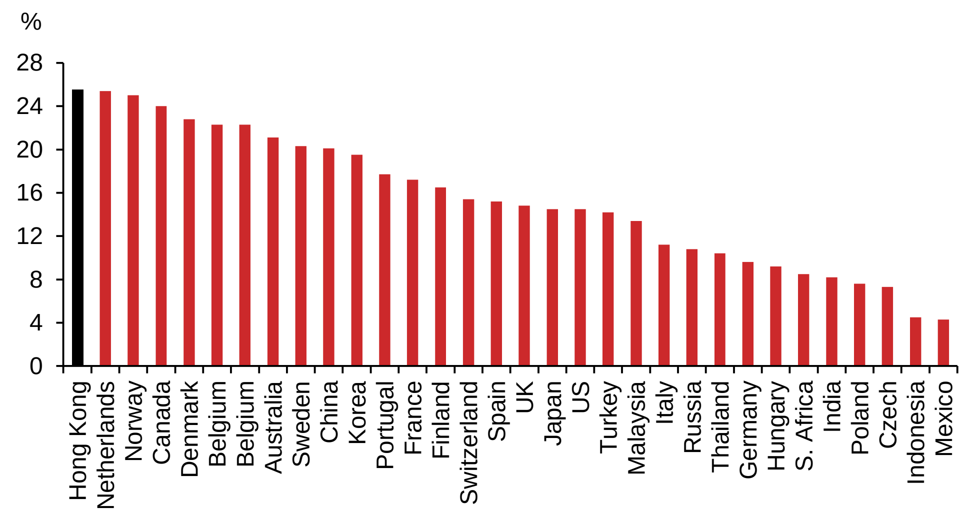
Hong Kong could be Asia's flashpoint

NOMURA

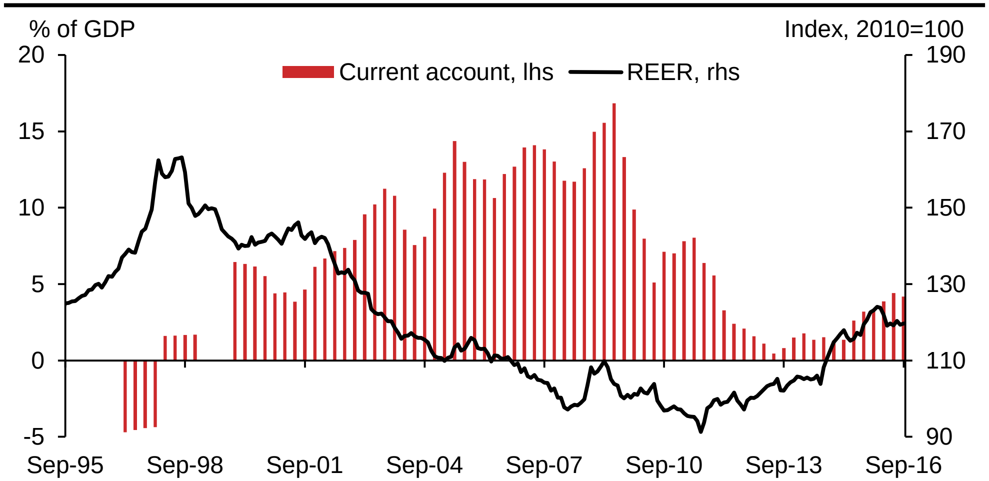
HK stuck between a rock (Fed hikes) and a hard place (China risks)

- Hong Kong has very large credit and property market overhangs. Since 2008, *real* property prices have risen 125% and the ratio of private non-financial credit to GDP has surged to 299%.
- The real effective exchange rate has risen 30% since 2011. The current account surplus/GDP has shrunk from 15% in 2008 to an estimated 3.2% in 2016, and is no longer a larger buffer to net capital outflows.
- Foreign assets and liabilities have surged since 2008. This leaves significant scope for capital outflows which, via the currency board, would likely lead to a spike in Hibor rates. Official reserve assets, at 10% of total liabilities, are a limited buffer.
- Economic hardship could ignite political and social instability, or vice versa, ahead of the new chief executive in March 2017. We would not rule out pressures on the HKD peg regime and hence spike in Hibor.

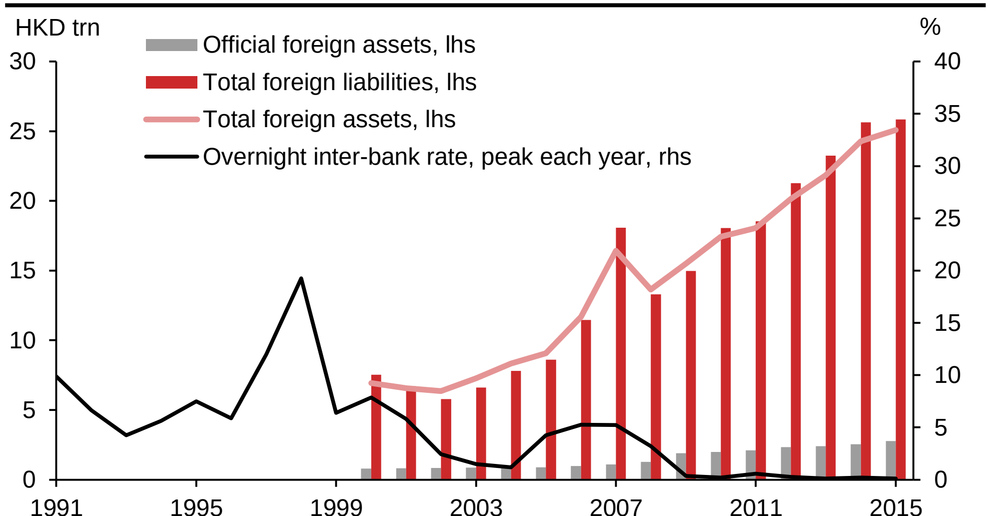
Debt-service ratios of private non-financial sector



The current account surplus has shrunk and REER appreciated



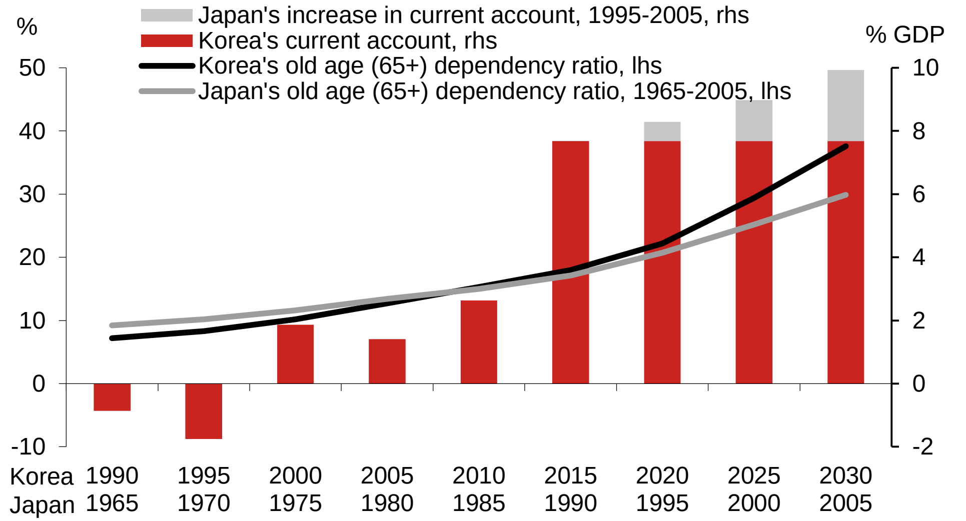
Capital flight would lead to higher interest rates, deflating the bubbles



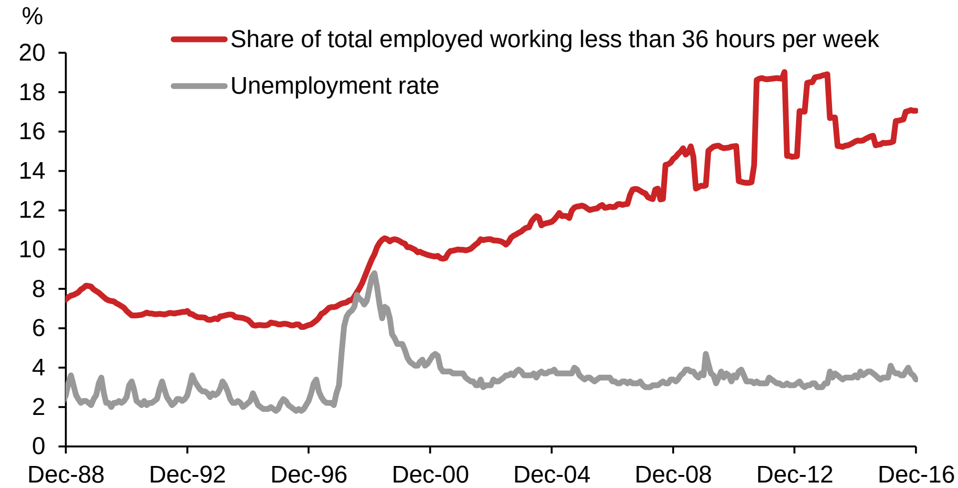
Sources: Top right- BIS and Nomura. Bottom left- BIS, CEIC and Nomura. Bottom right: CEIC and Nomura.

Korea seems to be following in Japan’s footsteps

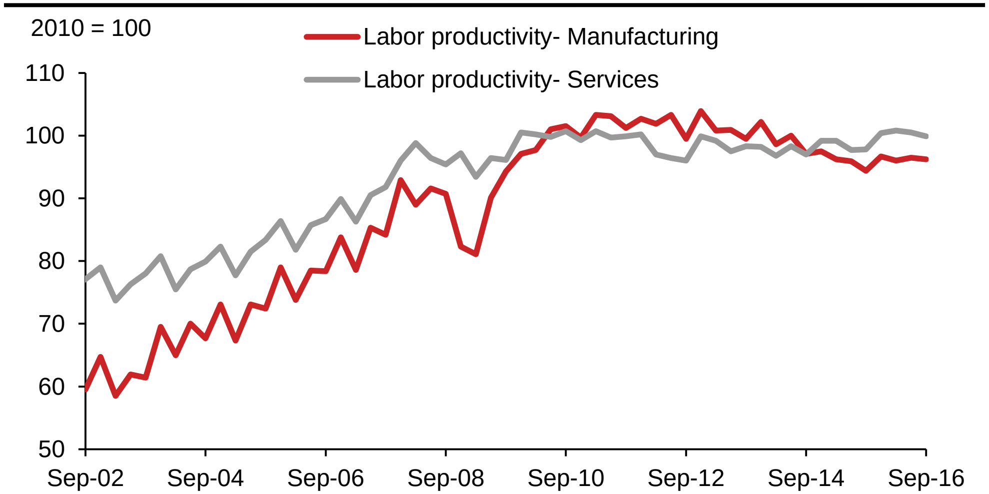
Rapidly ageing population will keep the current account surplus large



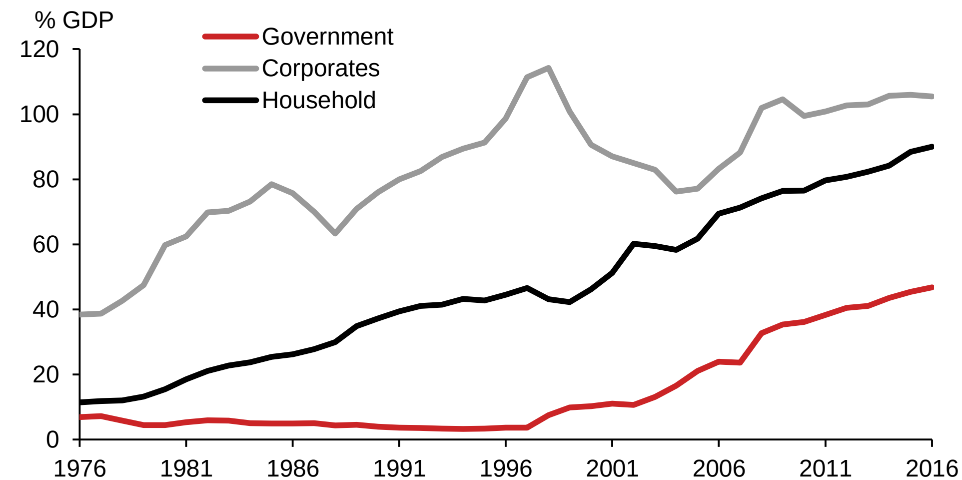
Jobless rate masks a serious hidden unemployment problem



Productivity growth has stalled in manufacturing and services



Economy-wide debt continues to rise making it hard to raise rates



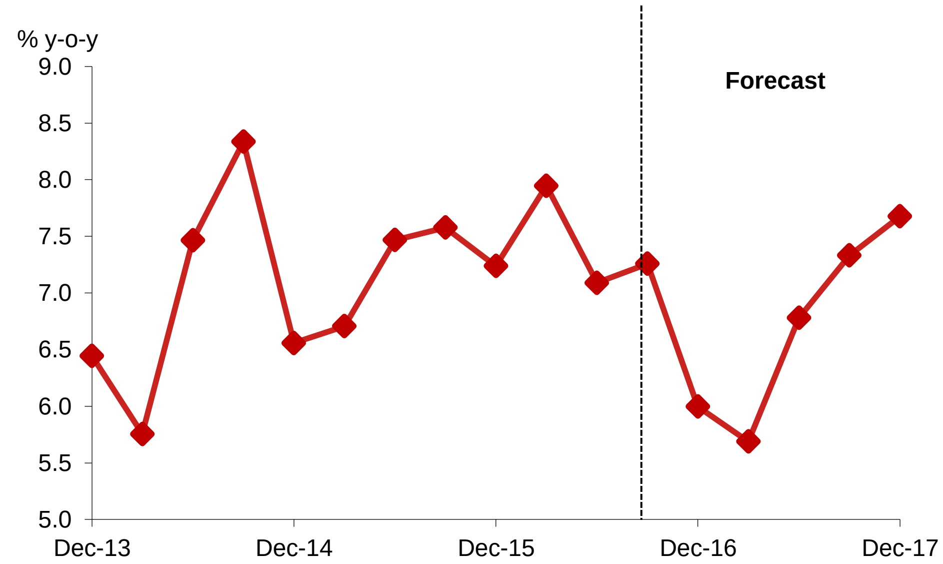
Note: Bottom right- 2016 are Nomura forecasts.
Sources: CEIC and Nomura.

India – V-shaped recovery in H2 2017

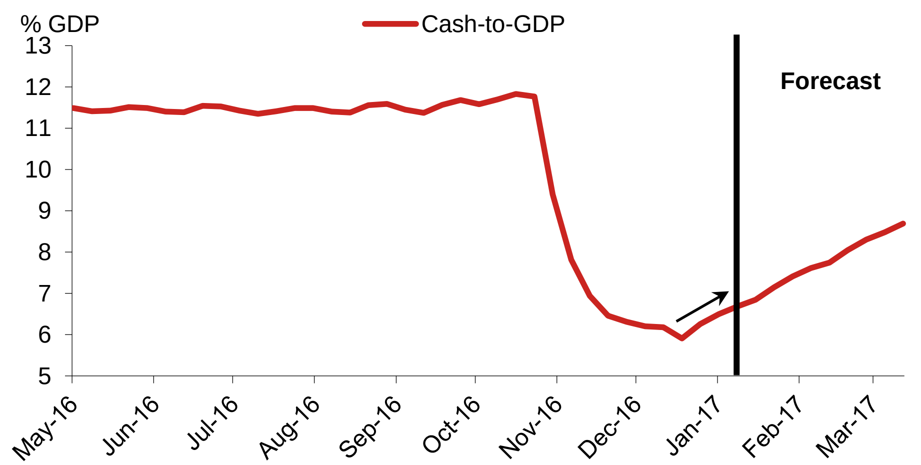
Demonetisation is a short-term negative shock

- The dislocation from demonetisation has been substantial and likely underestimated in the GDP statistics, but it is temporary. In H2 we expect a V-shaped recovery due to pent-up demand, lower lending rates, the transfer of some 'black' money from high to low income households, and more fiscal stimulus from the windfall revenue gain. In Q4, we expect 7.7% y-o-y GDP growth and 6.0% CPI inflation.
- Reforms are happening gradually (recent wins: bankruptcy bill, recognition of NPLs and new GST likely in July), the balance of payments is strong again and monetary and fiscal policies overall are likely to remain prudent (we expect one more 25bp rate cut in February and then a prolonged pause).
- In the world's largest democracy, it shouldn't be surprising that reforms are progressing only gradually, but over time they add up. Of all the EM economies, India is one of the few in which we are positive on both growth and economic fundamentals, i.e. sustainable growth.

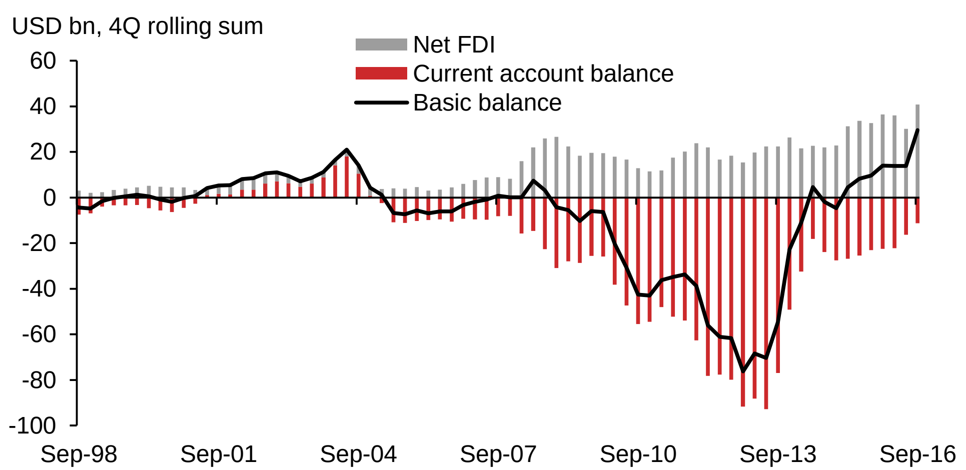
The market is setting itself up for upside surprises on GDP and CPI



The cash-to-GDP should normalise in March at around 9% of GDP



The basic balance is firmly back in positive territory

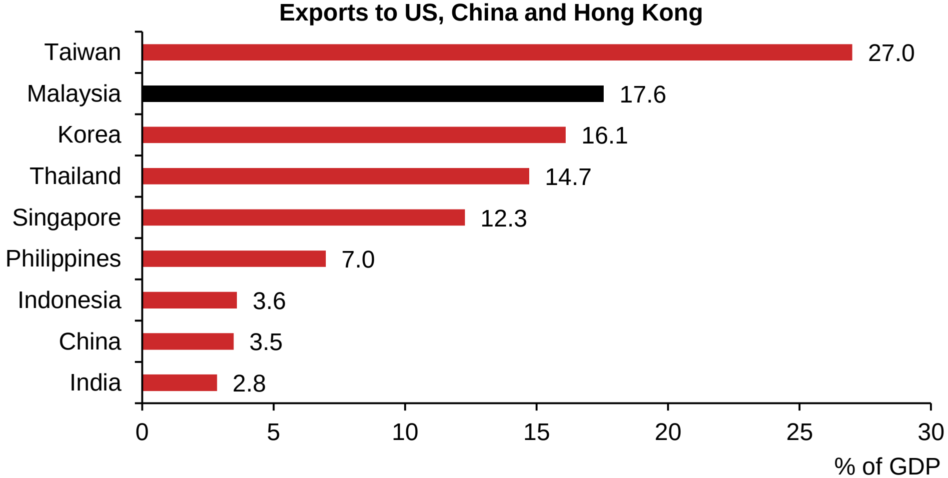


Sources: CEIC and Nomura.

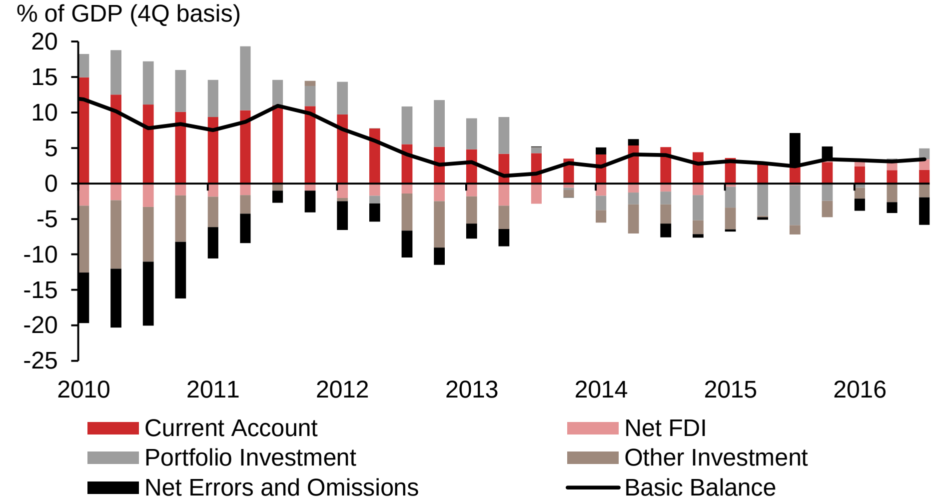
Malaysia – some cracks appearing

NOMURA

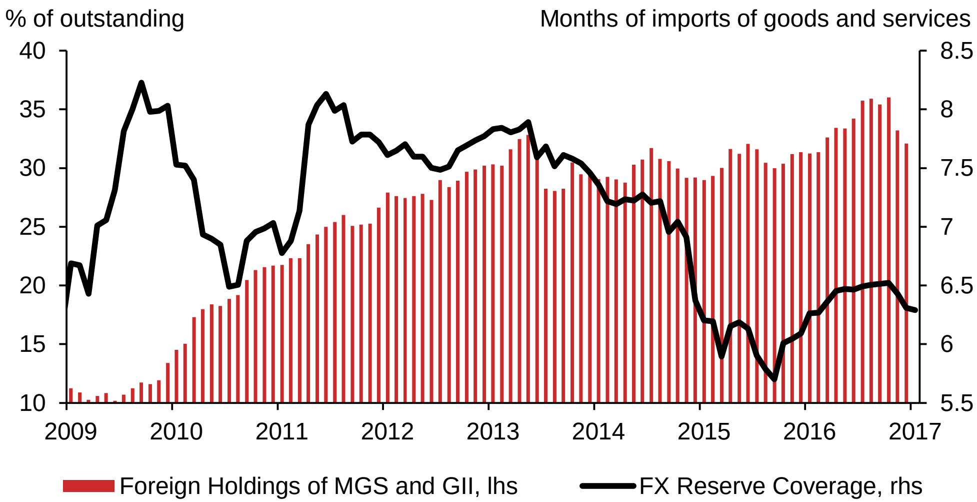
Highly exposed to a rise in trade protectionism and a slowing China



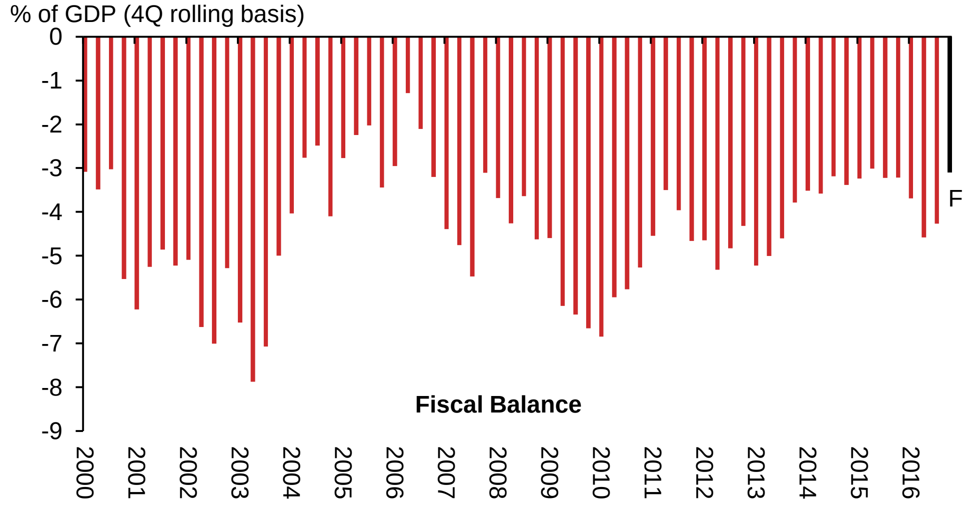
BOP vulnerable to capital flight



Limited FX reserve buffer and still high foreign holdings of bonds



Fiscal space is limited to counter external headwinds



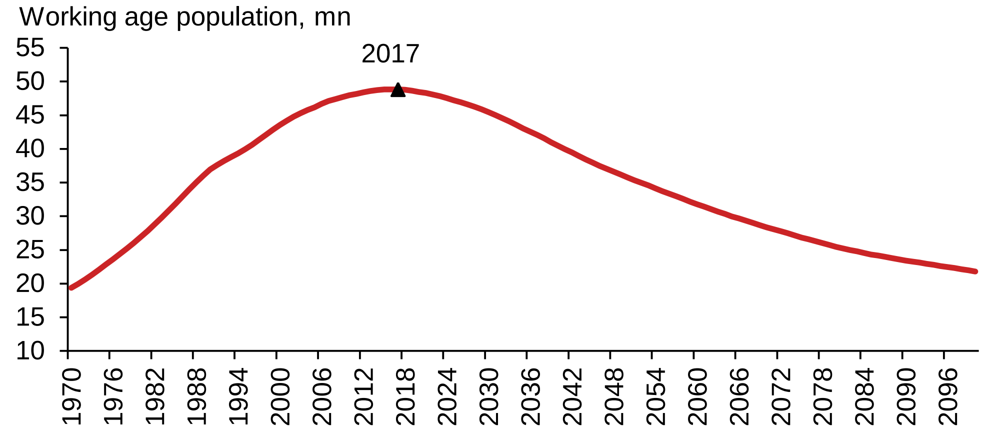
Sources: CEIC and Nomura.

Thailand – heavy baggage is taking its toll

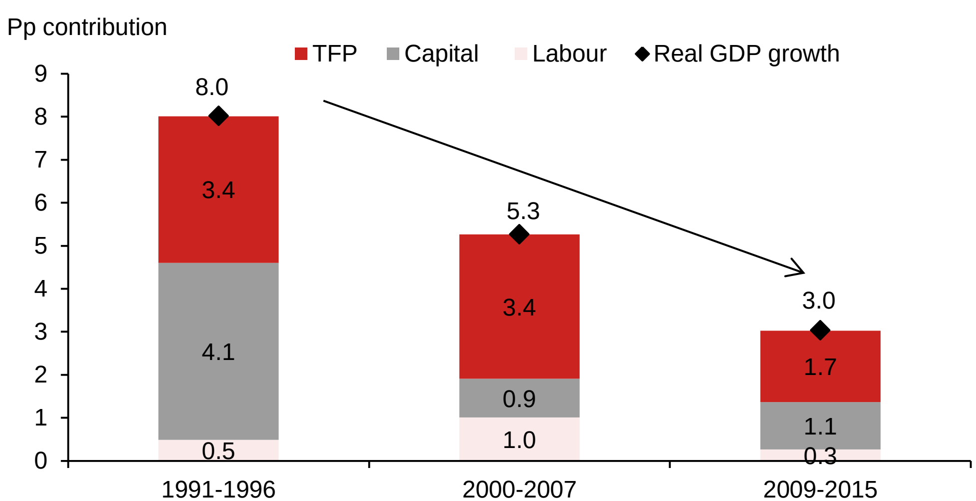
Military junta leadership is resorting to populist fiscal measures

Measures announced in 2016	THBbn
Baan Pracha Rat	70.0
Assistant measurements for drought and capacity building programs on agricultural sectors	93.0
Credit guarantee program for micro entrepreneurs (phase 2)	13.5
Baan Thanarat Pracha Rat	9.0
Handout to farmers who earn less than THB100,000 per year	6.5
Rice price support scheme (gross cost)	145.7
Retail tax break for consumer for the year-end	3.2
Tourism tax break for domestic Thai holidays	-
Supplementary budget for FY17	190.0
Total	623.9
% GDP	4.4

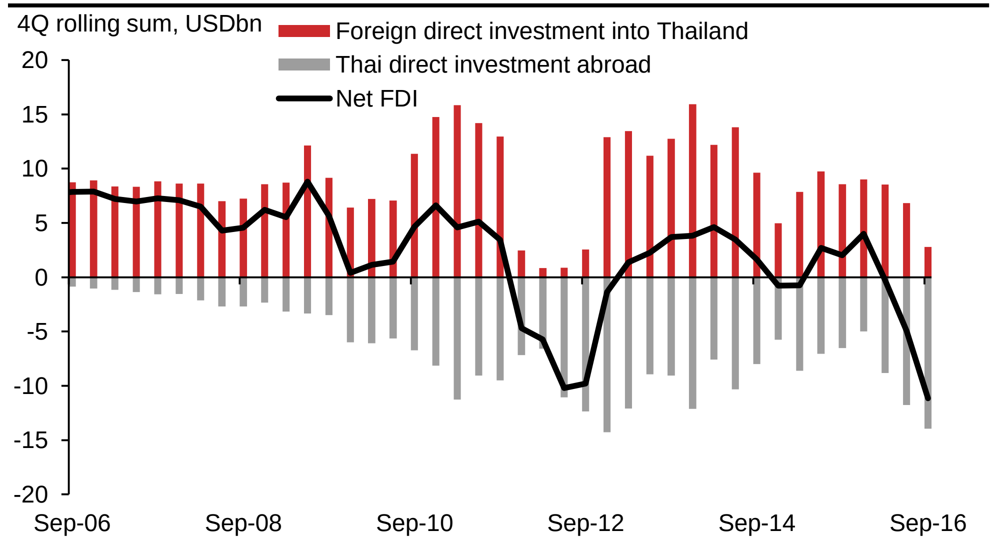
Demographics is a growing structural headwind



The lack of supply-side reforms is slowing potential growth



The dim outlook for potential growth is affecting business decisions

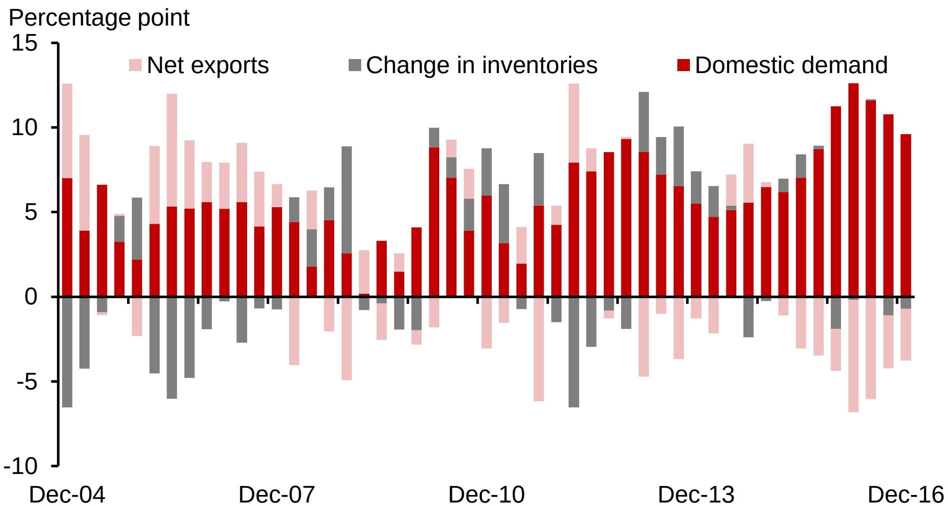


Sources: Top left- Bangkok Post; The Nation and Nomura.Top right- UN Demographics and Nomura. Bottom- CEIC and Nomura.

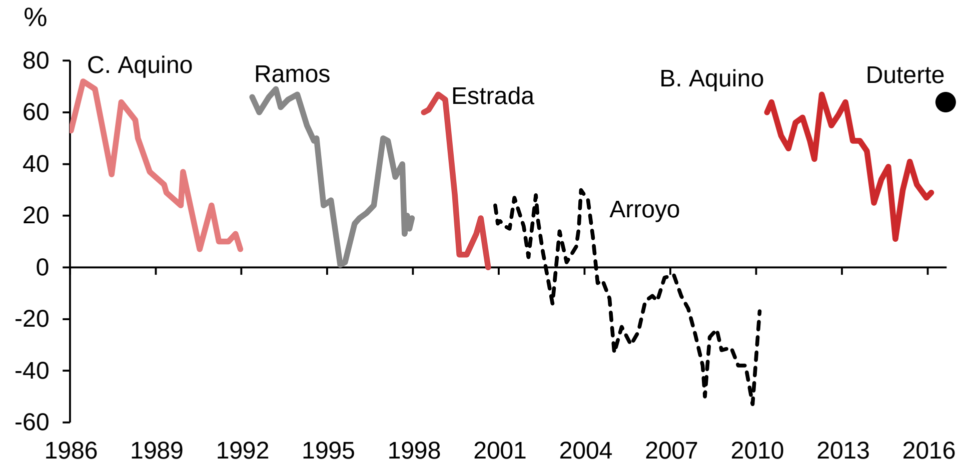
The Philippines: Goldilocks economy, but watch politics

NOMURA

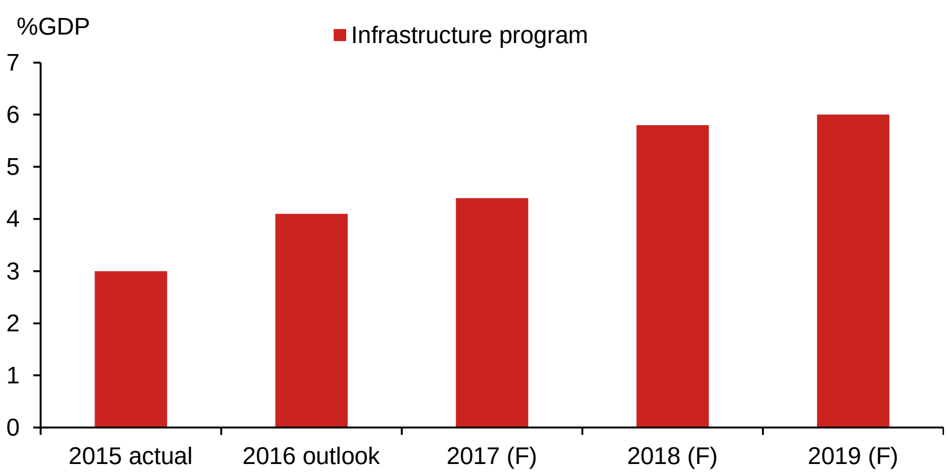
Domestic demand is booming…



… and the new president, while controversial, is very popular



There is lots of fiscal room to ramp up infrastructure spending



The stage is set for an investment boom and higher potential growth

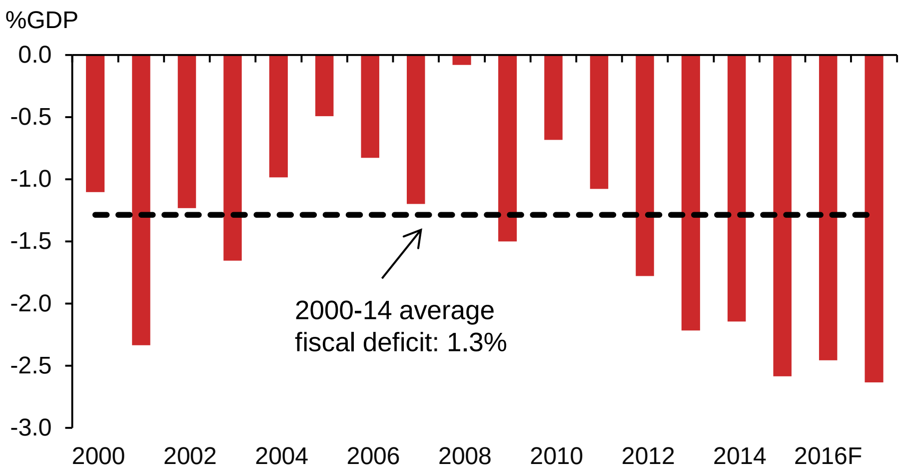
GDP per capita in 2015 (USD)		Average Investment/GDP, 2000 - 2015 (%)		Average Investment/GDP, Q2 2016 (%)	
Singapore	53224	China	40.9	China	43.4
Hong Kong	42097	Korea	30.5	Indonesia	33.2
Japan	32491	Vietnam	29.6	Korea	29.1
Korea	27513	India	29.6	India	28.5
Taiwan	22317	Singapore	26.7	Malaysia	26.2
Malaysia	9560	Indonesia	26.6	Singapore	25.5
China	7847	Thailand	24.8	Thailand	25.0
Thailand	6015	Malaysia	23.3	Vietnam	24.7
Indonesia	3374	Taiwan	22.9	**Philippines**	**22.7**
Philippines	**2875**	Hong Kong	22.7	Hong Kong	21.5
Vietnam	2171	Japan	22.1	Japan	21.5
India	1609	**Philippines**	**20.2**	Taiwan	20.6

Notes: Bottom right- Average investment/GDP for China, Singapore and Vietnam are for 2015 instead of Q2 2016 as only annual data available.
Sources: Top left- CEIC and Nomura. Top right- Social Weather Station and Nomura. Bottom left- Ministry of Finance and Nomura. Bottom right: IMF, CEIC and Nomura.

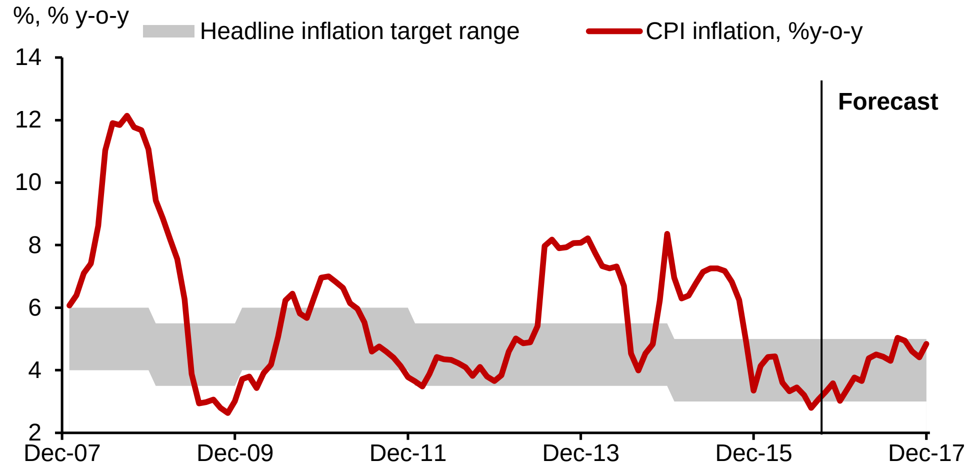
Indonesia's improving growth and reform outlook

NOMURA

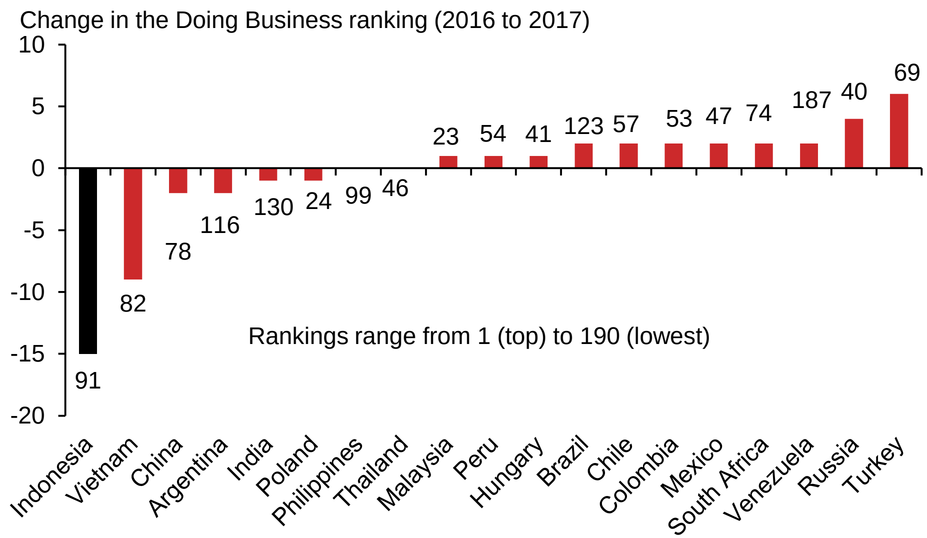
The government is starting to use its substantial fiscal space



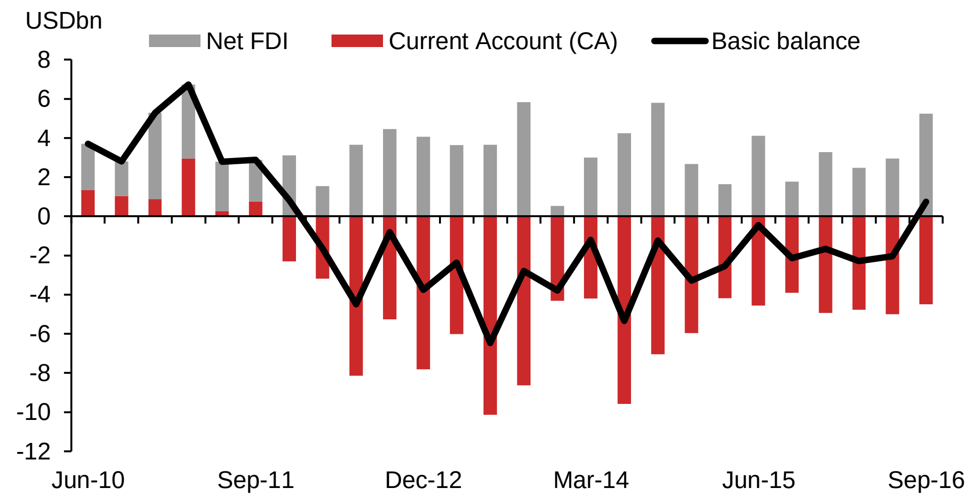
A new, prudent approach to monetary policy means no more rate cuts



Targeted reforms is successfully reducing the cost of doing business



Strong net FDI inflows have swung the basic BOP into surplus



Note: Bottom left- Labels indicate each country's World Bank Doing Business Rank for 2017.
Sources: Top left, Top right and bottom right- CEIC and Nomura. Bottom left- World Bank and Nomura.

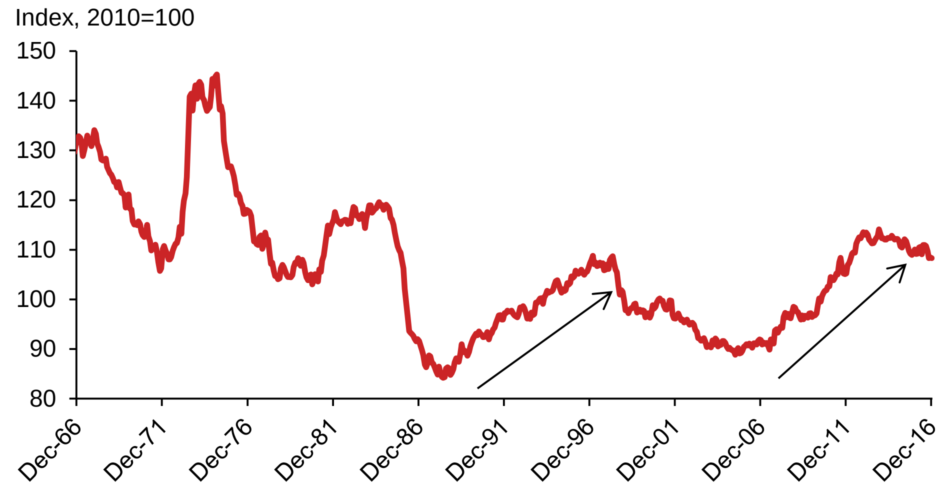
Singapore – besieged by negative external shocks

NOMURA

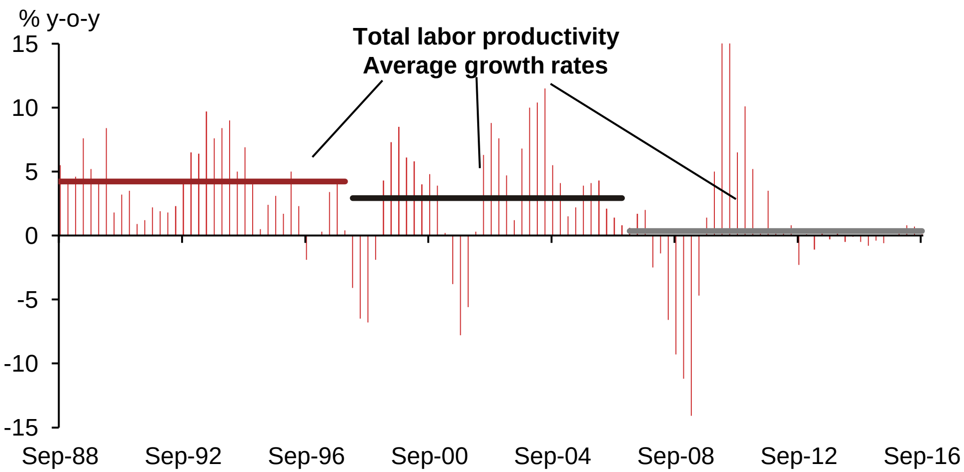
A very tough environment to implement painful restructuring

- Six years of corporate restructuring to boost productivity has so far little to show for it, and the going could get tougher as the economy has been hit simultaneously by a several negative external shocks:
- **China slowdown:** After Hong Kong, we estimate that Singapore is the world's second-most exposed economy to China.
- **Slump in oil price and trade.** Singapore is an oil refiner and trade entrepôt: 40% of its service value-added is related to trade activity.
- **Financial market turmoil.** Singapore is one of Asia's main financial hubs, and so directly exposed to reduced financial sector activity.
- **Rising short-term rates.** This is a consequence of the SGD/NEER policy, and with high domestic debt, it can be a drag on growth.

Singapore's real effective exchange rate remains at a strong level…



… yet growth in labour productivity has weakened considerably



There are many challenges in lifting the island's low productivity

GDP per capita in 2015 (USD)		Median age in 2015 (years old)		GINI coefficient (0= perfect equality 1= perfect inequality)	
Singapore	**53224**	Japan	46.5	Hong Kong	0.54
Hong Kong	42097	Hong Kong	43.2	**Singapore**	**0.46**
Japan	32491	Korea	40.6	Malaysia	0.46
Korea	27513	**Singapore**	**40.0**	Philippines	0.43
Taiwan	22317	Taiwan	39.9	China	0.42
Malaysia	9560	Thailand	38.0	Thailand	0.39
China	7847	China	37.0	Indonesia	0.38
Thailand	6015	Malaysia	28.5	India	0.34
Indonesia	3374	Indonesia	28.4	Taiwan	0.34
Philippines	2875	India	26.6	Japan	0.32
India	1609	Philippines	24.2	Korea	0.31

Sources: Top right: CEIC and Nomura. Bottom left: BIS and Nomura. Bottom right: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2015 Revision, Taiwan National Development Council, World Bank, CIA-The World Factbook, IMF, CEIC and Nomura.

Nomura forecasts versus the street

	Real GDP Growth (% y-o-y)					CPI Inflation (% y-o-y)				
	Nomura	Nomura	Consensus	Nomura	Consensus	Nomura	Nomura	Consensus	Nomura	Consensus
	2016	2017	2017	2018	2018	2016	2017	2017	2018	2018
China	6.7	6.5	6.4	6.2	6.1	2.0	2.6	2.2	1.9	2.2
Hong Kong	1.5	0.5	1.6	1.5	1.9	2.4	1.5	2.1	-0.1	2.1
India*	6.8	7.4	7.5	7.6	n.a.	5.0	5.4	5.0	5.2	n.a.
Indonesia	5.2	5.6	5.2	5.8	5.4	3.5	4.4	4.2	4.7	4.4
Malaysia	4.1	3.7	4.2	3.7	4.4	2.1	2.8	2.6	2.5	2.6
Philippines	6.9	6.3	6.3	6.5	6.2	1.8	3.3	3.1	3.7	3.2
Singapore	1.8	0.7	1.5	0.9	2.0	-0.5	0.5	0.8	0.5	1.2
South Korea	2.7	2.0	2.5	1.7	2.5	0.9	1.7	1.6	1.5	1.7
Taiwan	1.4	1.1	1.7	1.2	1.9	1.4	1.4	1.4	1.2	1.3
Thailand	2.8	2.8	3.1	2.8	3.2	0.2	1.4	1.6	1.1	1.9
Asia ex-Japan	**6.0**	**6.0**	**6.0**	**5.9**	**n.a.**	**2.6**	**3.2**	**2.9**	**2.8**	**n.a.**

	Current account (% of GDP)			Fiscal Balance (% of GDP)			Official policy rate, % end period		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
China	2.2	2.1	1.9	-4.0	-4.0	-4.0	1.50	1.50	1.25
Hong Kong	3.2	1.8	2.0	0.5	0.0	0.0	1.02	1.40	2.15
India	-0.8	-1.3	-1.7	-3.5	-3.0	-3.0	6.25	6.00	6.00
Indonesia	-2.2	-2.9	-3.2	-2.5	-2.6	-2.8	4.75	4.75	4.75
Malaysia	1.8	1.2	1.2	-3.1	-3.0	-2.8	3.00	2.50	2.50
Philippines	1.3	0.5	0.4	-2.2	-2.7	-2.8	3.00	3.50	3.50
Singapore	23.0	23.0	23.0	0.8	0.5	0.5	0.97	1.55	2.30
South Korea	7.1	5.8	6.5	0.1	0.8	1.2	1.25	1.00	1.25
Taiwan	14.2	12.1	12.4	-0.5	-1.5	-1.5	1.38	1.38	1.38
Thailand	10.6	7.8	6.8	-2.7	-2.7	-2.5	1.50	1.00	1.00
Asia ex-Japan	**2.3**	**1.8**	**1.5**	**-3.3**	**-3.2**	**-3.2**	**-**	**-**	**-**

*Notes: *India forecasts are for fiscal year, e.g. 2016 forecast is year ending Mar 2017. Nomura forecasts last revised 3 February 2016. Consensus forecasts are from the January 2017 Consensus Economics survey.*
Sources: Consensus Economics and Nomura.

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