Evolution of Monetary Policy Frameworks in the ASEAN-5 and New Challenges

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ASIA AND PACIFIC DEPARTMENT, IMF

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6TH BSP INTERNATIONAL RESEARCH CONFERENCE

*ASEAN-5: Indonesia, Malaysia, Philippines, Singapore and Thailand

Based on the Asean-5 Cluster Report : Evolution of Monetary Policy Frameworks

https://www.imf.org/external/pubs/ft/scr/2016/cr16176.pdf

Outline

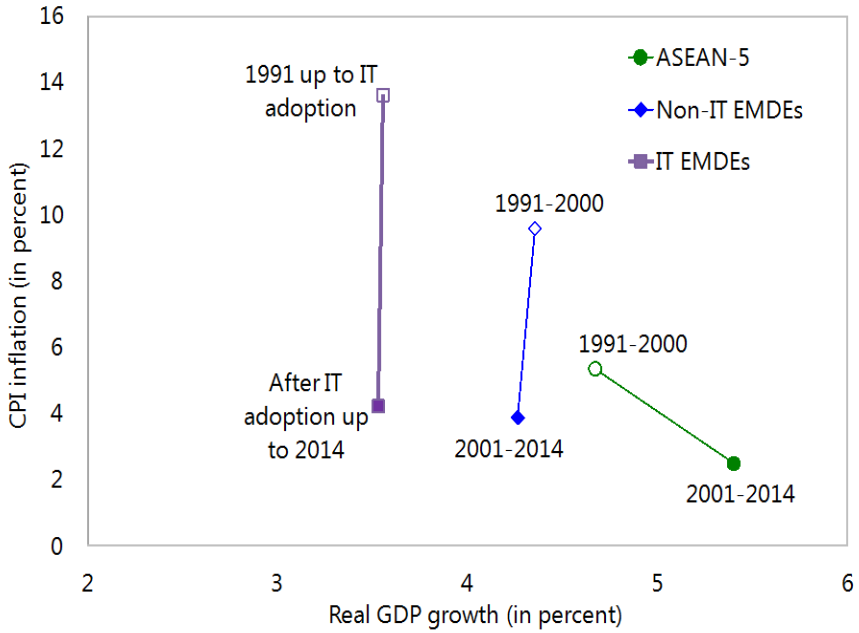
- ASEAN-5: Evolution of Monetary Frameworks since AFC
- Global Financial Cycle and Spillovers to Domestic Financial Conditions
- Policy Responses: Monetary Policy and the Broadening of the Policy Toolkit
- Macro-financial Challenges in the New Normal

Challenges and Evolution of Monetary Policy Frameworks in the ASEAN-5 economies

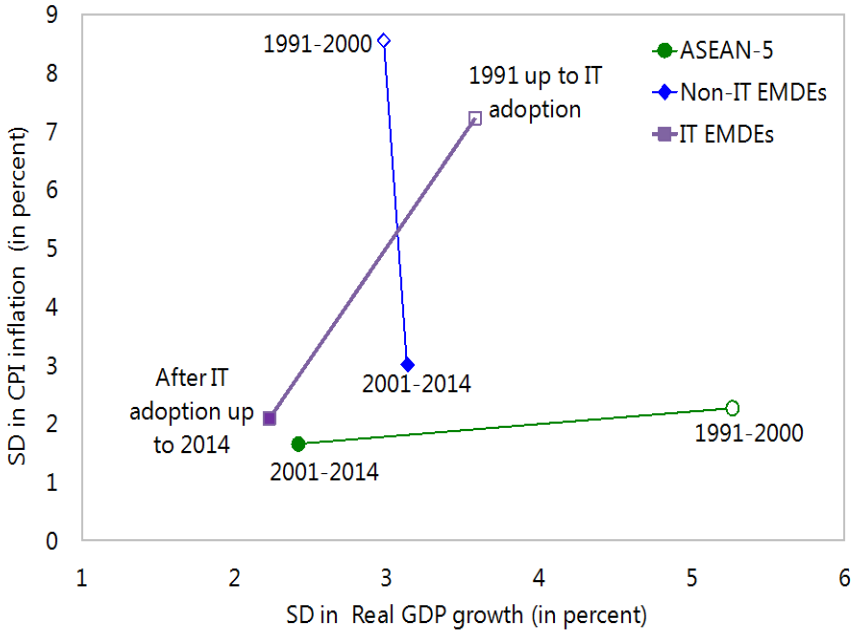
- The flexible inflation targeting frameworks have served the ASEAN5 economies well, but they have faced new challenges.
- The reduction in global interest rates and volatile capital flows posed a challenge to insulate domestic financial conditions.
- Greater exchange rate flexibility and liquidity management strengthened monetary policy autonomy and avoided generalized credit booms despite the global spillovers.
- ASEAN-5 central banks adapted their toolkits to dampen systemic risks (MPMs, CFMs) and address volatile capital flows (use of reserve buffers and CFMs), holding lessons on the use of both monetary and prudential policies separately.

The ASEAN-5 monetary policy frameworks have delivered a strong macroeconomic performance…

Growth and Inflation Performances



Volatility in Growth and Inflation

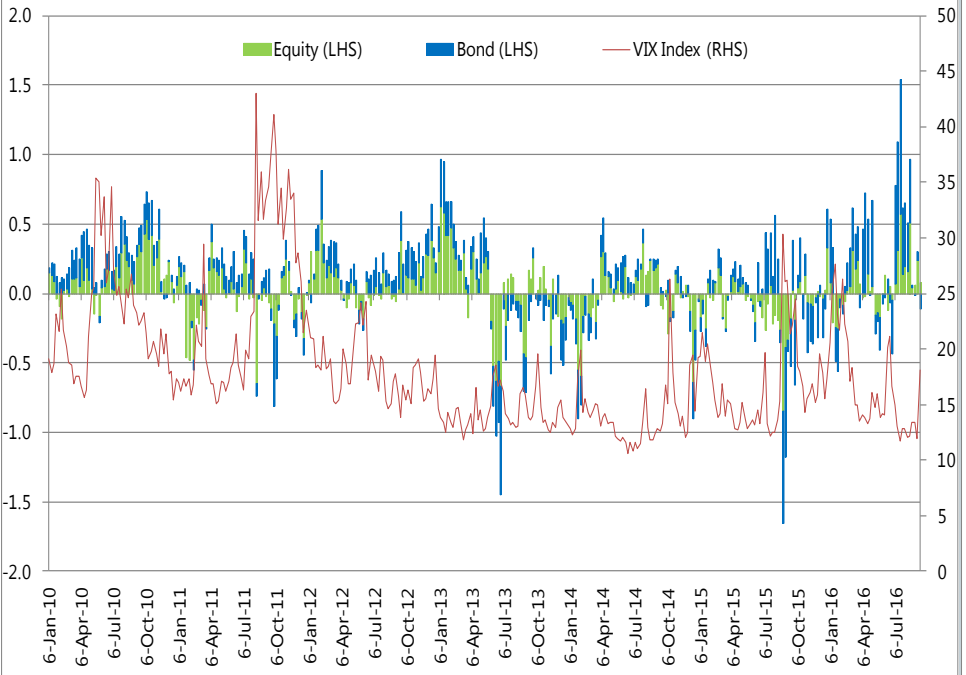


Global Financial Cycles and Spillovers

Global risk aversion and bond yields are drivers of financial cycles…

ASEAN5: Equity and Bond Funds- Weekly Net Flows[1]

in billions of USD

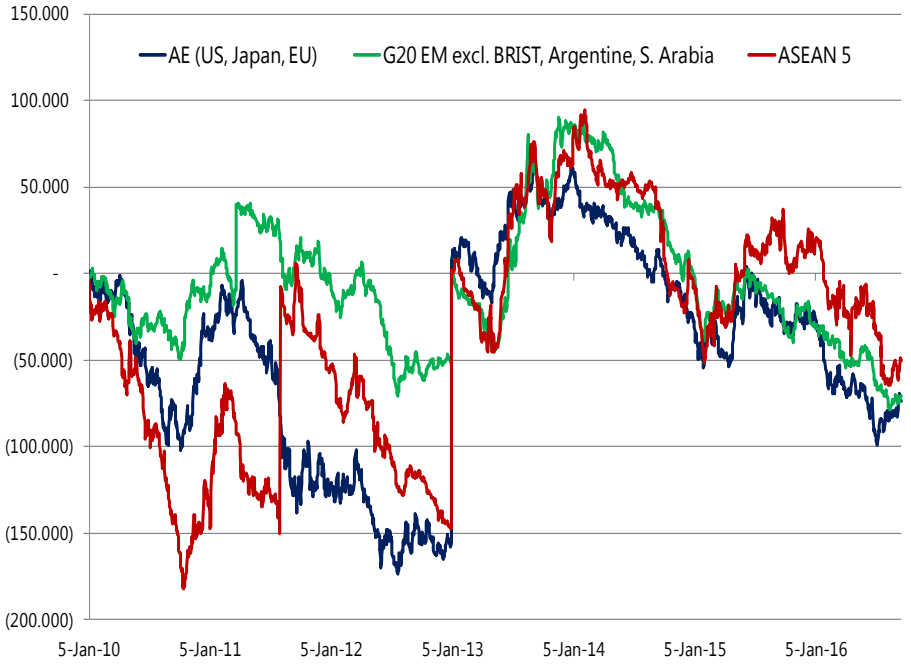


Source: EPFR Global, Haver Analytics, Bloomberg

[1] includes exchange traded fund flows and mutual fund flows

Global Bond Yields

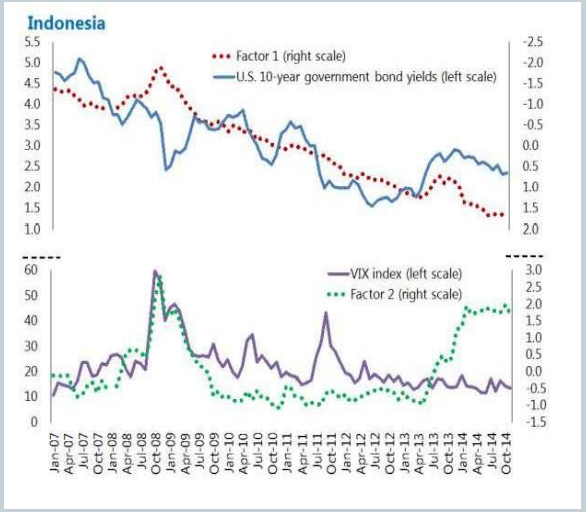
Change since January 2010 (bps)

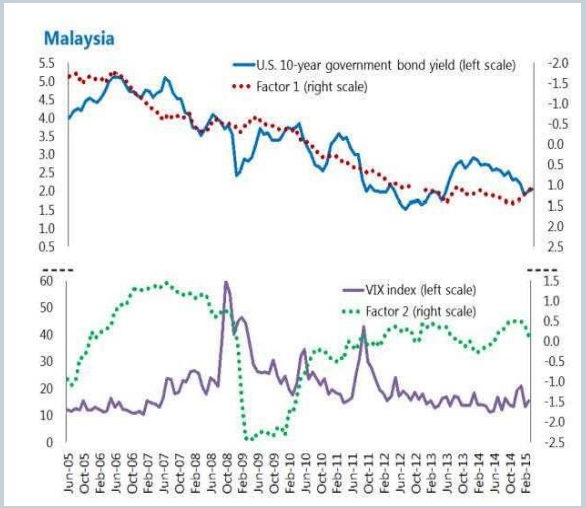


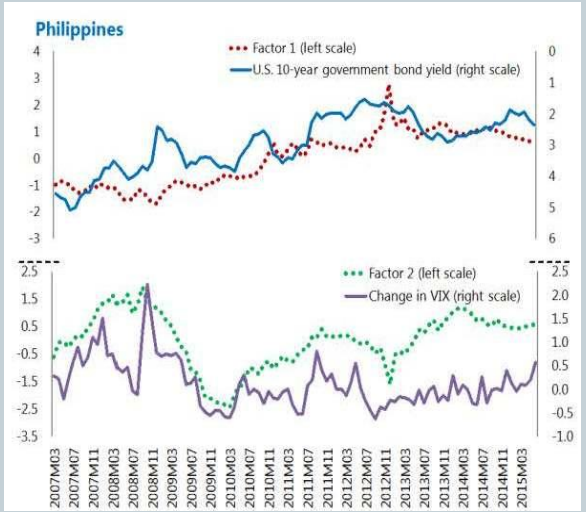
Source: Bloomberg L.P; Haver Analytics; and IMF Staff Calculation

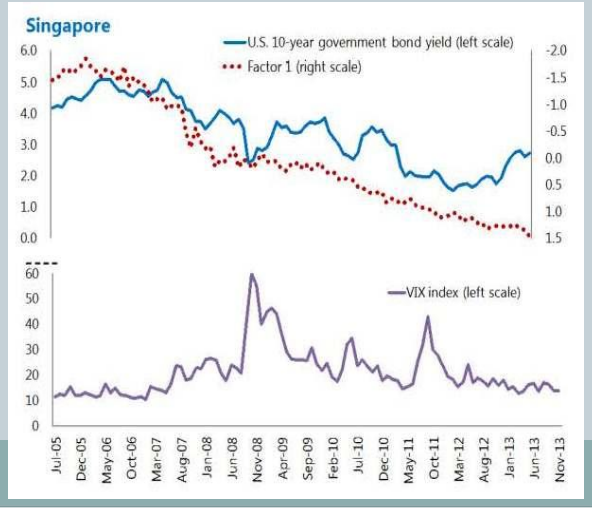
Domestic financial conditions in the ASEAN-5 are closely related to global financial factors…

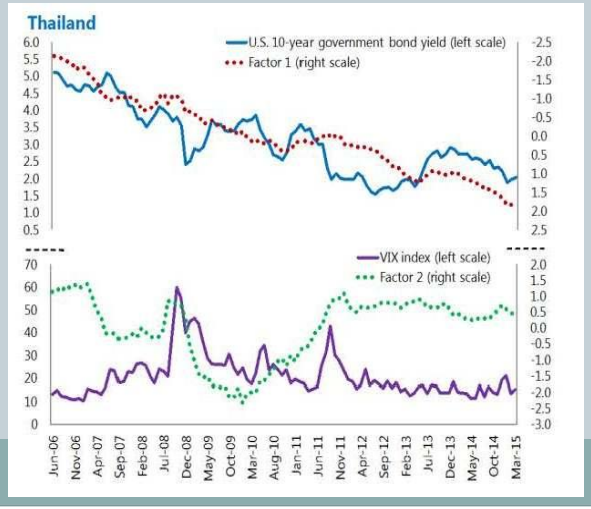
Co-movement of Latent Factors of Financial Conditions with Global Factors









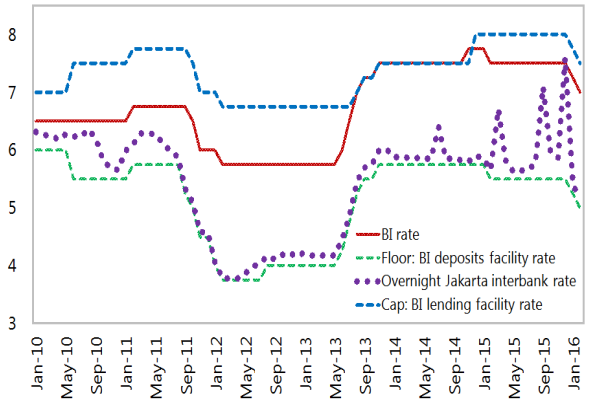


Including the interest rate structure…

- U.S. shadow Fed funds rates and term premia are key determinants of both short and long term bond yields.
- Domestic fundamentals can help cushion the impact of global financial factors.
- Retail bank lending rates in the ASEAN5 are also susceptible to the same global factors by affecting bank behavior, albeit to a lesser extent in Thailand.
- However, the domestic policy rates and liquidity conditions continue to matter, retaining a role for monetary policy.

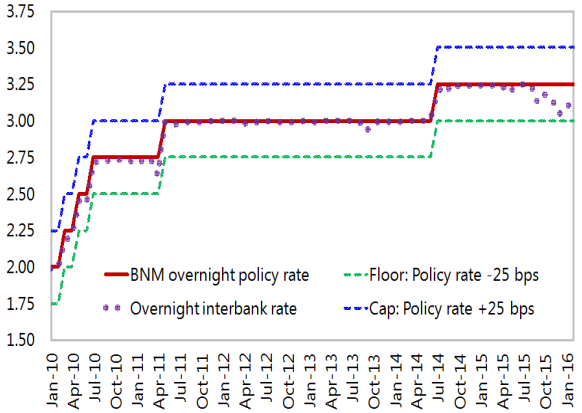
with short term market rates anchored within an interest rate corridor during most periods …

Indonesia: Policy and Interbank Rates
(In percent)



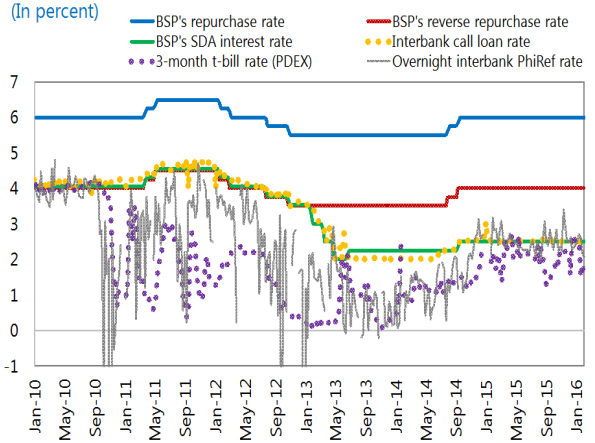
Sources: Haver Analytics; and CEIC Data Co., Ltd.

Malaysia: Policy and Interbank Rates
(In percent)



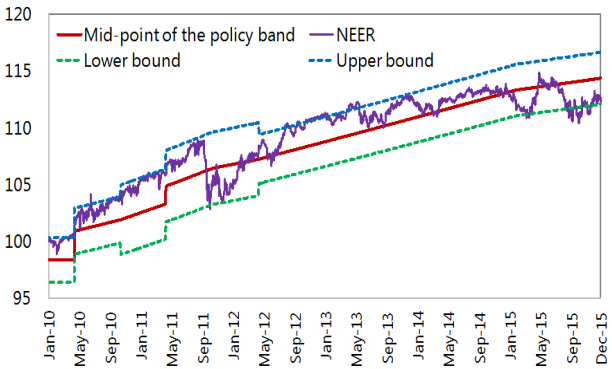
Sources: Haver Analytics; and CEIC Data Co., Ltd.

Philippines: Policy Rates, Interbank and T-Bill Rates
(In percent)



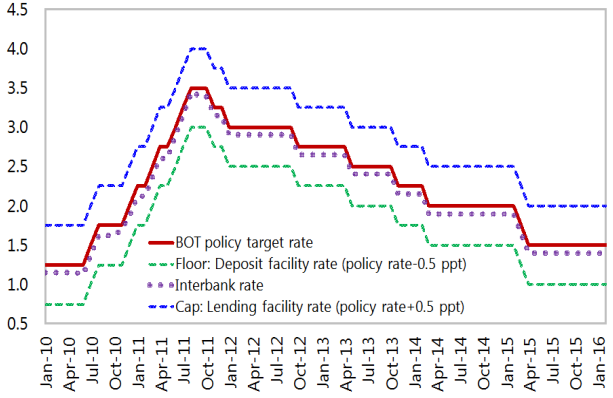
Sources: Bloomberg L.P.; Haver Analytics; and Philippine Dealing and Exchange Corp. (PDEX).

Singapore: NEER and Policy Band 1/
(Jan 1, 2010=100)



Source: IMF, *Information Notice System*; and IMF staff estimates.
1/ Mid-point, lower and upper bounds of the policy band are staff estimates.

Thailand: Policy and Interbank Rates
(In percent)



Sources: Haver Analytics; and CEIC Data Co., Ltd.

Policy Responses

Taylor rule estimations suggests a weight on both domestic and external factors…

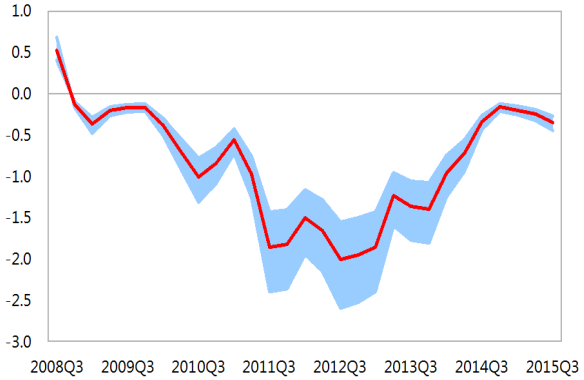
Taylor rule estimations fit the ASEAN-5 data quite well post-AFC and provide insights on policy weights:

- There is a high degree of interest rate smoothing in all 5 ASEAN economies.
- In general the weight on expected inflation is greater than output. The exchange rate does not appear to play a role in monetary policy decisions.
- Global factors such as the VIX and U.S. interest rates matter, particularly the latter in the UMP period.

With QE putting significant downward pressure on "rates" compared to those implied by a classic Taylor rule in the UMP period…

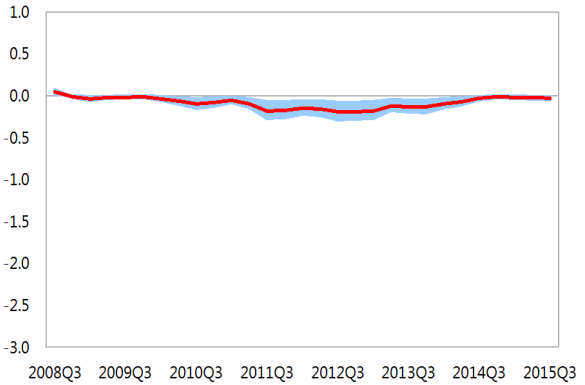
Impact of Shadow Fed Funds Rate

Indonesia
(In percent)



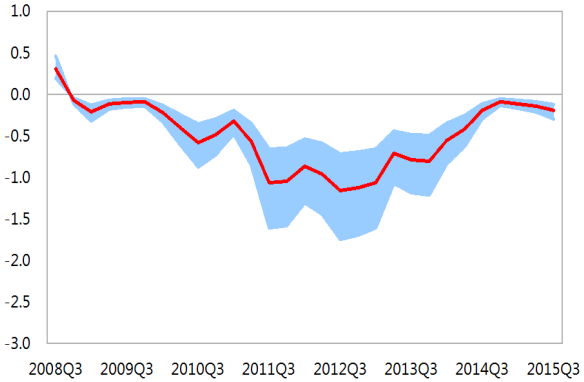
Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

Malaysia
(In percent)



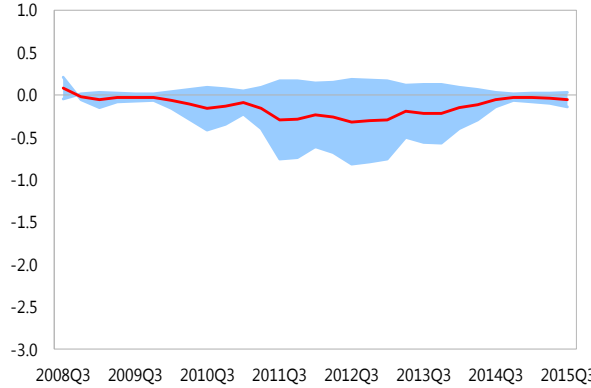
Sources: CEIC Data Co., Ltd.; and IMF staff estimates..

Philippines
(In percent)



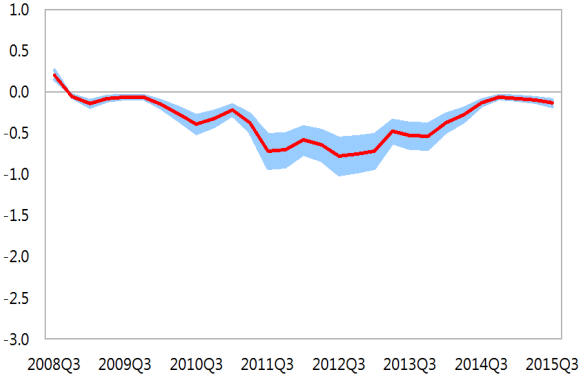
Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

Singapore
(Implied marginal change in NEER, in percent)



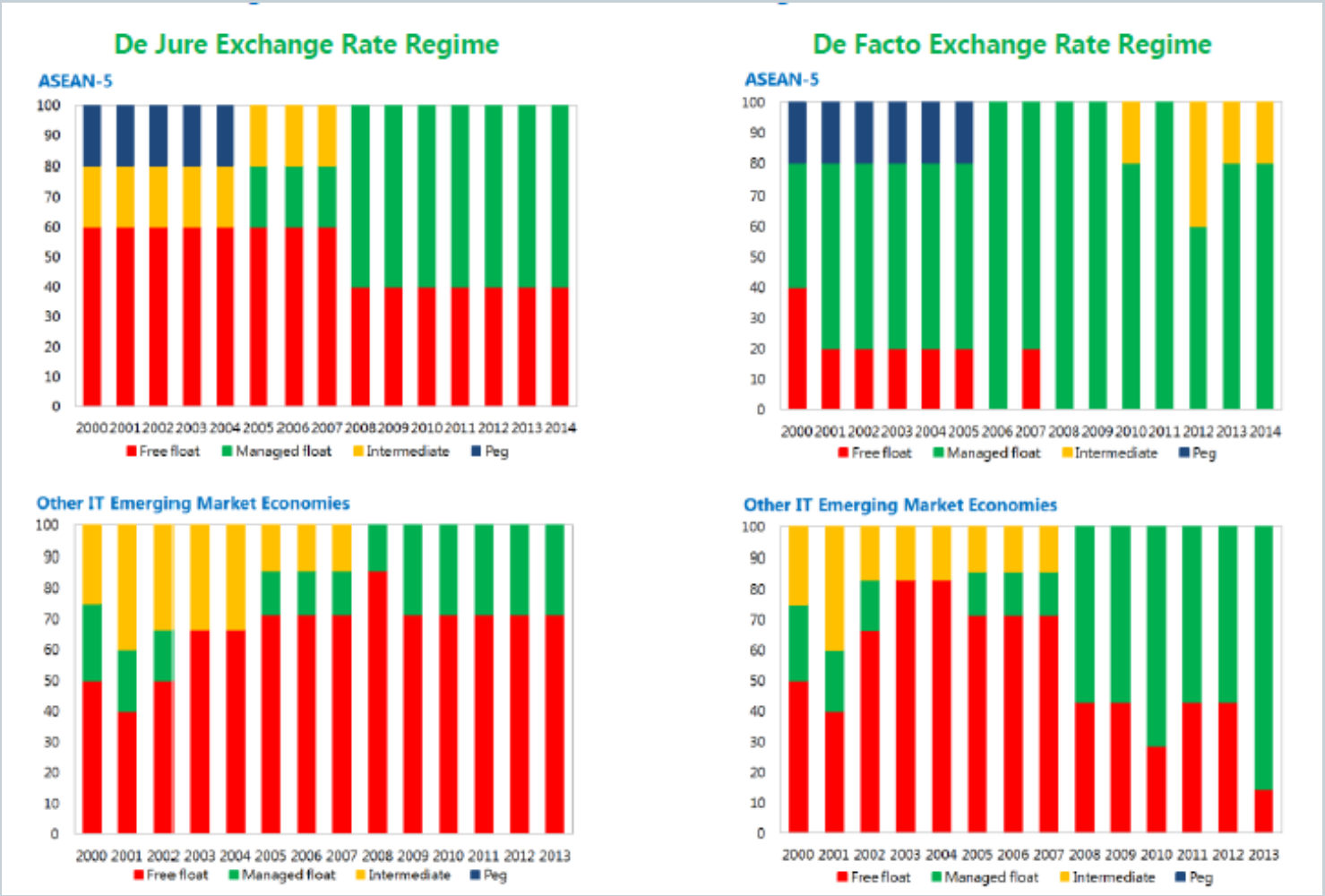
Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

Thailand
(In percent)



Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

While the ASEAN-5 have moved towards greater exchange rate flexibility…



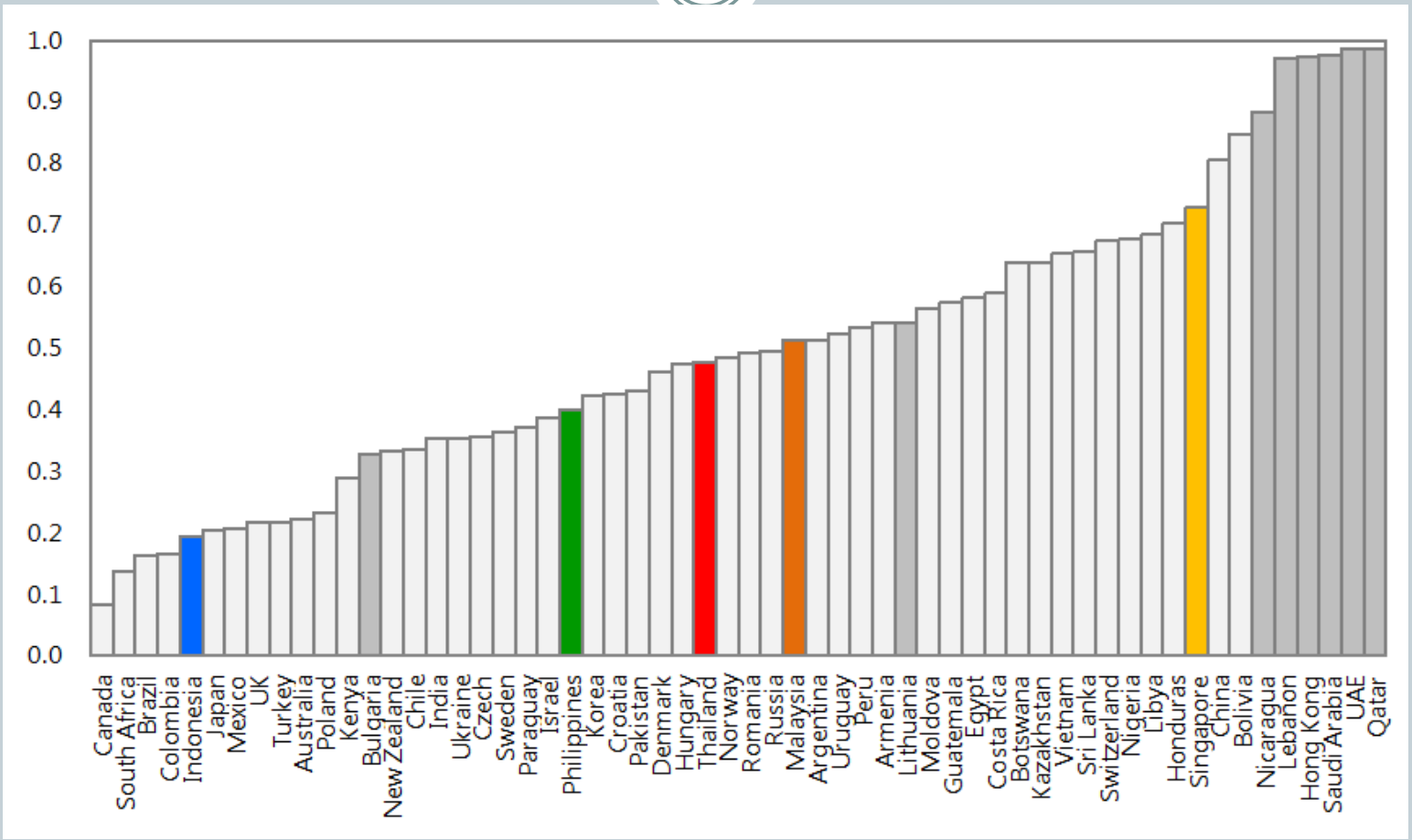
With the ASEAN-5 central banks smoothing volatility in the short-term, with higher variations at longer horizons…

Exchange Rate Volatility – Coefficient of Variation 1/

	10-day			50-day			250-day		
	Pre-AFC	GFC	Post-GFC	Pre-AFC	GFC	Post-GFC	Pre-AFC	GFC	Post-GFC
ASEAN-5									
Indonesia	0.10	1.33	0.50	0.31	4.17	1.27	1.14	5.78	4.04
Malaysia	0.23	0.62	0.54	0.61	1.77	1.25	1.76	3.79	2.89
Philippines	0.24	0.75	0.39	0.78	1.87	0.88	3.09	5.60	1.91
Singapore	0.24	0.73	0.39	0.60	1.90	0.90	1.69	3.28	2.23
Thailand	0.18	0.43	0.33	0.40	1.01	0.87	0.79	4.34	2.15
Other Asian free-floaters									
Australia	0.51	2.45	0.85	1.14	5.91	1.97	2.55	11.69	5.43
New Zealand	0.42	2.20	0.92	0.95	5.09	2.08	2.44	10.76	5.07
Japan	0.71	1.28	0.67	1.73	2.75	1.51	4.55	4.63	4.08

1/ Time periods: Pre-AFC (1991-June 1997); GFC (September 2008-February 2009); and Post-GFC (March 2009 to latest data).

and are not among the countries with the highest degree of FXI except possibly for Singapore…

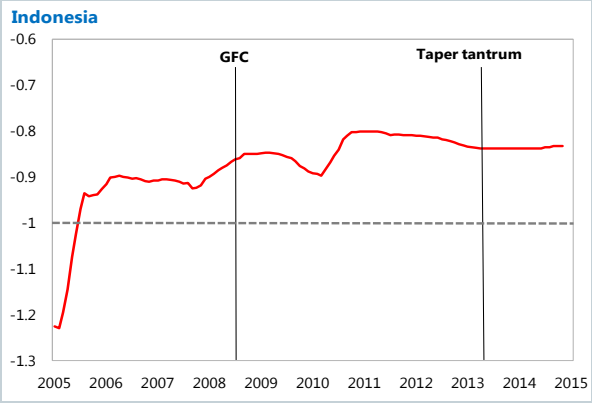


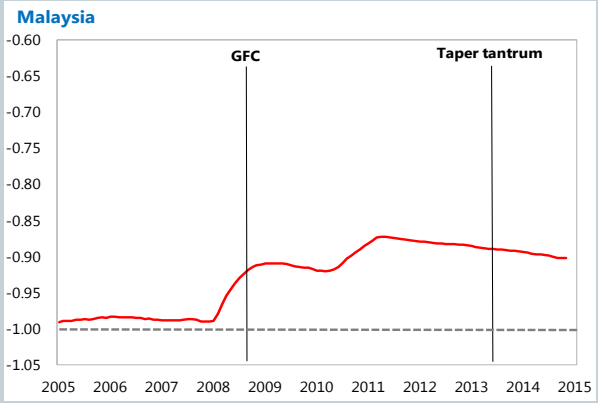
Sources: The figure reports a measure $\rho_j \equiv \sigma_j^{NFA}/(\sigma_j^{NFA} + \sigma_j^{S})$ where $\sigma_j^{\Delta NFA}$ and $\sigma_j^{\Delta S}$ denote the standard deviations of changes in net foreign assets and in nominal exchange rate, respectively. Gray bars correspond to countries with *de-jure* pegs for most of the sample, and the rest of the bars otherwise.

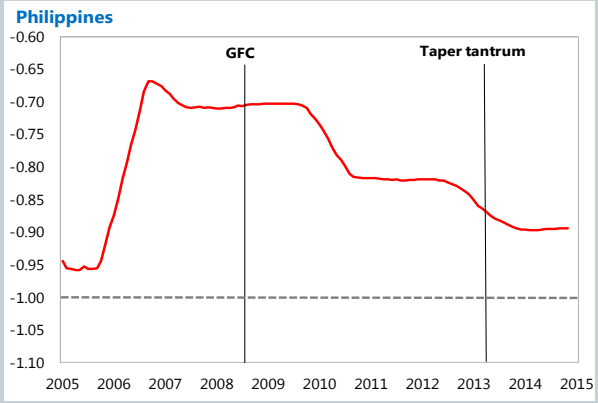
And have generally sterilized most of their FXI…

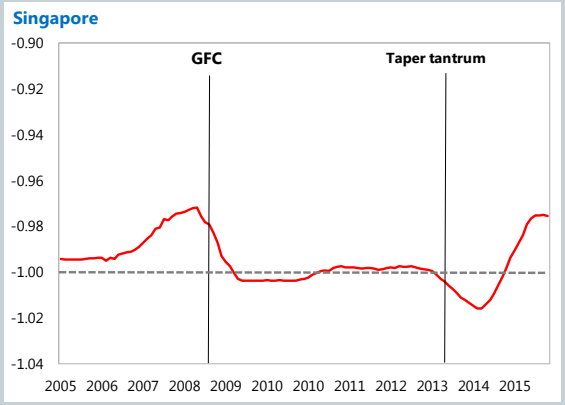
Sterilization Coefficient

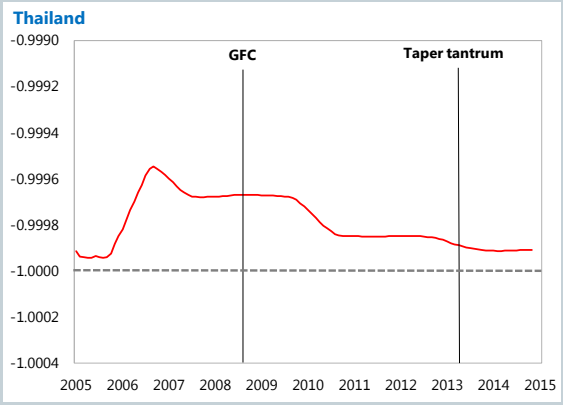
(one month extended window)











1/ The extent of sterilization coefficient (β) is estimated following Aizenmann and Glick (2008), with simple regression of the change in domestic assets on the change of foreign assets, scaled by the level of reserve money stock a year (or 12 months) ago, as: dNDA/RM(-12)=a+β*dNFA/RM(-12)+e.

2/ Average sterilization coefficient in table using one-month extended window during the pre-GFC (starting Jan 2005 or onward data available up to Aug 2008), GFC (Sept 2008 to Mar 2009), post-GFC (Apr 2009 to Apr 2013) and taper tantrum (May to Dec 2013).

with limited evidence of generalized credit booms in the region post-GFC…

Heat Map on the Evidence of Credit Booms 1/–4/

	Pre-AFC (1996-97)			Pre-GFC (2007-08)			Post-GFC/UMP (2009-2012)			Post-Taper Tantrum (2013-15)		
	M&T	D&O	GFSR	M&T	D&O	GFSR	M&T	D&O	GFSR	M&T	D&O	GFSR
Indonesia	0.09	-0.98	-0.53	-0.30	5.22	1.18	-0.29	3.76	0.89	-0.29	3.65	1.06
Malaysia	0.05	16.58	20.87	-0.23	1.38	1.22	-0.19	2.66	2.73	-0.17	2.27	2.59
Philippines	0.10	20.98	8.95	-0.36	2.14	0.58	-0.35	2.96	0.86	-0.24	7.51	2.57
Singapore	-0.02	7.89	6.90	-0.12	11.16	9.25	-0.12	3.98	3.84	-0.04	4.43	5.06
Thailand	0.07	12.27	17.26	-0.25	1.60	1.40	-0.22	4.83	4.74	-0.17	3.49	4.05

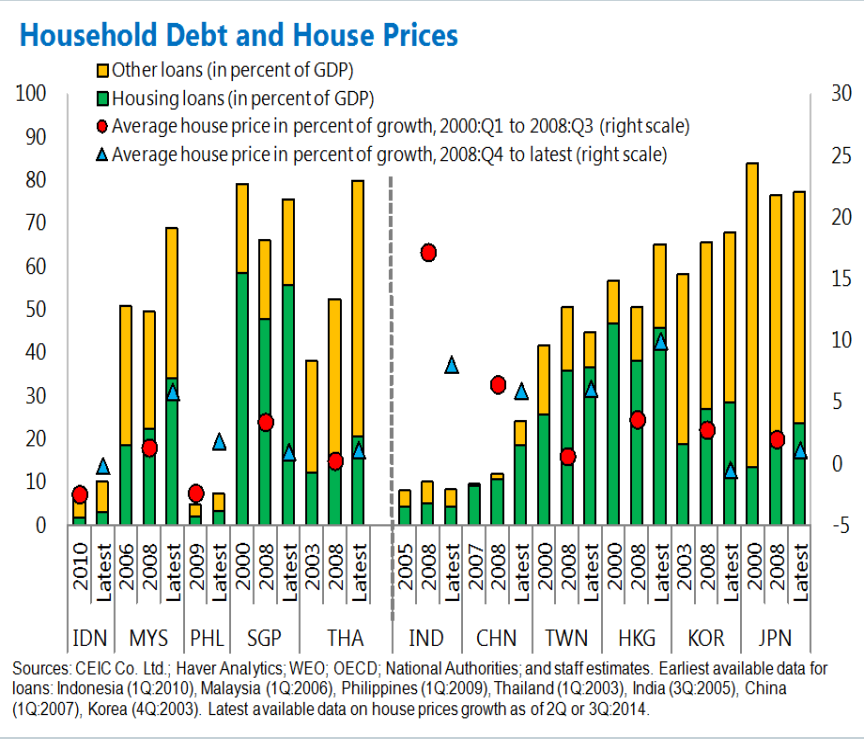
1/ Shades of green indicate lower threshold/early warning of credit boom; shades of red indicate that credit is above upper threshold/evidence of a credit boom.

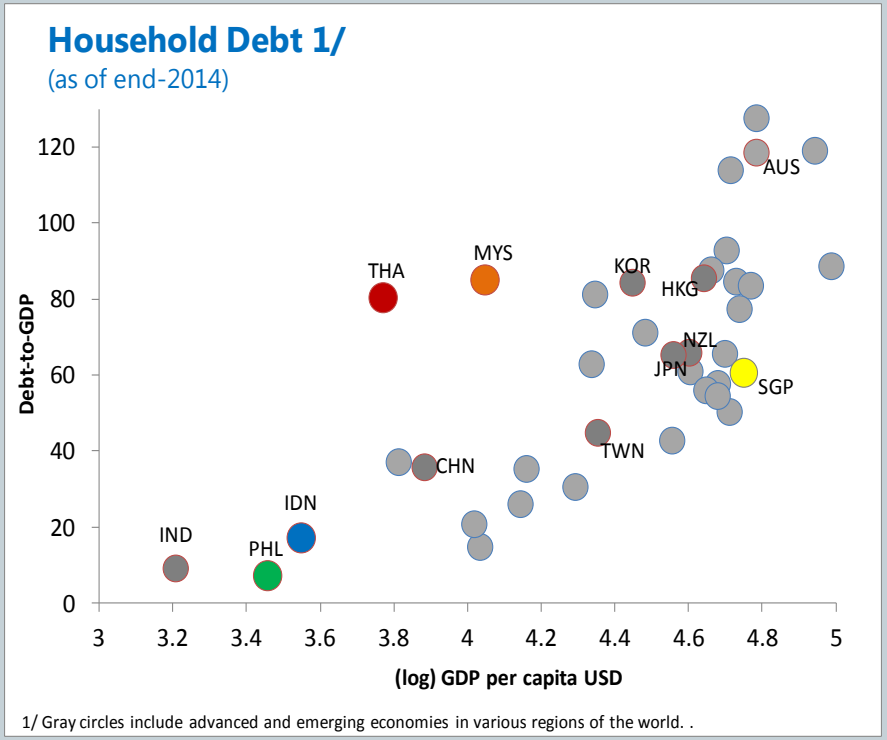
2/ Figures under Mendoza and Terrones, 2008 (M&T) refer to the deviations of log real credit per capita from its HP trend times 1.75 the trend's standard deviation. The deviations are averaged for the sub-periods identified. Positive figures shaded in red indicate an evidence of credit boom.

3/Figures under Dell'Ariccia and others, 2012 (D&O) refer to the average growth of credit-to-GDP ratio for the sub-periods identified. Figures shaded in green and red show ratio above the lower cut-off at 10 percent ratio and upper threshold at 20 percent ratio,

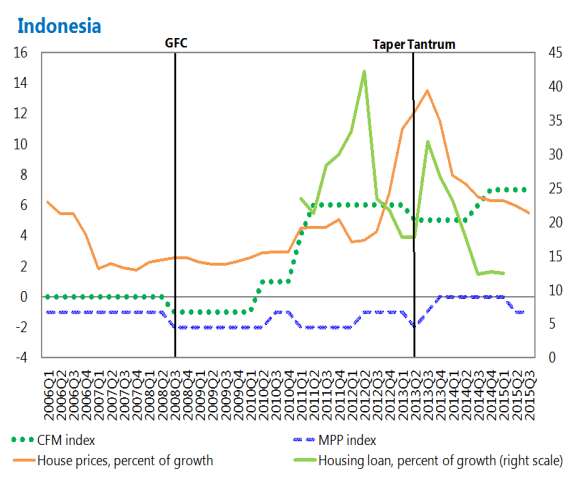
4/ Figures under the IMF's GFSR refer to the annual change in credit-to-GDP ratio in percentage points, averaged for the sub-periods identified. Figures shaded in green and red identify change in credit-to-GDP ratio above 3 percentage points and 5 percentage points, respectively.

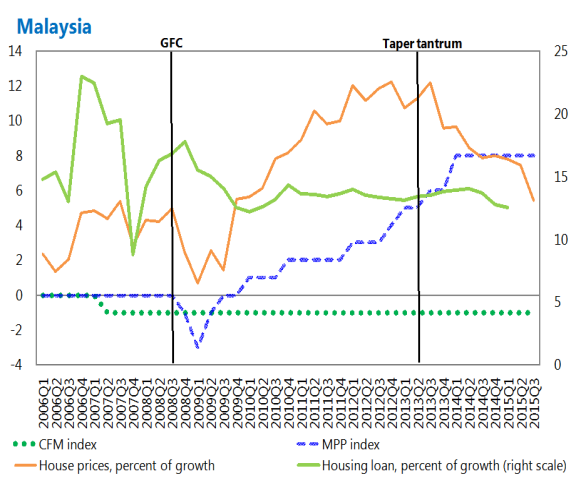
And instead sectoral imbalances with rising household debt in MYS and THA alongside house price appreciation…

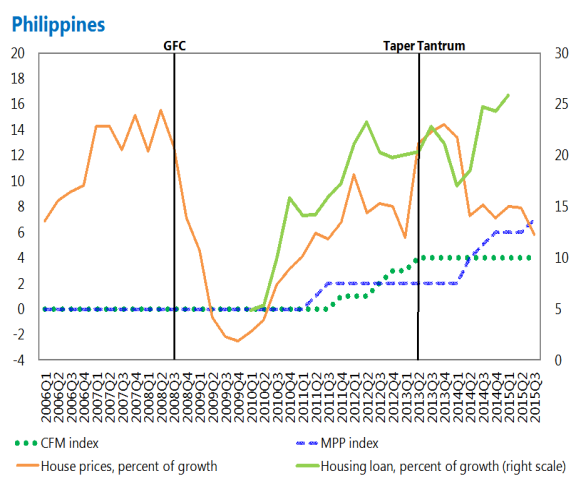


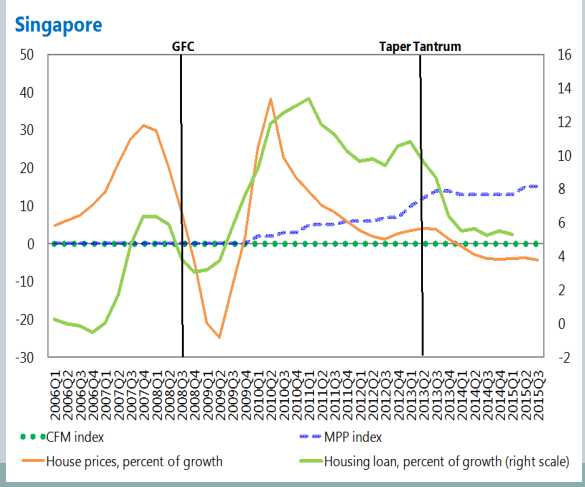


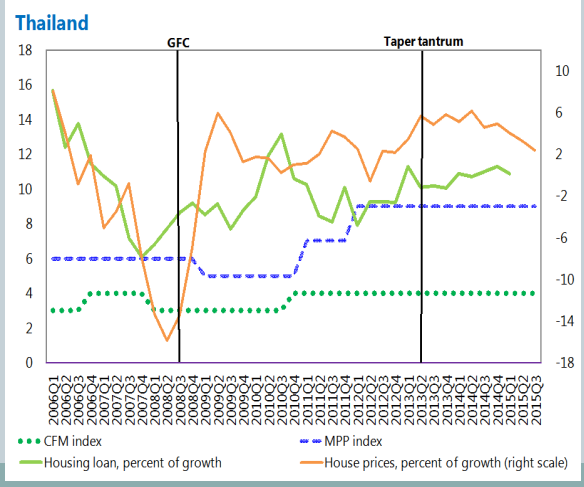
That may partly explain the broadening of the toolkit to mainly sectoral MPPs to address systemic risks…



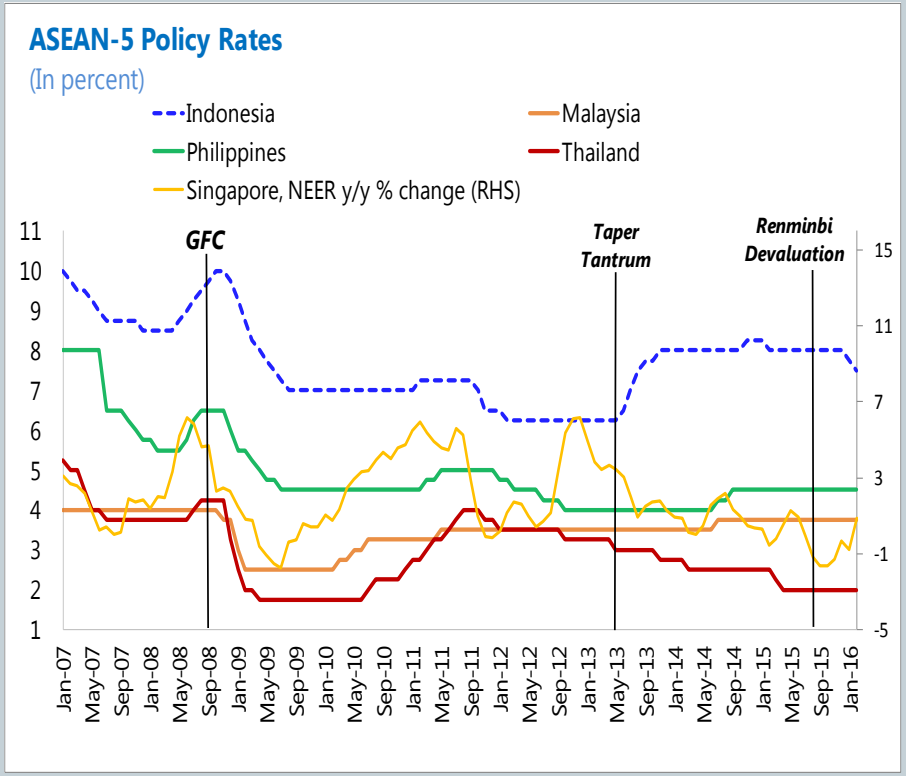


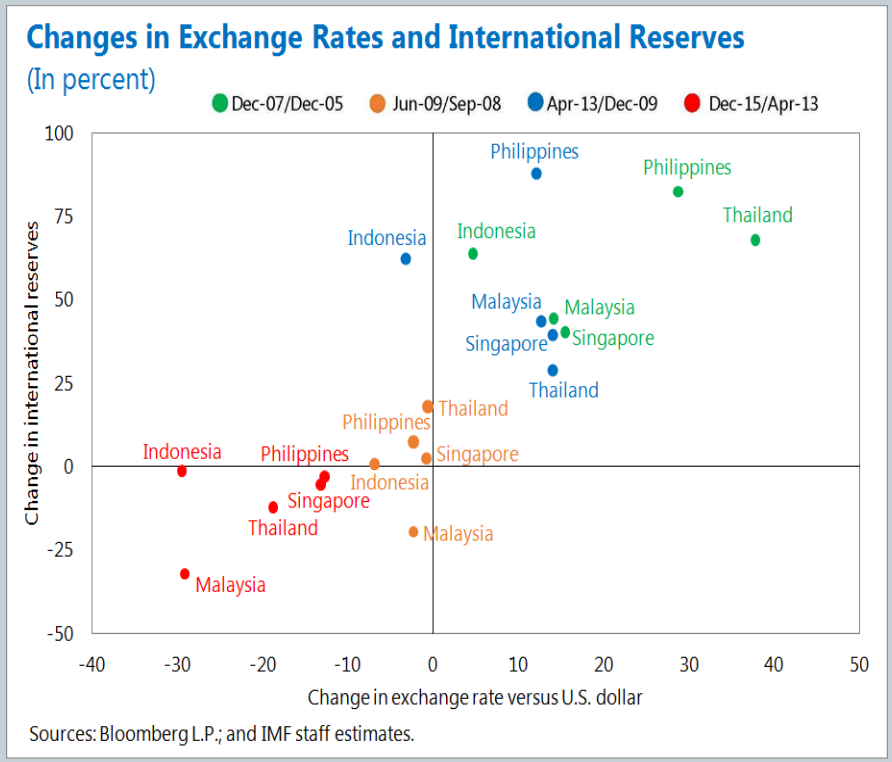






Adjustments in policy rates were complemented by greater exchange rate flexibility and use of reserve buffers during capital inflows and outflow episodes.





Sources: Bloomberg L.P.; and IMF staff estimates.

Lessons

- Monetary policy frameworks in the ASEAN-5 economies have evolved substantially and on the whole have performed well, providing lessons for other EMDEs transiting to flexible inflation targeting frameworks.

- Global financial factors can have a significant impact on domestic financial conditions and affect monetary policy decision-making, albeit with policy rates and liquidity conditions still important for monetary transmission and aggregate credit conditions.

- Greater exchange rate flexibility can enhance monetary autonomy and allow the exchange rate to act as an shock absorber, while the build up of a reserve buffer and use through sterilized intervention and supportive policies can help insulate the economy.

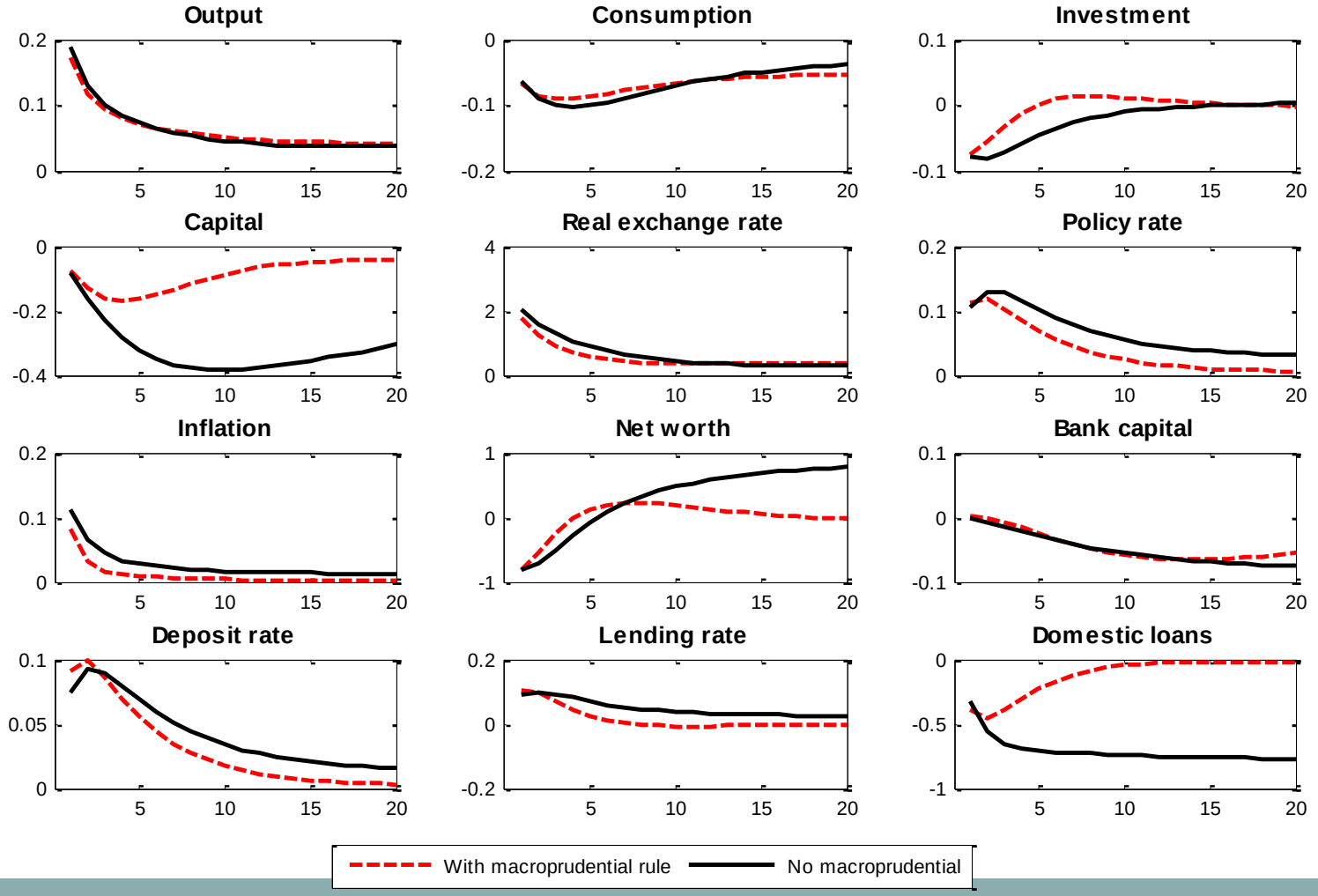
- MPPs can be used to address systemic and sectoral risks in combination with CFMs. Allowing monetary policy remain focused on domestic stability taking into account volatile capital flows.

New Challenges

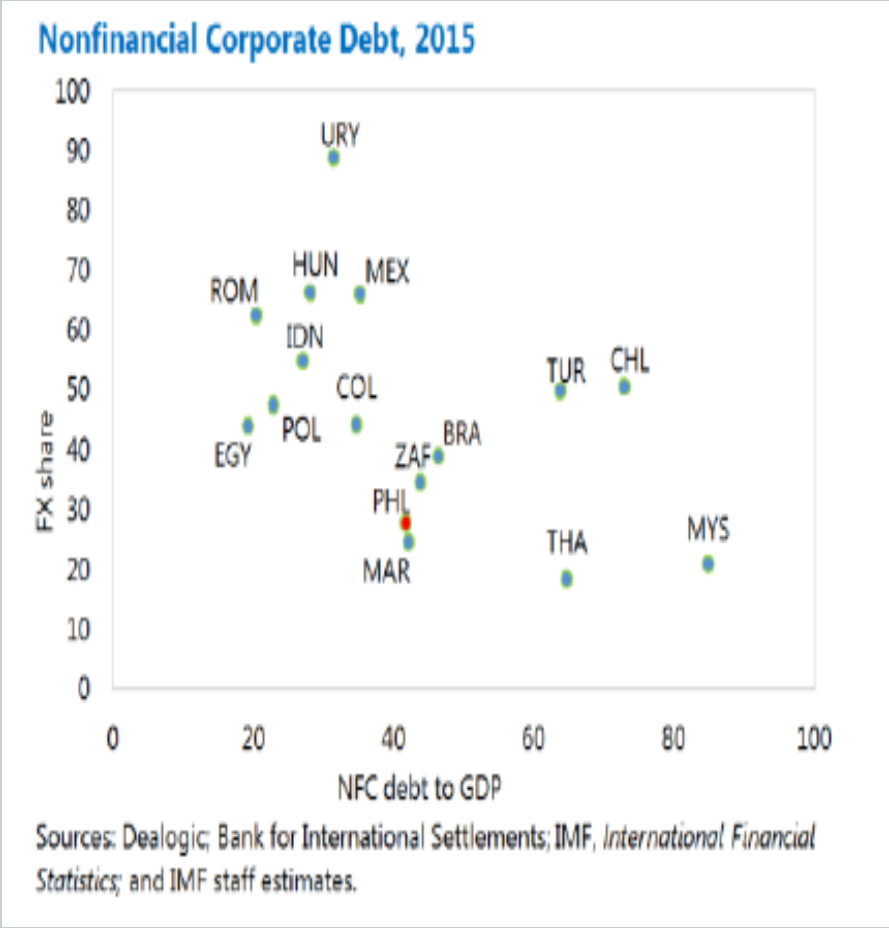
Further evolution of frameworks is likely in the conduct of monetary policy in the "new normal…"

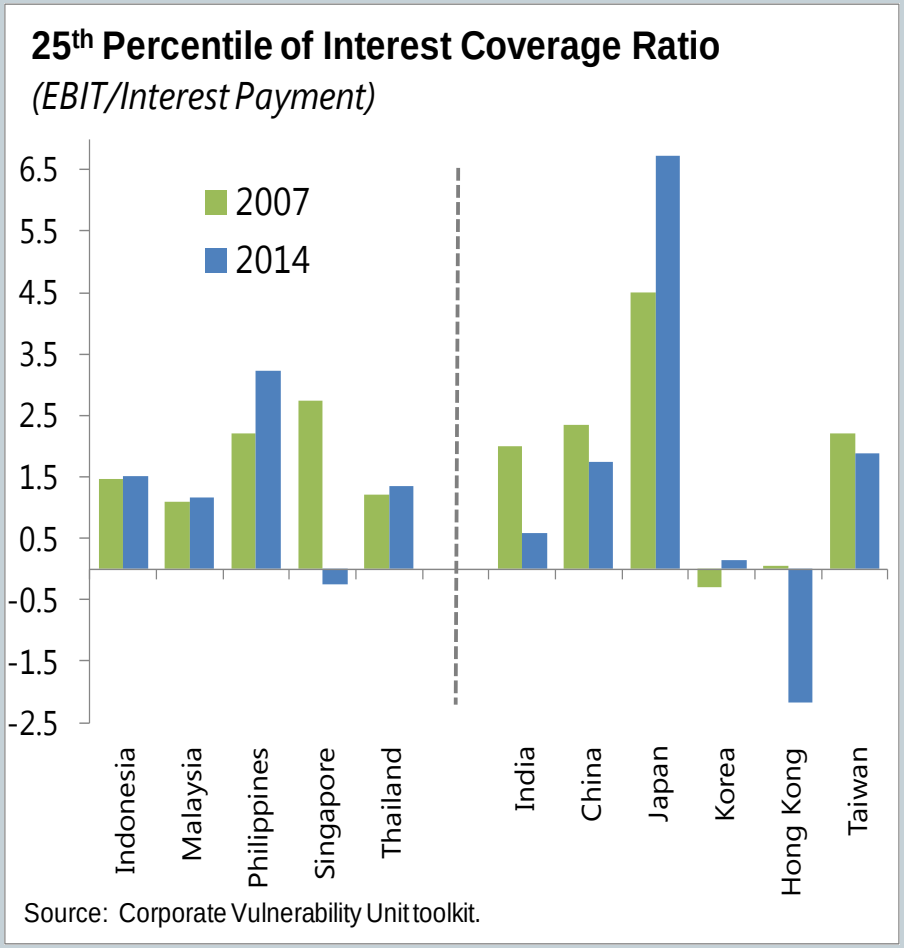
- The normalization of U.S. monetary policy may tighten domestic financial conditions in the ASEAN-5.
- The implementation of countercyclical MPPs (such as Basel III's countercyclical capital requirements) and/or loosening existing MPPs and CFMs in the event of a prolonged period of lower growth or negative shocks may need to be considered, balance sheet considerations permitting (see next slide).
- The global low inflation and policy rate environment is also spreading to Emerging Asia. This brings with it new challenges (see slide 25).
- In all cases, a transparent framework and clear communication about monetary policy actions will remain critical to ensure that both inflation expectations and underlying inflation measures remain consistent with central banks' targets.

An estimated DSGE model simulation of Fed rate hikes on the Philippines and potential role for macro-prudential policies…

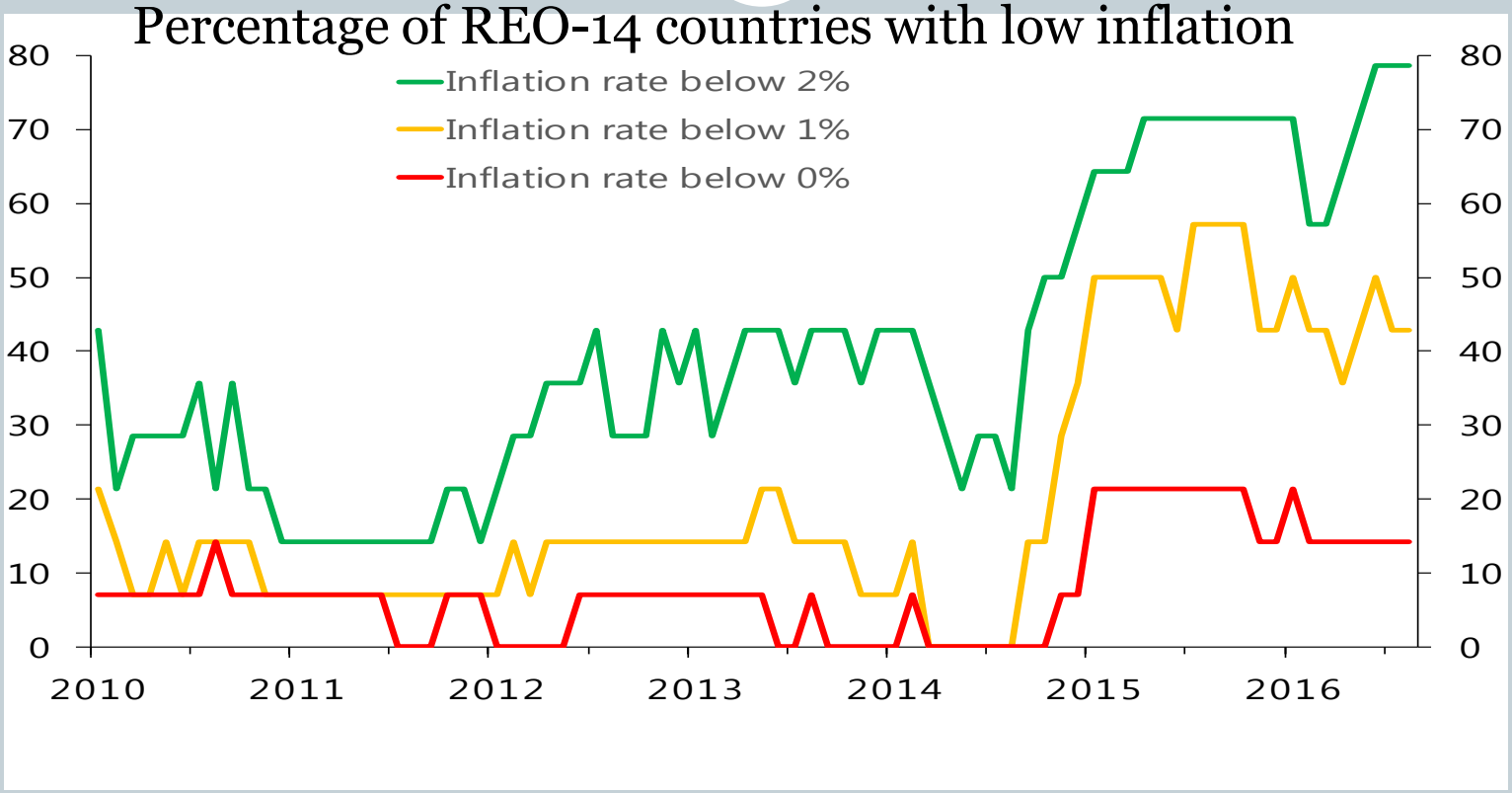


While corporate leverage remains relatively moderate, albeit with pockets of vulnerability to FX and interest rate shocks…





Low inflation is spreading across Asia



Inflation below 2% in 11 countries in 2016 H1 (Australia, China, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan POC, Thailand and Vietnam)

Inflation above 2% only in 3 countries (India, Indonesia and Hong Kong)

Challenges for monetary policy in New Normal

Low inflation → inflation must be **targeted *from below***

Long *below* target → risk of **de-anchoring** of long term expectations?
→ dark corners – deflationary traps

Low growth & → **constrained monetary policy** space

Low policy rates → financial stability concerns
→ asymmetric policy cycles among AEs and external stability concerns for EMs
(role for policy coordination?)

Thank you