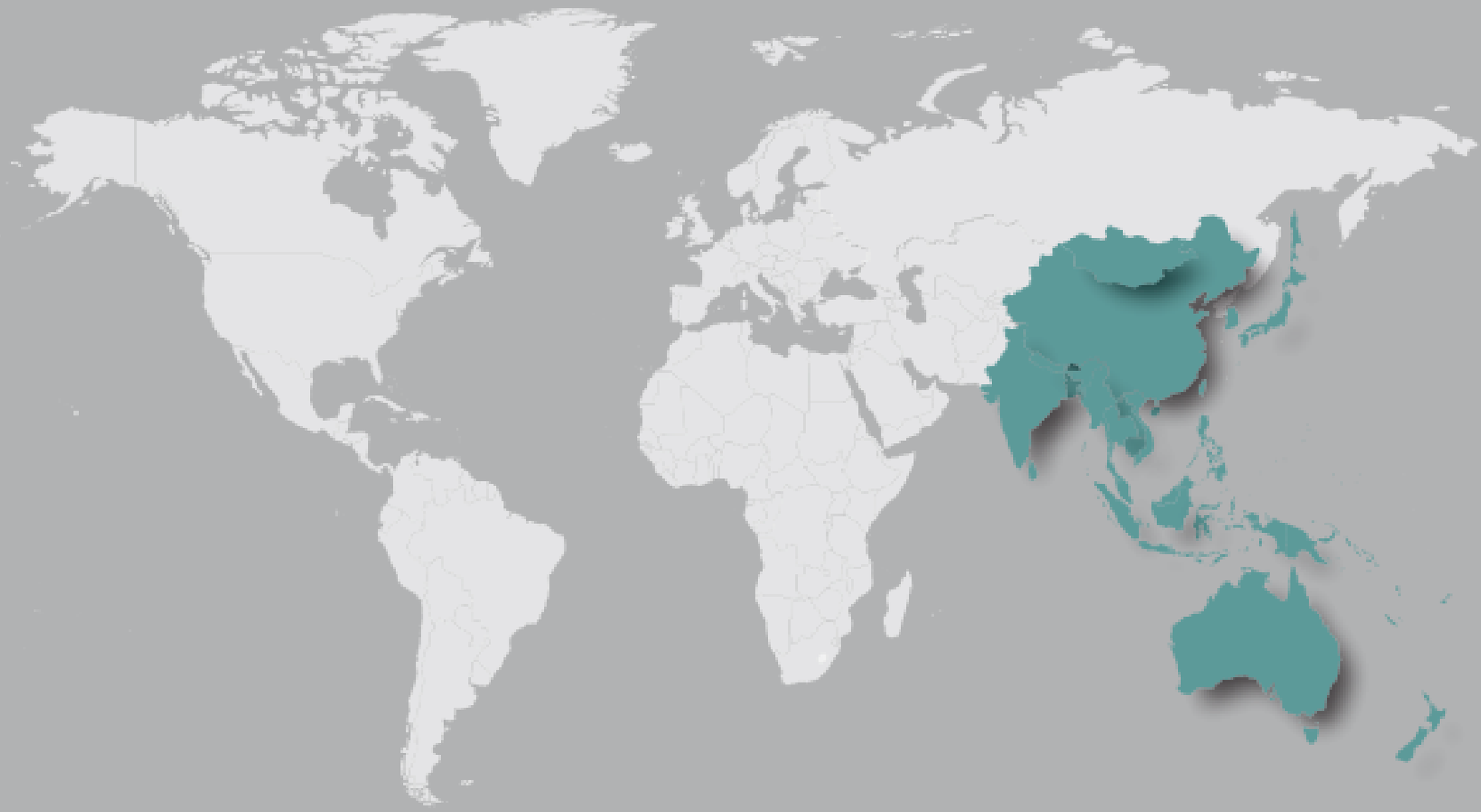
Peterson Institute for International Economics

Asia and Pacific Regional Economic Outlook

Sustaining the Momentum: Vigilance and Reforms



Changyong Rhee

Director, Asia and Pacific Department, IMF

Roadmap

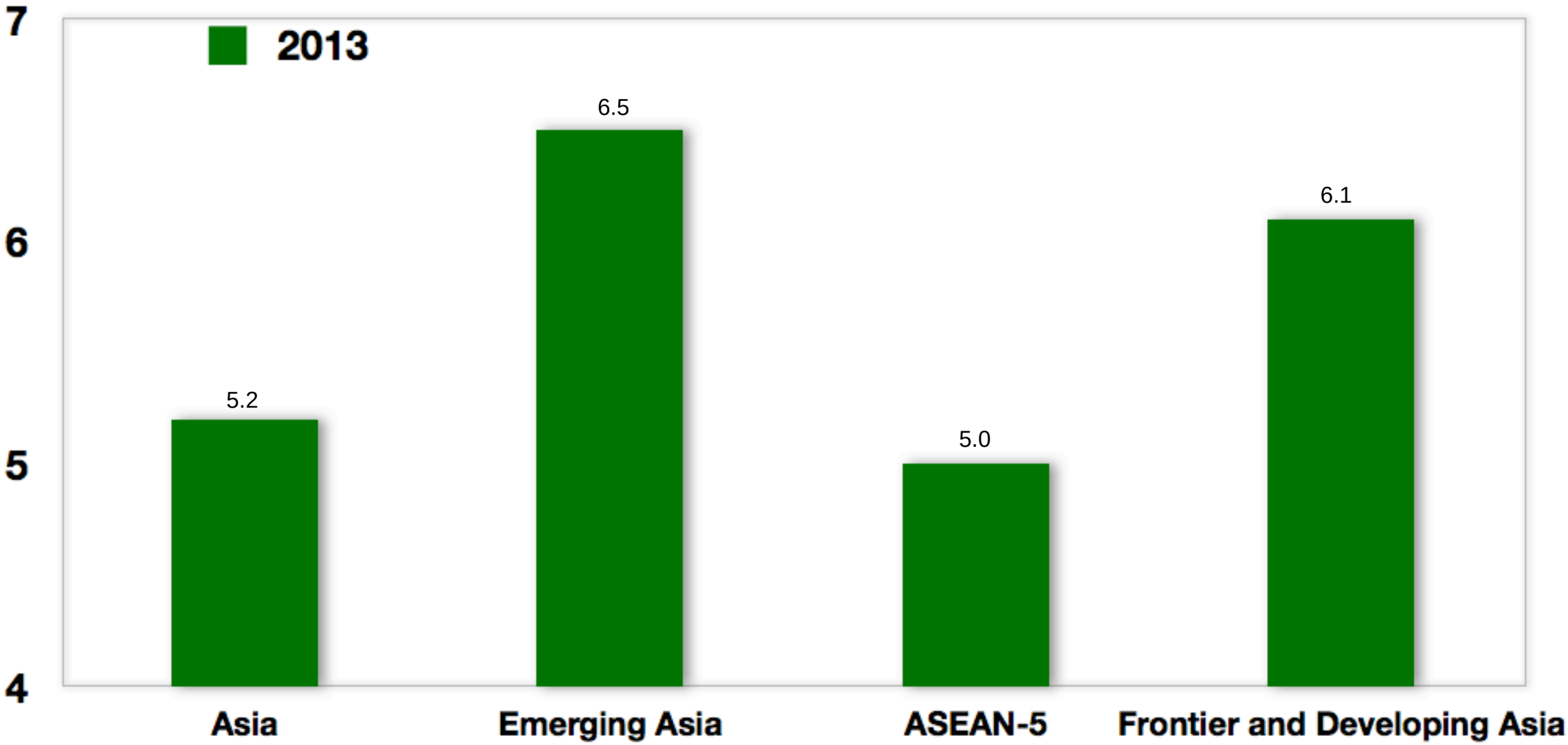
- **Economic Outlook— momentum set to continue**
- **Special Themes**
- **Leverage— a fault line?**
- **Responding to financial risks— what role for Macro-prudential policies?**
- **Regional integration— growing source of spillovers?**

Key Messages

- **Asia will remain the most dynamic region**
- **Risks from outside Asia have receded**
- **But need for vigilance and reforms**

Steady growth ahead...

Asia: Real GDP Growth by Region



Steady growth ahead...

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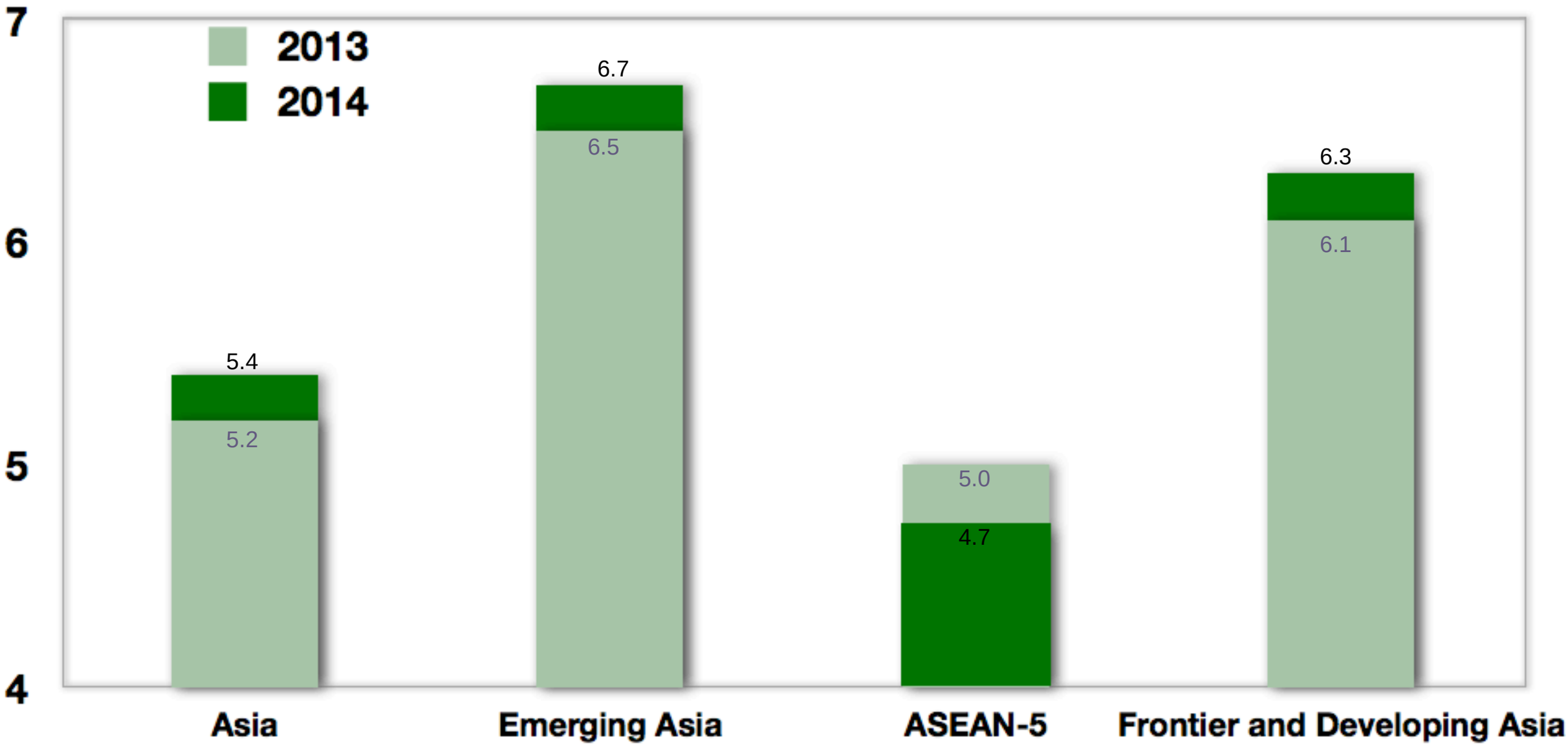

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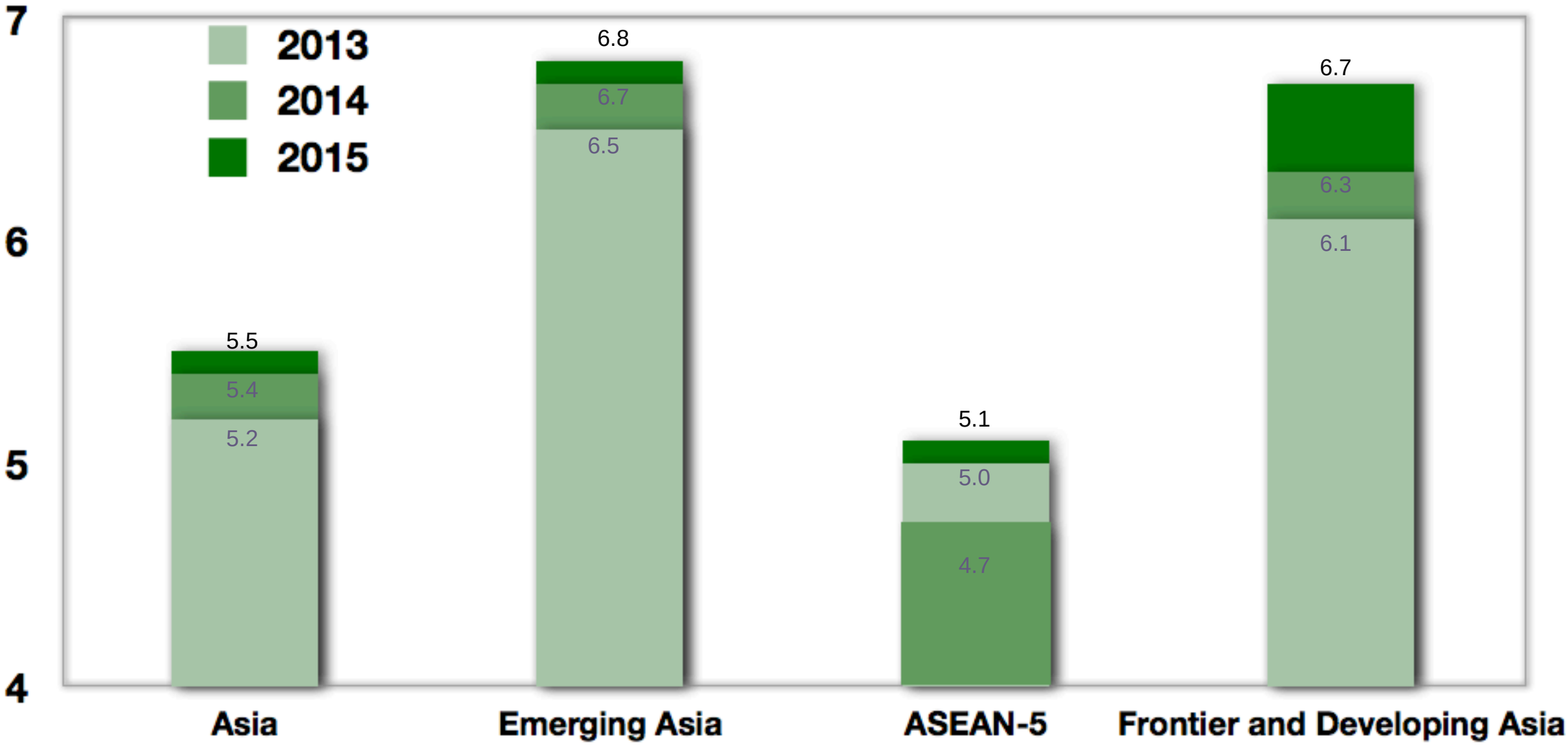


Steady growth ahead...

Asia: Real GDP

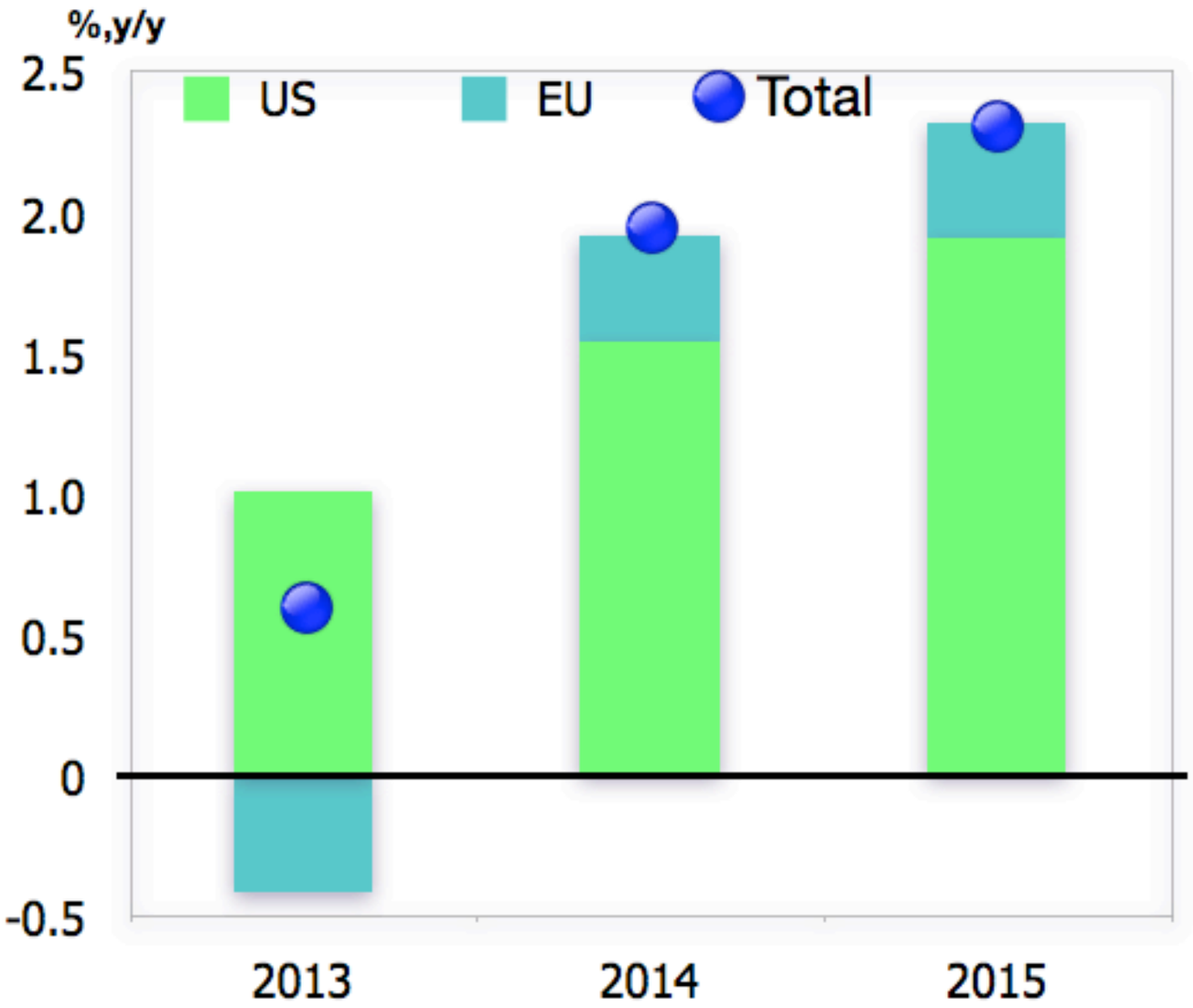
(Year-on-year percent change)

	Actual Data and Latest Projections					Difference from 2013 Oct WEO		
	2011	2012	2013	2014	2015	2013	2014	2015
Asia	**5.9**	**5.3**	**5.2**	**5.4**	**5.5**	**0.1**	**0.1**	**0.1**
Emerging Asia	**7.9**	**6.7**	**6.5**	**6.7**	**6.8**	**0.2**	**0.2**	**0.1**
Japan	-0.5	1.4	1.5	1.4	1.0	-0.4	0.1	-0.2
China	9.3	7.7	7.7	7.5	7.3	0.1	0.3	0.3
Korea	3.7	2.0	2.8	3.7	3.8	-0.1	0.0	-0.2
India	6.6	4.7	4.4	5.4	6.4	0.6	0.3	0.1
Indonesia	6.5	6.3	5.8	5.4	5.8	0.5	-0.1	-0.2
Malaysia	5.1	5.6	4.7	5.2	5.0	0.0	0.3	-0.2
Thailand	0.1	6.5	2.9	2.5	3.8	-0.2	-2.8	-1.2

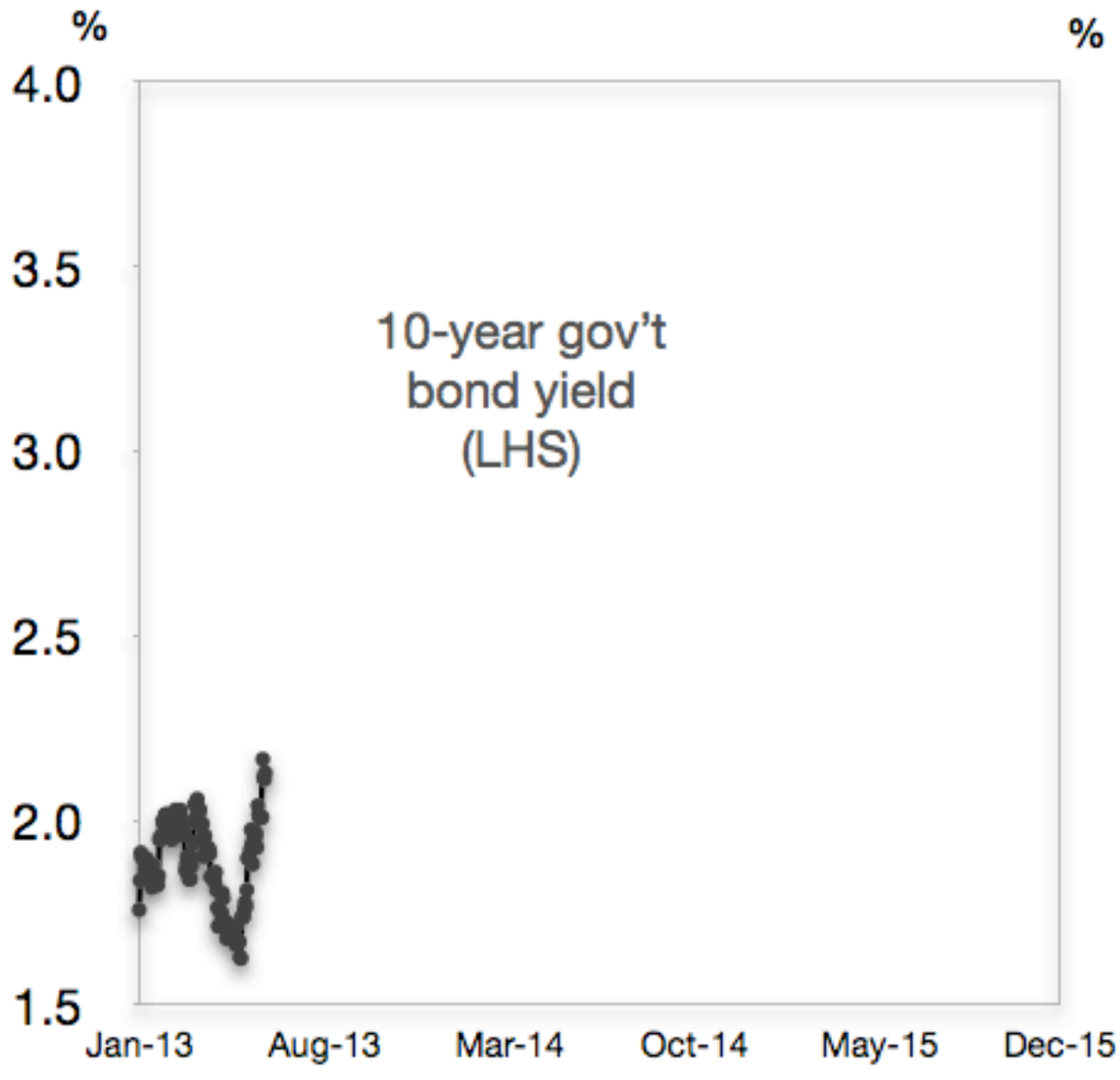
Source: IMF staff projections.
Note: Emerging Asia includes China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. India's data is reported on a fiscal year basis.

Global environment: supportive on balance

Domestic Demand from EU and US



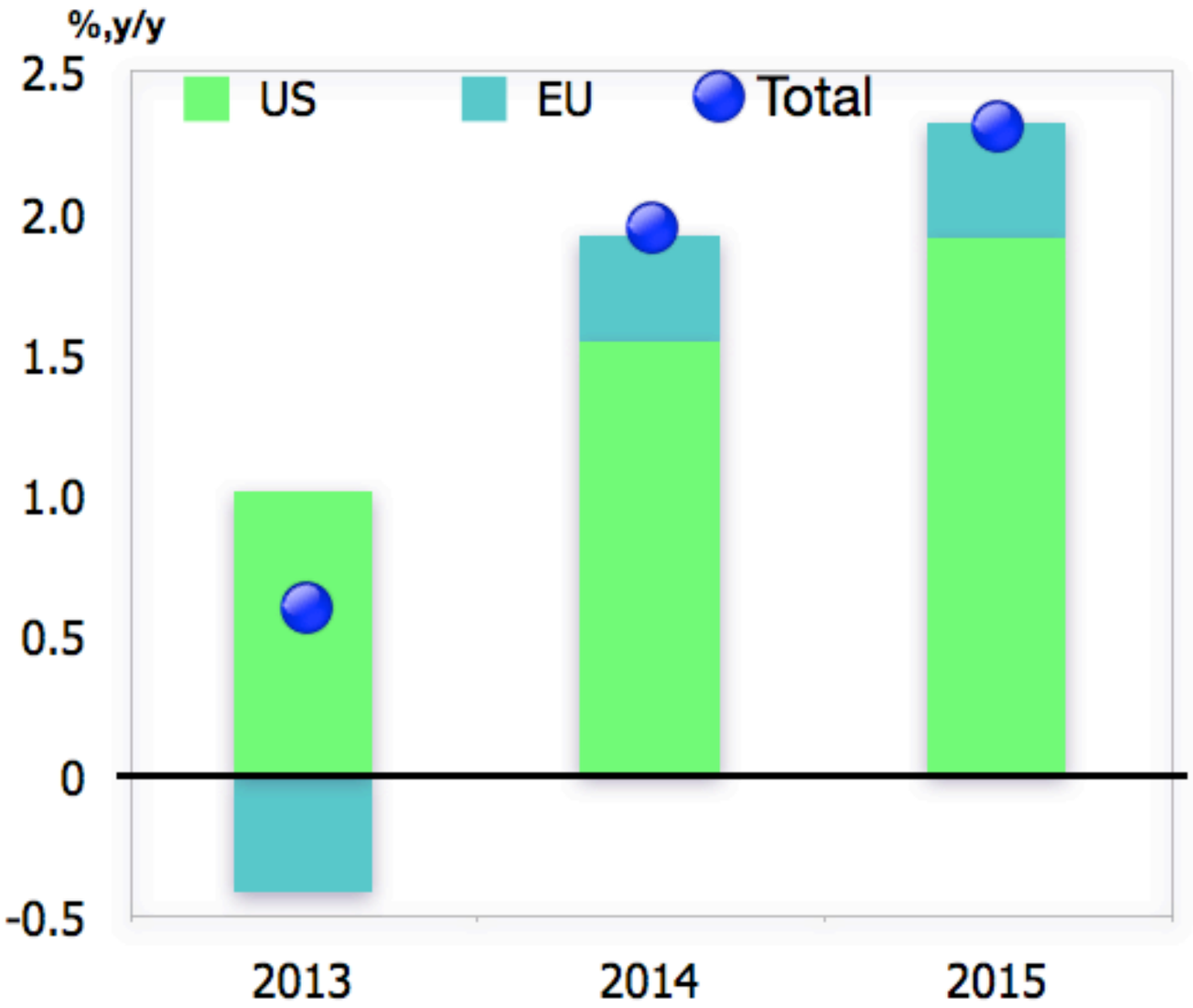
US Interest Rates



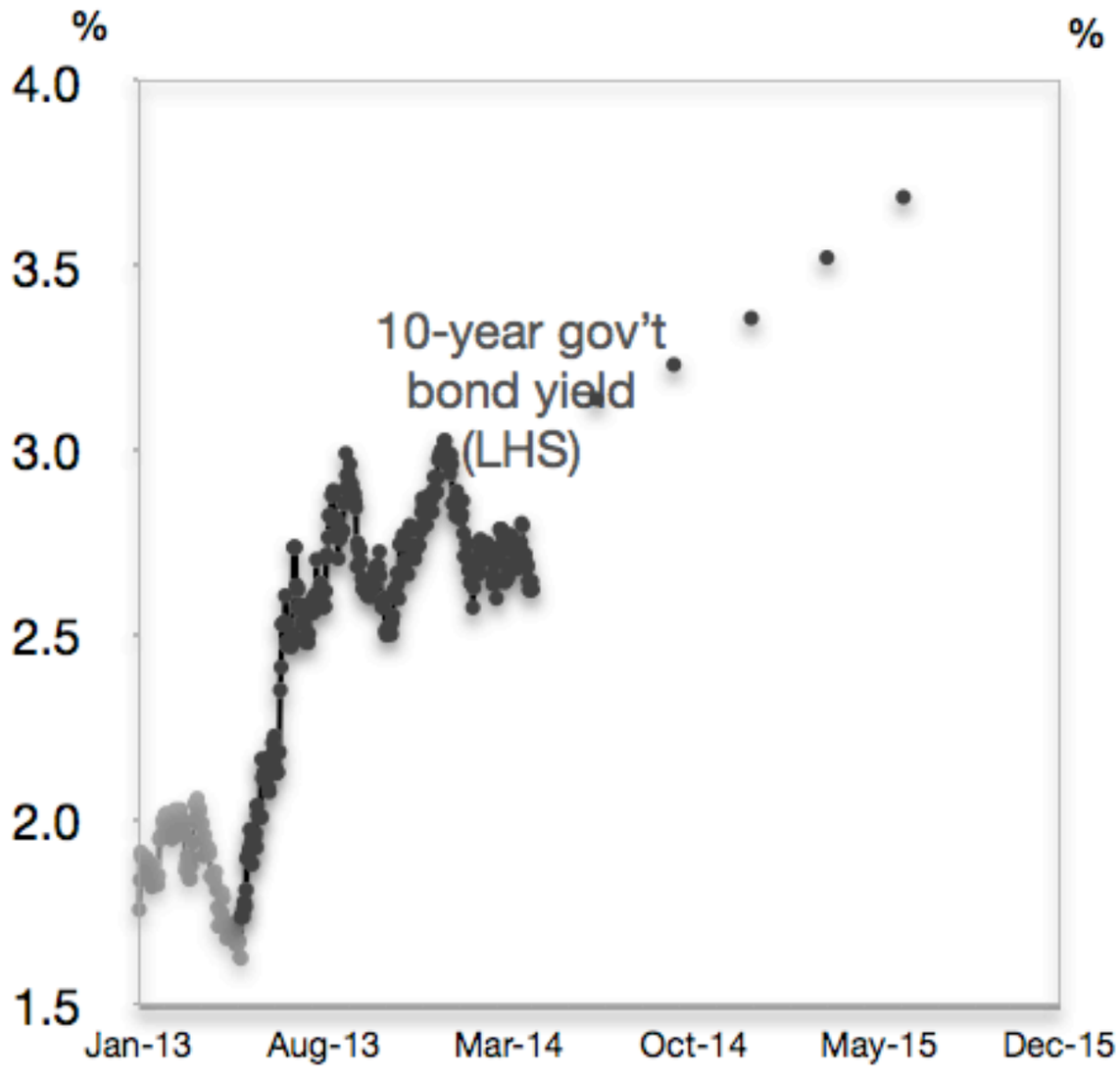
Outlook

Global environment: supportive on balance

Domestic Demand from EU and US

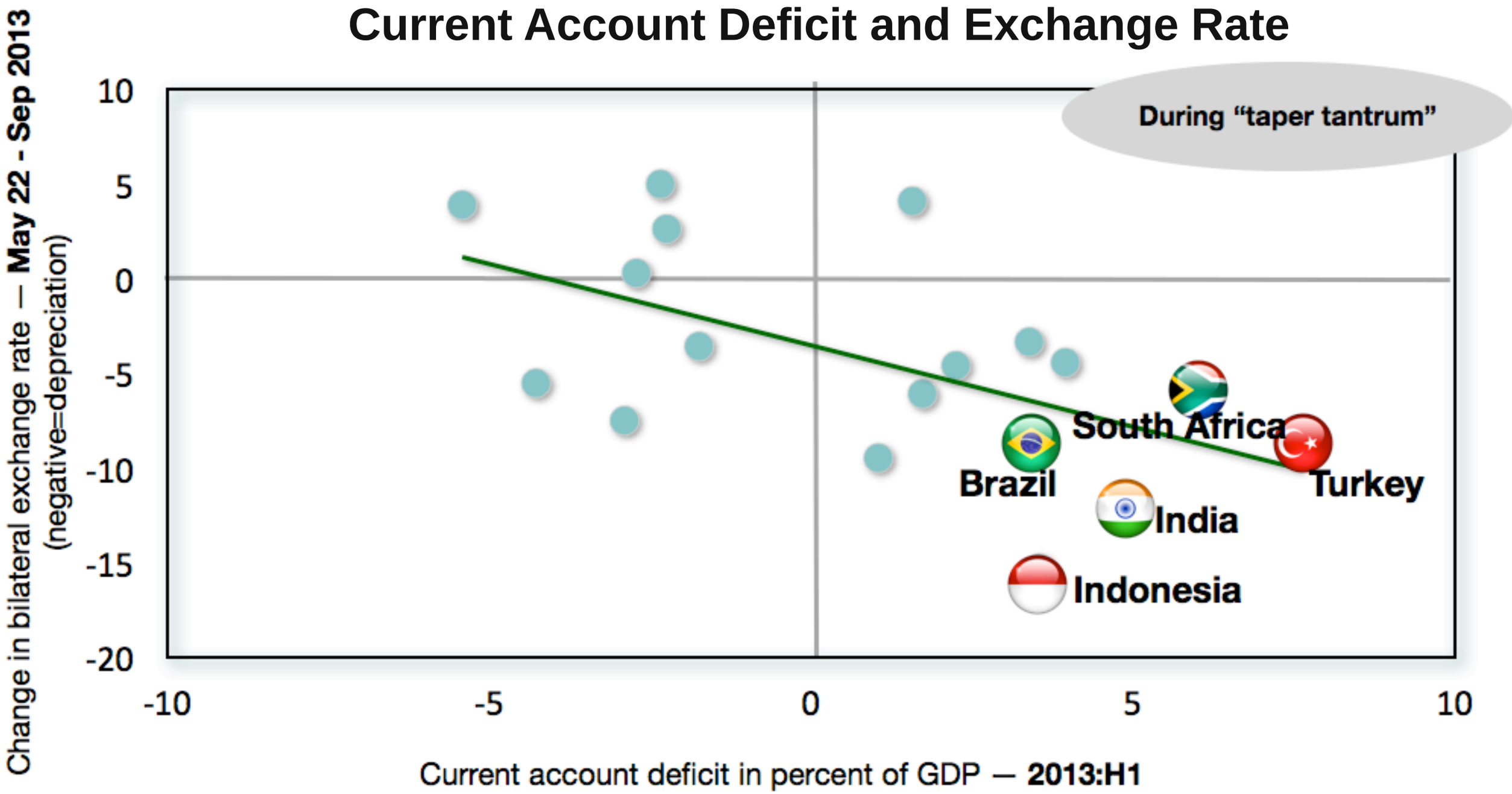


US Interest Rates



Outlook

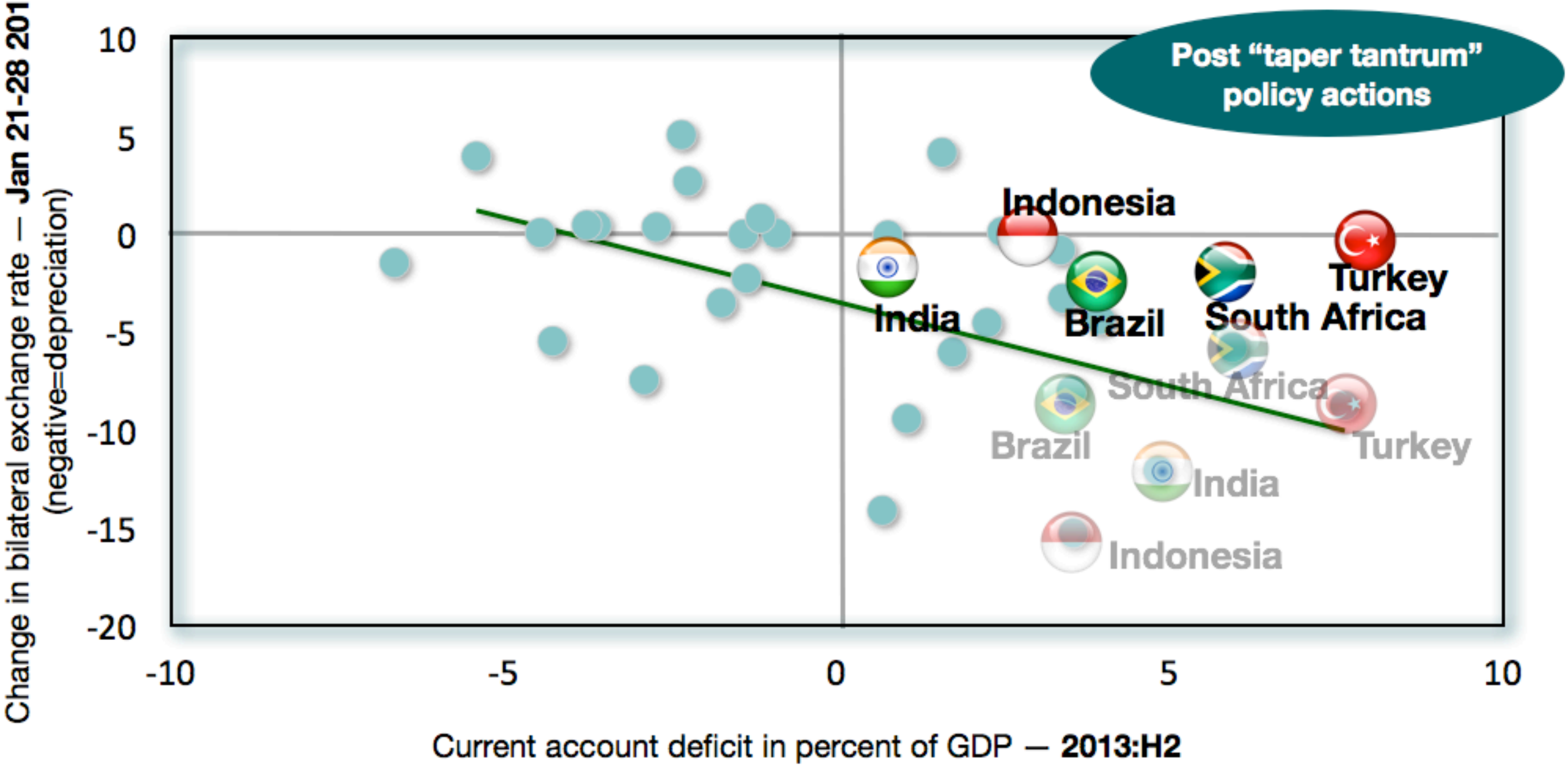
Vulnerabilities: actions taken to reduce them are bearing fruit



Outlook

Vulnerabilities: actions taken to reduce them are bearing fruit

Current Account Deficit and Exchange Rate

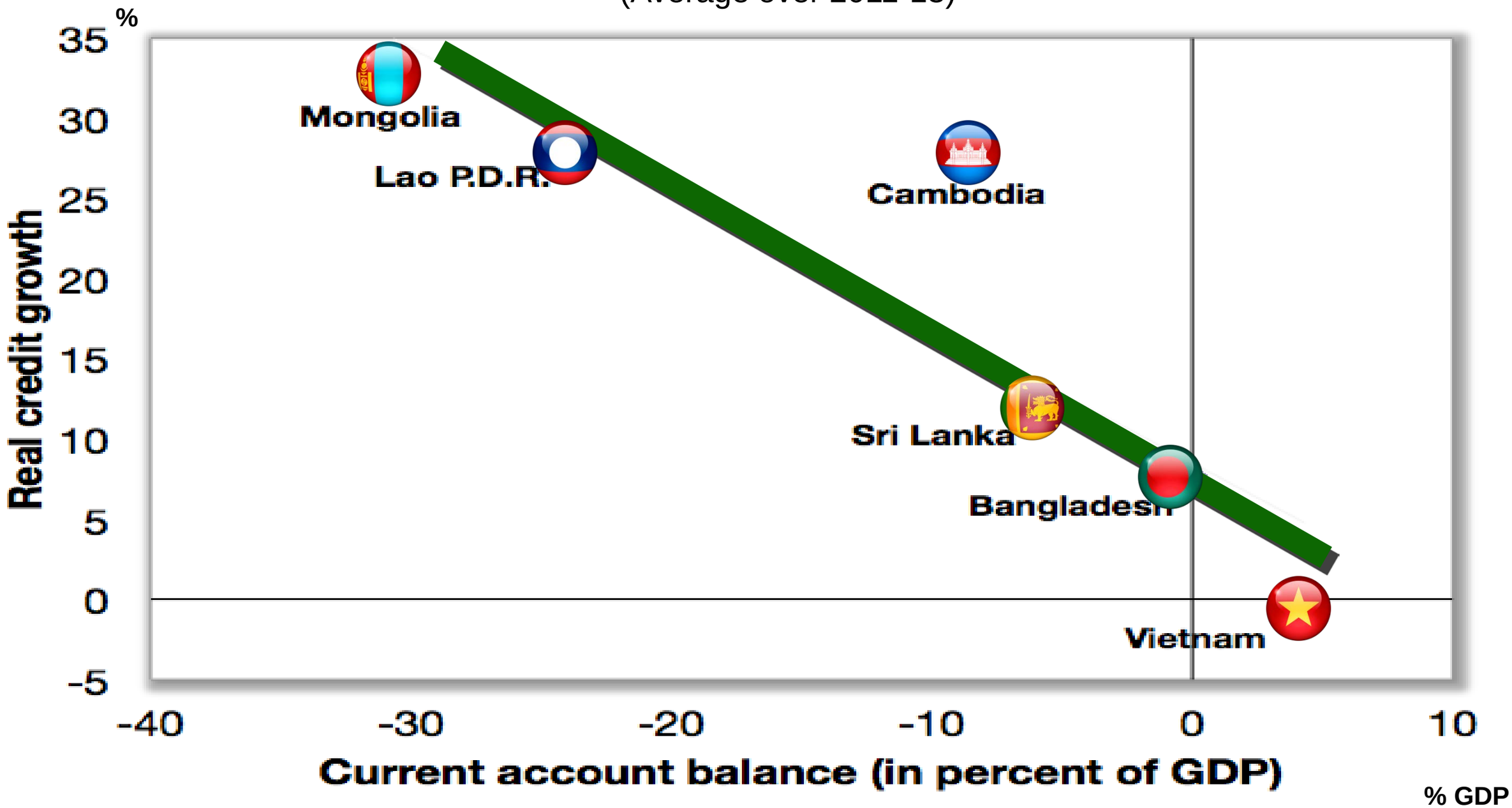


Outlook

Risks still present: frontier and developing economies

Current Account and Real Credit Growth

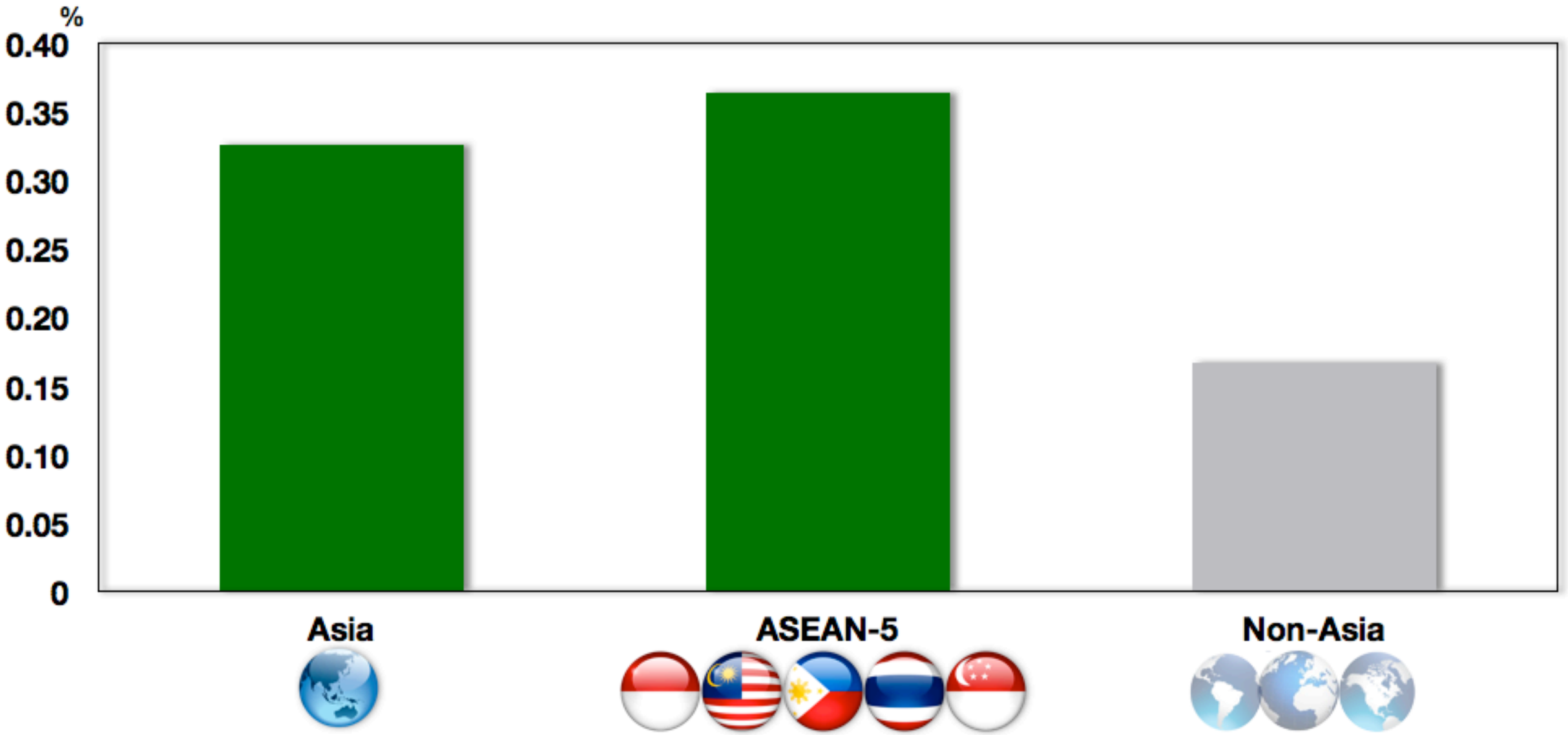
(Average over 2011-13)



Sharper than envisaged China slowdown

Estimated Impact of 1% Growth Surprise in China on Partner Country Growth

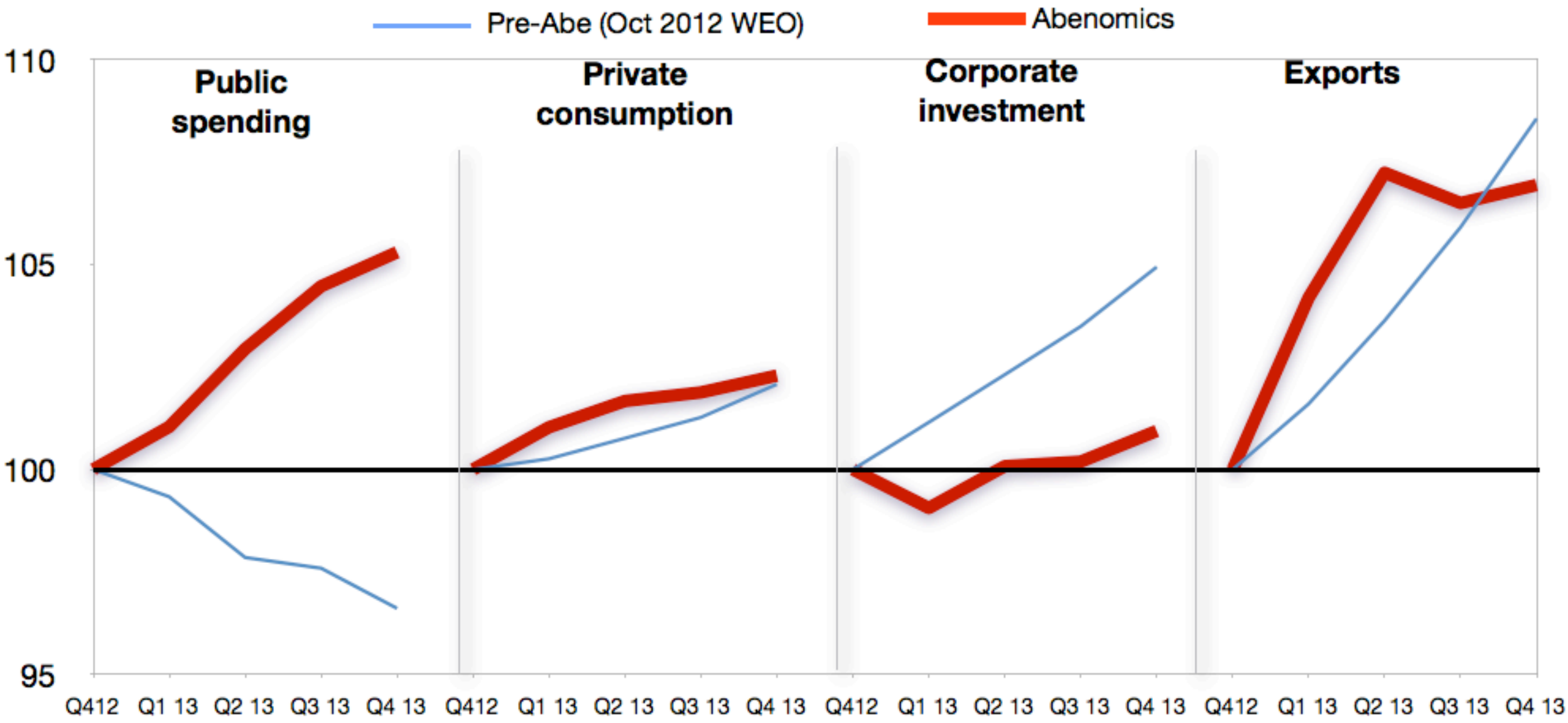
(GDP growth impact after one year, in percentage points: Median)



Sources: IMF, staff estimates (APD REO Chapter 3)

And in Japan, if reforms have a lower-than-anticipated impact on growth expectations

Japan: Components of Real GDP



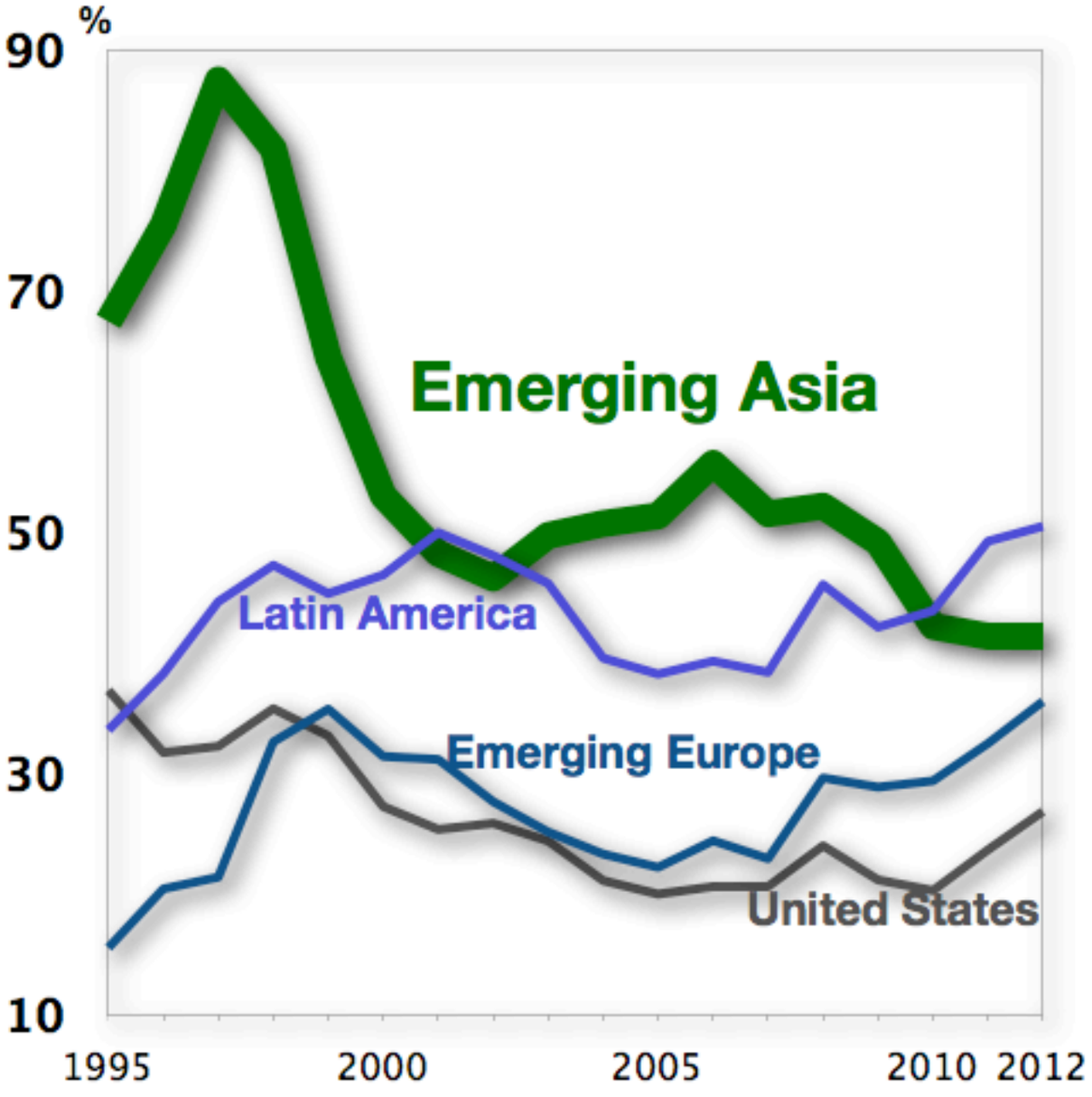
Leverage: a fault line?

- *Aggregate* corporate leverage has remained stable in recent years
- Pockets of vulnerability: leveraged firms tend to be the weakest
- Leverage could amplify corporate stress created by higher global interest rates
- Leverage likely have adverse implications for investment

No alarming build-up in overall leverage

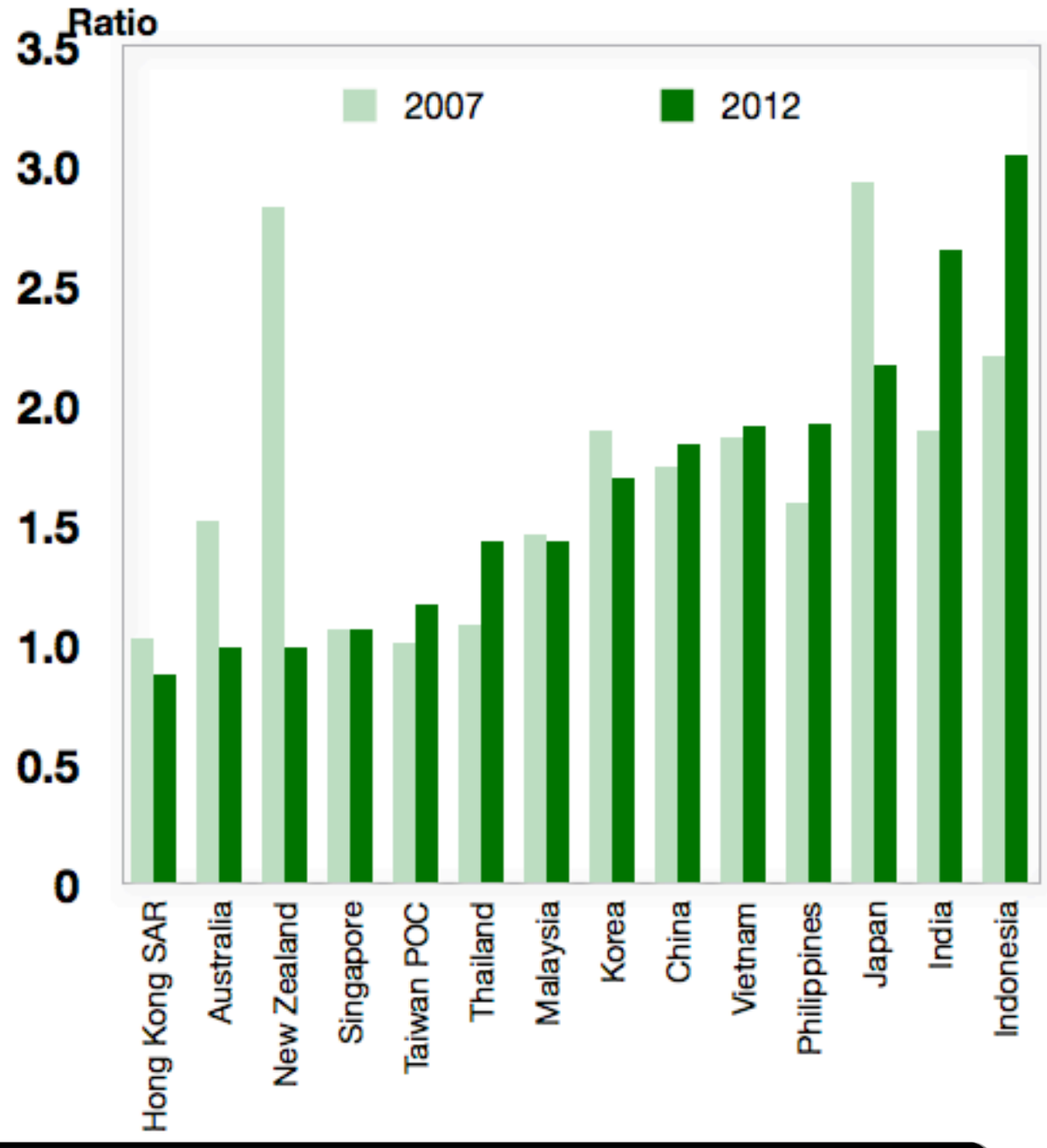
Debt to Equity Ratio

(In percent; median for non-financial corporates)



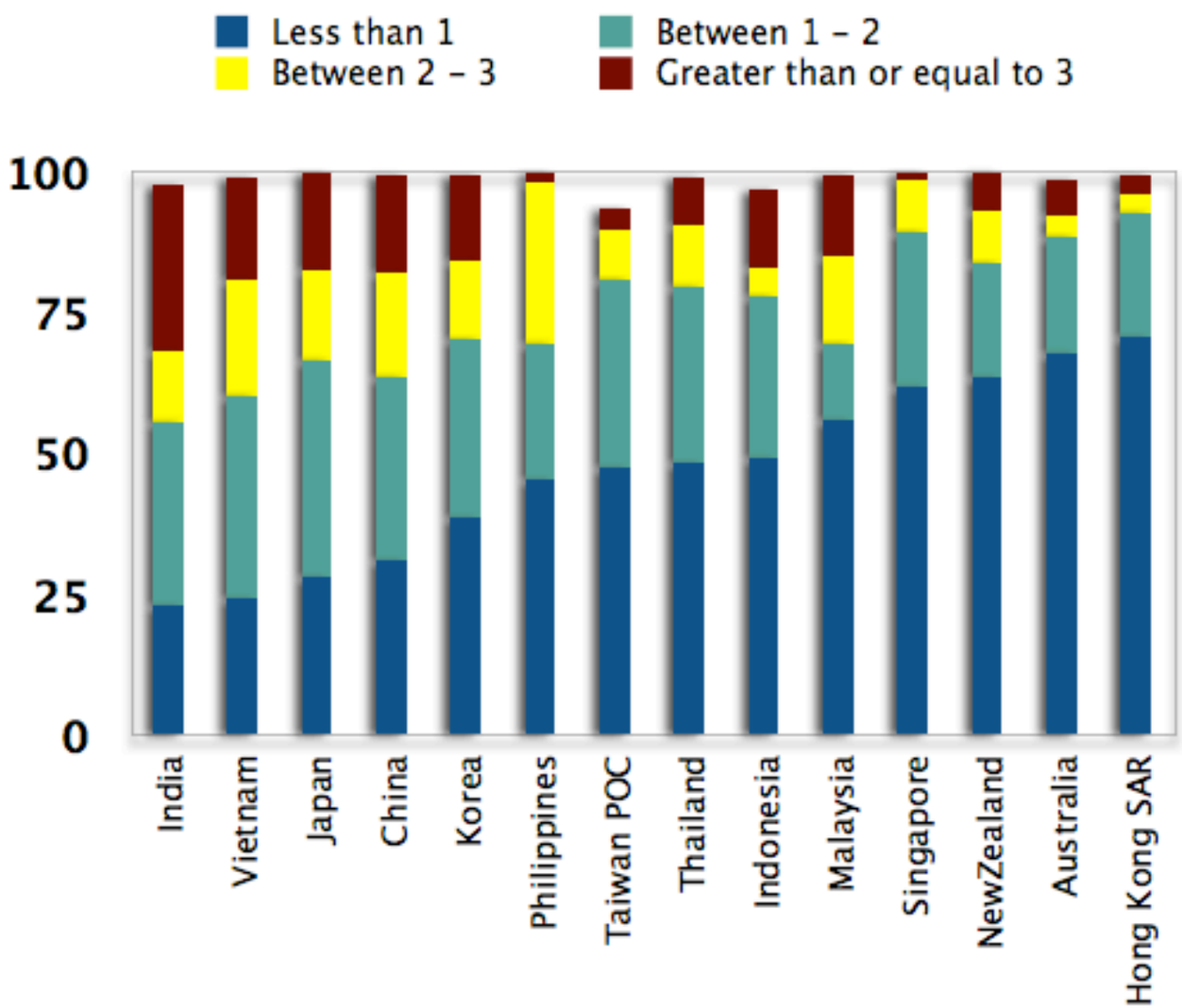
Asia: Debt to Equity Ratio

(Ratio, total debt-weighted average)



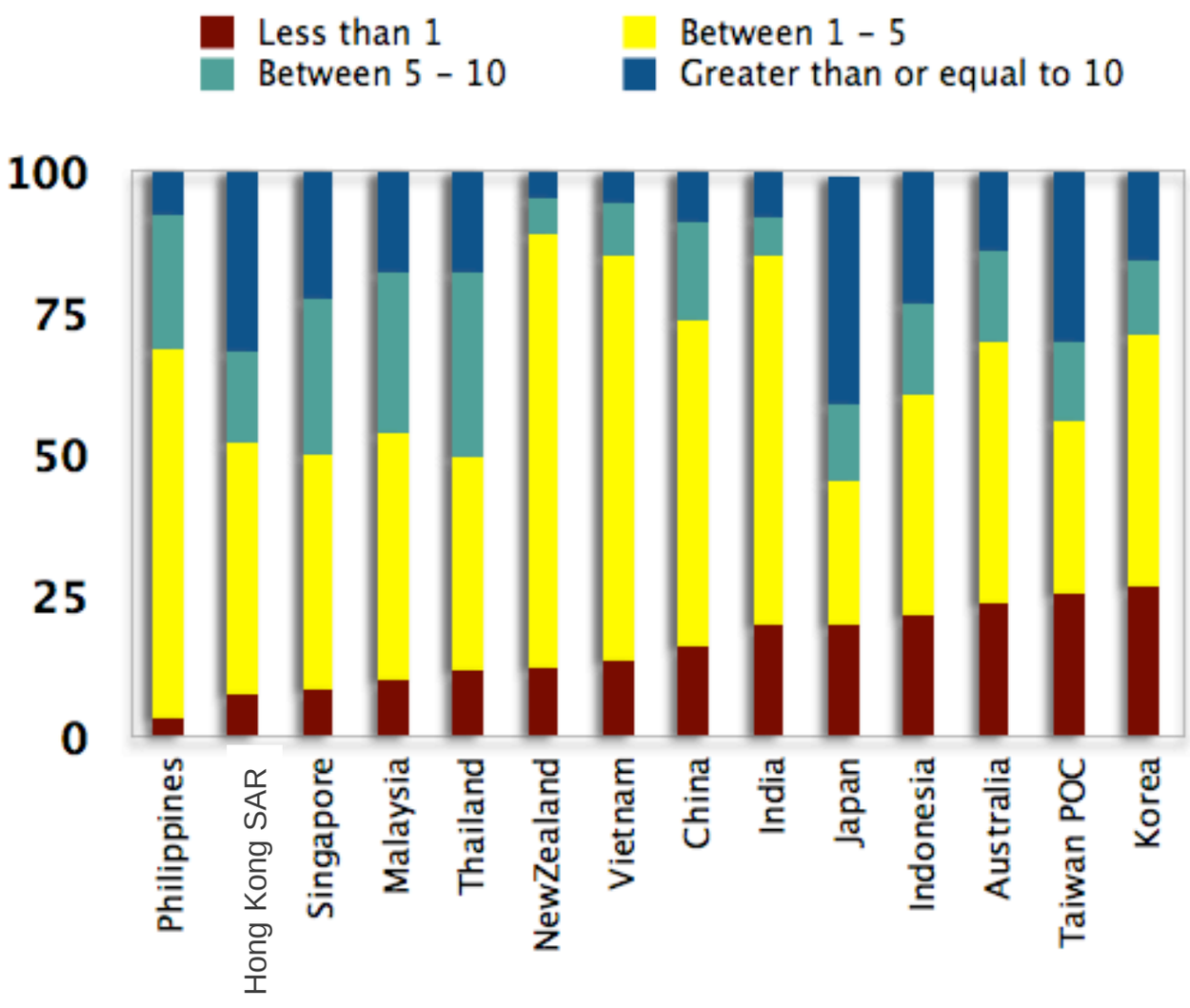
But there are pockets of vulnerability

Corporate Debt by Leverage Ratio[1]
(In percent of total corporate debt, 2012)



Sources: Thomson Reuters Worldscope; and IMF staff calculations.
[1] Leverage Ratio is measured by Total Debt/Common Equity.

Corporate Debt by ICR[1]
(In percent of total corporate debt, 2012)



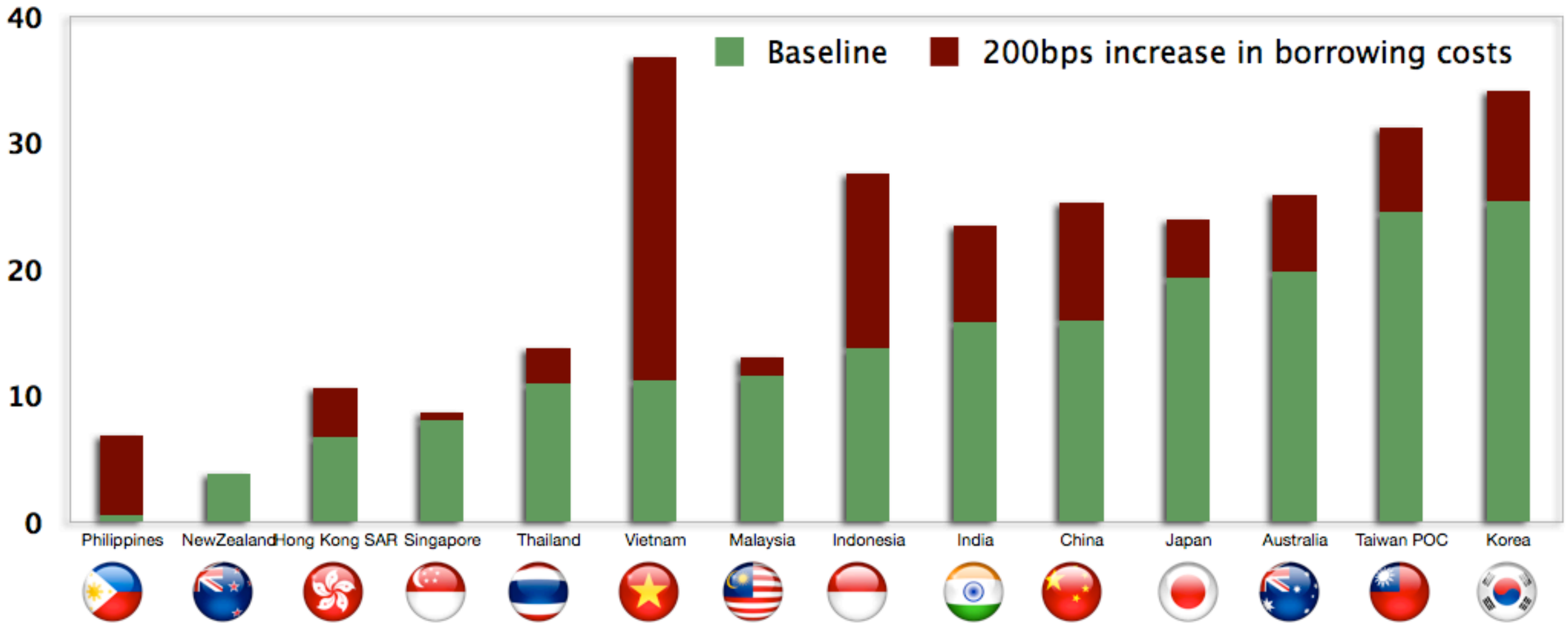
Thomson Reuters Worldscope; and IMF staff calculations.
[1] ICR is measured by EBIT/Total Interest Expense.

Leverage

Corporate stress could be amplified by tightening of global financial conditions

Stress Test: Debt of Corporates with ICR<1 under Baseline and Stress Scenario[1]

(In percent of total corporate debt, 2012)



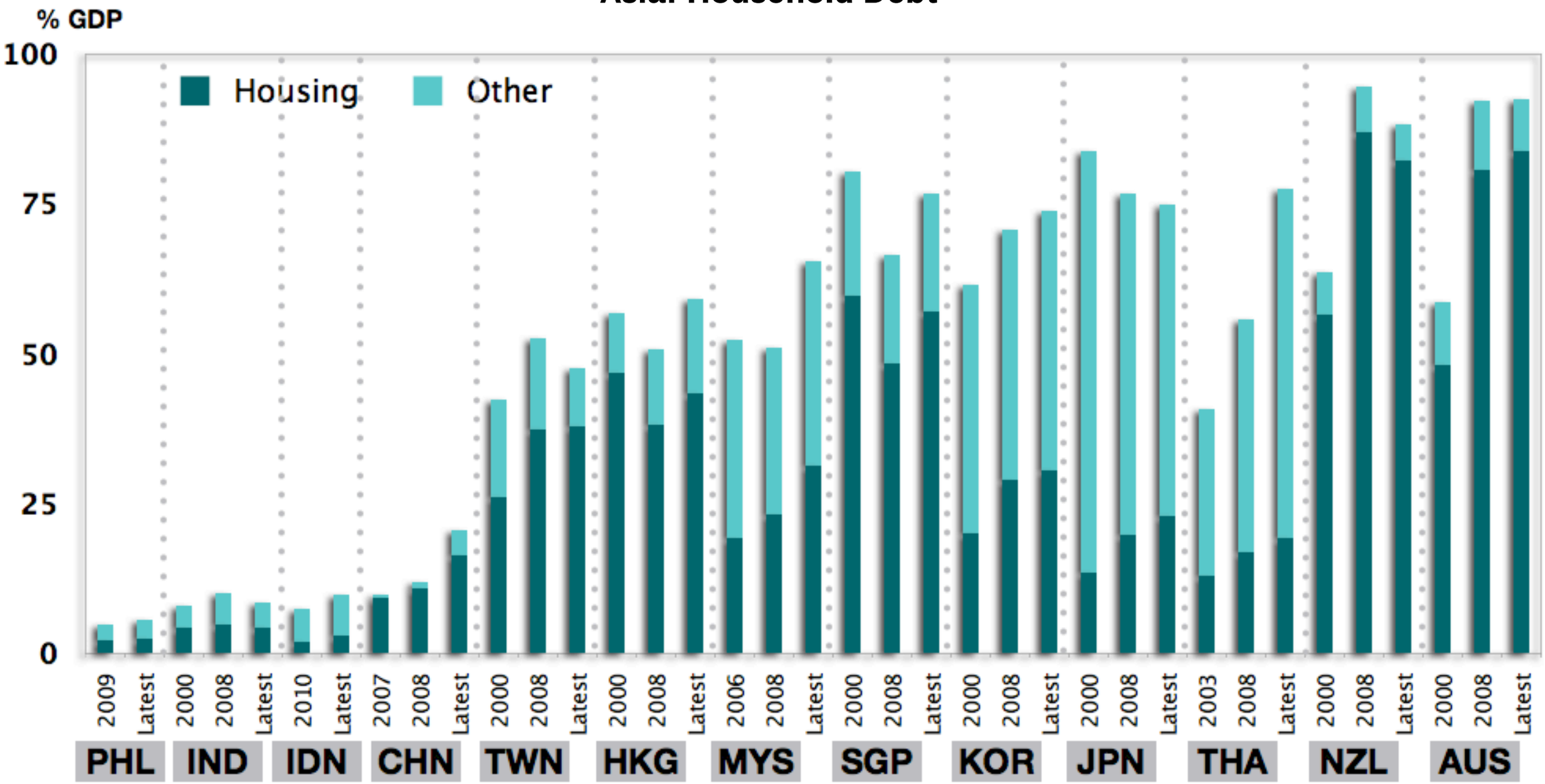
Sources: Thomson Reuters Worldscope; and IMF staff calculations.

[1] ICR is measured by EBIT/Total Interest Expense

Leverage

Household debt: also a growing concern in some economies

Asia: Household Debt

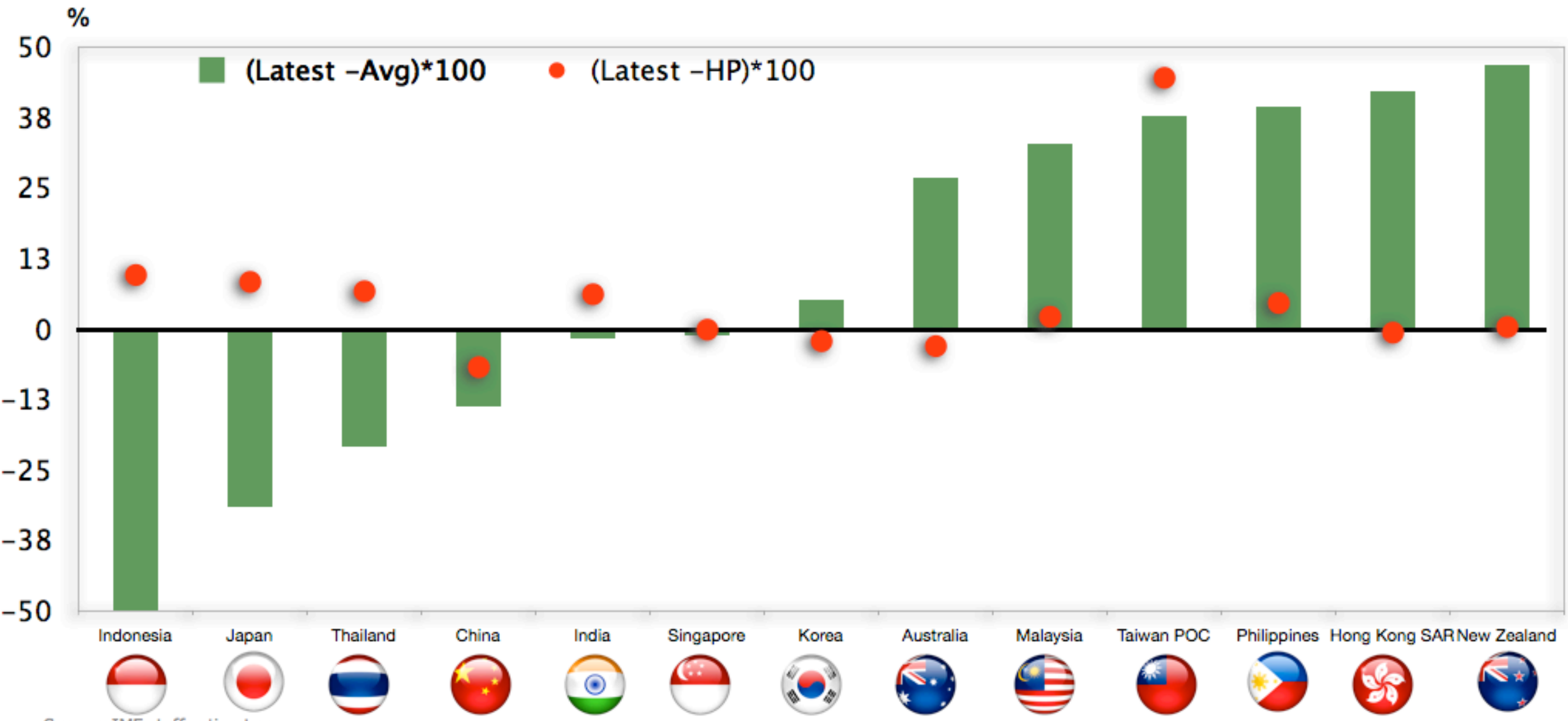


Sources: CEIC Co. Ltd.; Haver Analytics; World Economic Outlook; OECD; National Authorities; and staff calculations.
PHL=the Philippines, IND=India, IDN=Indonesia, CHN=China, TWN=Taiwan POC, HKG=Hong Kong SAR, MYS=Malaysia, SGP=Singapore, KOR=Korea, JPN=Japan, THA=Thailand, NZL=New Zealand, AUS=Australia.

Leverage

House prices have been high relative to historical trends

House Prices Deviation from Alternative Benchmarks



Source: IMF staff estimates.

Leverage

What role for macro-prudential policies?

- Macro-prudential policies (MPP) should be part of the toolkit to deal with risks and external shocks

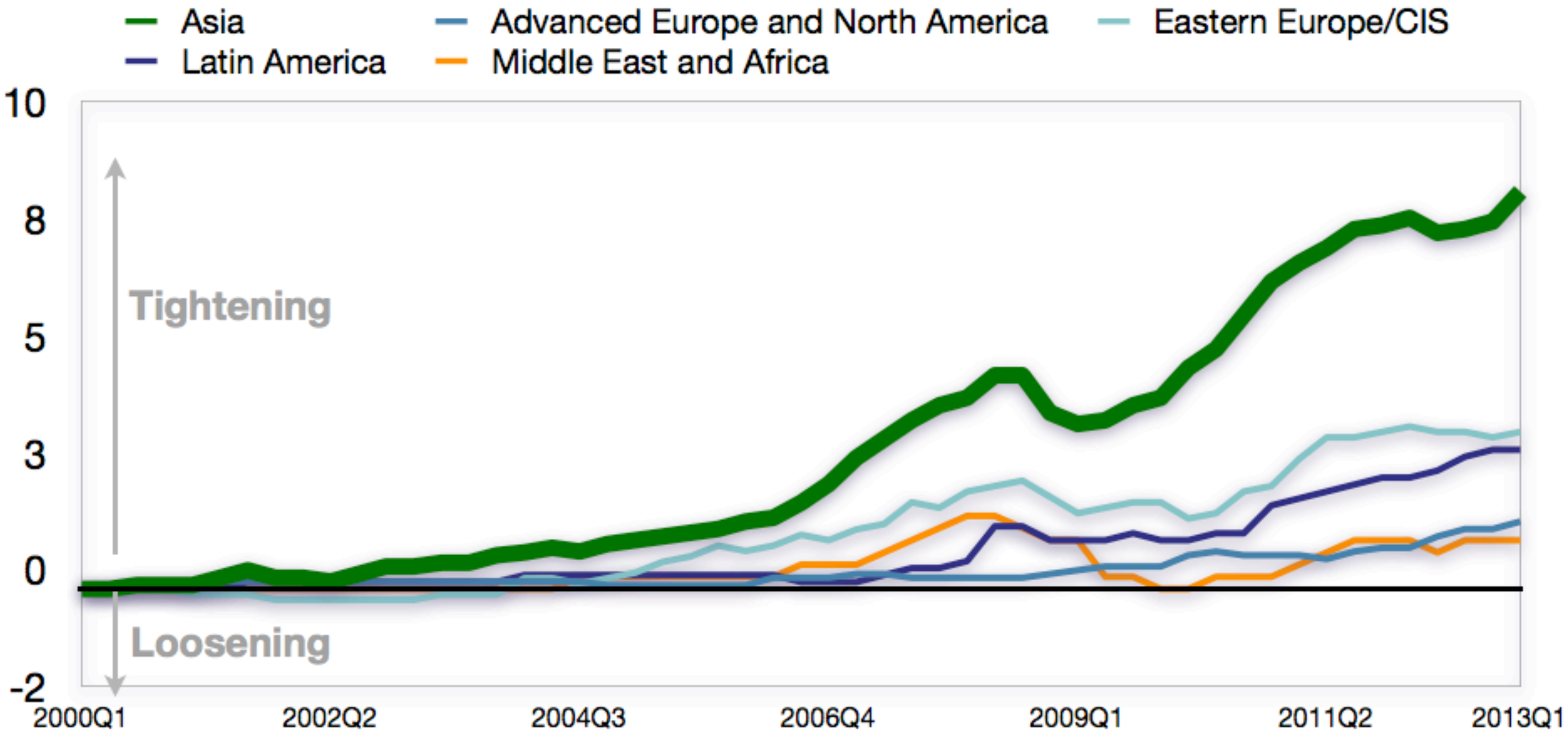
- Asia has used MPPs more than other regions

- Some measures are effective, particularly in housing

Macro-prudential policies: used extensively to manage risks and will provide a buffer

Macro-prudential Policies: Cumulative Actions by Region

(Average per country in each region; 2000:Q1-2013:Q1)[1]



Source: IMF staff calculations, Asia and Pacific Regional Economic Outlook-Chapter 4 (2014).

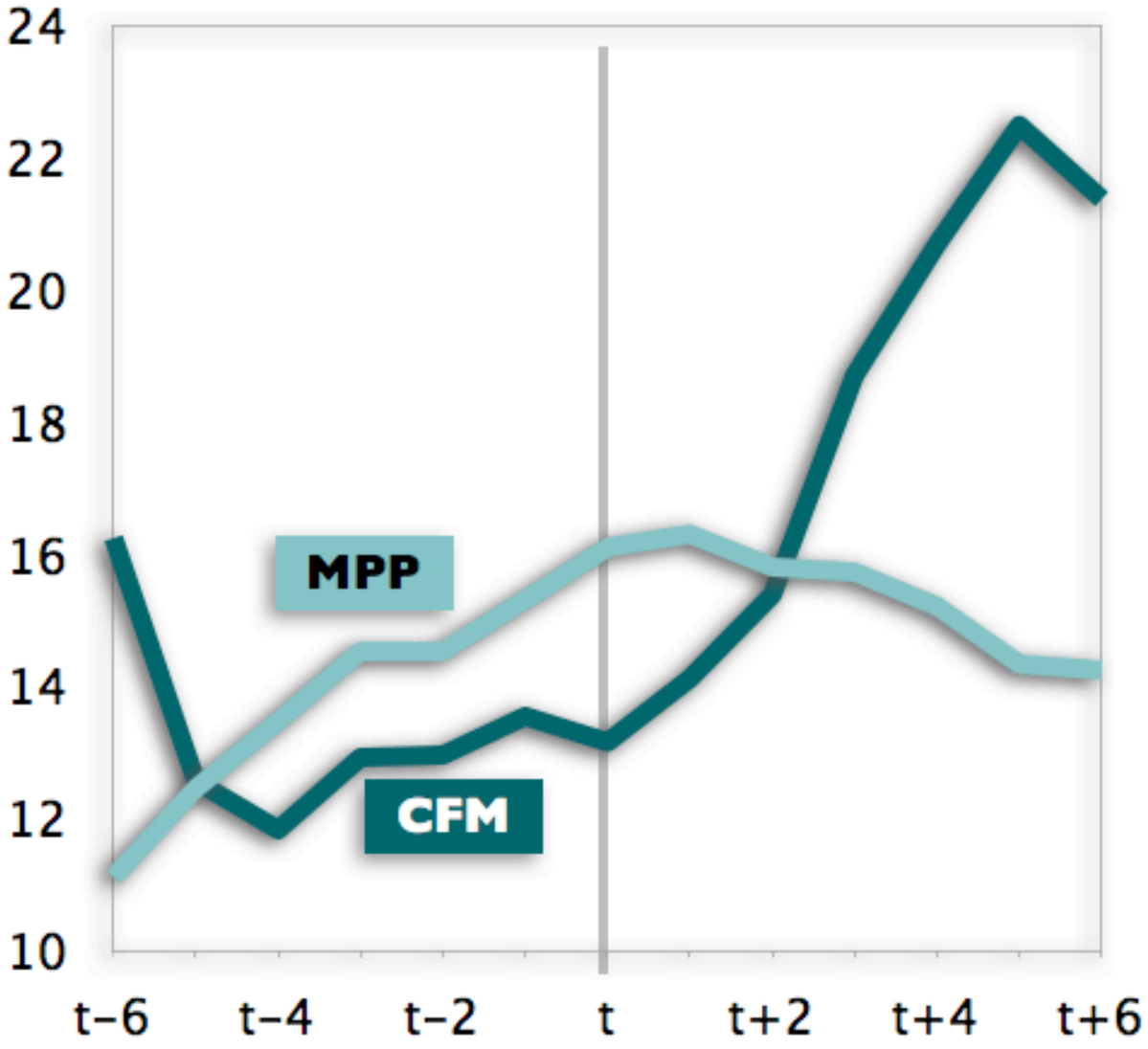
[1] Index summing up housing-related measures, credit measures, reserve requirements, dynamic provisioning and core funding ratio. Simple average across countries within country groups.

MPP

Some MPPs have helped so far, notably in housing

Asia: Credit Growth[1]

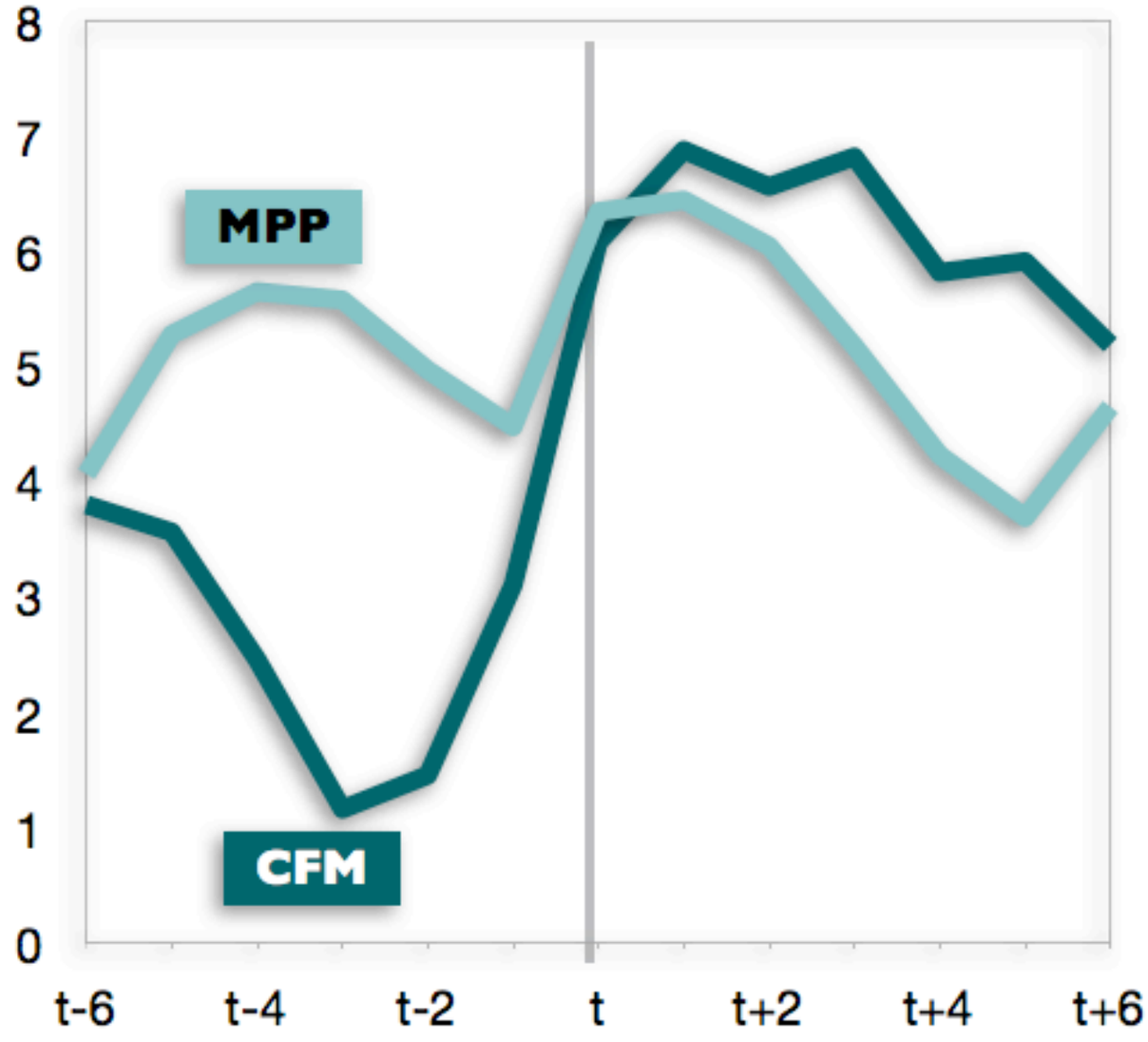
(Average across all episodes; year-over-year percentage change)



1 Relevant tightening policies introduced over the period 2000:Q1–2013:Q1.
Excludes overlapping episodes within four quarters.

Asia: Housing Prices[1]

(Average across all episodes; year-over-year percentage change)



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Excludes overlapping episodes within four quarters.

Sources: IMF, World Economic Outlook; CEIC Data Co Ltd.; Haver Analytics; and IMF staff estimates, Asia and Pacific Regional Economic Outlook-Chapter 4 (2014).

MPP

Role of macro-prudential policies in the downswing

Counter-cyclical use of reserve requirements relatively uncontroversial, but case for easing other housing-related tools less clear cut

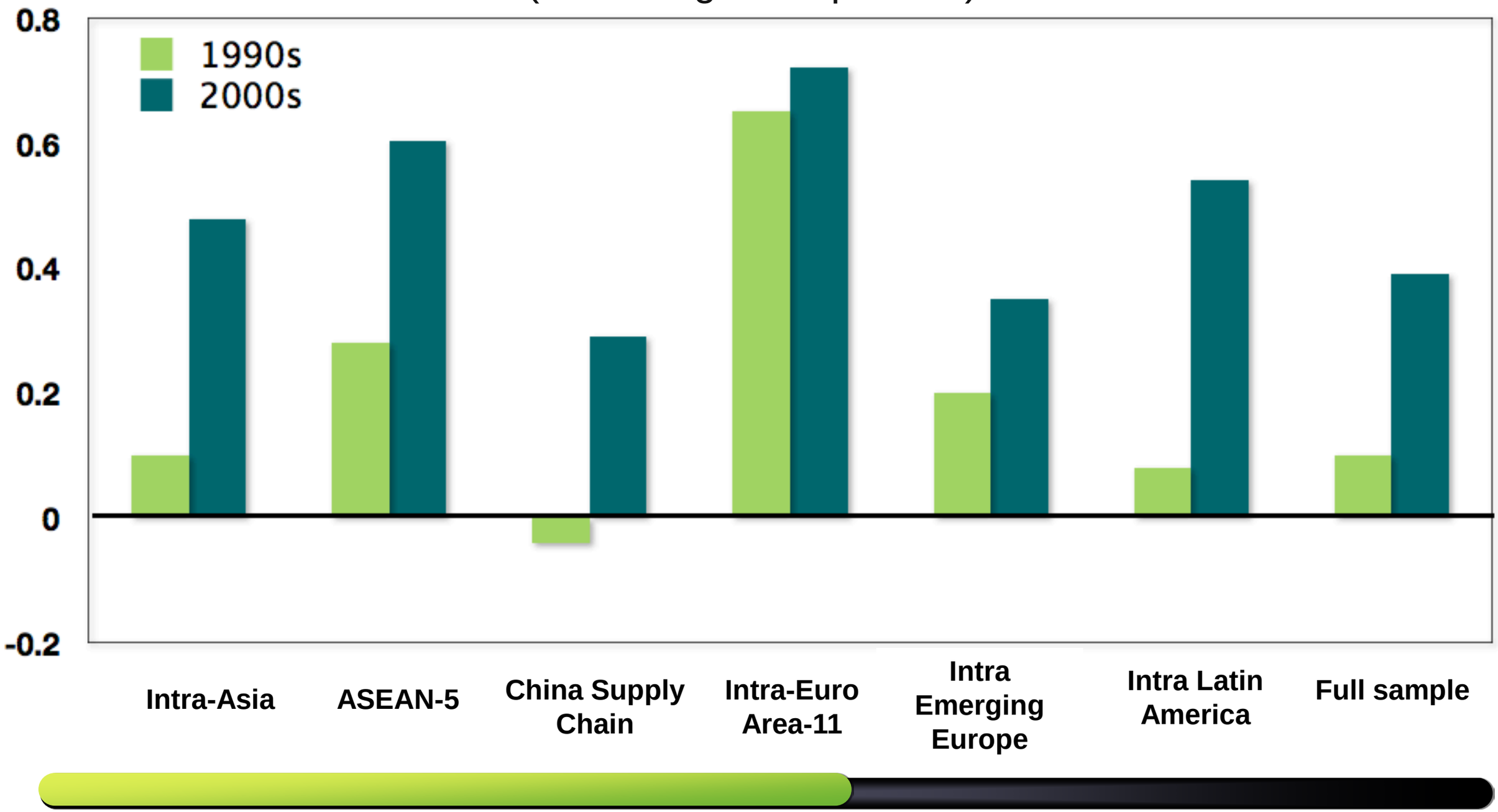
Regional integration: growing source of spillovers?

- *Asian economies are moving increasingly in synch...*
- ...partly due to growing trade integration (~ 1/4 of rise in comovement)
- ...which in turn reflects build-up of supply-chain linkages
- ...particularly around China, with Japan's role declining
- The future: greater integration => greater growth comovement => role for regional and global financial safety nets

Growth co-movement spikes in crises but is also on the rise in normal times

Instantaneous Quasi-Correlation by Region

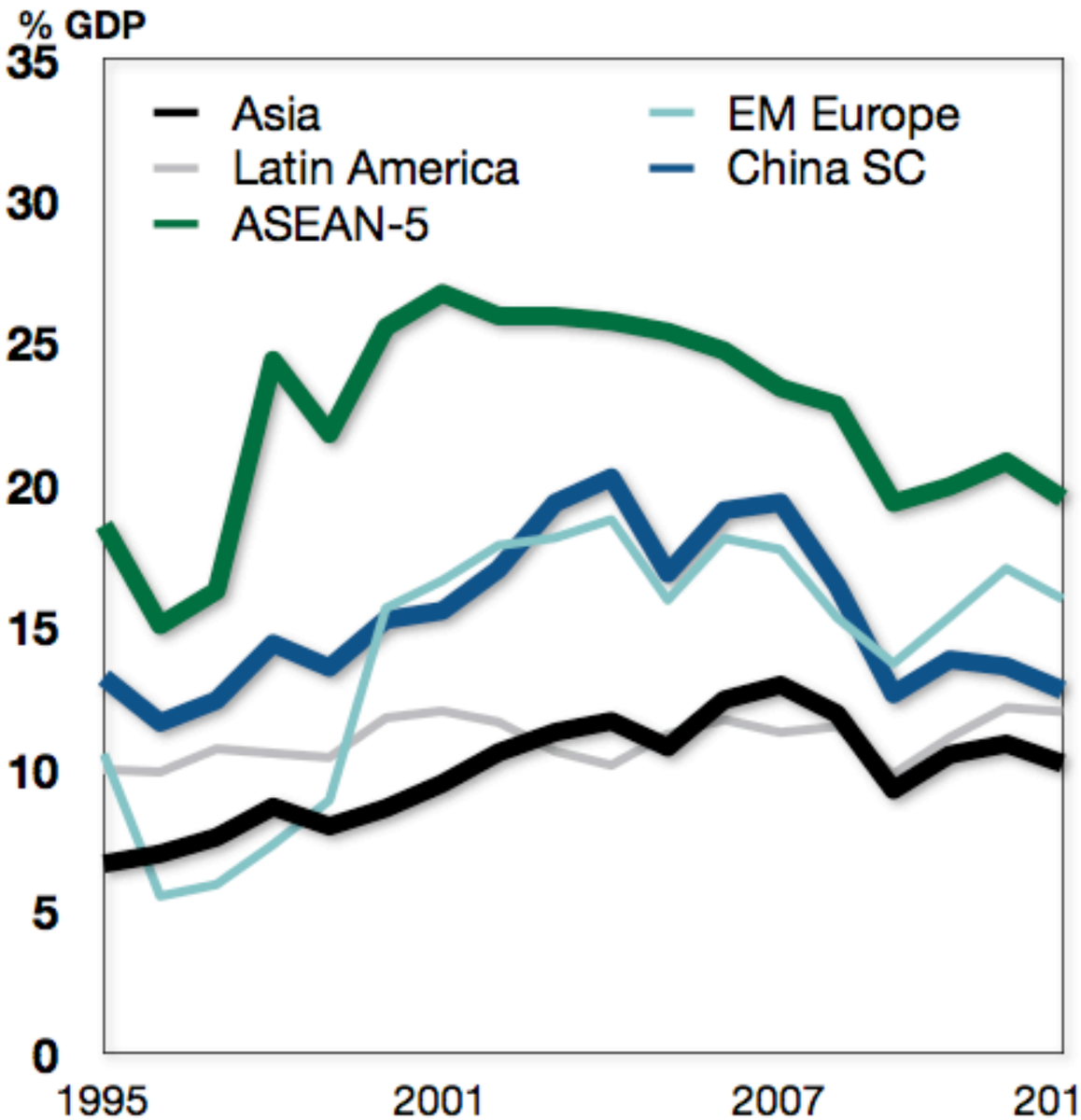
(Excluding crisis periods)



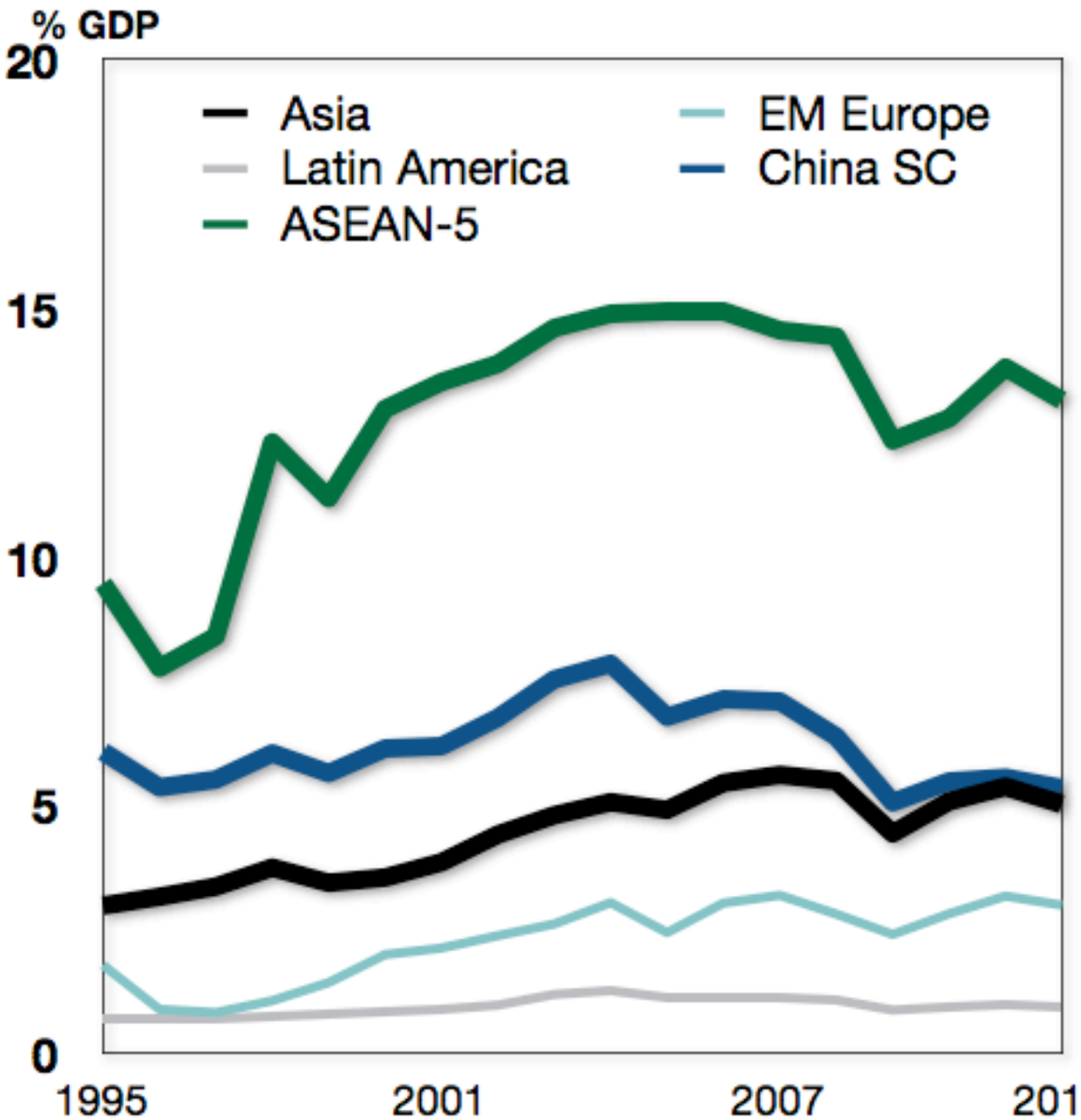
Regional integration & growth comovement

Asia's degree of trade integration: high and rising, although not since the 2000s

Trade Intensity with the World



Intra-regional Trade Intensity

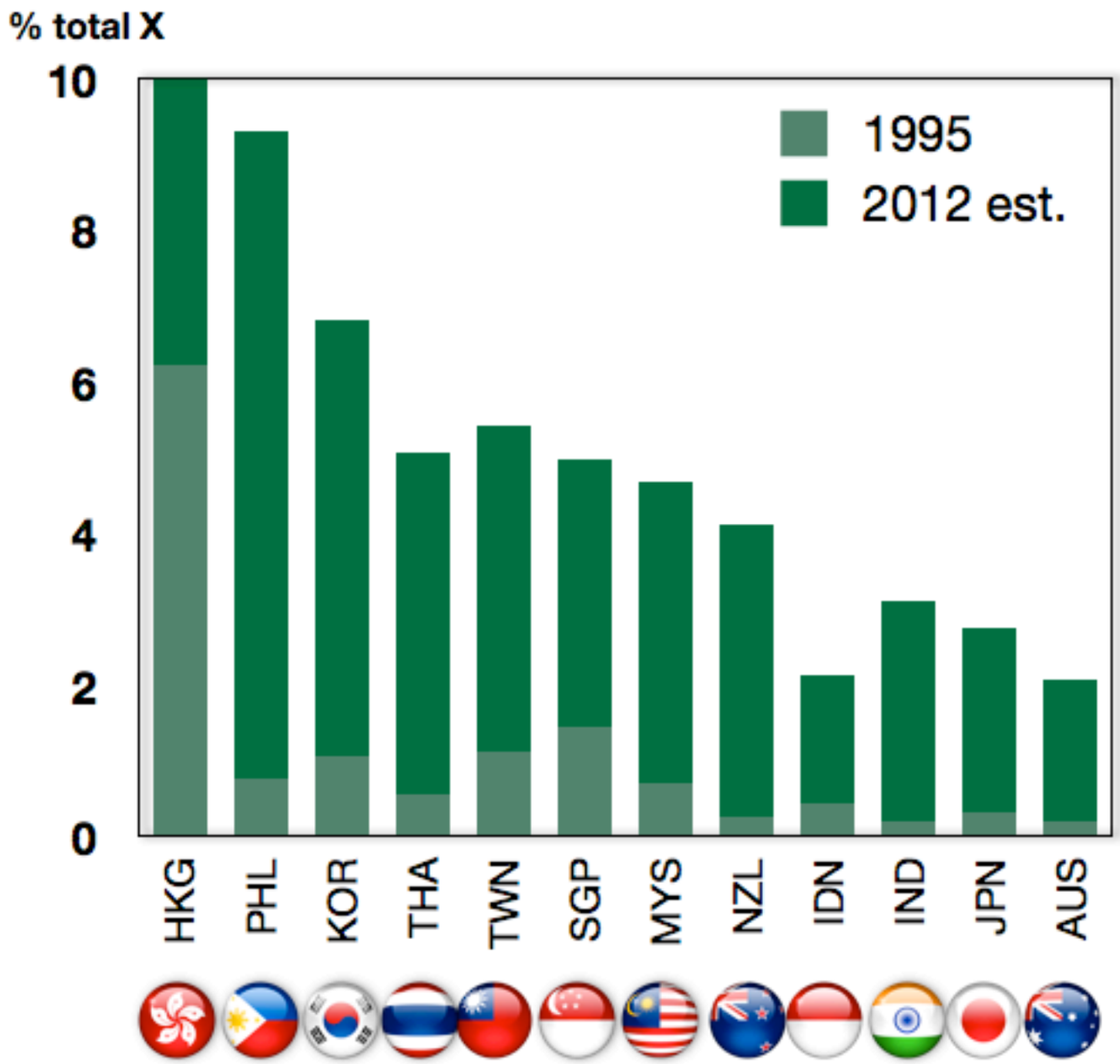


Note: China SC stands for China Supply Chain, which includes China, Korea, Malaysia, the Philippines, Taiwan Province of China, and Thailand.

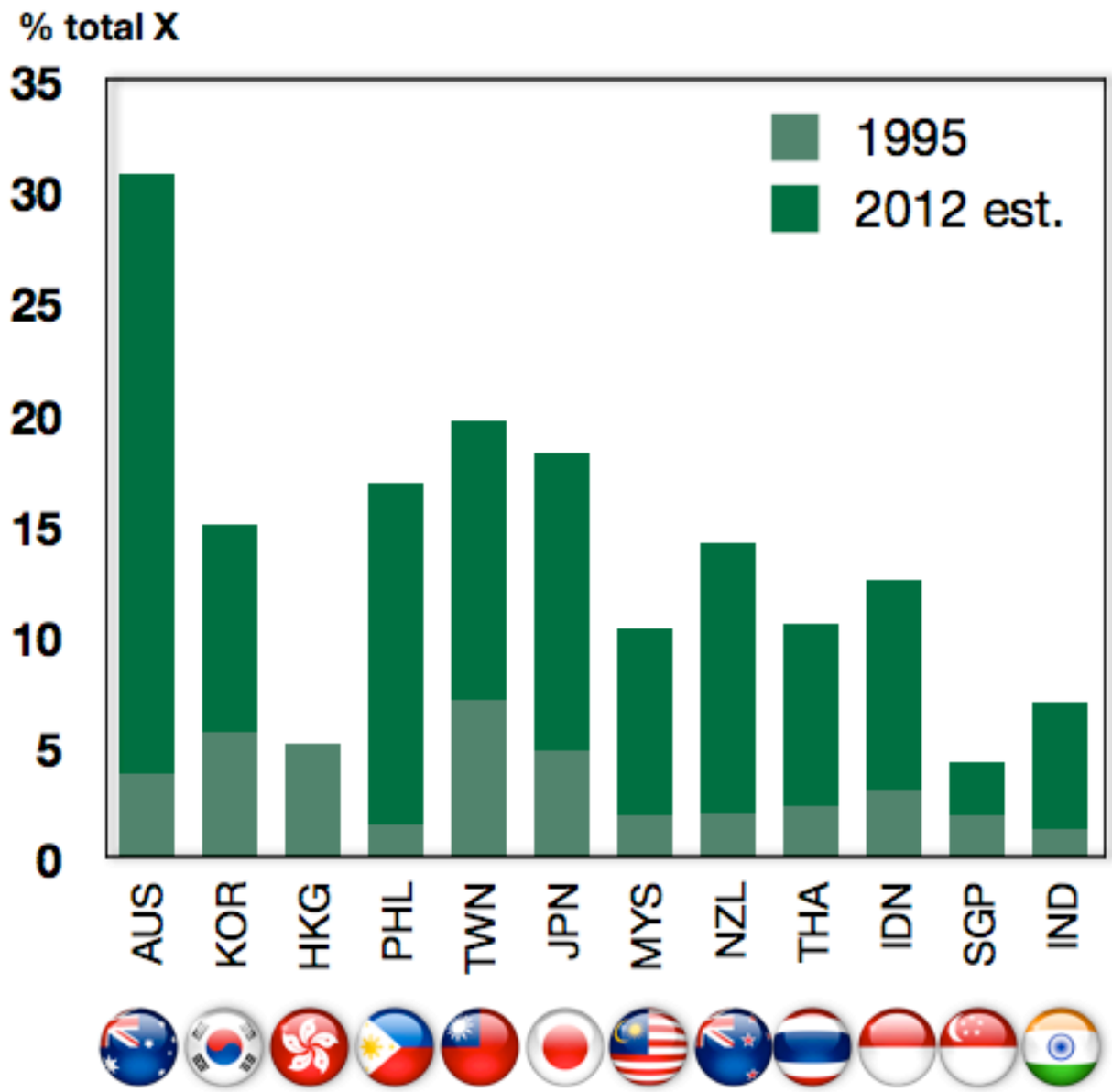
Regional integration & growth comovement

Growing integration with, and dependence on, China...

Value-added from China embodied in each economy's exports



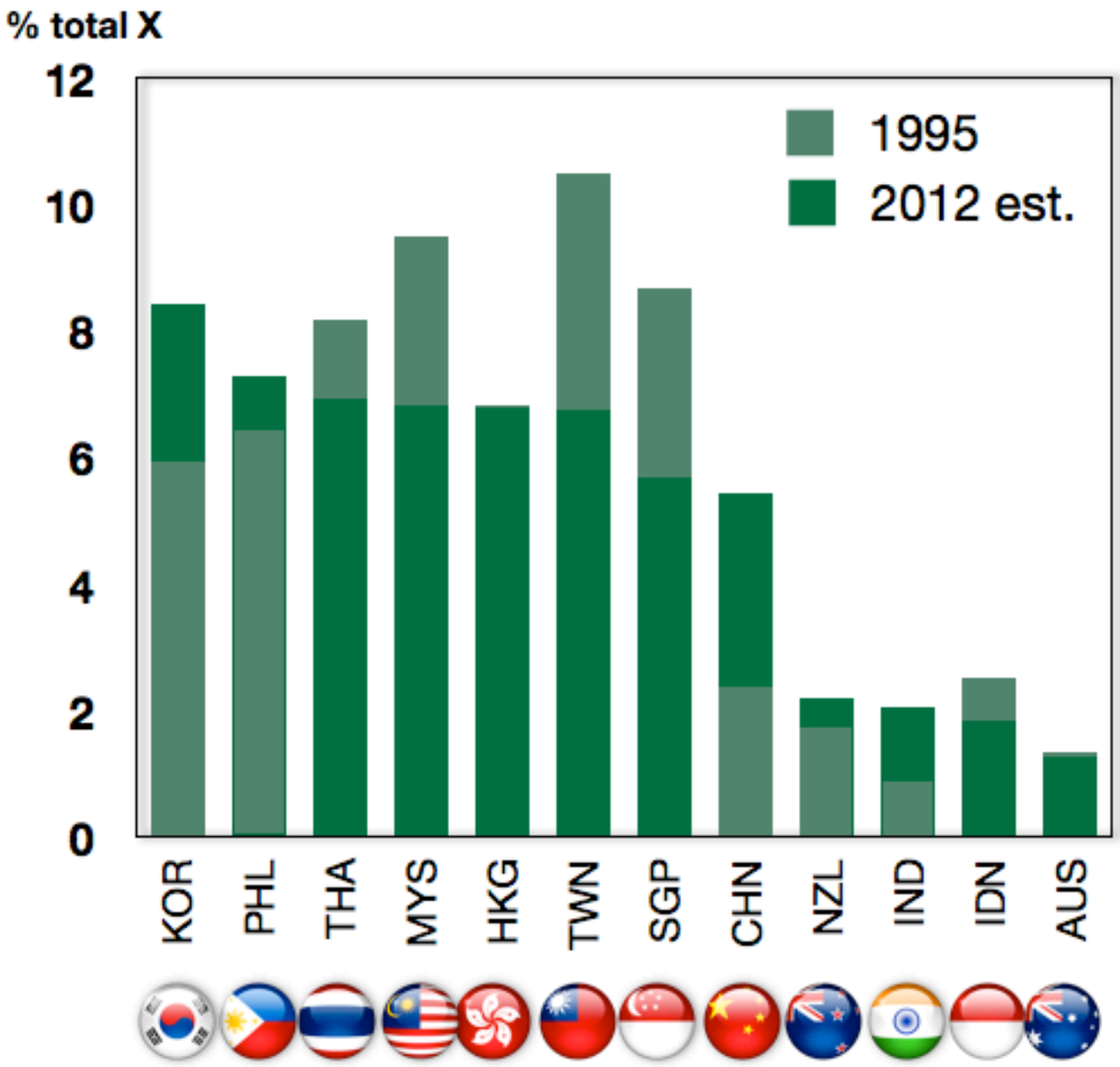
Domestic value-added embodied in each economy's exports to China



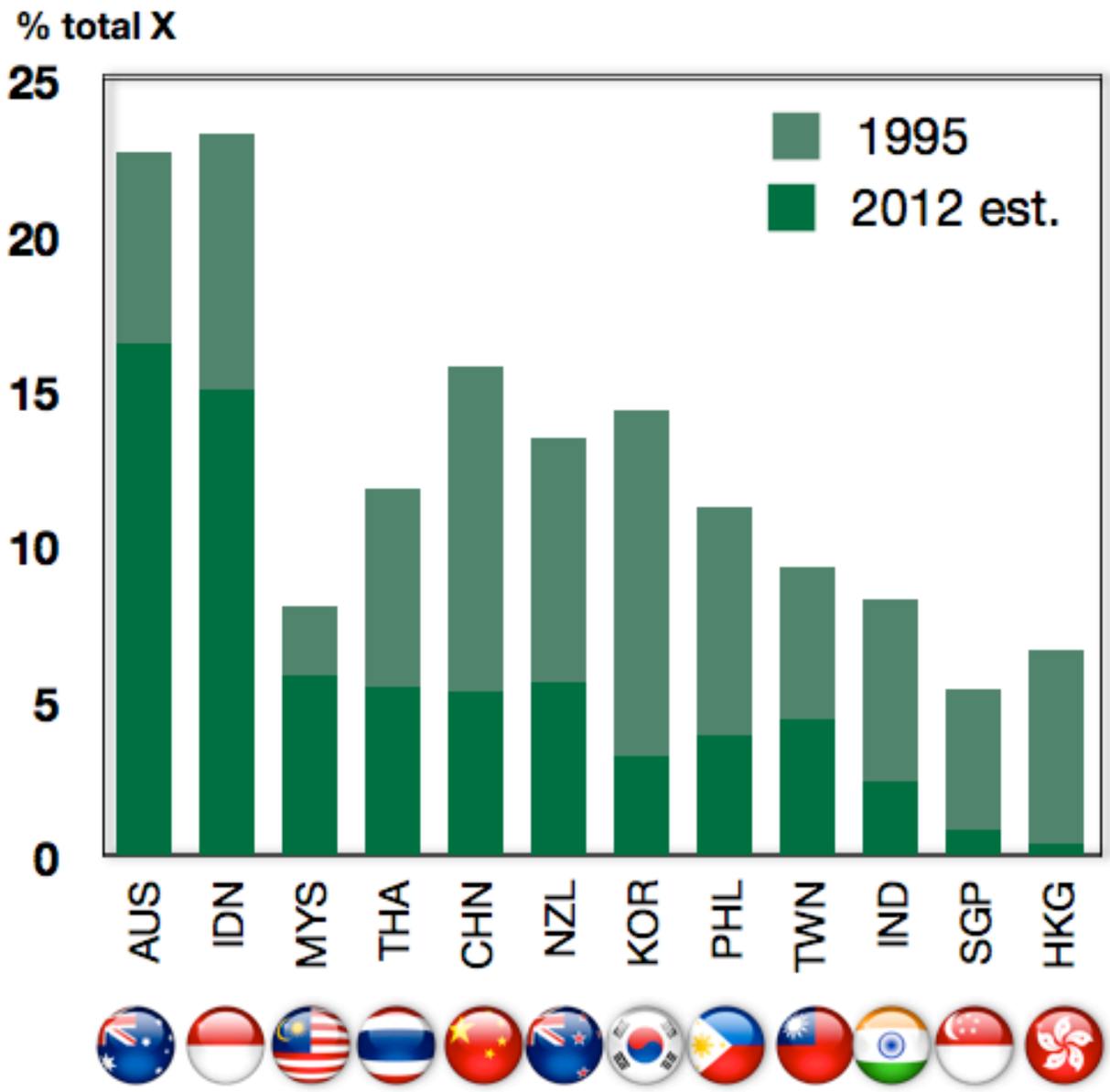
Regional integration & growth comovement

...and declining integration with, and dependence on, Japan

Value-added from Japan embodied in each economy's exports



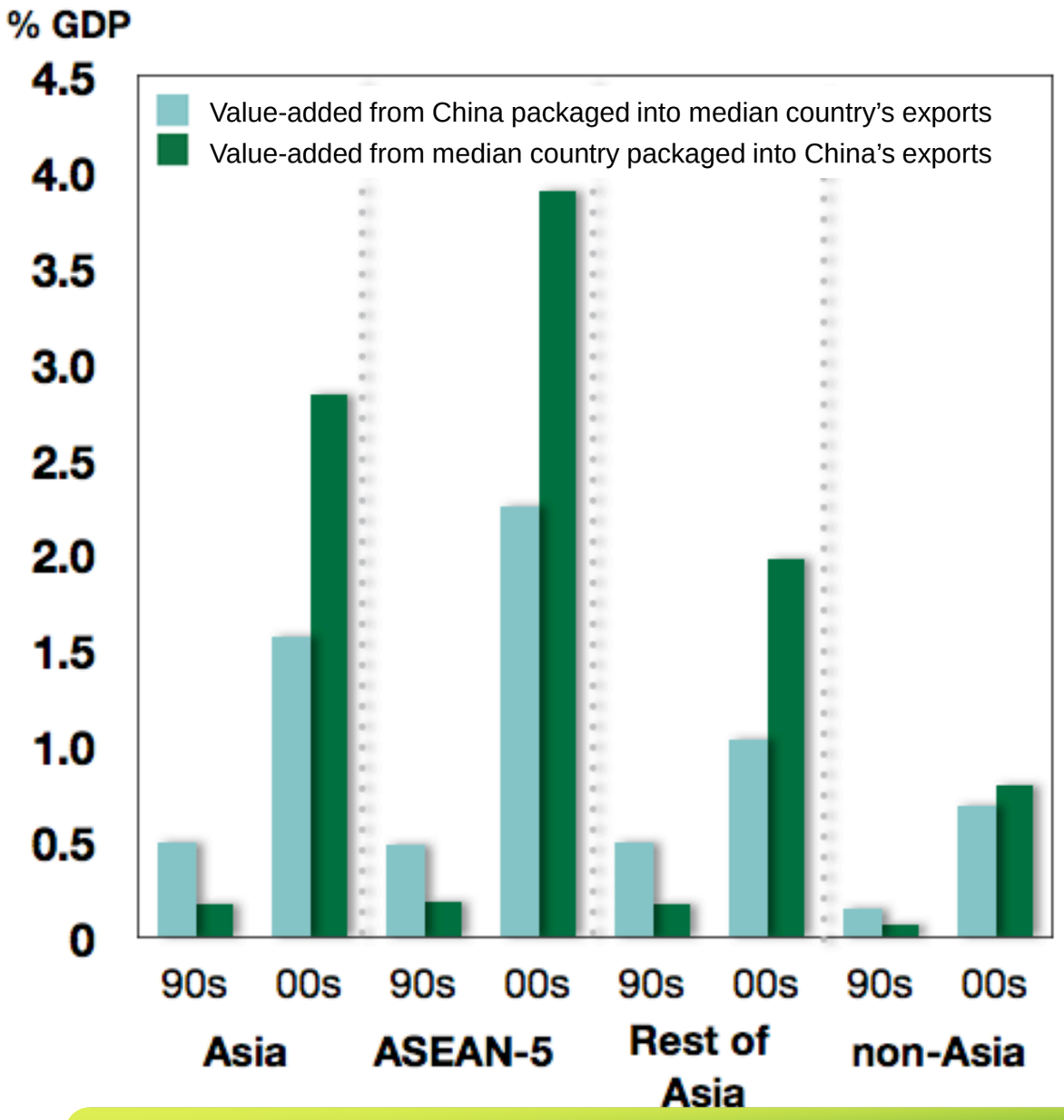
Domestic value-added embodied in each economy's exports to Japan



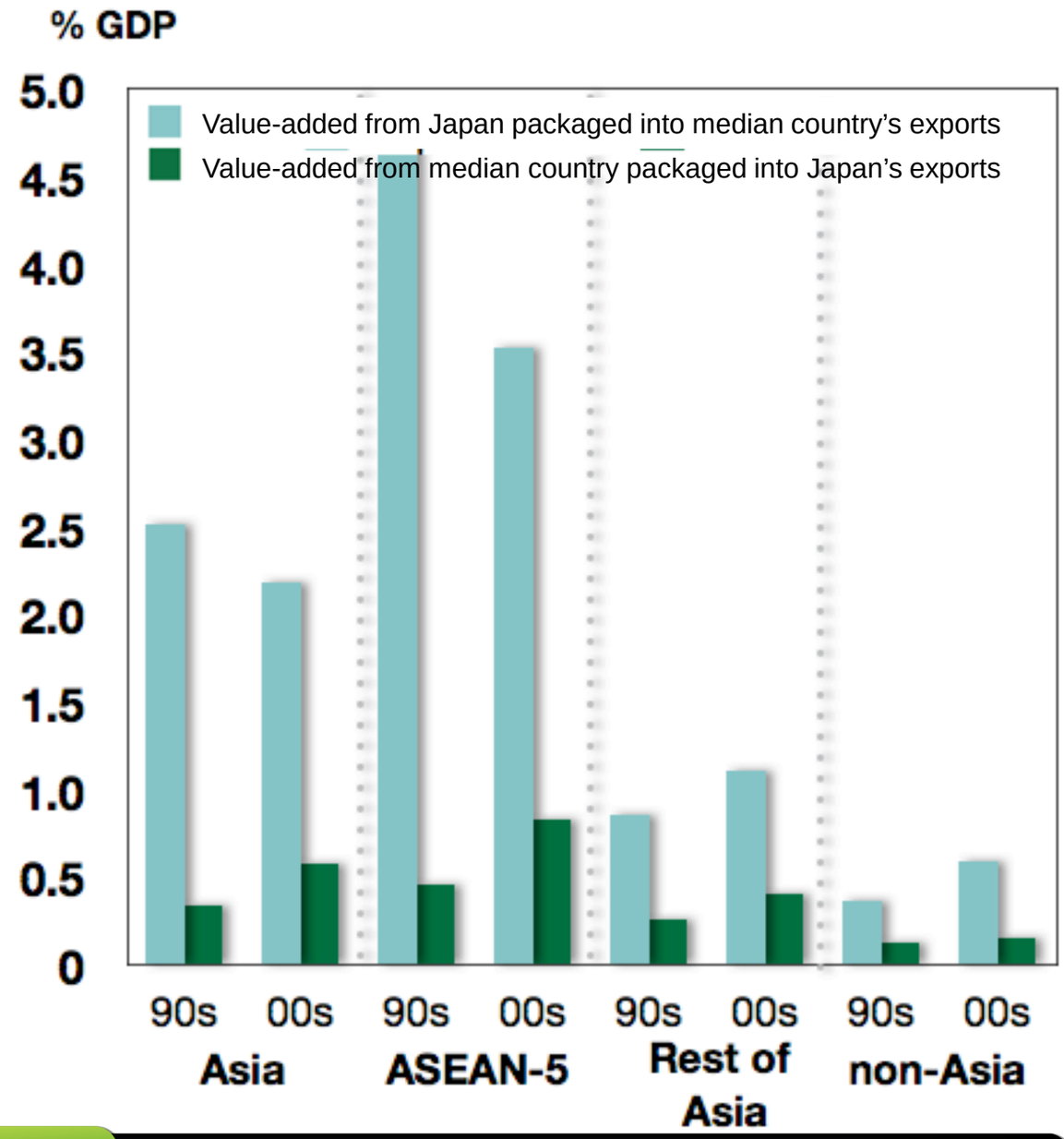
Regional integration & growth comovement

China's and Japan's positions in regional supply chain have also diverged

Median Vertical Trade with China



Median Vertical Trade with Japan

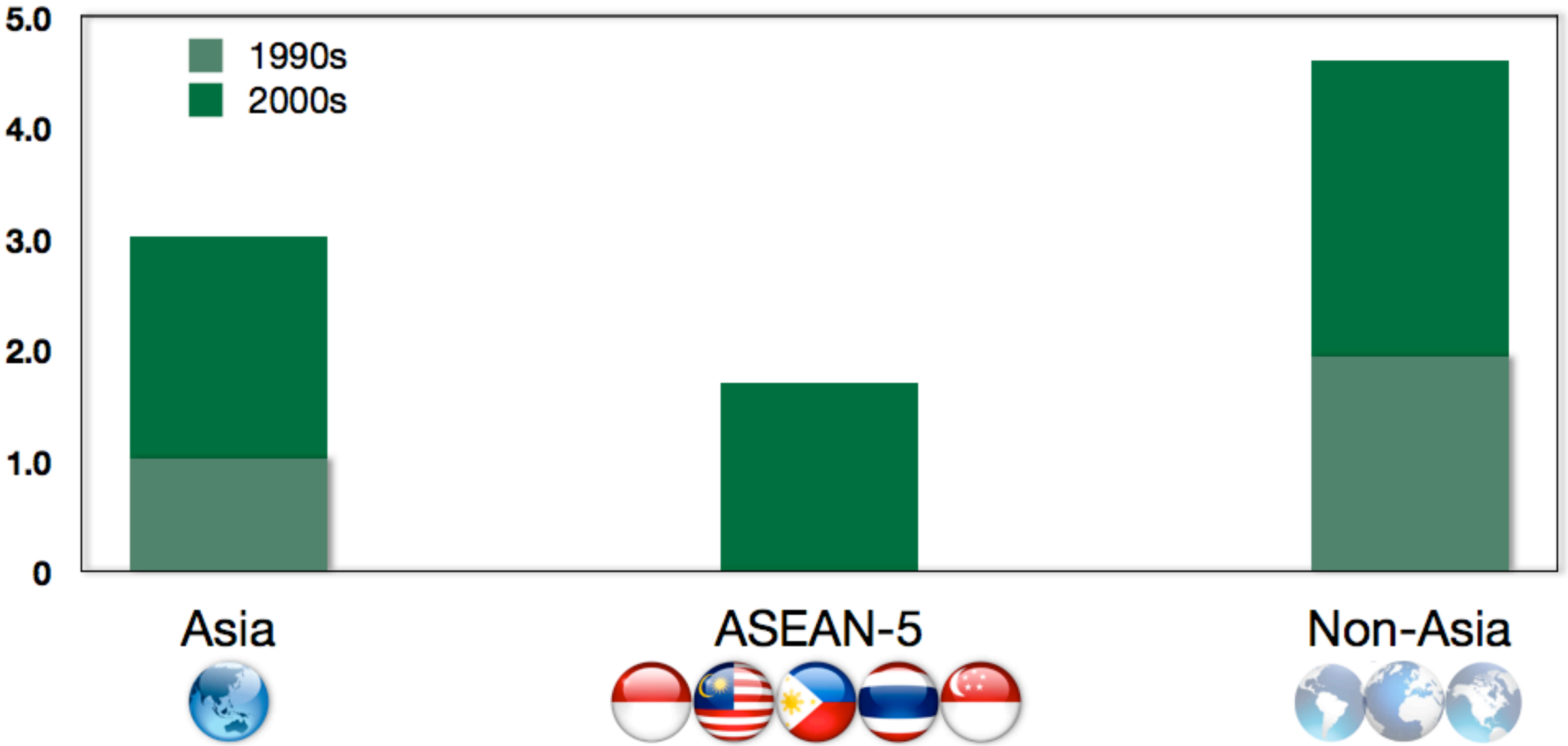


Regional integration & growth comovement

Financial integration in Asia: still lagging behind, but on the rise

Median Bilateral Banking Integration

(In percent of total external position with the world)



Regional integration & growth comovement

Implications: The Future

- **BCS to rise if economic integration increases further, especially in crisis times (financial integration)**

- **Role of China:** increasing as a final demand source, declining as "assembly hub" ➡ greater spillovers from China shocks, but China less of a conduit for global shocks

- **Higher BCS:** bad for risk sharing ➡ need for individual policies to strengthen resilience and broad (regional and global) safety nets; global safety net especially useful in event of regional shocks/shocks originating from China

Policy Settings and Challenges

•Monetary: progressive normalization as conditions warrant

- Fiscal: gradual consolidation

- Macroprudential: remains part of the toolkit

- Structural: key for both short-term financial stability and medium-term growth

• But no one size-fits-all: subregional specificities

Thank You

Asia and Pacific Department, May 2014

Background slides (BCS definitions)

Annex: Definitions—BCS

Instantaneous Quasi-correlation

$$QCORR_{ijt} = \frac{(g_{it} - g_i^*) * (g_{jt} - g_j^*)}{\sigma_i^g * \sigma_j^g}$$

where QCORR_ijt is the quasi-correlation of real GDP growth rates of country i and j in year t, g_it denotes the output growth rate of country i in year t and; g*_i and sigma*_i represent the mean and standard deviation of output growth rate of country i, respectively, during the sample period. The growth rate is measured as the first difference of the log of real GDP.

Annex: Definitions—BCS

Advantages of Instantaneous Quasi-correlation

• Enables the calculation of co-movement at every point in time rather than over an interval of time. By contrast, most of the literature measures output co-movement between two economies by the rolling Pearson correlation of actual or detrended growth rates between a country pair over a window period. This **artificially introduces autocorrelation** of the BCS time series due to a high degree overlapping observations throughout the sample.

•The quasi-correlation measure retains some nice statistical properties:

- •It can be easily shown that the period mean of the measure would asymptotically converge to the standard Pearson correlation coefficient.
- •At any point in time, the measure is not necessarily bounded between -1 and 1. (As argued by Otto and others (2001) and Inklaar and others (2008), if the BCS measure lies between -1 and 1, the error terms in the regression explaining it are unlikely to be normally distributed)

Annex: Definitions—Banking Integration

Banking Integration

Defined as the ratio of the stock of bilateral assets and liabilities between countries i and j in year t to the sum of these two countries' external assets and liabilities vis-à-vis the entire world in the previous year:

$$BI_{ijt} = \frac{BP_t^{ij} + BP_t^{ji}}{BP_{t-1}^{iworld} + BP_{t-1}^{jworld}}$$

where BI_ijt is bilateral banking integration between countries i and j in year t, BP_ijt is the stock of assets and liabilities of country i's banks vis-à-vis country j, and BP_i*world*t-1 is the total stock of asset and liabilities of country i vis-à-vis the world in year t-1.