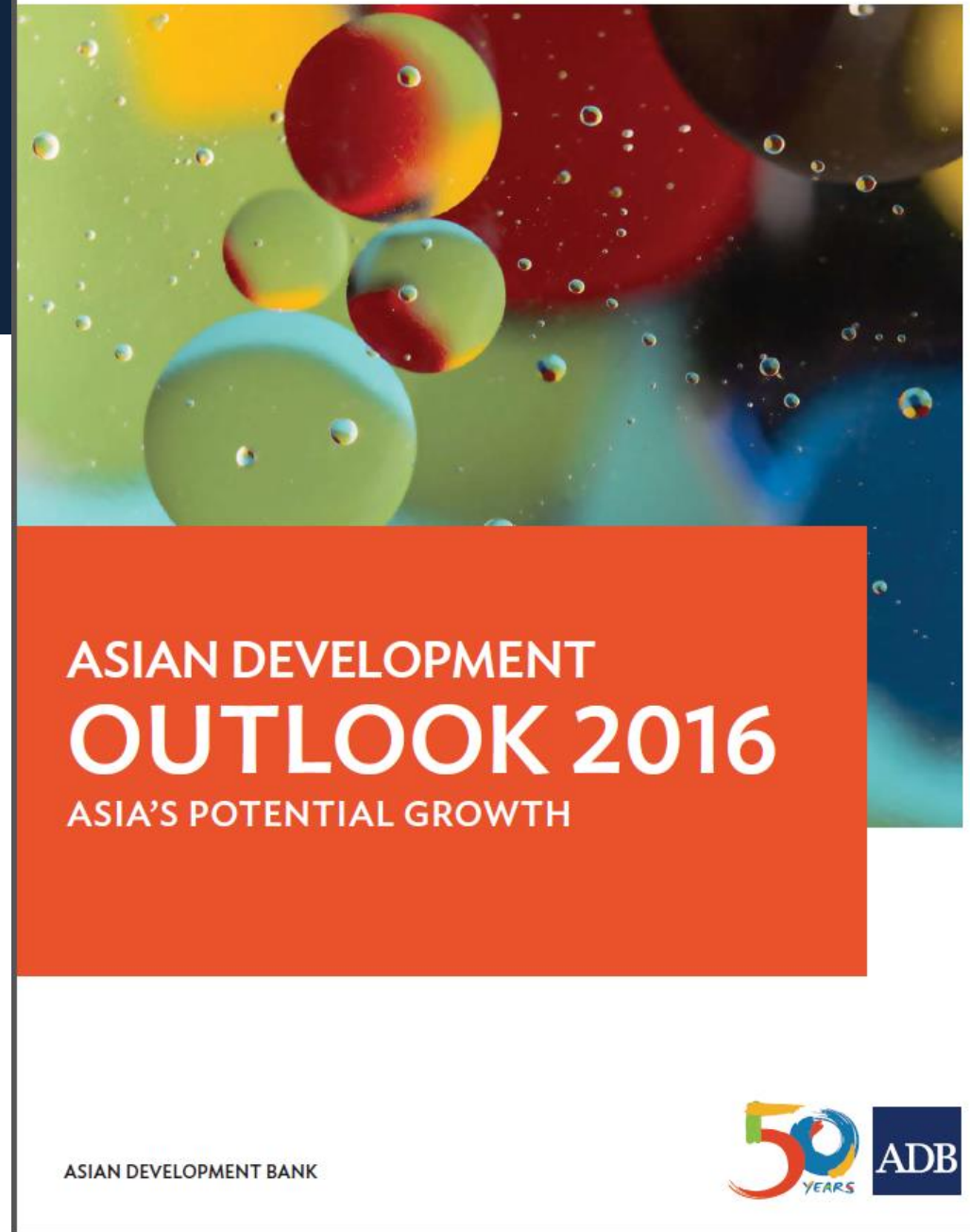


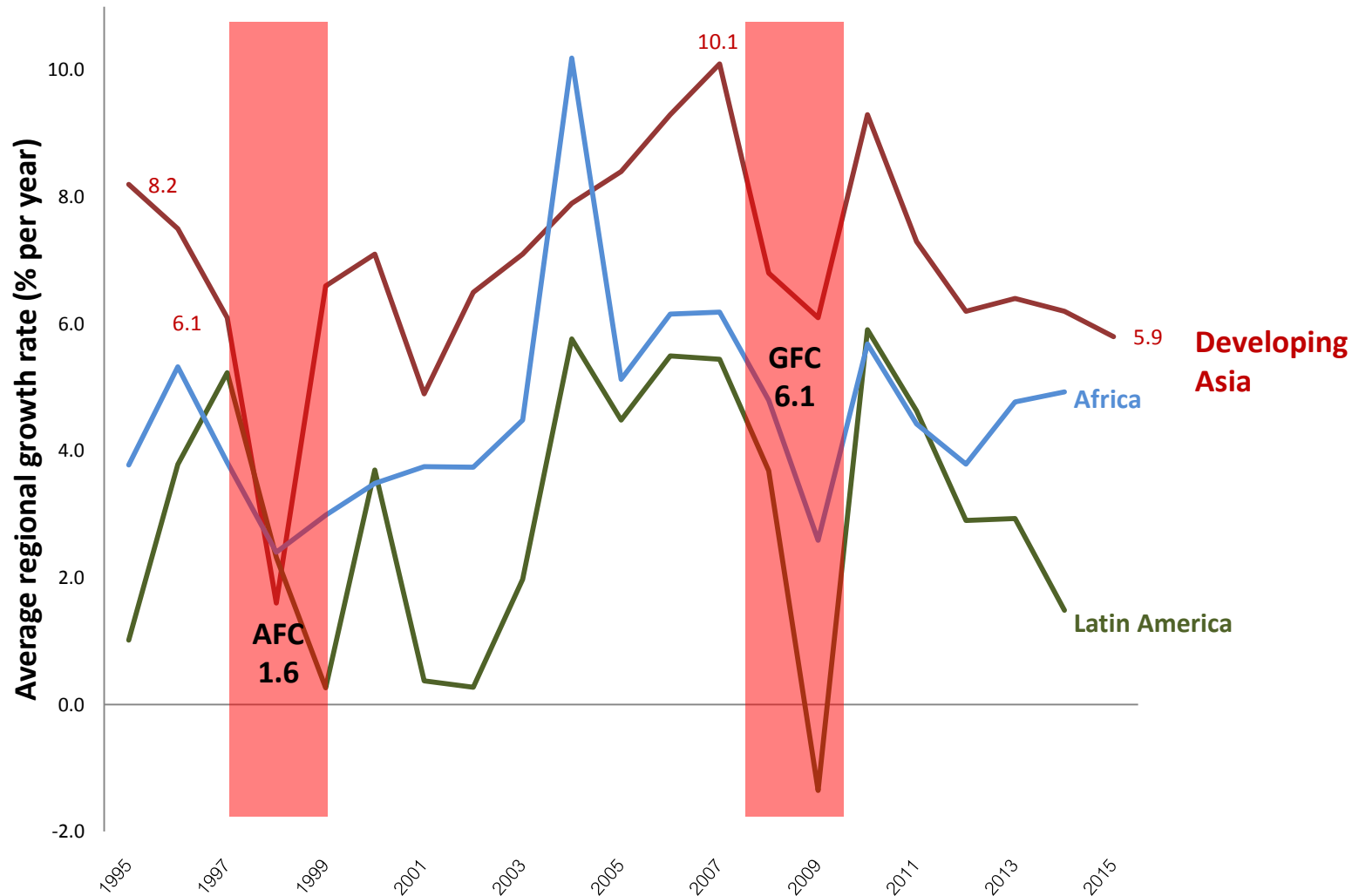
Asia's Potential Growth

Jesus Felipe

Asian Development Bank



Growth momentum has flagged in developing Asia since the GFC



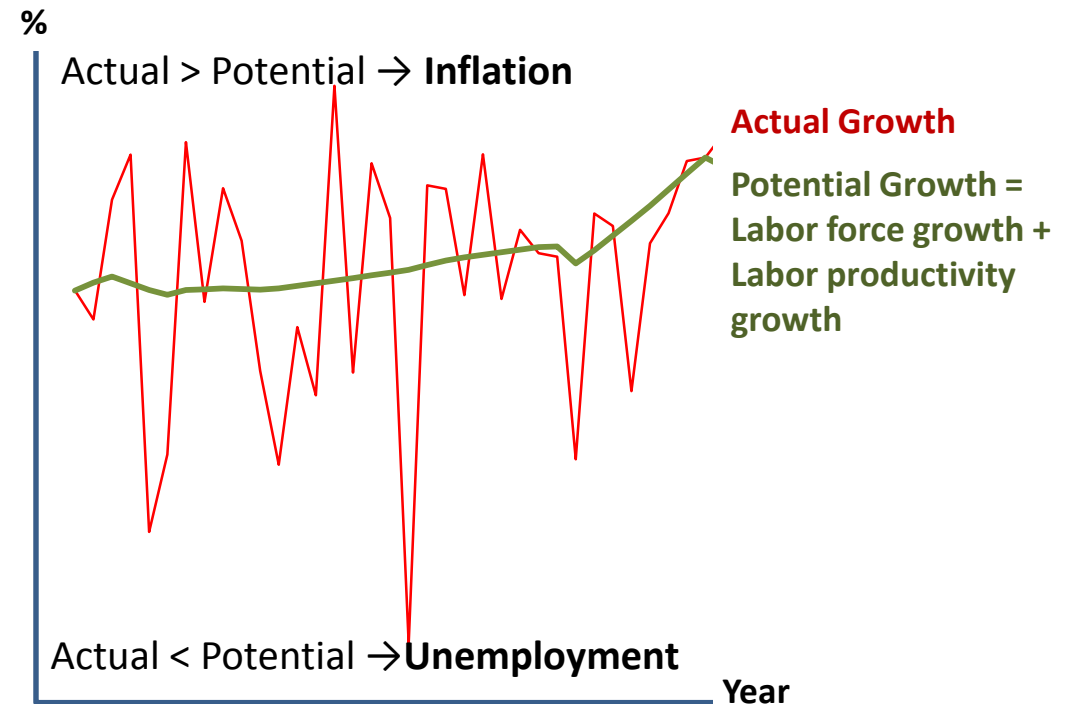
- Causes of slowing growth?
- Is Asia entering a 'New Normal'...
- ...or is this temporary?
- What has been the effect of the GFC?
- Policies to stimulate growth

We answer these questions by looking at the supply side of the economy through the concept of *potential output growth*

- Maximum growth rate associated with the full employment of productive resources – consistent with stable inflation and full employment
 - Countries do not hit their potential until growth starts creating inflationary pressures
 - Not immutable, i.e., amenable to policy

Why does this study matter?

- Implications for poverty reduction



We answer these questions by looking at the supply side of the economy through the concept of *potential output growth*

- Potential output growth is the maximum growth rate consistent with stable inflation (actual inflation rate is equal to the expected inflation rate), i.e., without generating inflationary/deflationary pressures
- It indicates that countries do not hit their potential until growth starts creating inflationary pressures
- Method: Multivariate Filter (Aggregate Supply) consistent with:
 - Harrod: $\hat{g}_t^N = \hat{y}_t^N + \hat{n}_t^N$
 - Okun: $U_t = U_t^N - \beta_t(\hat{g}_t - \hat{g}_t^N)$
 - Phillips: $\pi_t = \pi_t^e - \gamma_t(U_t - U_t^N)$
- AS Model: $\pi_t = \pi_t^e + \phi_t(\hat{g}_t - \hat{g}_t^N)$
- Two specifications of π_t^e :
 - (i) time-varying function of π_t : $\pi_t^e = \alpha_t \pi_t + \epsilon_t$: $\hat{g}_t = \hat{g}_t^N + \frac{(1-\alpha_t)}{\phi_t} \pi_t + \epsilon_t$;
 - (ii) adaptive expectations: $\pi_t^e = \pi_{t-1} + \epsilon_t$: $\hat{g}_t = \hat{g}_t^N + \frac{1}{\phi_t} \Delta \pi_t + \epsilon_t$
- Open-economy versions; time-varying parameters –Kalman Filter
- **23 Asian economies** – 71 economies in total

ESTIMATING POTENTIAL OUTPUT GROWTH USING FINANCE-NEUTRAL POTENTIAL OUTPUT AND OUTPUT GAP MODELS

- Developed by Borio, Disyatat and Juselius (2013)
- Multivariate filter approach to the estimation of potential output
- Assumes that the cyclical component of output (i.e., the output gap) is influenced by the financial cycle.
- The underlying state space model is defined by:

$$\begin{aligned} \text{state equation} & : \Delta y_t^* = \Delta y_{t-1}^* + \varepsilon_{0,t} \\ \text{measurement equation} & : y_t - y_t^* = \beta \cdot (y_{t-1} - y_{t-1}^*) + \gamma^T \cdot X_t + \varepsilon_{1,t} \end{aligned}$$

where

y_t^* is potential output at time t

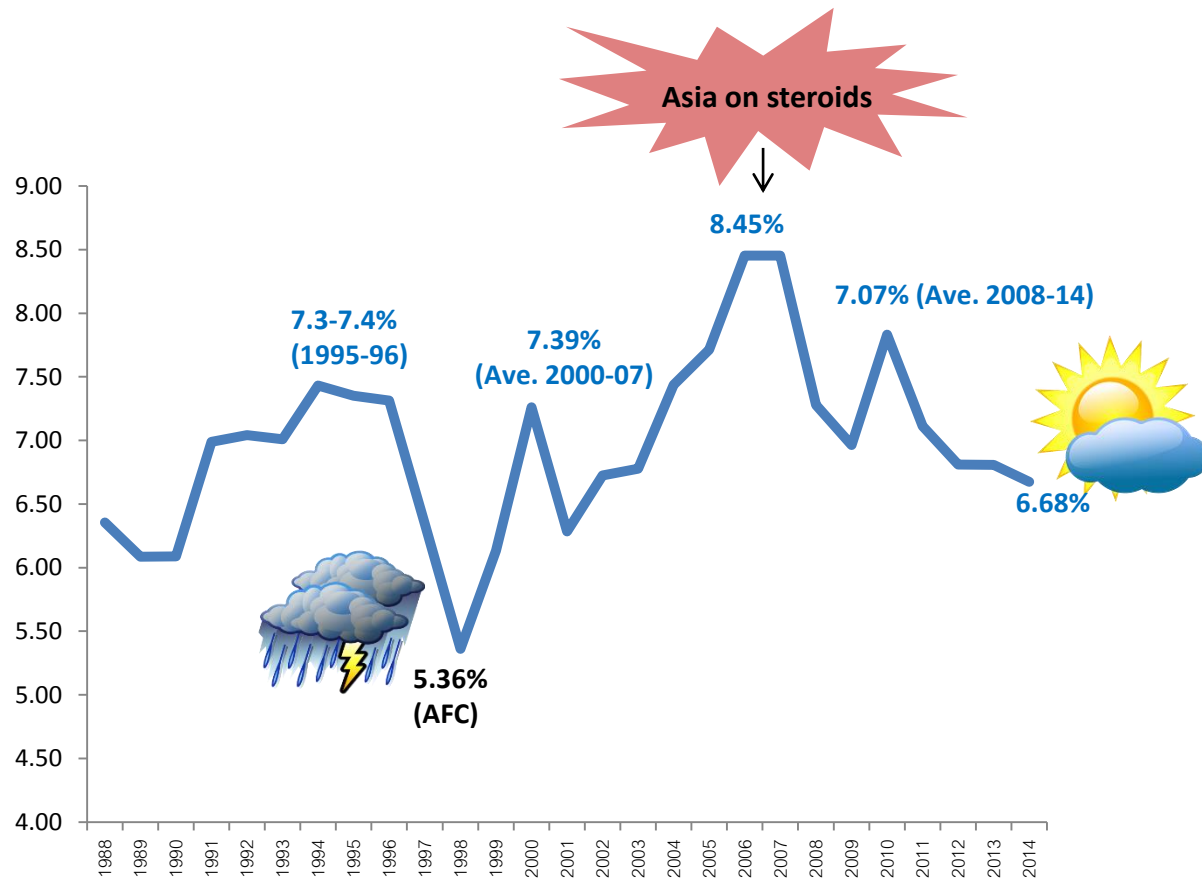
y_t is actual output at time t

X_t is a vector of financial factors (e.g., credit, property prices)

$\varepsilon_{0,t} \sim iid(0, \sigma_{0,t}^2), \varepsilon_{1,t} \sim iid(0, \sigma_{2,t}^2)$

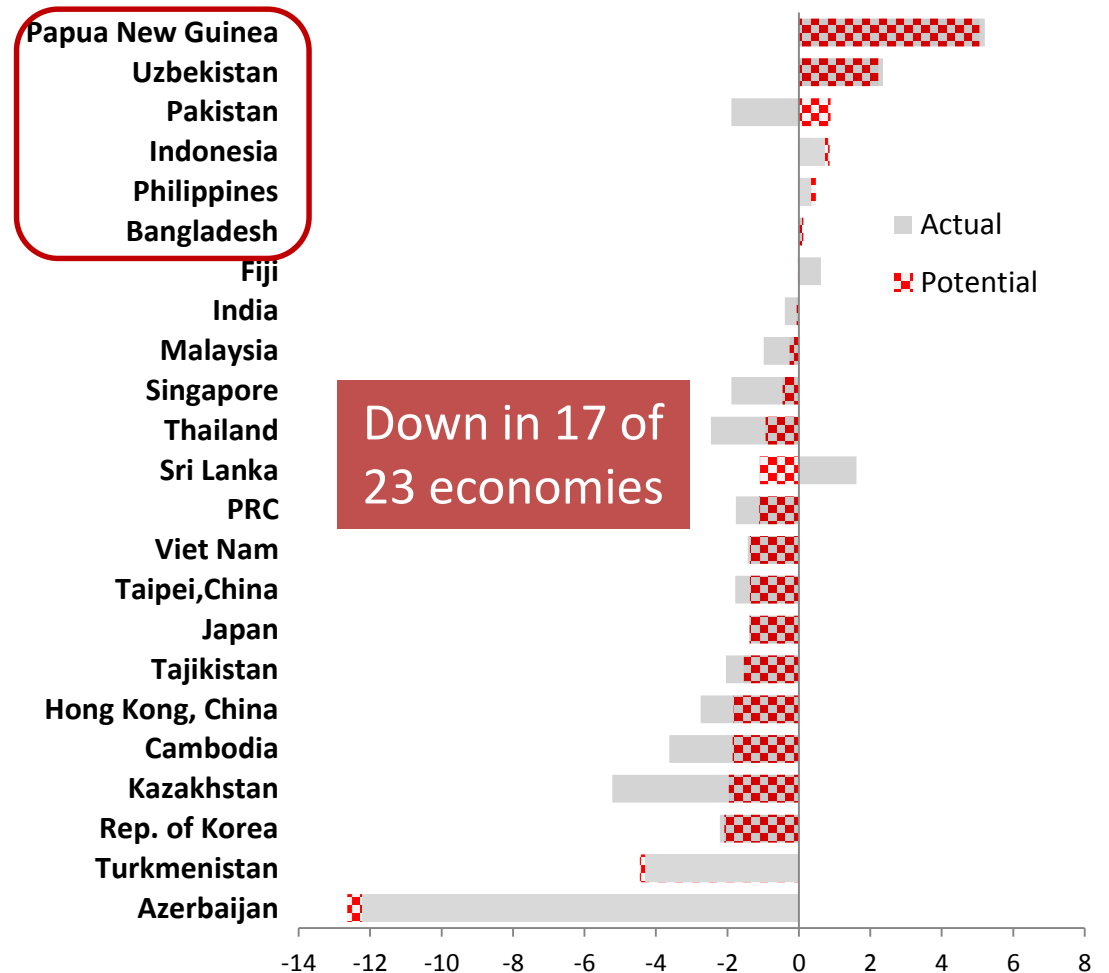
- The model yields estimates of potential output and output gap that have been adjusted for the effects of financial factors

Average potential growth in developing Asia has fallen by about 2 p.p. from its 2007 peak



The decline in potential growth accounts for about 40% of the decline in actual growth

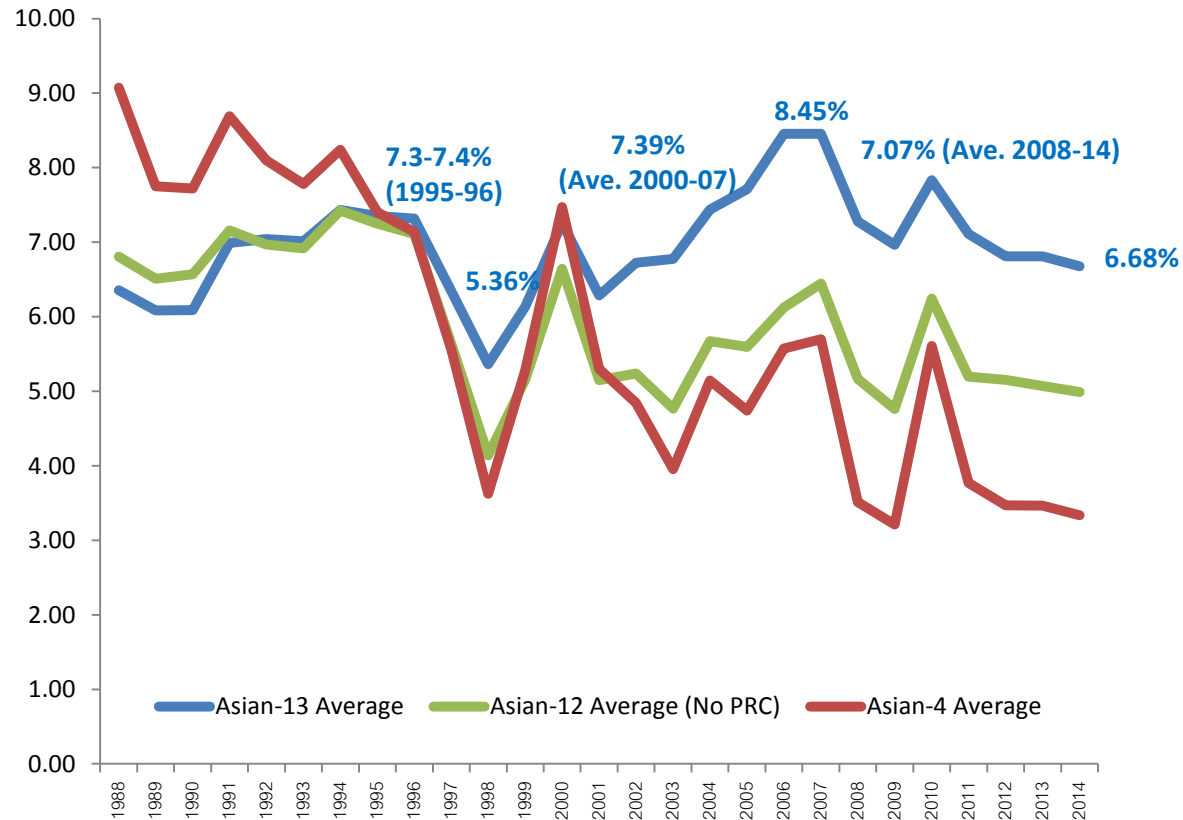
Percentage point change in actual and potential output growth
Avg. (2008-2014) – Avg. (2000-2007)



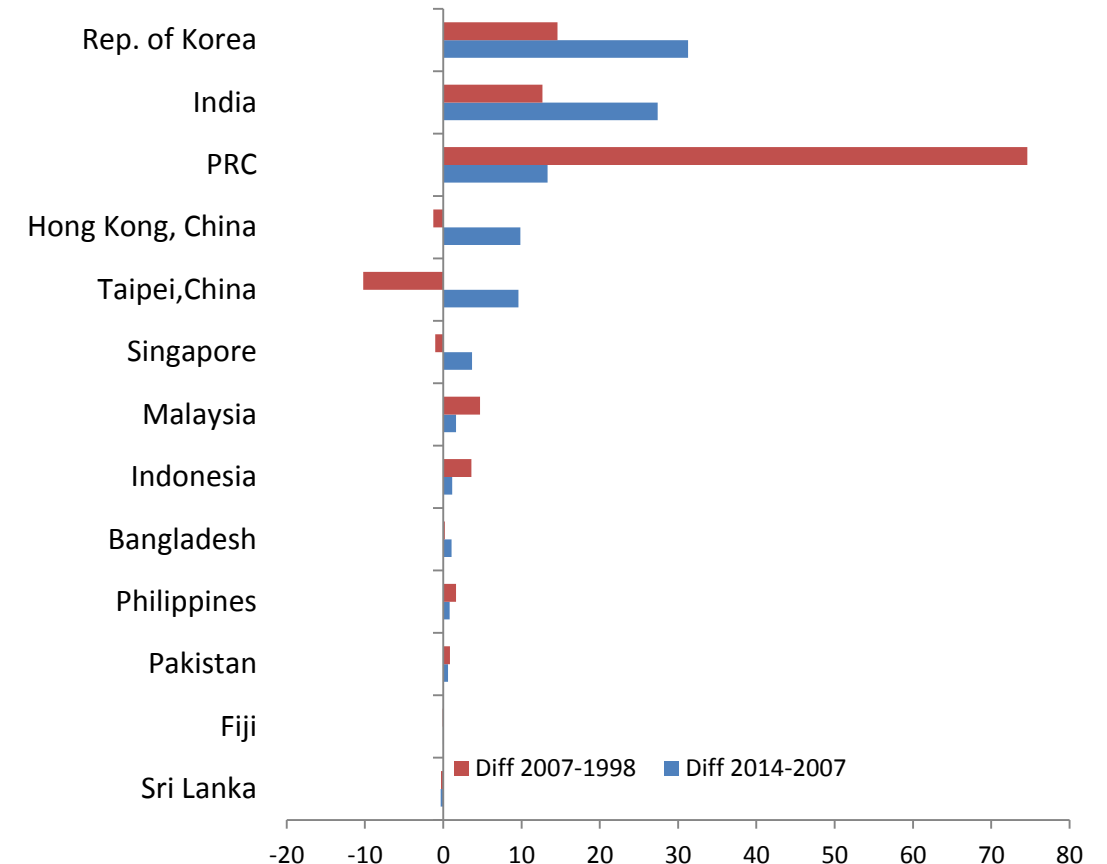
Even without the PRC, potential has declined; Significant decline in Asian-4

Changes pre-post crisis are explained mostly by PRC, Korea and India

Developing Asia's average potential output growth rate

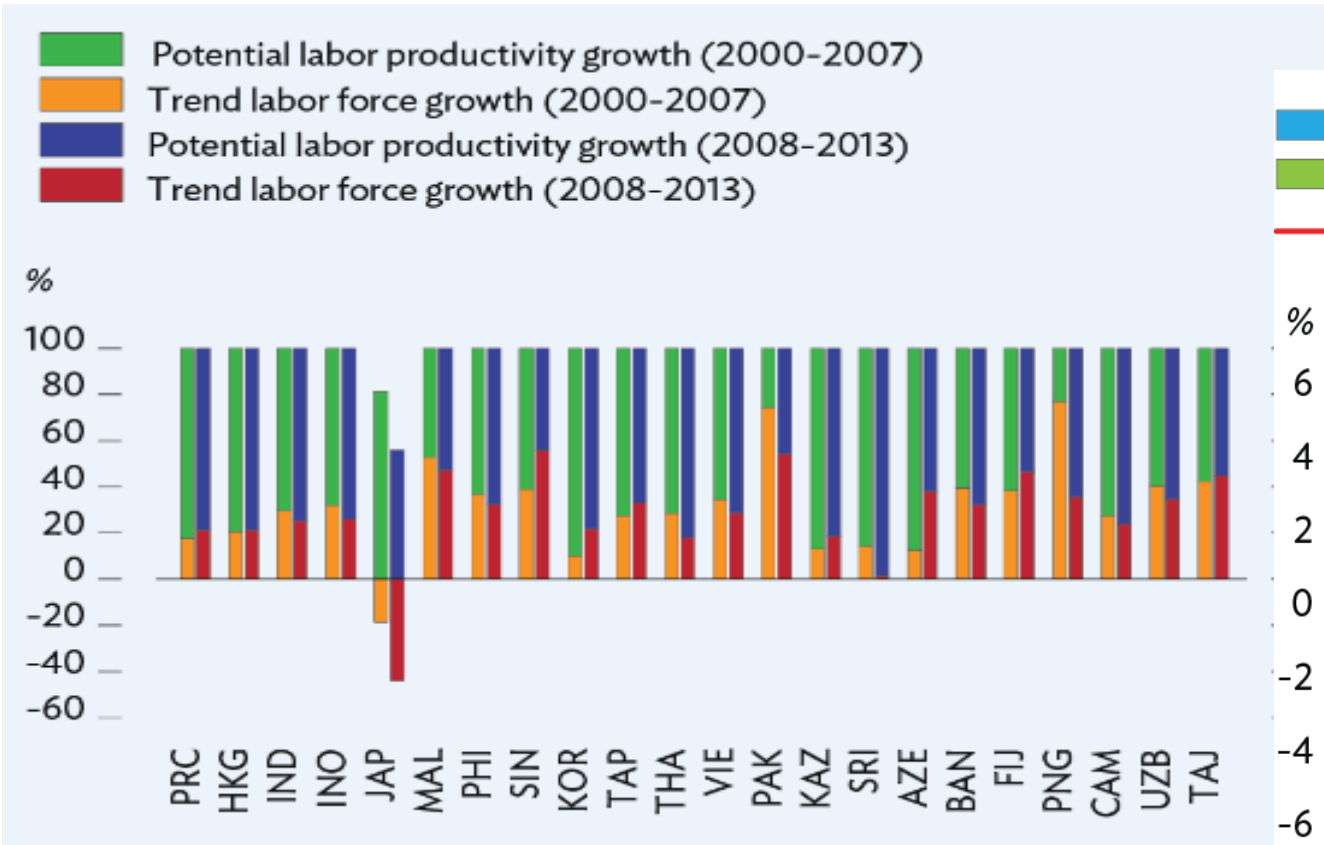


Contribution to change in potential output growth (2014-2007) and (2007-1998)

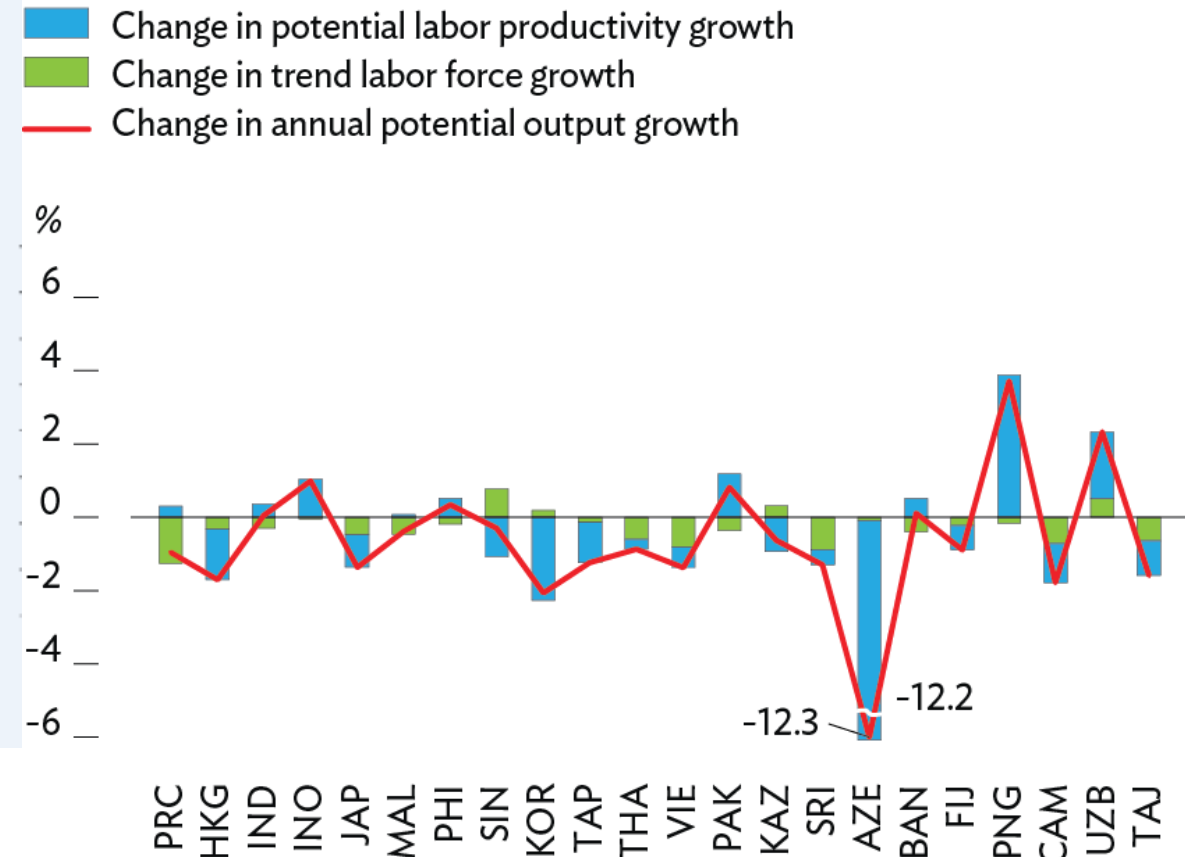


Potential labor productivity accounts for the bulk of potential output growth (78% during 2000-2007 and 86% during 2008-2013)

Change in potential output growth between 2000-2007 and 2008-2013 and changes in potential labor productivity growth and in (filtered) working age population growth. 22 Asian economies

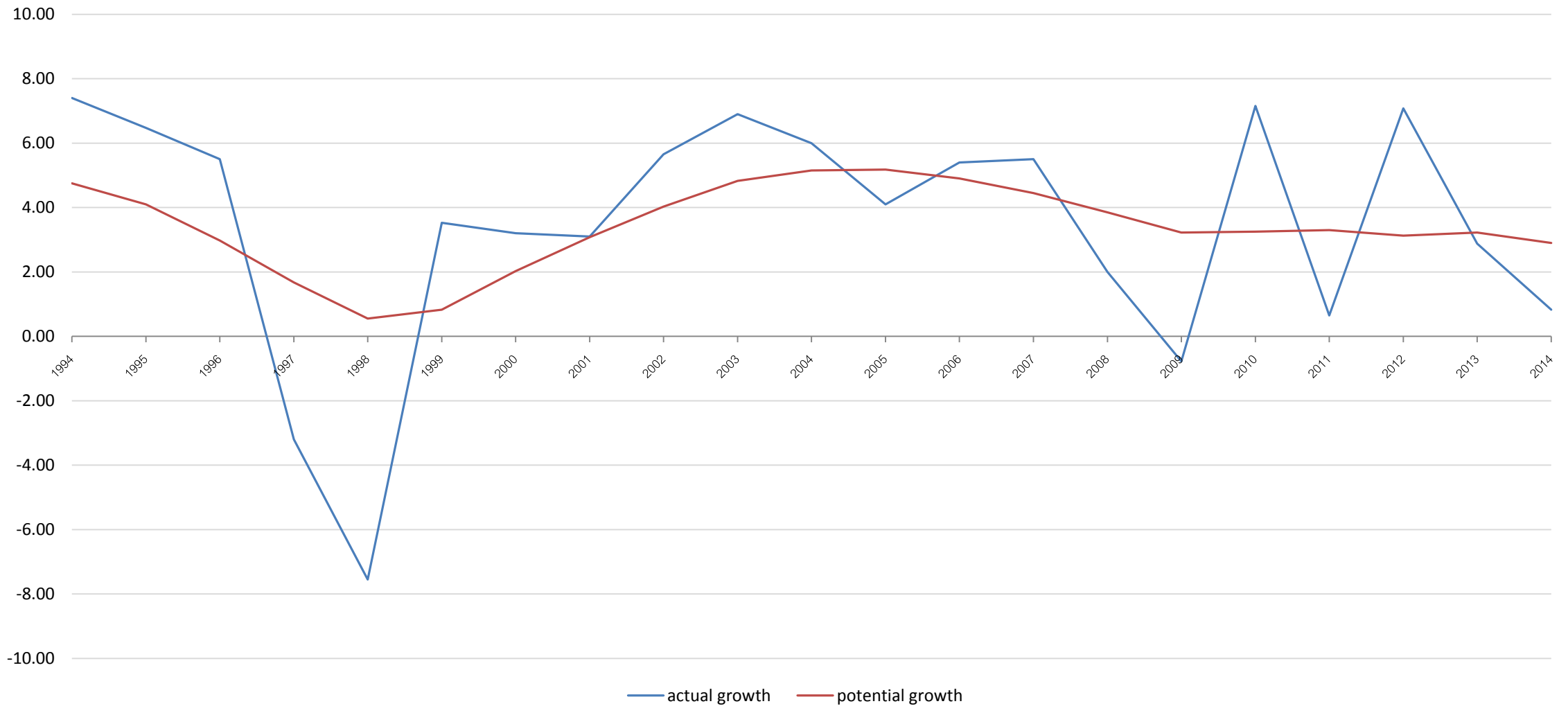


Note: For Fiji and Papua New Guinea, first period refers to 2002-2007. For Taipei, China, Cambodia, and Uzbekistan, second period refers to 2008-2012. For Tajikistan, first period refers to 2002-2007 while second period refers to 2008-2012.



Demographics important in Malaysia, Pakistan & Singapore

Estimates of Thailand's potential growth rate



Determinants of Potential Output Growth: The Bayesian Model Averaging (BMA) Approach

- BMA resolves uncertainty in the choice of explanatory variables in regressions
- Given a linear model defined by

$$g = \alpha_0 + \sum_{i=1}^M \alpha_i f_i + \sum_{j=1}^N \beta_j x_j + \epsilon$$

where

f_i 's are fixed or focus regressors (appears in all regressions)

x_j 's are auxiliary regressors

$\epsilon \sim i.i.d.(0, \sigma^2)$

- There are 2^N possible combinations of auxiliary variables, equal to the number of regressions, such that $2^{35} = 34.4$ Bn
- BMA produces an estimate of β_j which is a weighted average of all estimates of β_j in models where x_j is included as a regressor
- We use panel data BMA to identify robust determinants of potential output growth
 - 77 countries (Asia -12; OECD-31; Latin America-12; Africa-6; Middle East-7)
 - Annual data : 1960-2014
 - 36 potential determinants (fixed regressors-1; auxiliary regressors-35)
- We essentially employ BMA on dynamic panel data regressions to identify “robust” determinants of potential output (i.e., with posterior inclusion probabilities greater than or equal to 0.50)

What determines Potential Growth?

Labor productivity growth



Labor force growth



Tertiary enrollment ratio

Trade ratio

Additional variables: (i) Initial income per capita; (ii) Technological gap with the US

Working-age population (ages 15-64) growth

Good Institutions

Financial capital integration

Macroeconomic stability

Frontier Potential Growth: Efficient factor allocation of capital and labor at firm level



Firm-level factor misallocation and institutional obstacles

Electricity	Bangladesh, Myanmar, Indonesia, Pakistan, Nepal, India, Philippines, Kazakhstan, Sri Lanka
Corruption	India, Bangladesh, Nepal, Philippines
Access to finance	Viet Nam, Indonesia, Sri Lanka, Mongolia
Education	Kazakhstan, Myanmar, Lao PDR
Political stability	Bangladesh, Pakistan, Nepal, Mongolia
Tax rates	India, Pakistan, Philippines, Kazakhstan, Sri Lanka, Lao PDR, Mongolia
Access to land	Lao PDR, Viet Nam
Informal sector	Indonesia, Viet Nam

Then..... can we speak of a “New Normal” of lower growth?
Is it here to stay? Probably...but important caveat

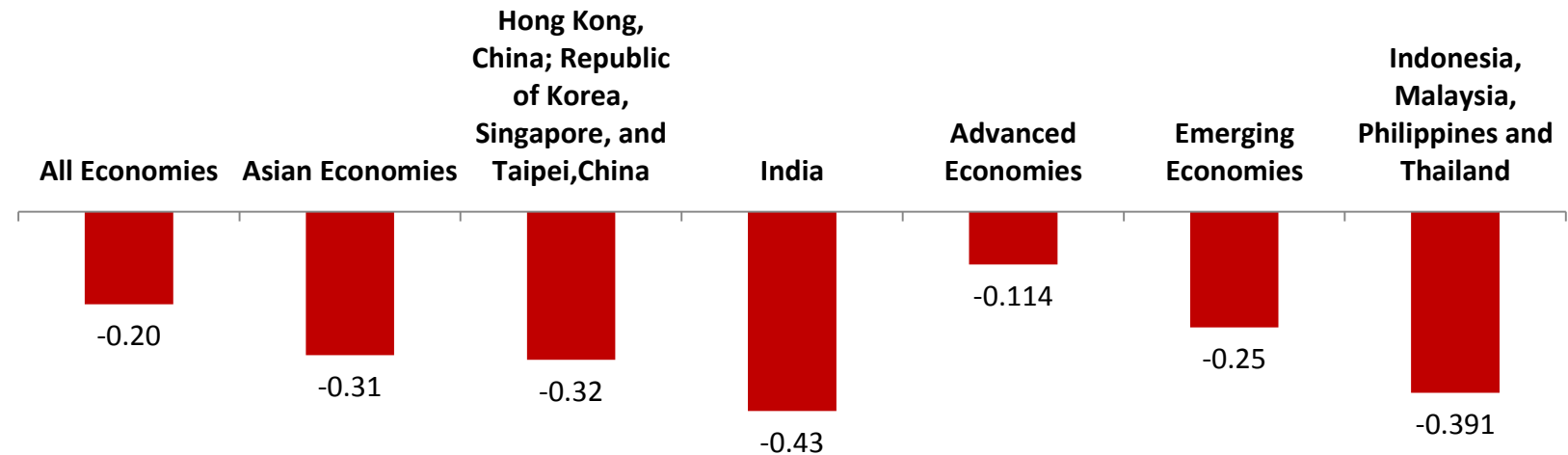
End of the demographic dividend in some countries

Developing Asia’s past success has narrowed the gap with the advanced economies

GFC structural shift in Asia’s potential growth
Caveat: The GFC may have been a big business cycle – temporary effect

Moderating growth in the PRC spills over to other economies

A one percentage point decline in the PRC’s **actual** growth leads to decline in **potential** growth in other countries by:

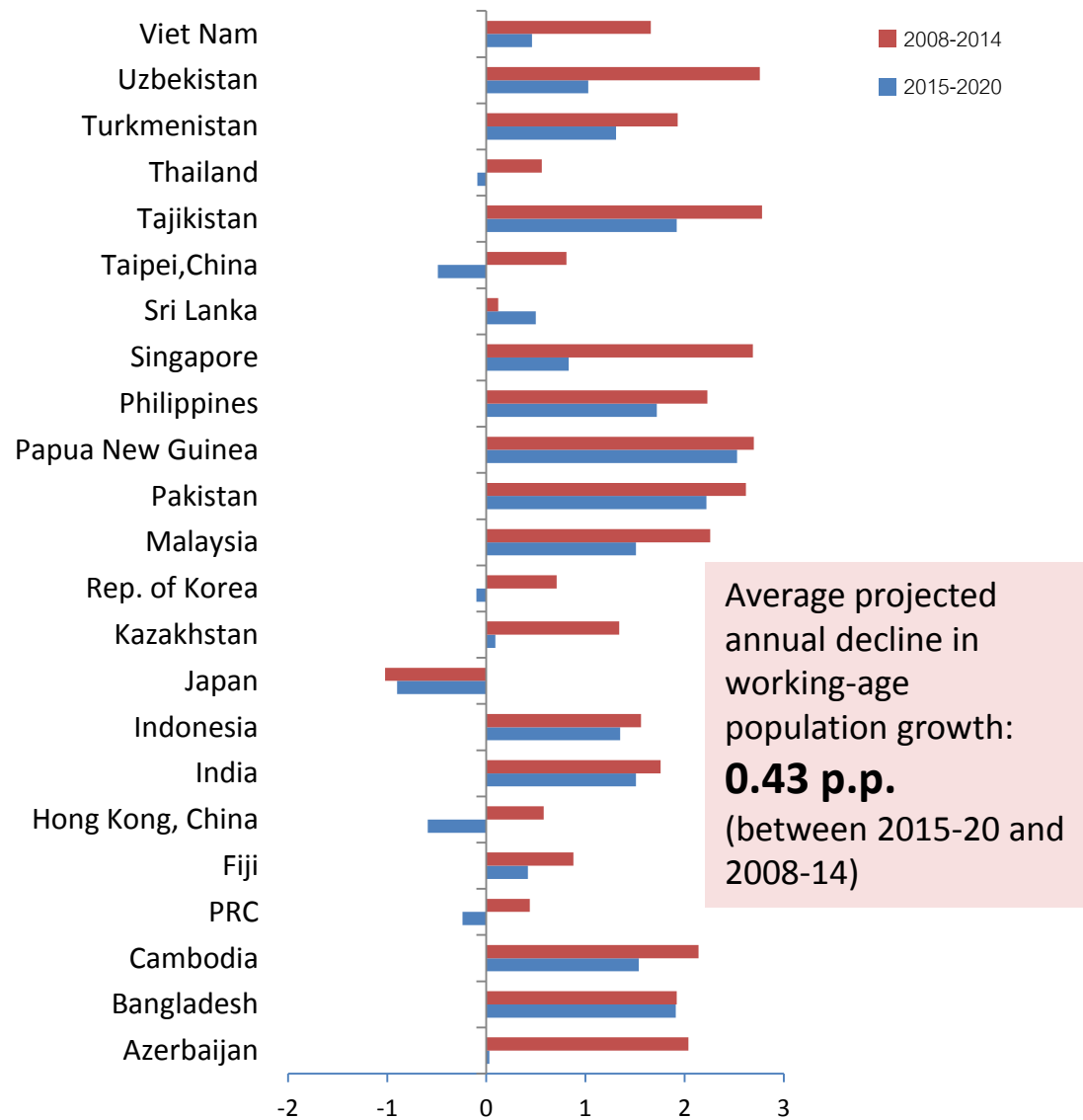


If GFC turns out to be just a big cyclical downturn, then potential growth is not immutable. Policies to invigorate it

- If the GFC was just a big cyclical downturn, then it is possible that a large enough cyclical upturn can offset the decline due to the GFC
- To offset the impact of **demographics**
- 1. Supply-side policies:
 - Capital investment (infrastructure)
 - **Reforms** to boost labor productivity growth
 - Reforms to reduce factor misallocation
- 2. Sound **macroeconomic management**

Demographics in Asia

Working-age population growth rates (%)



Potential growth rate over 2015-2020 taking into account working-age population projections (%)

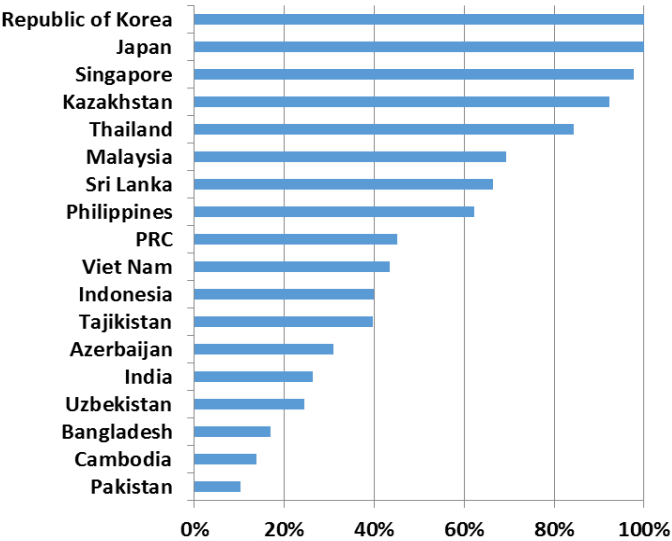
	Forecast based on 2008-14 average	Forecast based on 2014 estimate
Azerbaijan	3.25	1.02
Bangladesh	5.96	6.11
Cambodia	6.81	6.48
PRC	8.11	7.23
Fiji	1.25	3.27
Hong Kong, China	1.84	1.08
India	6.72	6.04
Indonesia	5.59	4.79
Japan	0.36	0.27
Kazakhstan	5.56	3.80
Rep. of Korea	2.68	2.52
Malaysia	4.27	5.06
Pakistan	4.53	5.00
Papua New Guinea	7.14	5.74
Philippines	6.55	7.39
Singapore	3.25	2.24
Sri Lanka	5.96	7.22
Taipei, China	2.04	1.76
Tajikistan	6.06	5.88
Thailand	2.62	2.25
Turkmenistan	10.40	9.65
Uzbekistan	6.60	6.40
Viet Nam	4.81	4.86
Ave. (excl. Japan)	6.40	6.01

Exclusively due to demographics: small decline in average potential growth with respect to:

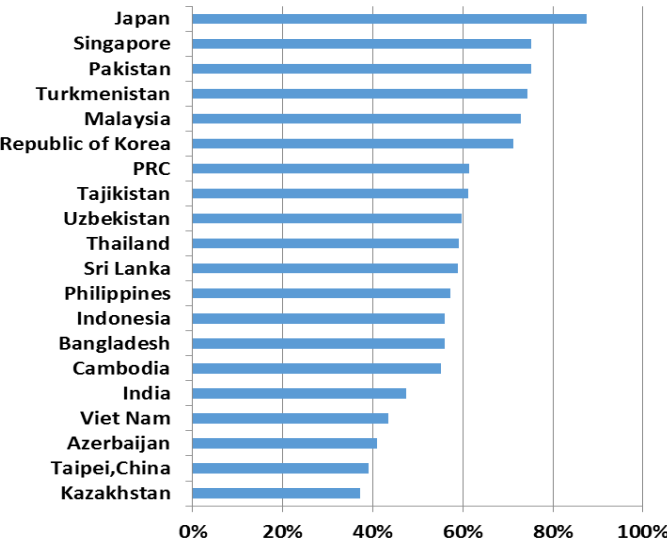
- 2008-14 average (7.07%)
- 2014 (6.68%)

Distance to the frontier: Determinants of Potential Growth

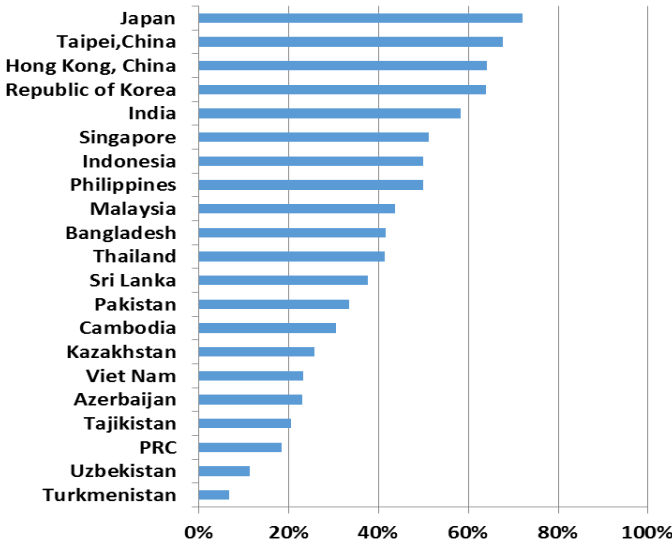
Tertiary enrollment ratio



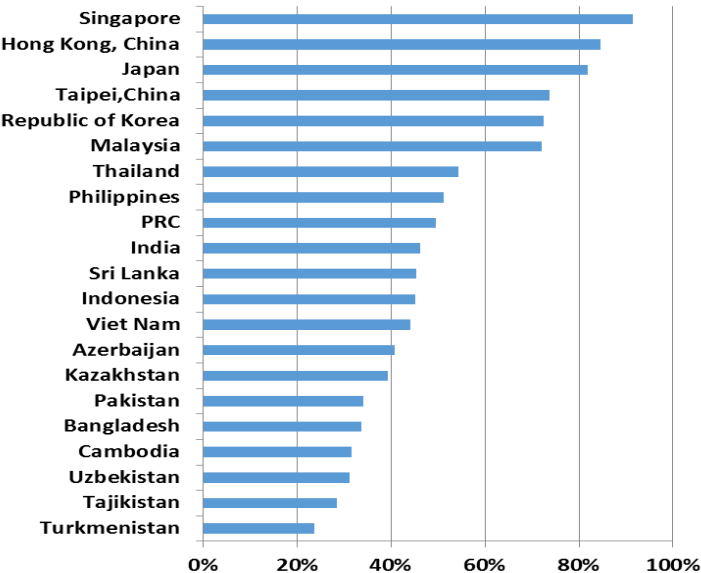
Labor market flexibility



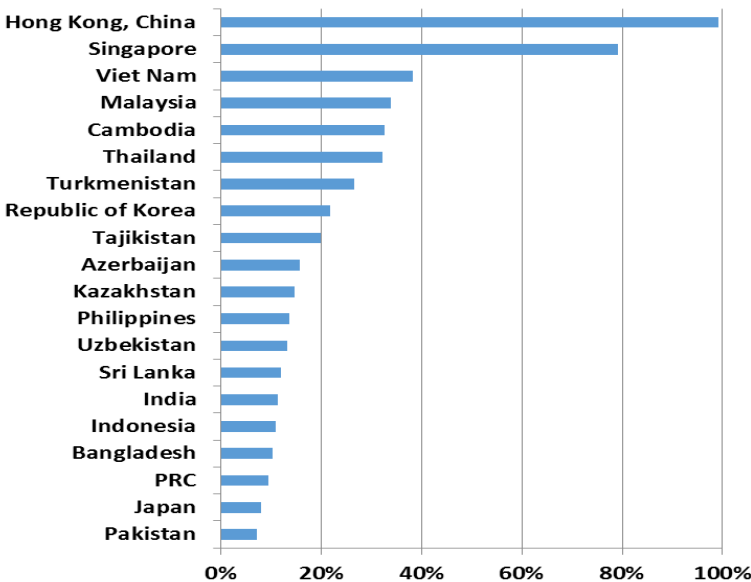
Voice and accountability



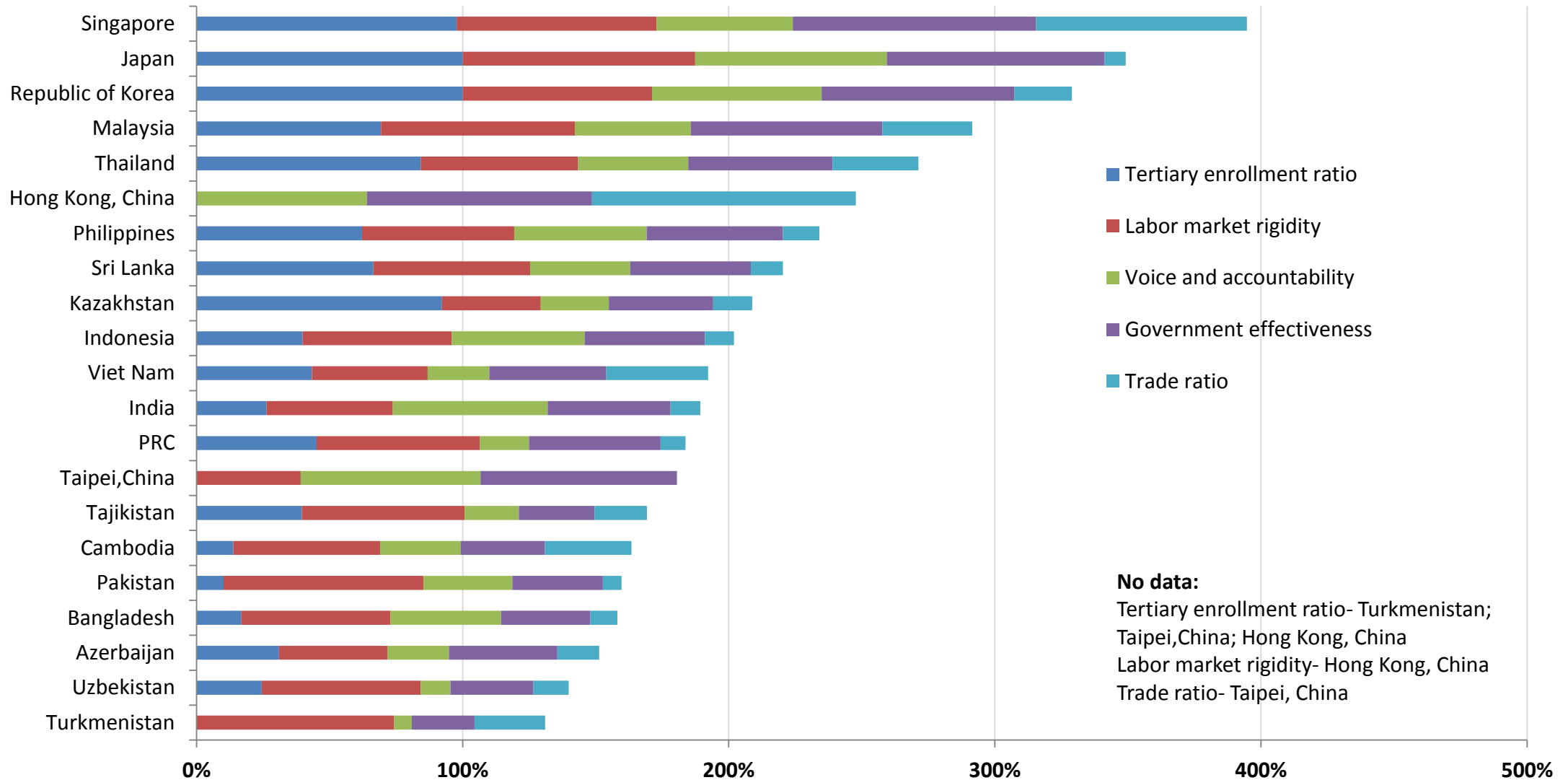
Government effectiveness



Trade ratio



Distance to the frontier: Determinants of Potential Growth (Total per Economy)



Annual average percent change in potential growth over a 10-year period for assumed supply-side reforms, policies to boost working-age population growth, and macro-management stability

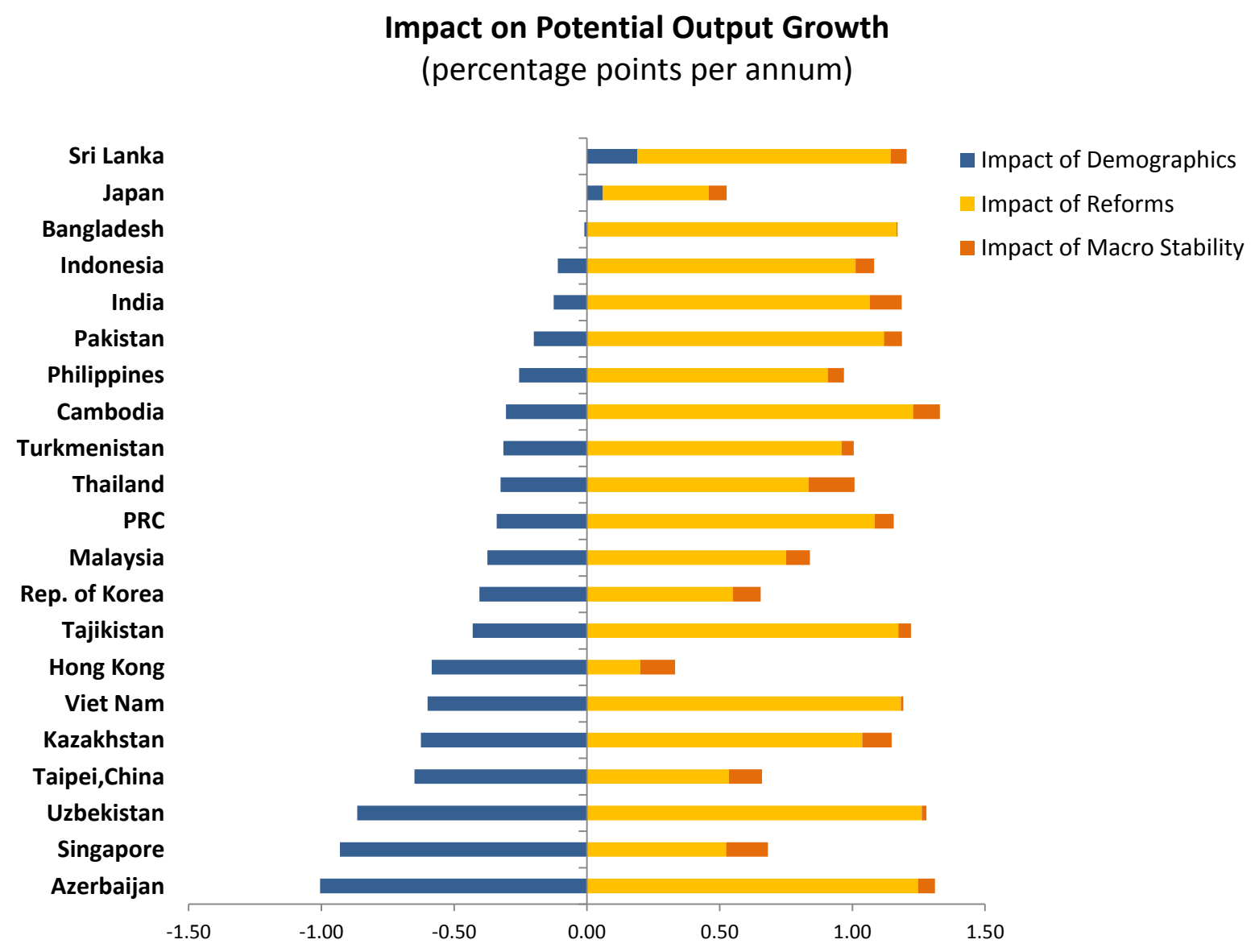
Economy	Demo- graphics	Tertiary enrollment	Labor market rigidity	Institutional quality	Trade	Financial capital integration	Reforms	Reforms & Demographics	Stable macro- economy	OVERALL TOTAL
Azerbaijan	-1.01	0.26	0.30	0.52	0.16	0.01	1.25	0.24	0.06	0.31
Bangladesh	-0.01	0.30	0.23	0.47	0.16	0.02	1.17	1.16	0.00	1.16
Cambodia	-0.31	0.31	0.23	0.52	0.16	0.01	1.23	0.92	0.10	1.03
PRC	-0.34	0.21	0.20	0.51	0.16	0.01	1.08	0.74	0.07	0.82
Hong Kong	-0.59	N.A.	N.A.	0.20	0.00	0.00	0.20	-0.38	0.13	-0.25
India	-0.13	0.27	0.27	0.36	0.16	0.01	1.07	0.94	0.12	1.06
Indonesia	-0.11	0.23	0.23	0.39	0.16	0.01	1.01	0.90	0.07	0.97
Japan	0.00	0.00	0.06	0.18	0.16	0.00	0.40	0.40	0.07	0.47
Kazakhstan	-0.63	0.03	0.32	0.51	0.16	0.01	1.04	0.41	0.11	0.52
Rep. of Korea	-0.41	0.00	0.15	0.24	0.16	0.00	0.55	0.14	0.10	0.25
Malaysia	-0.38	0.12	0.14	0.33	0.16	0.01	0.75	0.38	0.09	0.47
Pakistan	-0.20	0.32	0.13	0.50	0.16	0.02	1.12	0.92	0.07	0.99
Philippines	-0.26	0.15	0.22	0.37	0.16	0.01	0.91	0.65	0.06	0.71
Singapore	-0.93	0.01	0.13	0.23	0.16	0.00	0.52	-0.41	0.16	-0.25
Sri Lanka	0.19	0.13	0.21	0.44	0.16	0.01	0.95	1.14	0.06	1.20
Taipei,China	-0.65	N.A.	0.31	0.22	N.A.	0.00	0.54	-0.11	0.12	0.01
Tajikistan	-0.43	0.23	0.20	0.57	0.16	0.02	1.17	0.74	0.05	0.79
Thailand	-0.33	0.06	0.21	0.40	0.16	0.01	0.84	0.51	0.17	0.68
Turkmenistan	-0.32	N.A.	0.13	0.65	0.16	0.03	0.96	0.64	0.05	0.69
Uzbekistan	-0.87	0.28	0.21	0.60	0.16	0.02	1.26	0.40	0.02	0.41
Viet Nam	-0.60	0.21	0.29	0.51	0.16	0.01	1.18	0.58	0.01	0.59
Weighted average	-0.33						0.98	0.65	0.09	0.73

Demographics:
reduce the negative impact of a lower working-age population growth rate by 50%

Reforms:
close 50% of the distance with the frontier in each determinant through reforms over a 10-year period

Reduced volatility of
actual-potential growth by 25%

Annual average percent change in potential growth over a 10-year period for assumed supply-side reforms, policies to boost working-age population growth, and macro-management stability



- Policies to counteract the negative effect of the decline in working-age population growth:
 - more flexible immigration policies to attract skilled labor - incentives to increase fertility rate - increase female participation rates - postpone retirement age
- Lift *Frontier Potential Growth*:
 - (i) Relax institutional obstacles that prevent the efficient allocation of labor and capital to their best use (Electricity - Labor laws - Courts - Corruption - Access to finance – Tax system)
 - (ii) Address government and market failures that impede faster reallocation of employment. Key in countries with high employment shares in agriculture
- Implement policies and reforms in areas discussed, e.g., supply education more efficiently; foster financial capital integration, more flexible labor markets, etc.

Macro-management policies

Devise policies aimed at stabilizing actual growth in the proximity of potential growth –to avoid volatility, unemployment or inflationary pressures

Take away: The region's productive capacity has slowed down

- Main factors driving down potential growth: (i) demographics; (ii) variables that facilitated catch-up in the past, and that affect potential labor productivity -running out of steam; (iii) Moderating growth in the PRC; (iv) GFC
- Unless a 'positive shock' lifts it, the days of very high growth may be over (country exceptions)
- Supply-side policies important to counteract the decline in potential
- The increasing importance of macro-management to avoid volatility, unemployment and inflation

THANK YOU

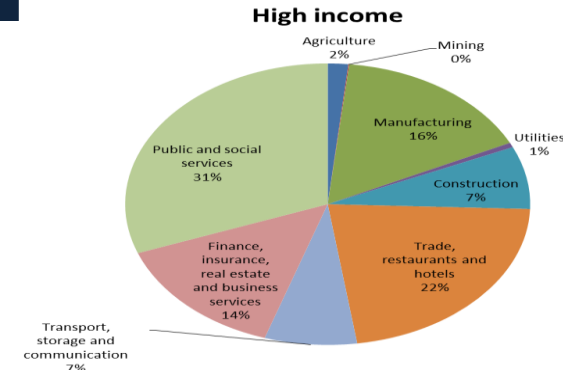
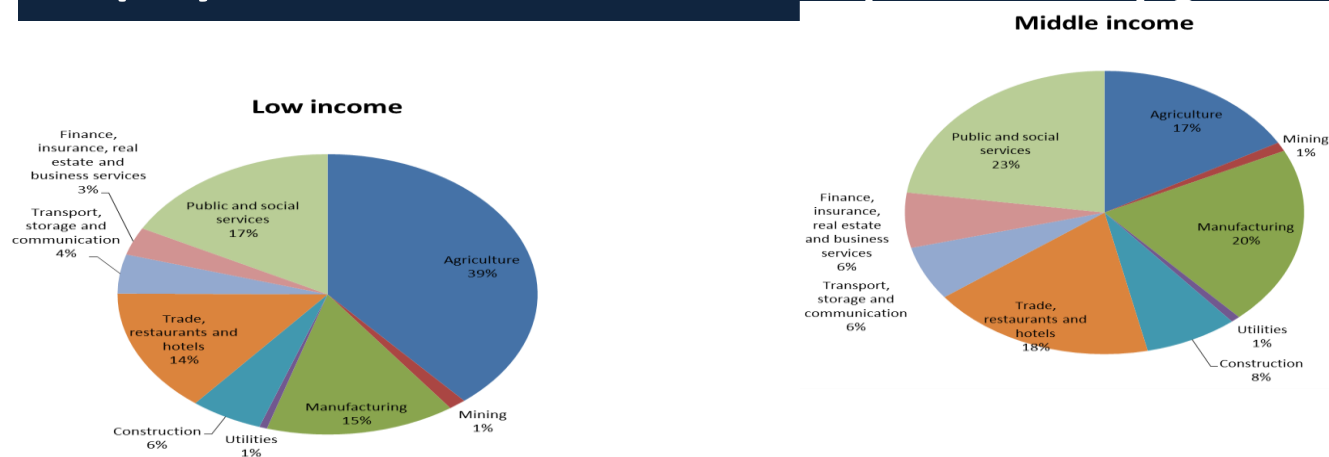
The model works: inflation increases as the growth gap widens

- Estimate $\Delta\pi_{it} = \vartheta_i + \omega(\hat{g}_{it} - \hat{g}_{it}^N) + \varepsilon_{it}$ via fixed effects
- Larger sample with 71 countries: Results confirm that for inflation rates below 25%, for each percentage point of actual growth in excess of the natural growth rate the inflation rate increases by about $\omega = 0.12$ percentage points. When inflation is above 25%, the relationship breaks down
- Smaller sample of 23 Asian countries: Results also show that for inflation rates below 45%, for each percentage point of actual growth in excess of the natural growth rate the inflation rate increases by about $\omega = 0.20$ percentage points

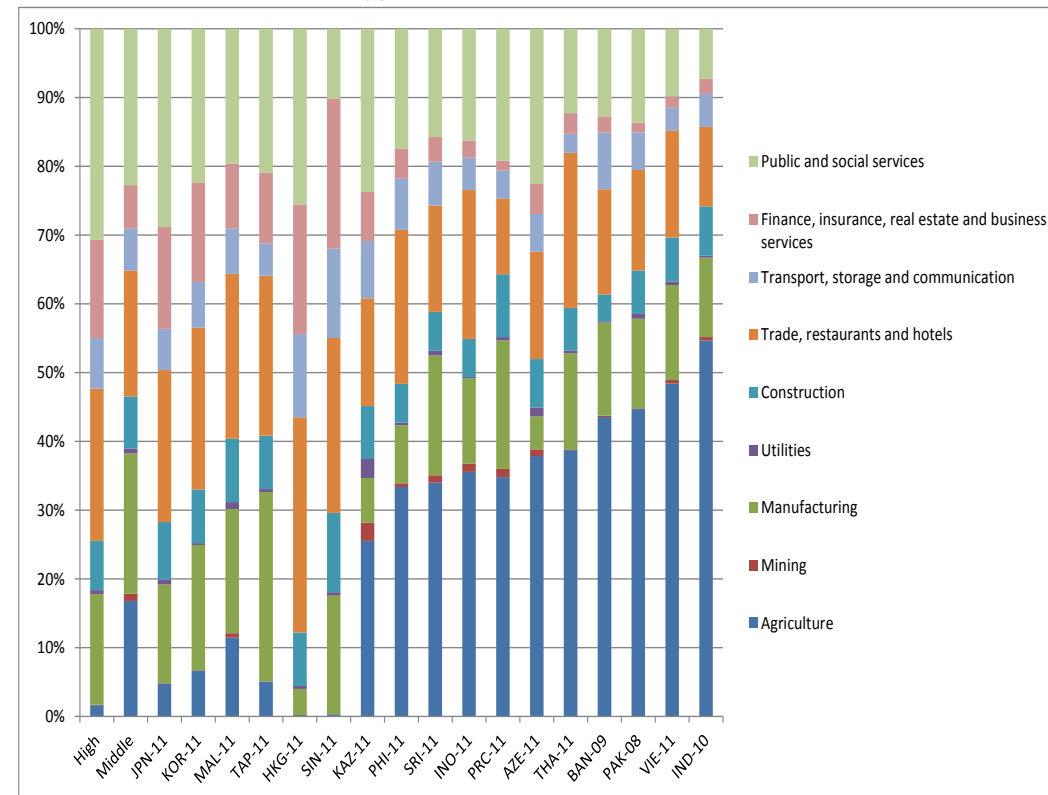
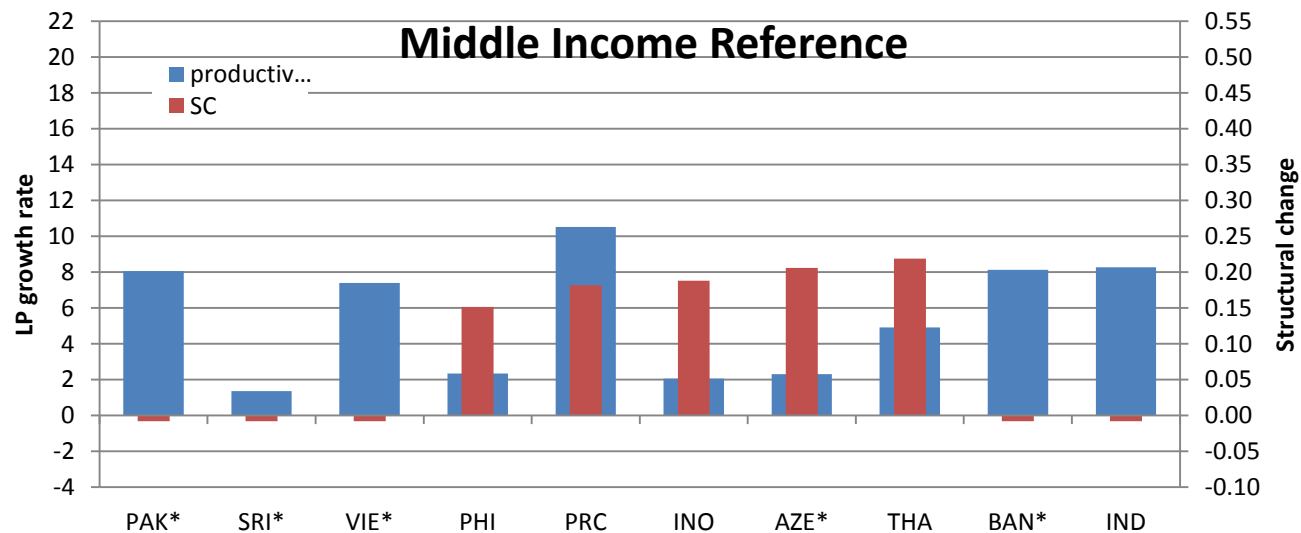
Asia's potential growth rate declined (during 2008-2014 with respect to the average of 2000-2007) in 16 out of the 23 Asian economies studied (Actual/Potential), inc. Japan

	Azerbaijan	Bangladesh	Cambodia	Fiji	Hong Kong, China	India	Indonesia	Japan
2014	2.8/3.03	6.1/6.12	7/7.08	3.80/3.73	2.3/2.25	7.2/6.29	5.0/5.01	0/0.15
Avg. 2000-07	17.36/17.90	5.86/5.84	9.58/9.26	1.44/1.74	5.34/4.83	7.18/7.03	5.04/4.95	1.54/1.63
Avg. 2008-14	5.14/5.26	5.96/5.97	5.94/7.42	2.06/1.71	2.59/3.01	6.79/6.97	5.76/5.81	0.14/0.24
Difference (2008-14) – (2000-07)								
Actual	-12.22	0.09	-3.63	0.62	-.2.75	-0.39	0.72	-1.39
Potential	-12.64	0.13	-1.85	-0.03	-1.83	-0.06	0.86	-1.38
	Kazakhstan	Malaysia	Pakistan	PNG	PRC	Philippines	Rep. of Korea	Singapore
2014	4.3/5.05	6/5.81	5.40/5.40	5.54/5.91	7.4/7.91	6.1/7.90	3.3/3.33	2.9/4.10
Avg. 2000-07	10.16/8.77	5.58/5.27	5.05/4.04	2.24/2.26	10.51/9.90	4.90/6.58	5.40/5.58	6.44/5.57
Avg. 2008-14	4.94/6.81	4.60/5.02	3.16/4.93	7.45/7.31	8.76/8.80	5.23/7.06	3.19/3.49	4.54/5.11
Difference (2008-14) – (2000-07)								
Actual	-5.22	-0.98	-1.89	5.21	-1.76	0.33	-2.21	-1.89
Potential	-1.96	-0.26	0.89	5.05	-1.11	0.48	-2.09	-0.46
	Sri Lanka	Taipei.China	Tajikistan	Thailand	Turkmenistan	Uzbekistan	Viet Nam	
2014	7.4/6.84	3.7/3.06	6.7/6.74	0.7/2.90	10.3/10.28	8.1/8.13	6/6.06	
Avg. 2000-07	5.06/6.67	4.85/4.70	8.80/8.46	5.06/4.20	15.21/15.48	5.91/6.12	7.19/7.38	
Avg. 2008-14	6.67/5.58	3.07/3.34	6.76/6.93	2.60/3.27	10.90/11.03	8.31/8.34	5.76/6.01	
Difference (2008-14) – (2000-07)								
Actual	1.61	-1.78	-2.04	-2.46	-4.31	2.36	-1.43	
Potential	-1.09	-1.37	-1.54	-0.93	-4.45	2.22	-1.37	

A hypothetical reallocation of employment to match the structure of the typical middle-income economy yields significant labor productivity growth, exclusively the result of changes in the employment structure and not of productivity growth within sectors



Counterfactual employment reallocation



Changes in the determinants of Potential Growth in Recent Years

	Institutional Quality			Trade	Financial integration	Education (tertiary)
	Labor market rigidity	Government effectiveness	Voice and accountability			
<i>Asian economies</i>						
Azerbaijan	increasing rigidity until 2008, declining after		declining			
Bangladesh	declining rigidity			increasing	increasing until 1994, declining after	
Cambodia				increasing	increasing	
PRC	declining rigidity				increasing	increasing
Hong Kong, China					increasing	
India	increasing rigidity	declining		increasing	increasing	
Indonesia		increasing	increasing		increasing until 1998, declining after	
Japan					increasing	increasing
Kazakhstan		increasing	declining	declining	increasing	increasing
Rep. of Korea					increasing	increasing
Malaysia				increasing until 2000, declining after	increasing	
Pakistan		declining	increasing		increasing until 2002, declining after	

	Institutional Quality			Trade	Financial integration	Education (tertiary)
	Labor market rigidity	Government effectiveness	Voice and accountability			
<i>Asian economies</i>						
Philippines		increasing	declining	increasing until 1997, declining after	increasing until 2001, declining after	
Singapore		increasing until 2008, declining after			increasing until 2007, declining after	
Sri Lanka			declining	increasing until 2000, declining after	increasing until 1993, declining after	increasing
Taipei, China					increasing	
Tajikistan	decreasing rigidity		declining	increasing until 2000, declining after	increasing until 2000, declining after	
Thailand		declining	declining until 2006, increasing after	increasing	increasing	increasing
Turkmenistan			declining	declining	increasing	
Uzbekistan		increasing	declining		increasing	declining
Viet Nam				increasing	increasing	increasing

Determinants of Potential Growth

Potential growth decreases as initial income increases

Working-age population growth: one-to-one relationship

Tertiary enrollment ratio and Trade ratio have inverted U-shape effects

Negative effect of more rigid labor markets
Positive effect of citizens' participation and government effectiveness

The effect of the Gap with the US varies with Political stability: larger effect for countries with lower political stability values.
The effect of Financial capital integration varies with Regulatory quality: significant only for small values of regulatory quality

Structural break after the GFC

Potential Output Growth	All countries		Asian countries	
	(1)	(2)	(3)	(4)
<i>Initial GDP per capita</i>	-0.00004	.000039	-.00011*	-.00033**
<i>Working-age pop .growth</i>	1.02960**	.94840^	.87025**	1.15725**
<i>Gap with the US</i>	.067824*	.09642^	.03865*	.07306*
<i>Gap US x Pol .stability</i>	-	-	-	-.00613*
<i>Tertiary enrollment ratio</i>	-.049638	-.15805	.15810**	.16284**
<i>Tertiary enrolment squared</i>	-	-	-.00146**	-.00160**
<i>Labor market rigidity</i>	-1.63685**	-8.74926**	-1.97340**	-2.92375**
<i>Freedom and political accountability</i>	1.46852**	-1.07999**	.75121*	1.65097^
<i>Government Effectiveness</i>	1.17995*	2.78906*	1.03906*	1.36106**
<i>Trade ratio</i>	.053891**	.063626**	.08266**	.06488**
<i>Trade ratio squared</i>	-	-	-.00008**	-.00007**
<i>Financial capital integration</i>	-.003078**	-.00083	-.00197**	.00452*
<i>Financial capital x Regulatory quality</i>	-	-	-	-.00313**
<i>Break in 2008-14</i>	-	-	-2.49142**	-2.72717**
Constant	-.452107	7.05794	-3.55837*	-
F-statistic for	0.006	0.012	0.372	0.511
# of countries	61	18	61	61
# of observations	655	188	655	425

Source: Authors' estimates

Notes: **, * and ^ indicate, respectively, significant at the 1%, 5% and 10% level. Variables instrumented with first lag. Driscoll and Kraay (1998) standard errors.

Some evidence that the GFC has had a significant effect on potential output growth...but caution

Structural break during 2008-14 (GFC). “New Normal”

But deviations of actual from potential growth (5 years) are insignificant

- GFC may be just a big downturn with only a temporary effect on actual growth
- Actual growth may return to potential
- Policies that raise actual growth above potential have only a temporary effect

The standard deviation of actual from potential growth (5 years) is significant –**Volatility matters; Permanent effect on actual growth. Role for stabilization policies**

	Business Cycles and Potential Growth		Spillovers from the PRC and the US		
	All countries		All countries		Asian countries
	(1)	(2)	(3)	(4)	(5)
<i>Initial GDP per capita</i>	-.00011**	-.00033**	.00002	-.00034	.00032
<i>Working-age population growth</i>	.66407**	1.22262**	.47607*	1.0228**	1.3831^
<i>Gap with the US</i>	.04372**	.07345*	.05578**	.081924^	.11239^
<i>Gap US $\times$ Pol. Stability</i>	-	-.00759*	-	-.00395	-
<i>Tertiary enrollment ratio</i>	-.00842	.122695**	-.026358	.08522	-.16867**
<i>Tertiary enrollment squared</i>	-	-.00140**	-	-.00109^	-
<i>Labor market rigidity</i>	-2.57858**	-2.76644**	-2.068521*	-3.0915**	-10.05854**
<i>Freedom and political accountability</i>	.93560**	2.0438*	1.30475*	1.6002	-.43673
<i>Government effectiveness</i>	.68828^	1.15356**	.964237*	1.55105**	1.3442
<i>Trade ratio</i>	.06635**	.08178**	.06189**	.057578**	.06091**
<i>Trade ratio squared</i>	-	-.000097**	-	-.00005*	-
<i>Financial capital integration</i>	-.00202**	.00415*	-.00355**	.00099	-.00139
<i>Financial capital $\times$ Regulatory quality</i>	-	-.00289**	-	-.00206^	-
<i>Break in 2008-14</i>	-2.48124**	-2.82251**	-2.43485**	-1.93914**	-2.26529**
<i>gdev5</i>	-.200279	.05946	-	-	-
<i>gdev5sd</i>	-.19378**	-.19208**	-	-	-
<i>PRC growth</i>	-	-	.34761**	.20185**	.57000**
<i>US growth</i>	-	-	.191782*	.39016*	-.15472
Constant	2.3533*	-	-4.36771	-	1.03687
F-statistic for	8.462**	0.398	10.683**	0.014	0.304
# of countries	61	61	59	59	17
# of observations	616	421	633	411	177

Source: Authors’ estimates

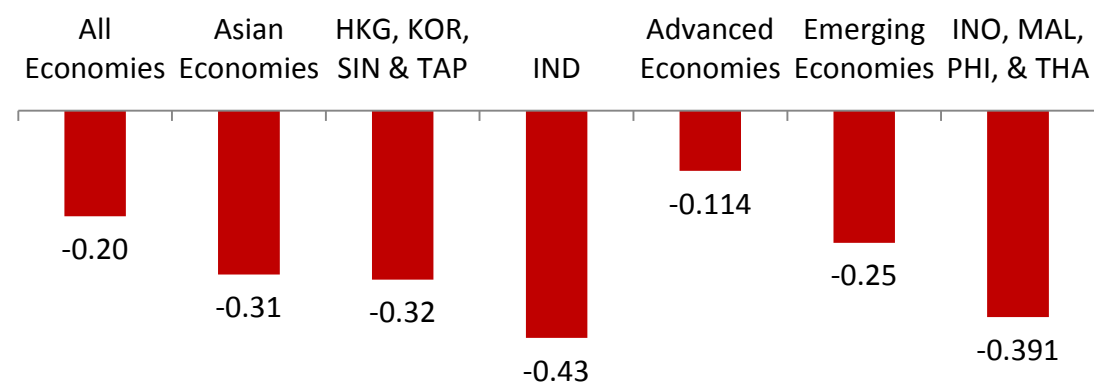
Notes: **, * and ^ indicate, respectively, significant at the 1%, 5% and 10% level. Variables instrumented with first lag. Driscoll and Kraay (1998) standard errors.

Estimates of spillovers from the PRC and the US on potential growth rate

- Significant impact of PRC’s actual growth on the region’s potential growth
- Insignificant impact of the US’s actual growth on the region’s potential

But different impact

A one percentage point decline in the PRC’s **actual** growth leads to decline in **potential** growth in other countries by:



	Business Cycles and Potential Growth		Spillovers from the PRC and the US		
	All countries		All countries	Asian countries	
	(1)	(2)	(3)	(4)	(5)
<i>Initial GDP per capita</i>	-.00011**	-.00033**	.00002	-.00034	.00032
<i>Working-age population growth</i>	.66407**	1.22262**	.47607*	1.0228**	1.3831^
<i>Gap with the US</i>	.04372**	.07345*	.05578**	.081924^	.11239^
<i>Gap US × Pol. Stability</i>	-	-.00759*	-	-.00395	-
<i>Tertiary enrollment ratio</i>	-.00842	.122695**	-.026358	.08522	-.16867**
<i>Tertiary enrollment squared</i>	-	-.00140**	-	-.00109^	-
<i>Labor market rigidity</i>	-2.57858**	-2.76644**	-2.068521*	-3.0915**	-10.05854**
<i>Freedom and political accountability</i>	.93560**	2.0438*	1.30475*	1.6002	-.43673
<i>Government effectiveness</i>	.68828^	1.15356**	.964237*	1.55105**	1.3442
<i>Trade ratio</i>	.06635**	.08178**	.06189**	.057578**	.06091**
<i>Trade ratio squared</i>	-	-.000097**	-	-.00005*	-
<i>Financial capital integration</i>	-.00202**	.00415*	-.00355**	.00099	-.00139
<i>Financial capital × Regulatory quality</i>	-	-.00289**	-	-.00206^	-
Break in 2008-14	-2.48124**	-2.82251**	-2.43485**	-1.93914**	-2.26529**
gdev5	-.200279	.05946	-	-	-
gdev5sd	-.19378**	-.19208**	-	-	-
PRC growth	-	-	.34761**	.20185**	.57000**
US growth	-	-	.191782*	.39016*	-.15472
Constant	2.3533*	-	-4.36771	-	1.03687
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