

Asian Development OUTLOOK 2016

UPDATE

Meeting the Low-Carbon Growth Challenge

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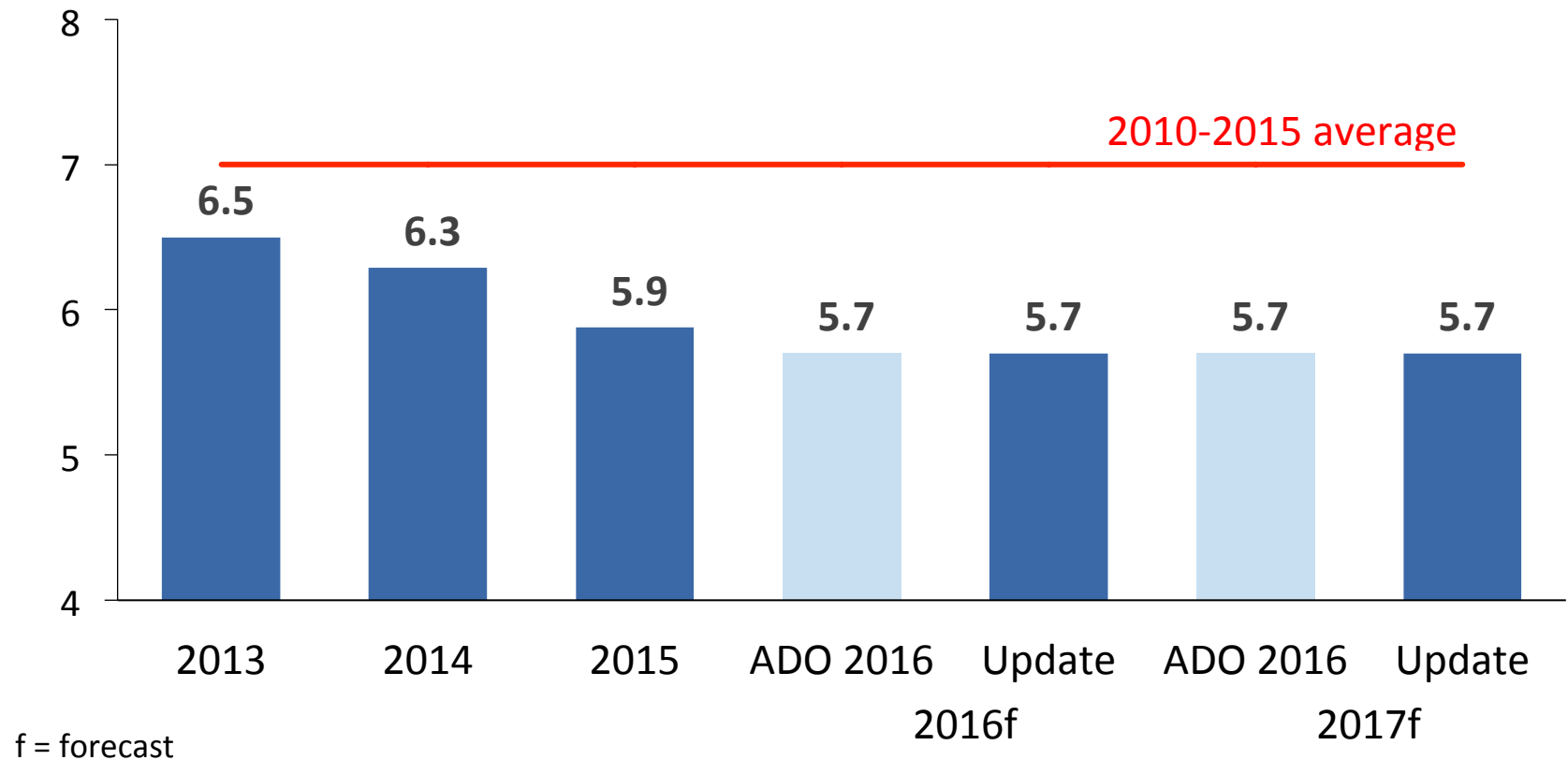


Key messages

- Growth in developing Asia steady at 5.7% in 2016 and 2017, despite global headwinds
 - PRC growth upgraded to 6.6% in 2016 and 6.4% in 2017, as policy support eases growth moderation
 - India growth maintained at 7.4% in 2016 and 7.8% in 2017, along with steady progress in reforms
- Commodity prices rising, yet inflation remains subdued
- Risks to the outlook tilted to the down side
- Developing Asia's role is critical in meeting the global climate goal

Developing Asia's growth is steady...

GDP growth (%)

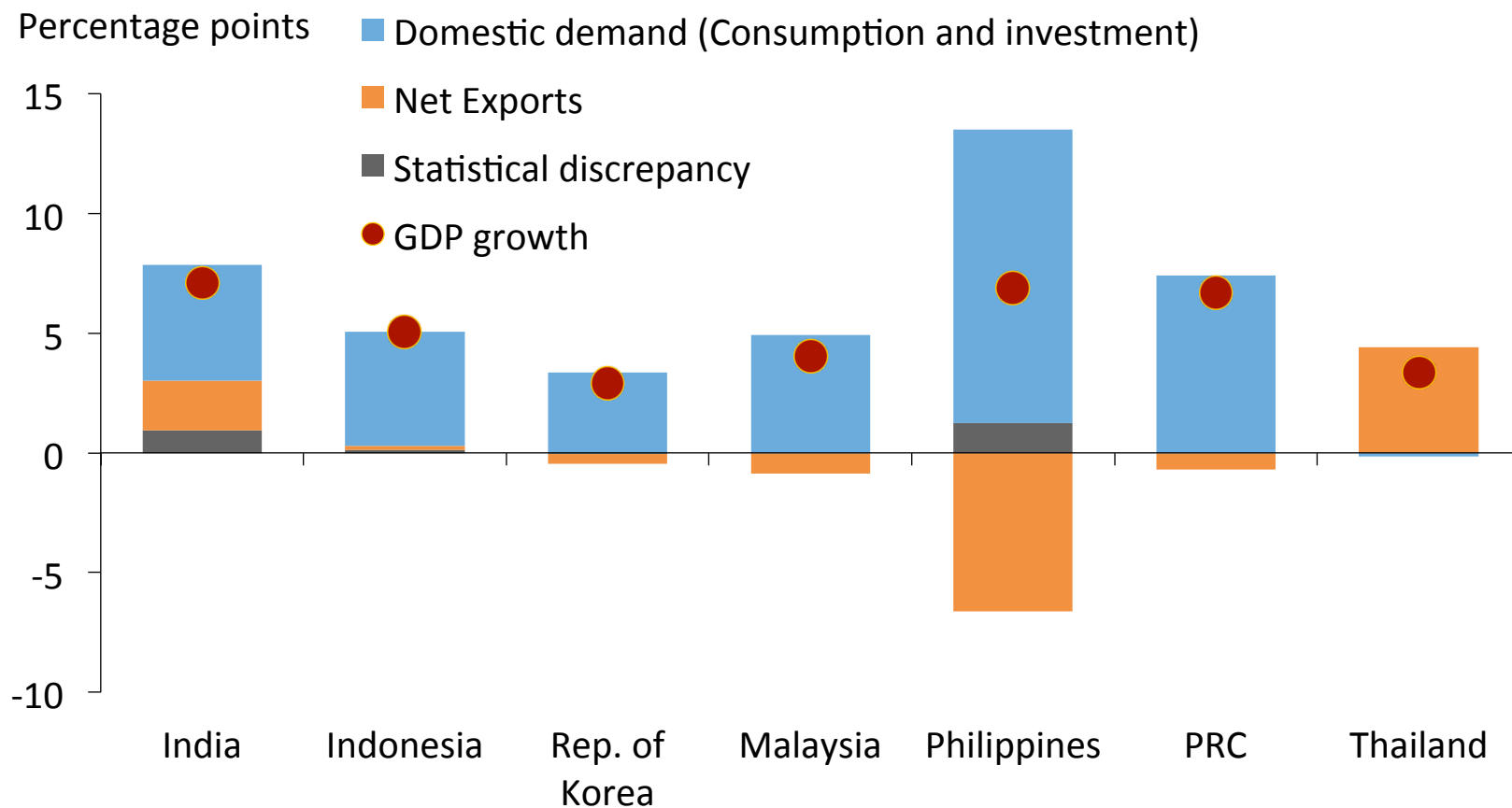


...despite the soft external environment

	2015	2016 forecast		2017 forecast	
		<i>ADO 2016</i>	<i>Update</i>	<i>ADO 2016</i>	<i>Update</i>
Major industrial economies	2.0	1.8	1.4	1.9	1.8
United States	2.6	2.3	1.5	2.5	2.4
Euro area	1.9	1.5	1.5	1.6	1.4
Japan	0.6	0.6	0.6	0.5	0.8

Domestic demand is holding up

Demand-side contributions to growth, H1 2016



Note: Data for India refers to Q1 of FY2016.

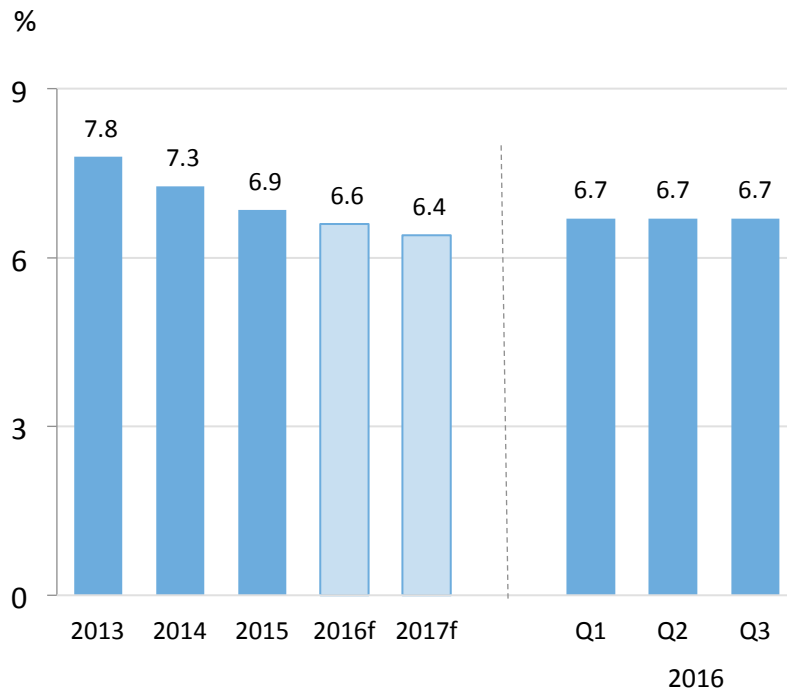
Divergent prospects across countries

	2015	2016f		2017f			2015	2016f		2017f	
South Asia	7.0	6.9	↔	7.3	↔	East Asia	6.1	5.8	▲	5.6	↔
Bangladesh	6.6	7.1	▲	6.9	↔	China, People's Rep. of	6.9	6.6	▲	6.4	▲
India	7.6	7.4	↔	7.8	↔	Korea, Rep. of	2.6	2.6	↔	2.8	↔
Pakistan	4.0	4.7	▲	5.2	▲	Taipei,China	0.6	0.9	▼	1.5	▼
Southeast Asia	4.4	4.5	↔	4.6	▼	Central Asia	3.0	1.5	▼	2.6	▼
Indonesia	4.8	5.0	▼	5.1	▼	Azerbaijan	1.1	-2.5	▼	1.0	↔
Malaysia	5.0	4.1	▼	4.4	↔	Kazakhstan	1.2	0.1	▼	1.0	↔
Philippines	5.9	6.4	▲	6.2	▲						
Thailand	2.8	3.2	▲	3.5	↔	The Pacific	7.2	2.7	▼	3.5	▲
Viet Nam	6.7	6.0	▼	6.3	▼	Fiji	4.0	2.4	▼	4.5	↔
						Papua New Guinea	9.9	2.2	▼	3.0	▲

f = forecast, ↔ = retained forecasts in March ADO, ▲ = upgrade, ▼ = downgrade

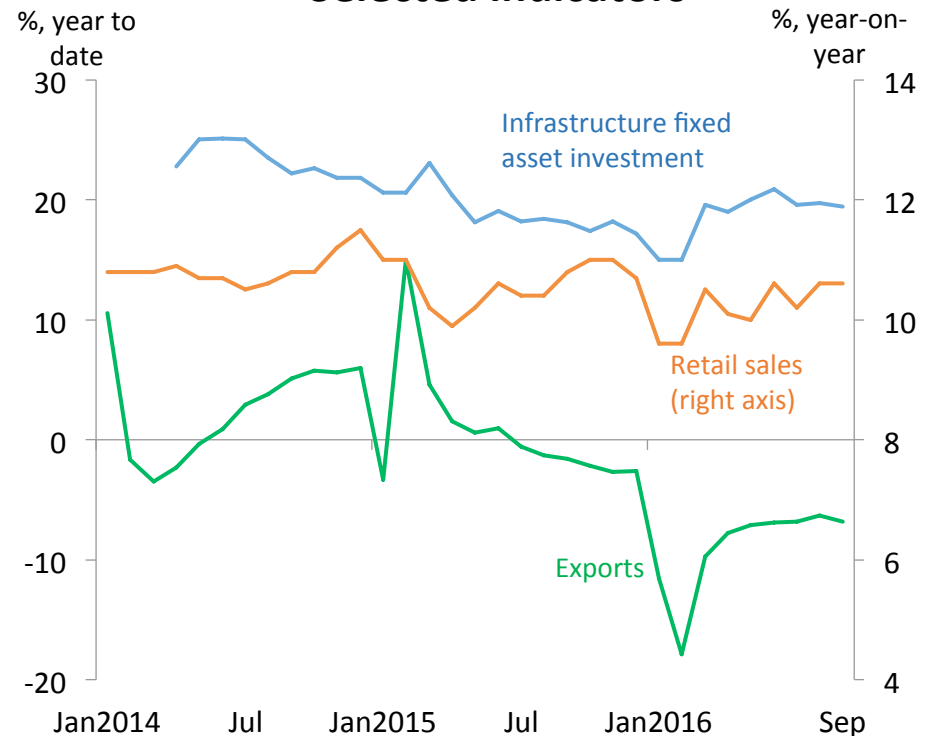
PRC's growth exceeding expectations

GDP growth



f = forecast

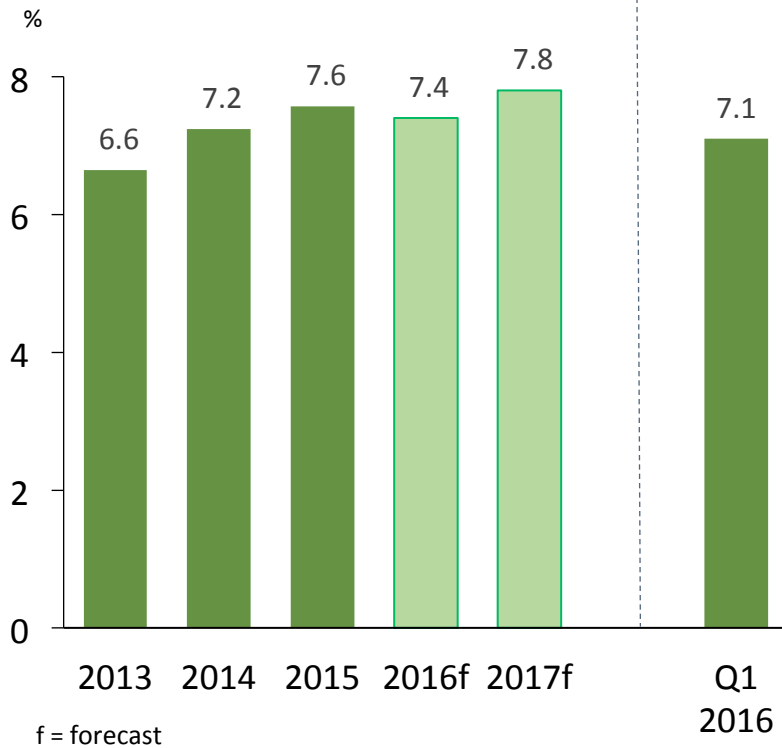
Selected indicators



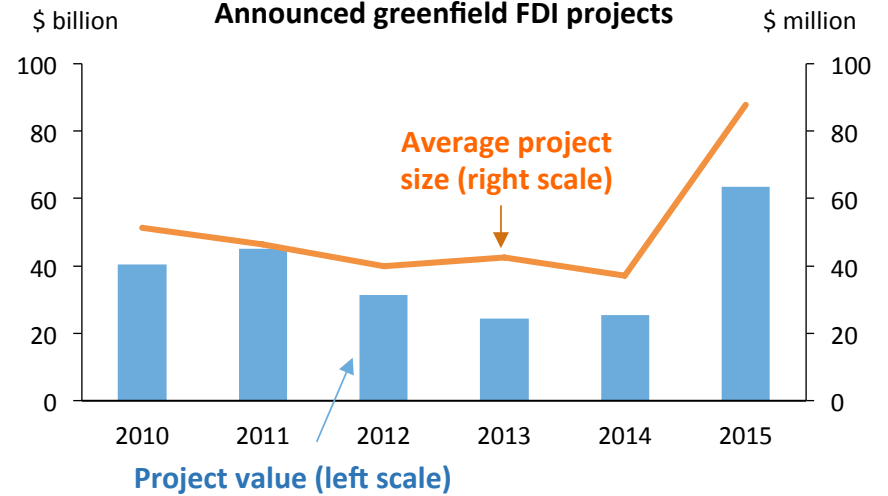
Note: Infrastructure investment and exports refer to year to date year-on-year growth, while retail sales refer to year-on-year growth.

Reform supporting India's expansion

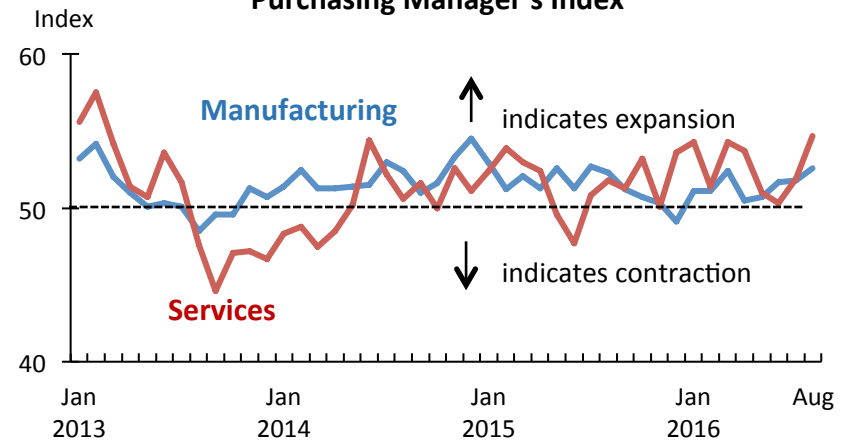
GDP growth



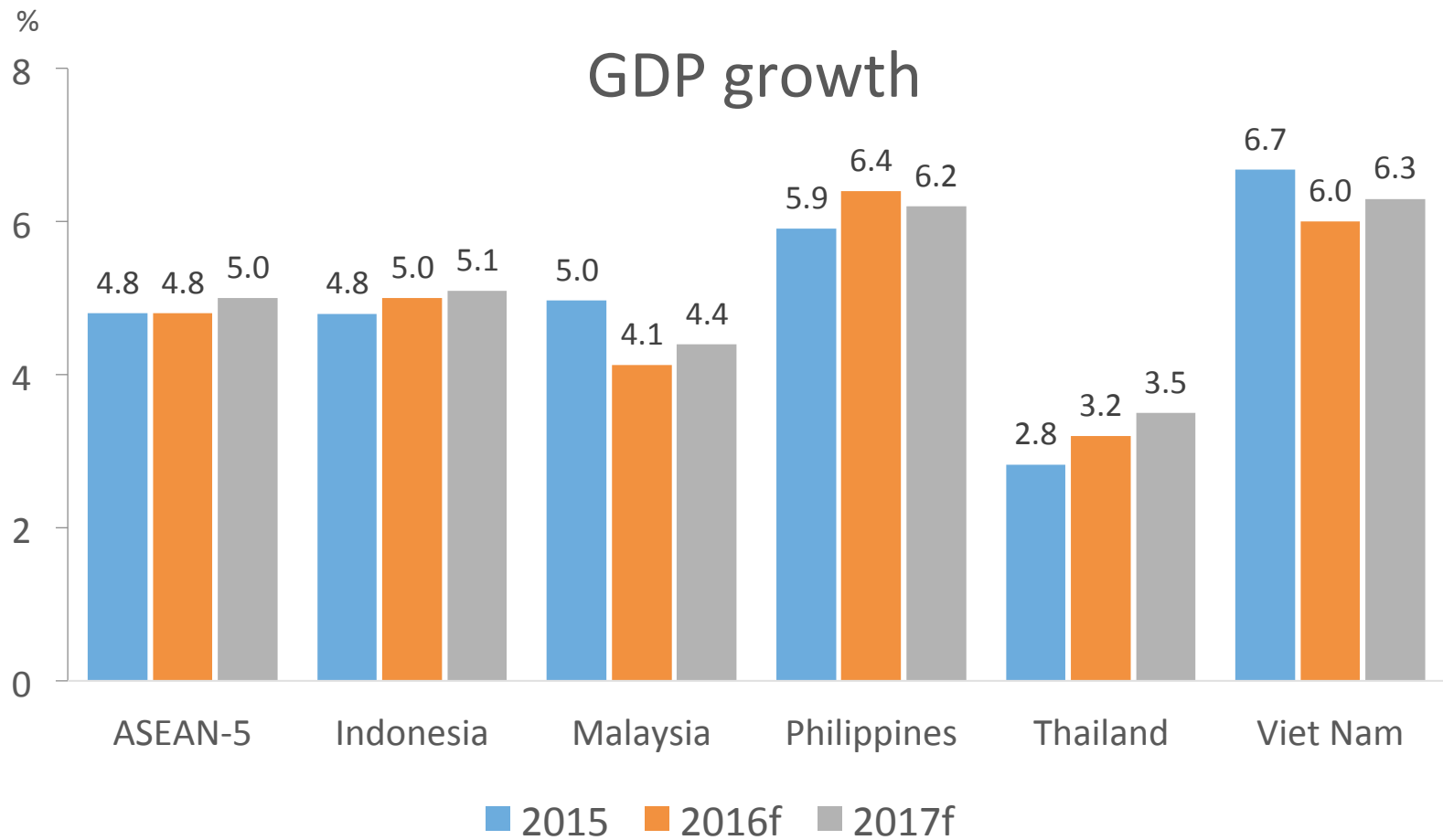
Announced greenfield FDI projects



Purchasing Manager's Index

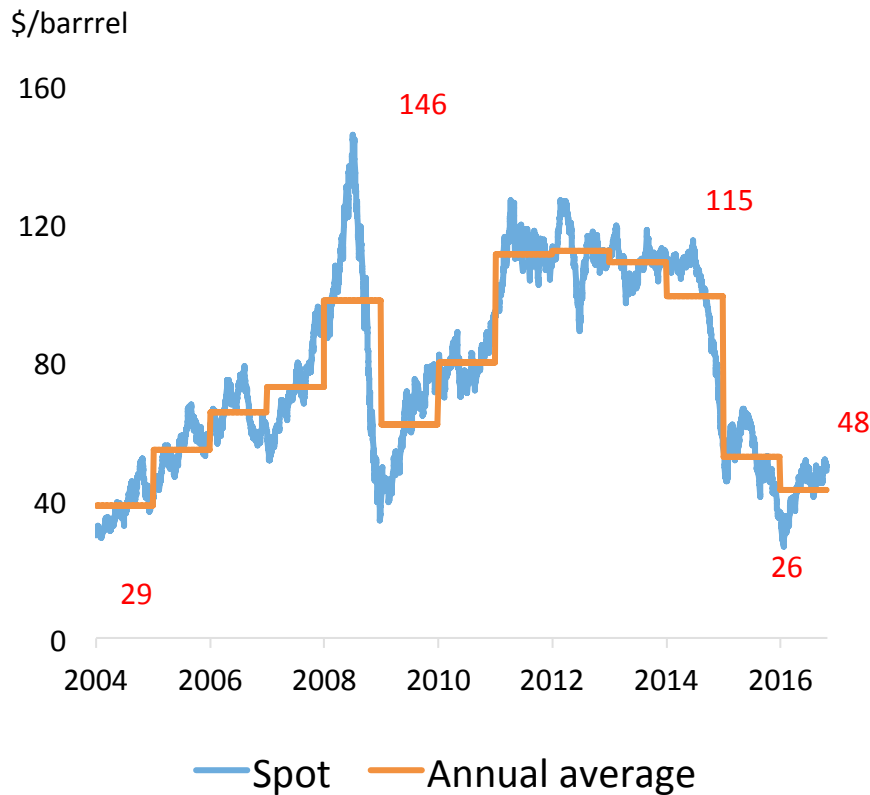


Growth performance in ASEAN mixed

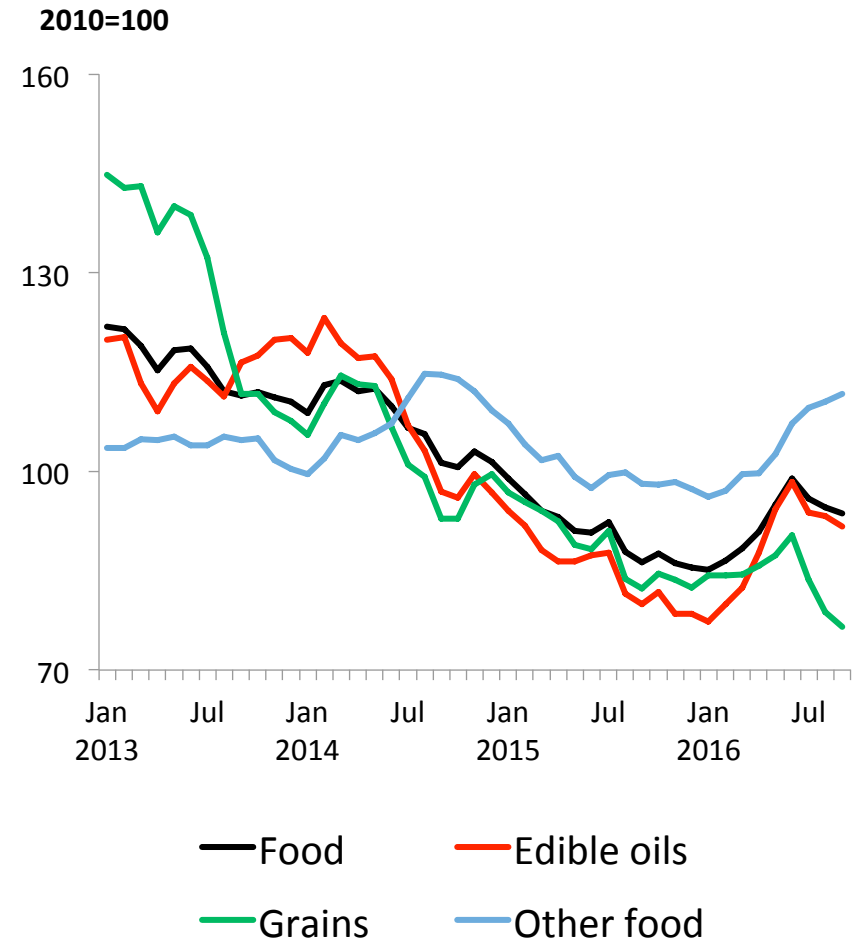


Global commodity prices picking up...

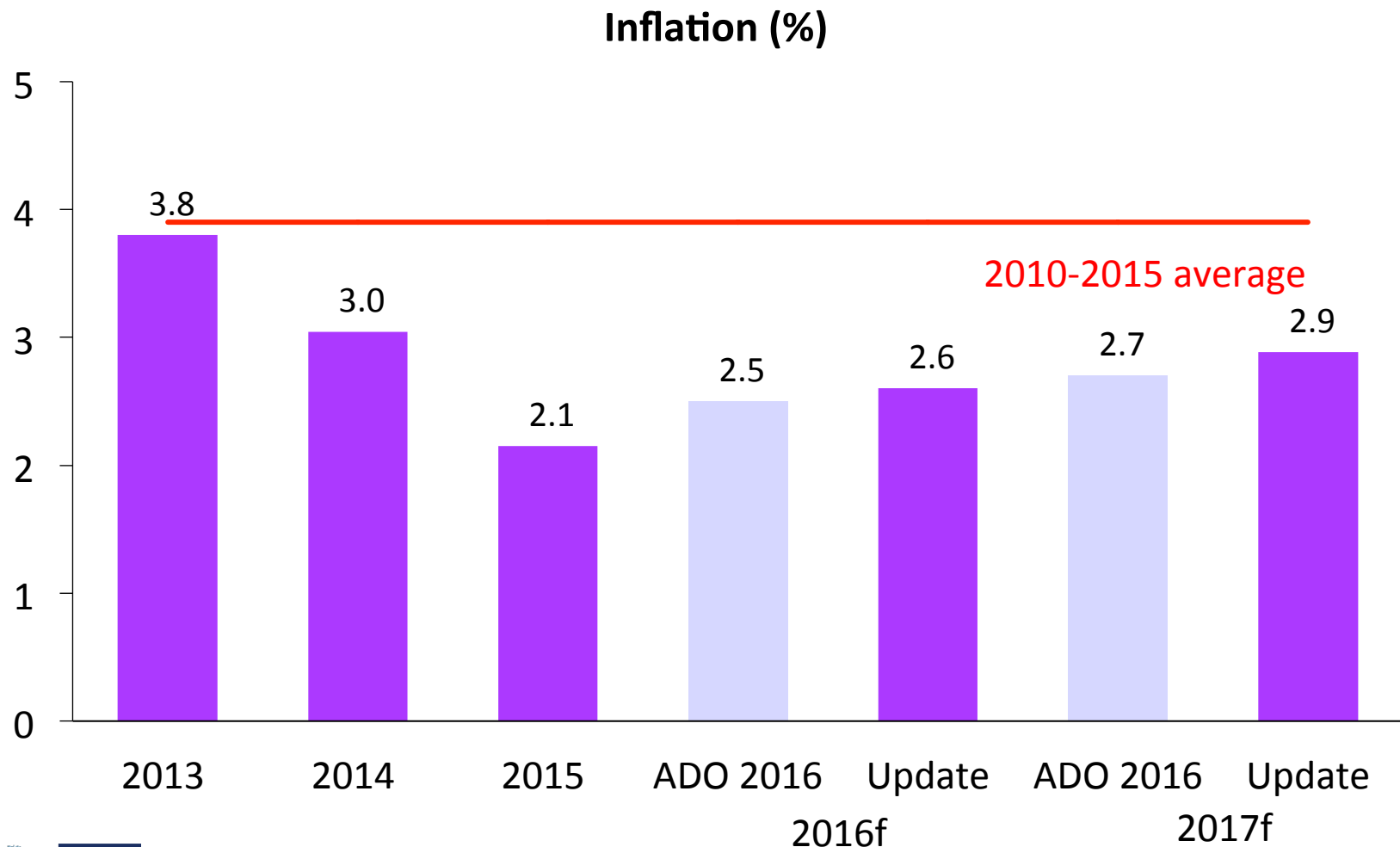
Price of Brent crude oil



Food commodity price indexes



...but Asia's inflation largely subdued

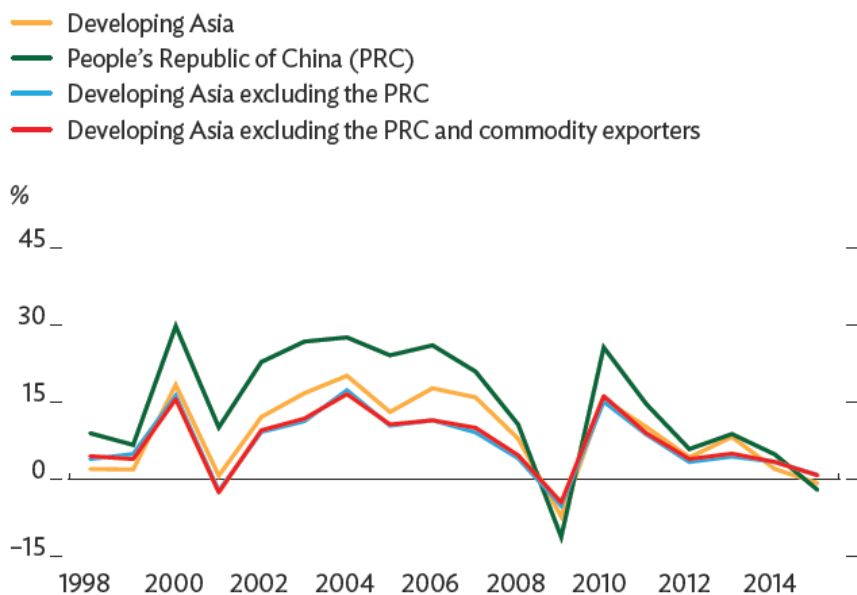


Risks are tilted to the downside

1. Advanced economies' monetary policies
 - Capital flow disruption; complicating macro management
2. Fragile external demand plus growing protectionism
 - Weak demand from the US, euro area, and Japan
 - Increased protectionism could further undermine the region's weak exports

Falling trade and rising protectionism

Volume growth of goods and services export



Note: Developing Asia refers to the developing member countries of the Asian Development Bank. Commodity exporters are Azerbaijan, Brunei Darussalam, Kazakhstan, Malaysia, Papua New Guinea, Timor-Leste, Turkmenistan, and Uzbekistan.

Sources: ADB estimates based on data from International Monetary Fund. 2016. *World Economic Outlook* (April) and World Bank. World Development Indicators online database (accessed 11 August 2016).

Nontariff measures in force



Notes: A stock approach is used wherein measures in force at the selected date are recorded. Measures in force are discounted from measures initiated, and measures withdrawn are discounted from measures in force. Nontariff measures include antidumping actions, countervailing duties, quantitative restrictions, safeguards, sanitary and phytosanitary rules both regular and emergency, special safeguards, regular technical barriers to trade, tariff-rate quotas, and export subsidies.

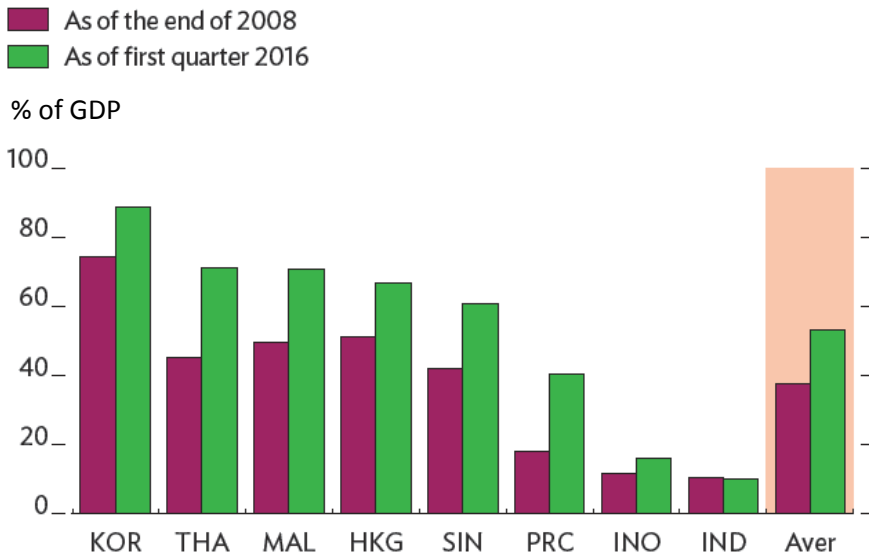
Source: World Trade Organization. Integrated Trade Intelligence Portal. www.wto.org (accessed 31 August 2016).

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3. **Rising private debt**
 - Requiring close monitoring to prevent systemic risks

Burgeoning private debt

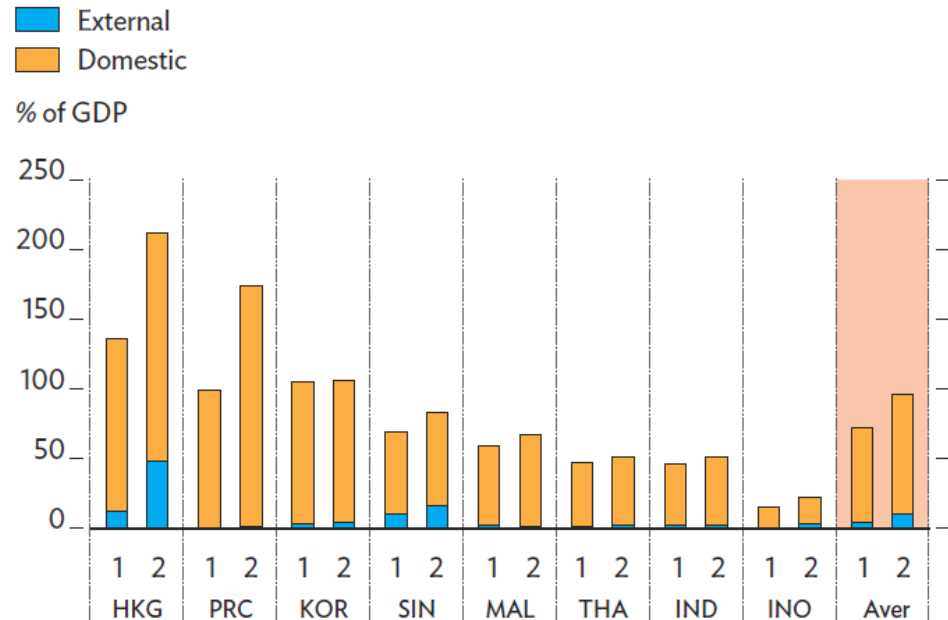
Household debt/GDP



Aver = simple average of the Asia sample, HKG = Hong Kong, China, IND = India, INO = Indonesia, KOR = Republic of Korea, MAL = Malaysia, PRC = People's Republic of China, SIN = Singapore, THA = Thailand.

Source: IIF 2016.

Nonfinancial corporate debt /GDP



1 = 2008, 2 = First quarter of 2016.

Aver = simple average of the Asia sample, HKG = Hong Kong, China, IND = India, INO = Indonesia, KOR = Republic of Korea, MAL = Malaysia, PRC = People's Republic of China, SIN = Singapore, and THA = Thailand.

Sources: IIF 2016; Locational Banking Statistics database and Debt securities database, Bank for International Settlements; ADB estimates.

Risks are tilted to the downside

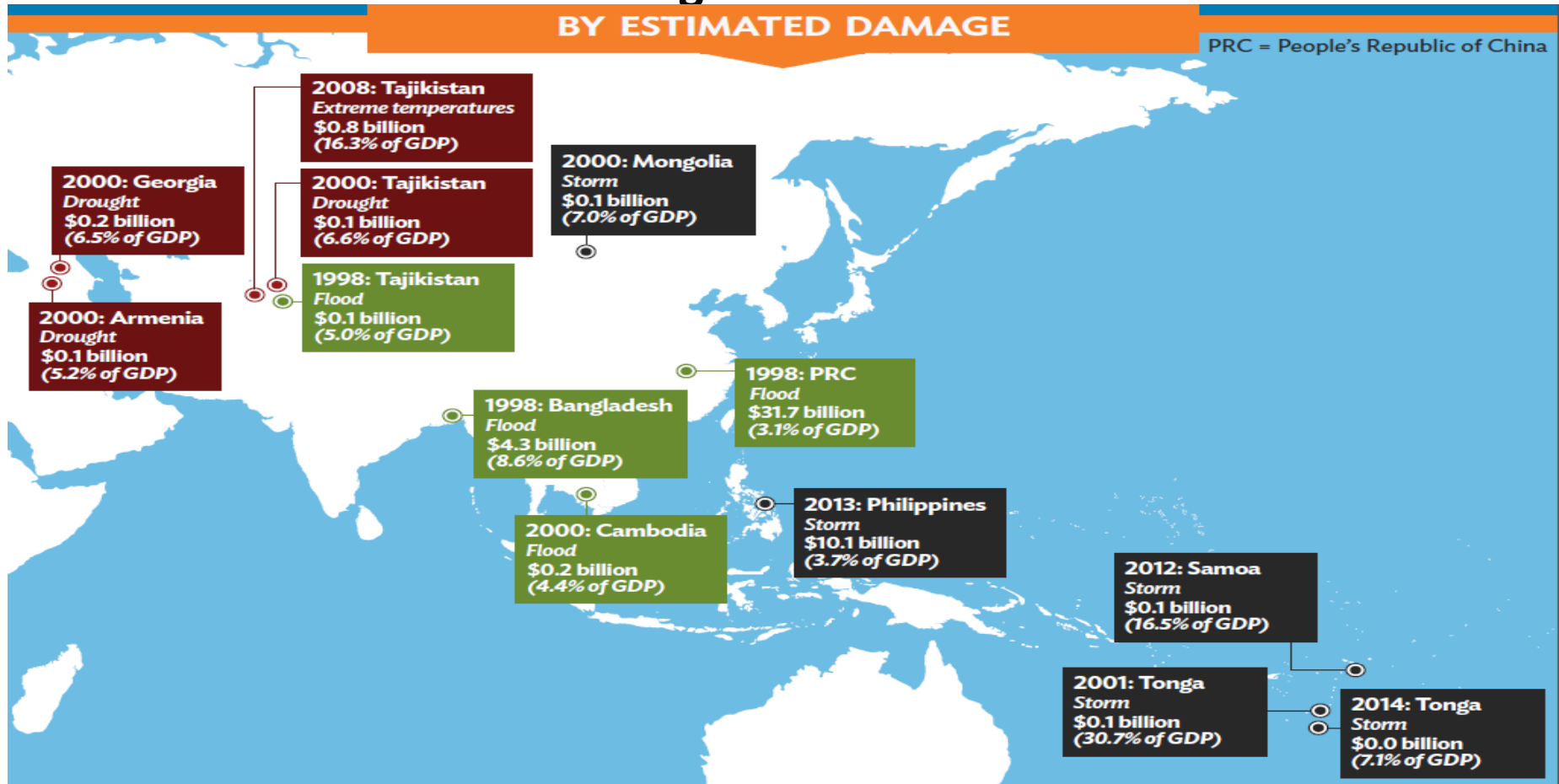
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4. **Natural disasters**
 - Increasing vulnerability in view of global climate change

Risks from climate change are evident

Recent significant disasters

BY ESTIMATED DAMAGE

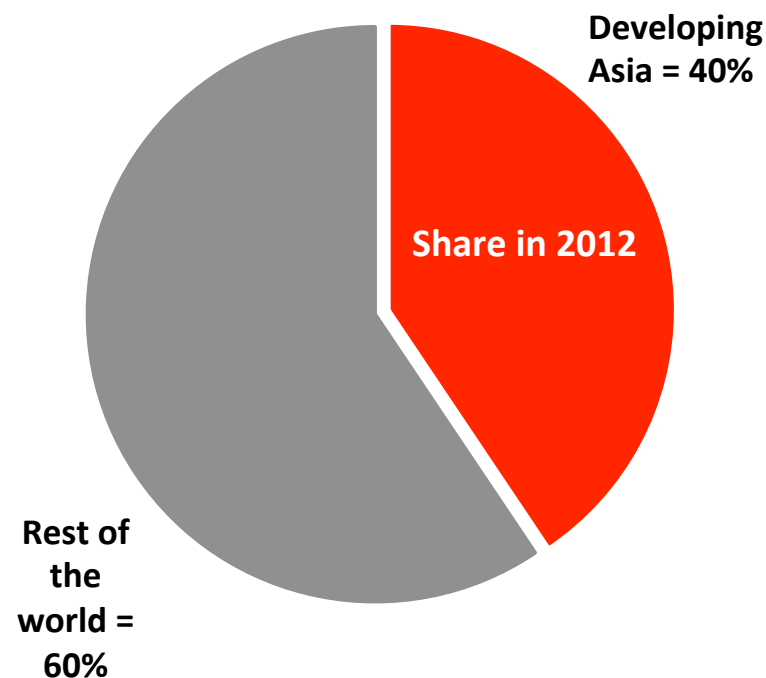
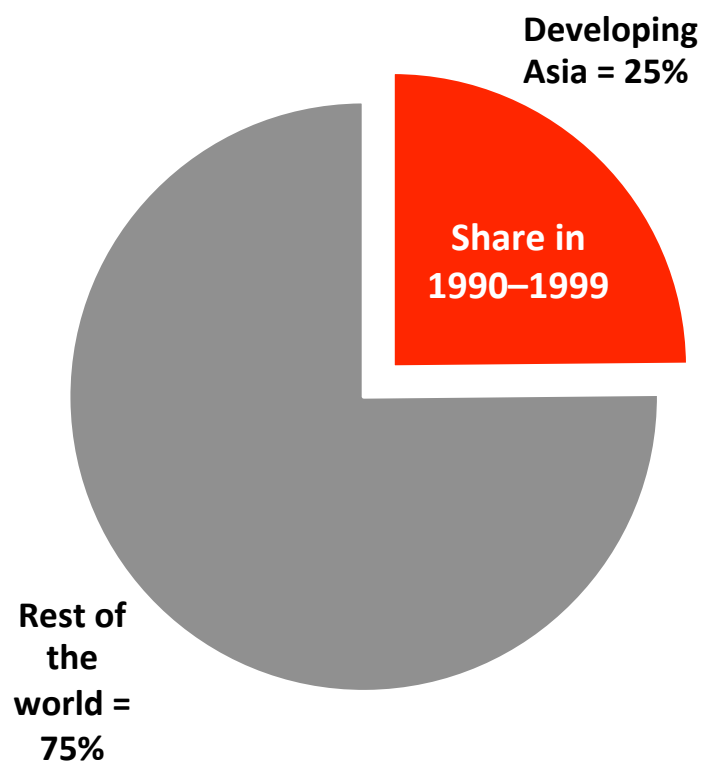
PRC = People's Republic of China



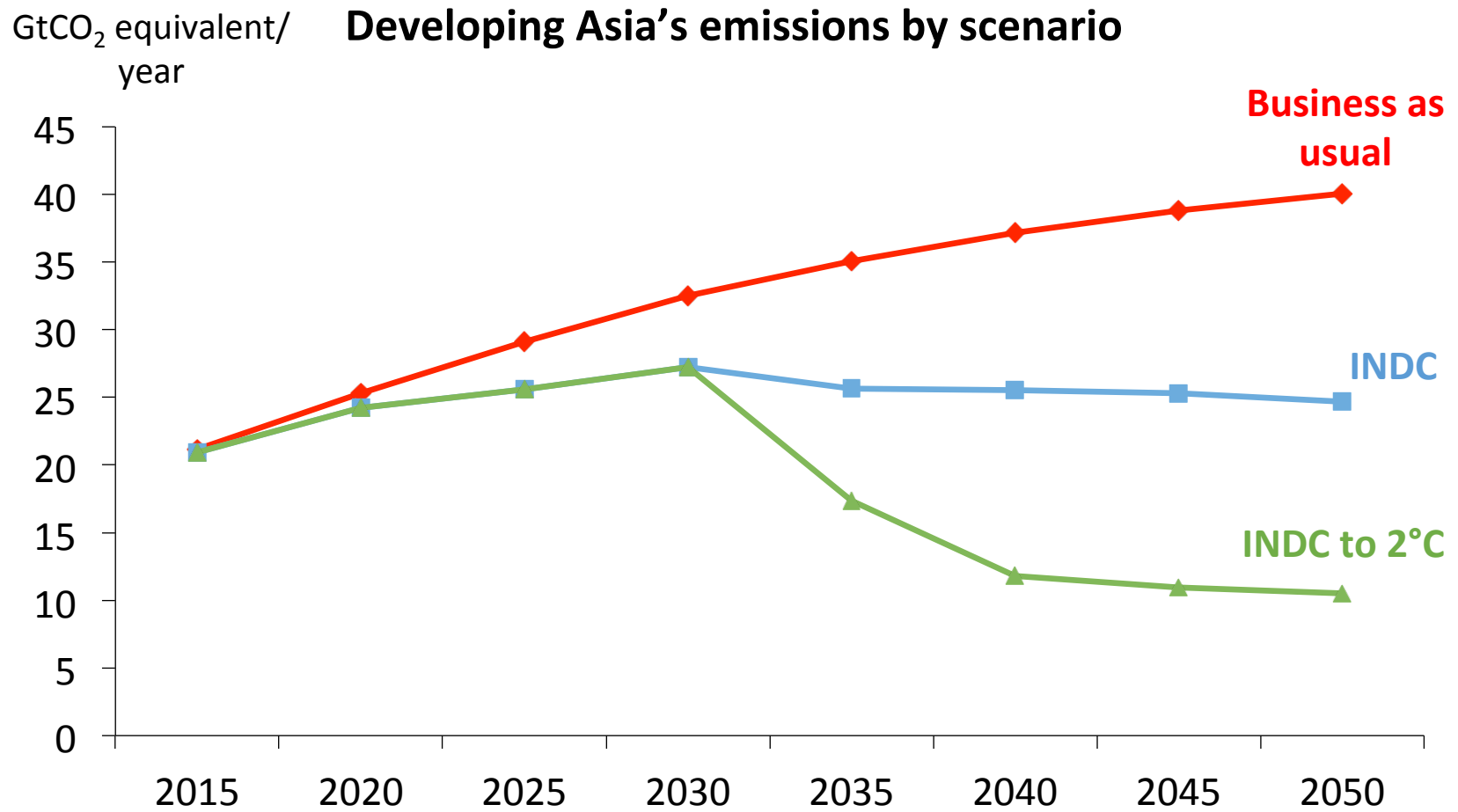
Theme chapter: Meeting the Low-Carbon Growth Challenge

Asia is critical to achieving the 2°C goal

Developing Asia's share in global greenhouse gas emissions



Paris emissions reduction pledges are a good start—but more work is needed

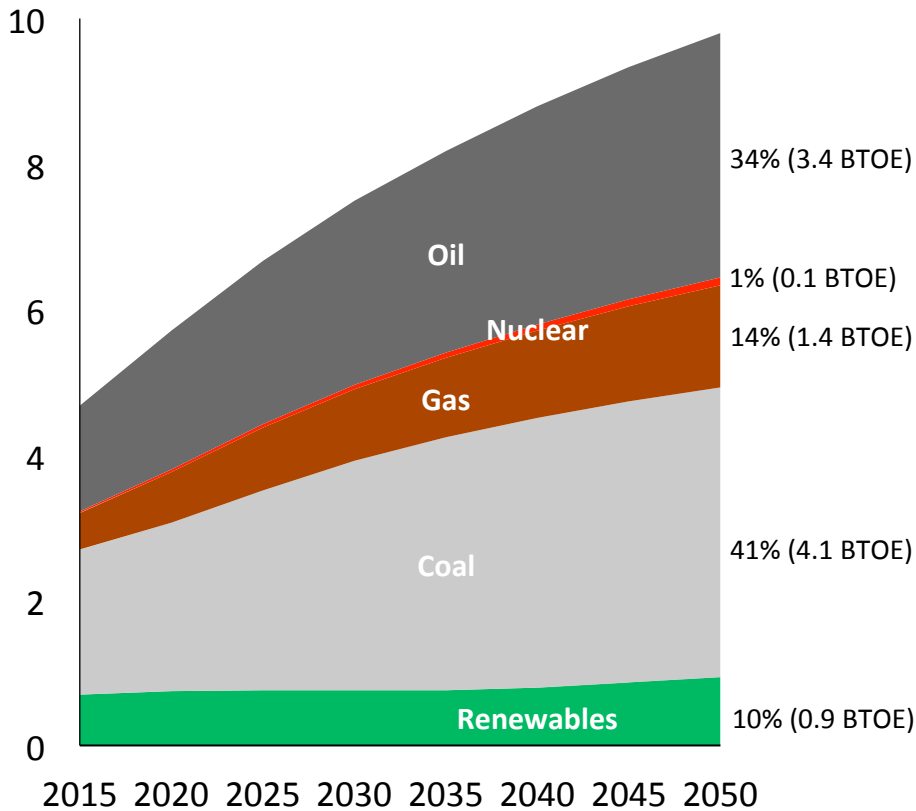


Containing global warming means a dramatic energy transition...

Primary energy composition in developing Asia under modelled scenarios

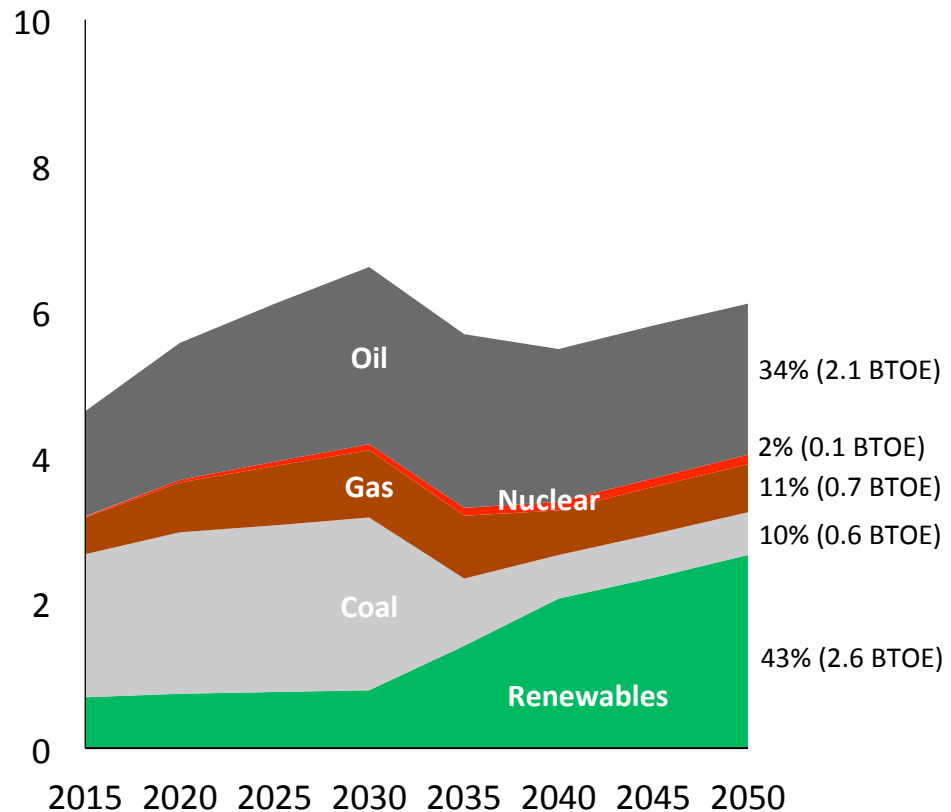
Business as usual

Billion tons of oil equivalent



INDC to 2°C

Billion tons of oil equivalent

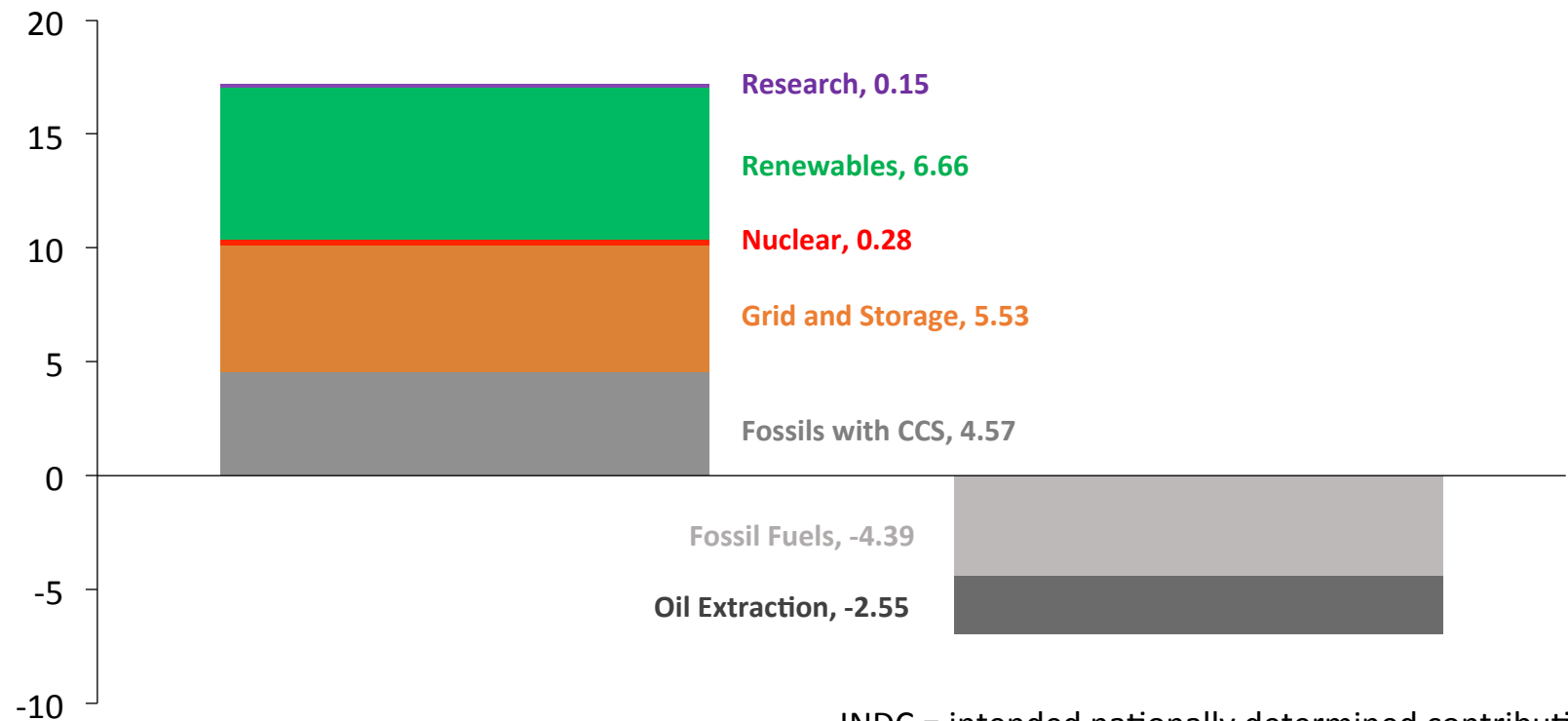


INDC = intended nationally determined contribution

... which needs substantial investment

**Additional 2015–2050 energy supply investments
in developing Asia under INDC to 2°C mitigation**

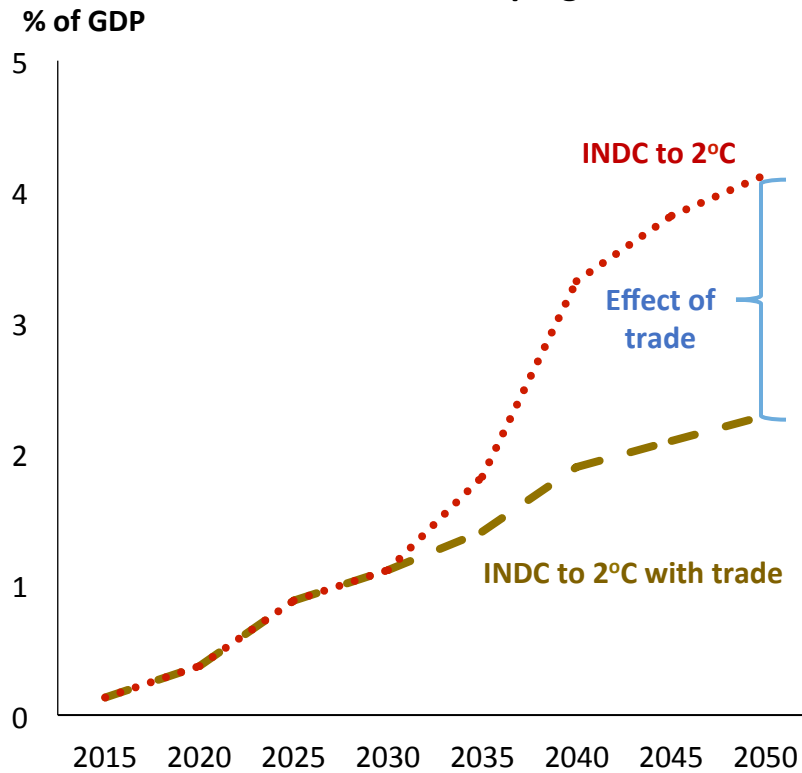
Trillion US\$2005



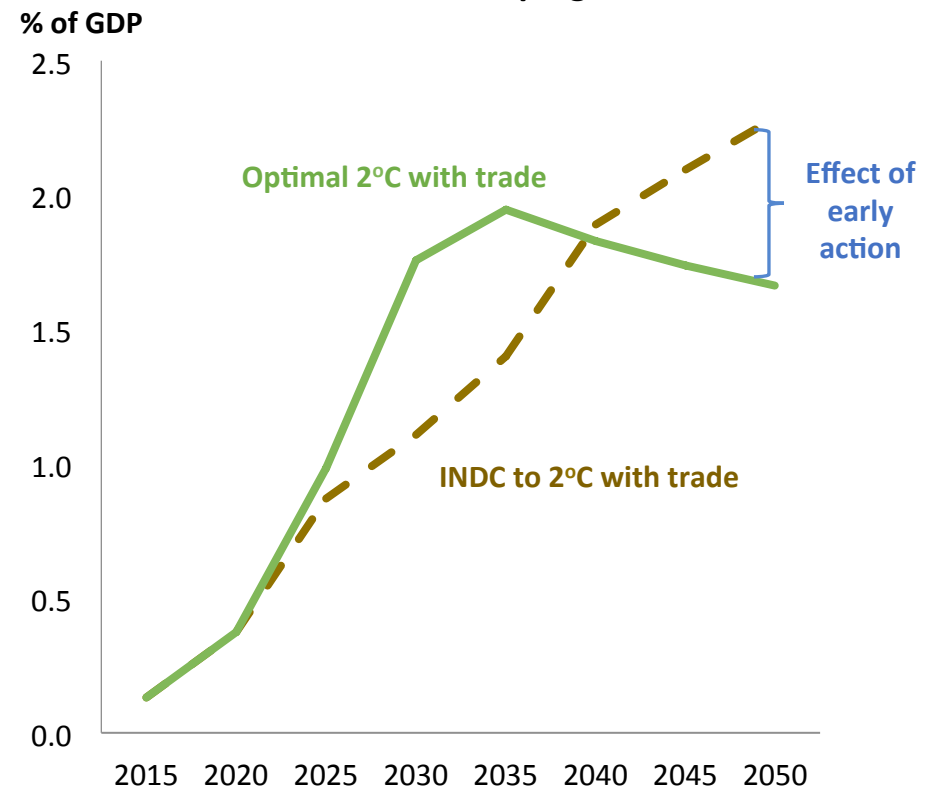
Additional \$300 billion per year to 2050

Carbon trade and early action reduce low-carbon transition costs

Cost of emissions reduction as % of GDP in developing Asia

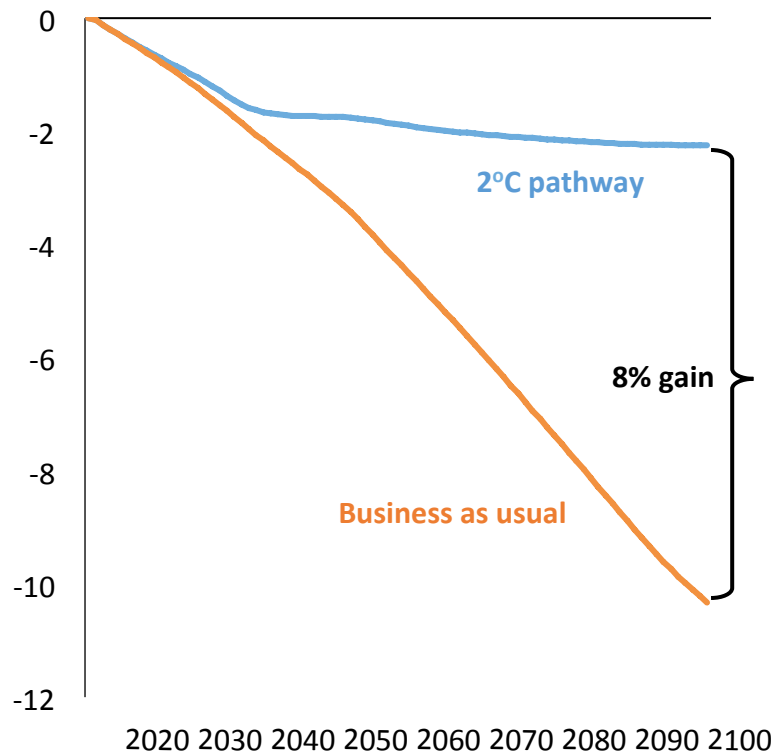


Cost of emissions reduction as % of GDP in developing Asia

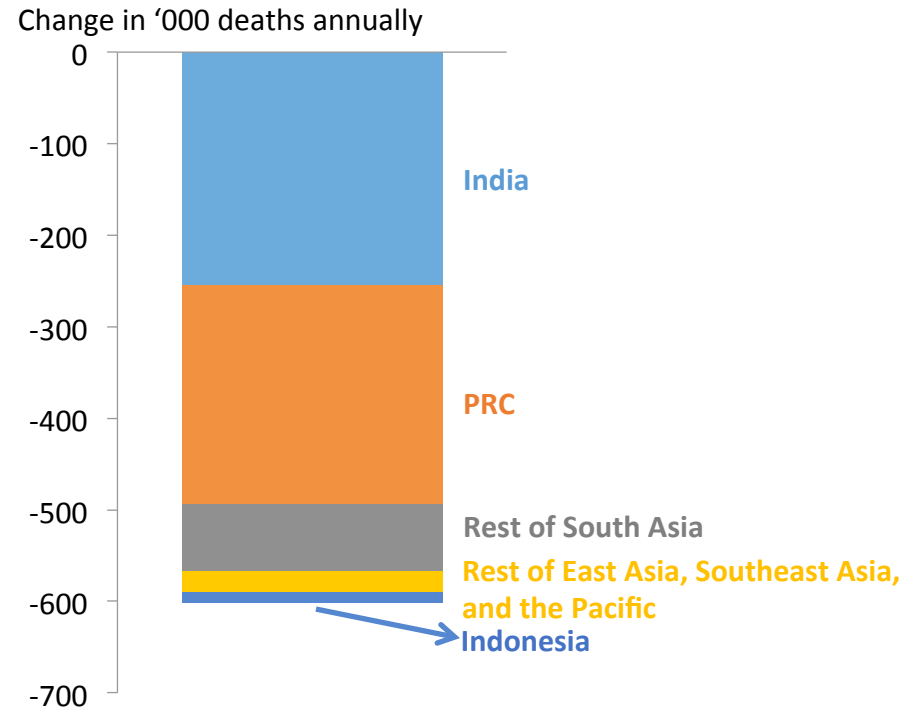


Large benefits and co-benefits ...

GDP change from climate change under different scenarios (%)

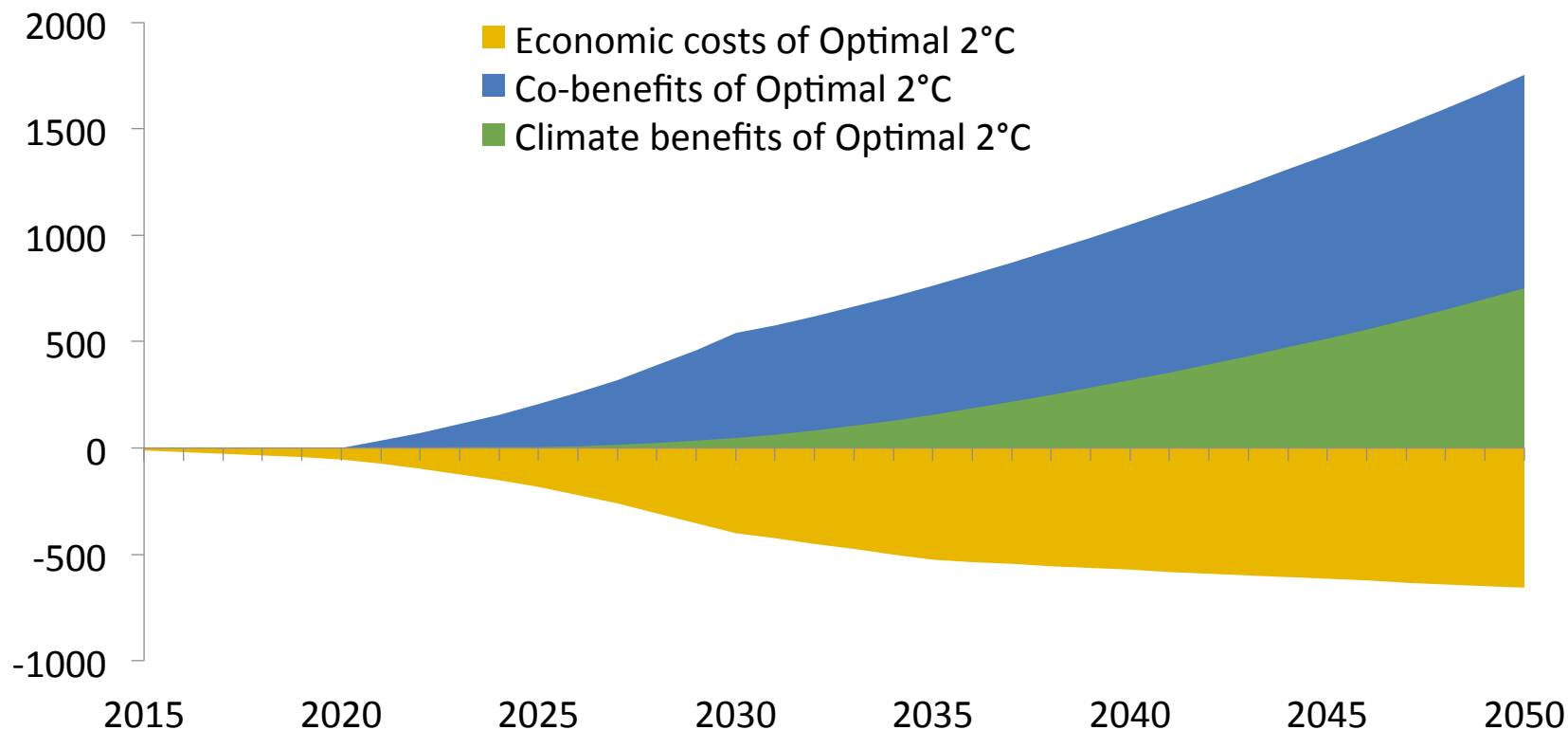


Reduction in premature deaths from air pollution in 2050 moving from business as usual to 2°C scenarios



...far outweigh climate-mitigation costs

Annual billions of
2005\$



With right steps, each \$ spending on mitigation could potentially generate \$2.2 discounted benefits for developing Asia during 2015–2100

Asia needs a four-pronged approach to meet its Paris pledges

1. Putting a price on carbon emissions

- Removing fossil fuel subsidy
- Introducing carbon taxation and/or cap and trade

2. Instituting appropriate regulations

- Setting renewable energy targets
- Introducing energy efficiency mandates

3. Supporting investment in clean and efficient energy

- Leveraging the private sector by reducing investment risk
- Providing financial incentives, especially for piloting

4. Fostering international cooperation

- Support for developing countries to mitigate through carbon offsets, and other mechanisms
- Technical cooperation on clean energy research and development

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