ASIAN DEVELOPMENT OUTLOOK 2019

STRENGTHENING DISASTER RESILIENCE

APRIL 2019

#ADO2019

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Asian Development Outlook 2019

Strengthening Disaster Resilience

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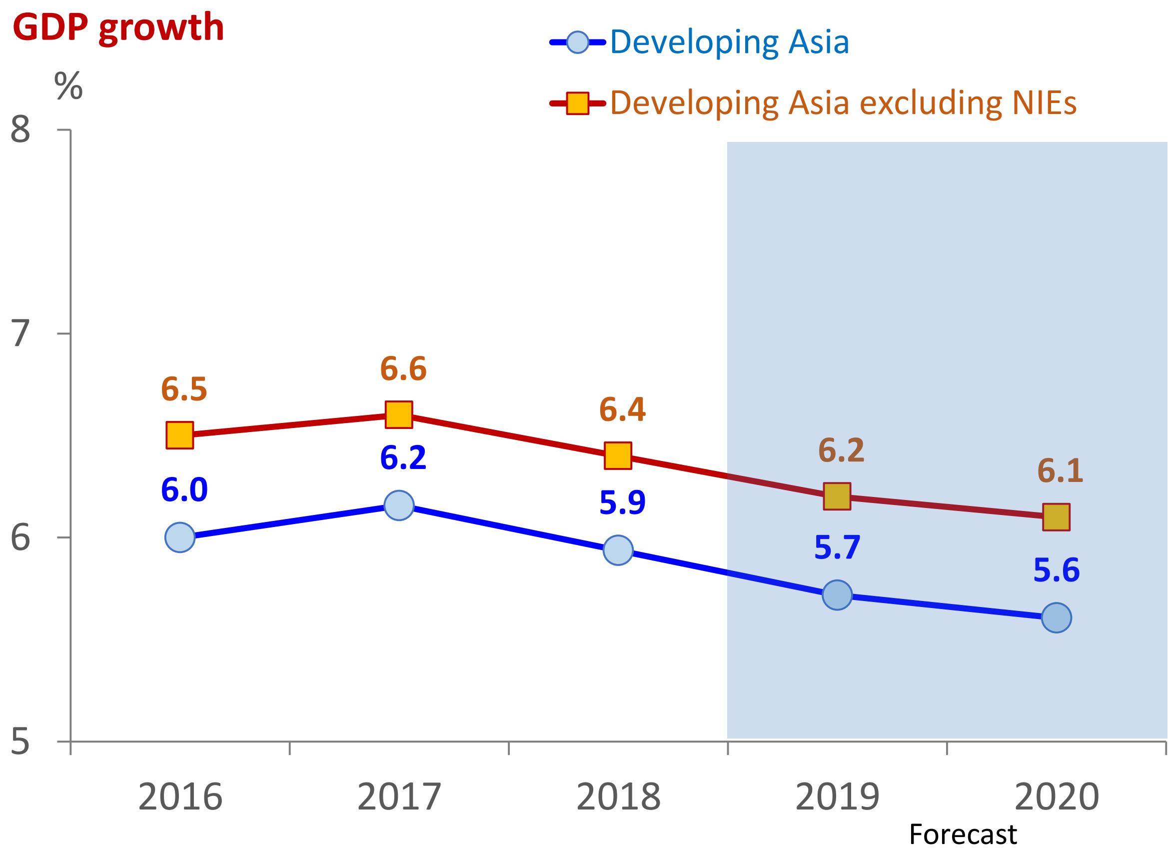
Key Messages

- Developing Asia’s growth to moderate to 5.7% in 2019 and 5.6% in 2020 amid weaker global demand and trade tensions
- PRC moderation partly reflects efforts to control financial risks; India set to rebound as consumption strengthens
- Inflation to remain subdued at 2.5% in 2019 and 2020
- The primary risk still centers on the trade conflict, with uncertainty heightened by protracted negotiations
- Asia must strengthen its disaster resilience given growing risks posed by natural hazards

Developing Asia's growth is softening, as prospects in advanced economies dim



NIEs = newly industrialized economies of Hong Kong, China; Republic of Korea; Singapore; and Taipei,China

Source: *Asian Development Outlook 2019* database.

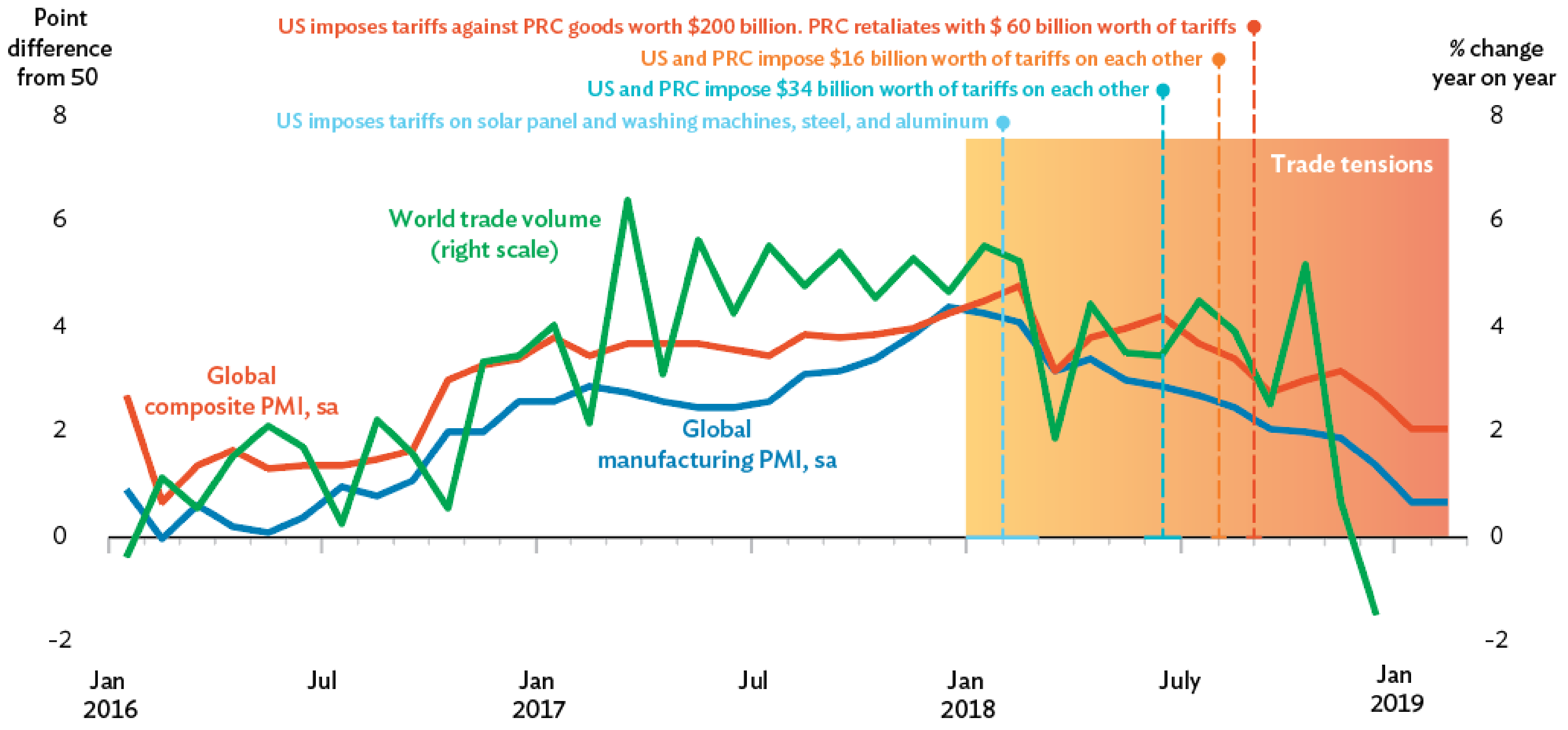
GDP growth (%)	2017 Actual	2018 Actual	2019 ADO forecast	2020 ADO forecast
Major industrial economies[a]	**2.3**	**2.2**	**1.9**	**1.6**
United States	2.2	2.9	2.4	1.9
Euro area	2.5	1.8	1.5	1.5
Japan	1.9	0.8	0.8	0.6

[a] Average growth rates are weighed by gross national income, Atlas method.

Sources: US Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov; Eurostat, http://epp.eurostat.ec.europa.eu; Economic and Social Research Institute of Japan, http://www.esri.cao.go.jp; Consensus Forecasts; Bloomberg; CEIC Data Company; Haver Analytics; ADB estimates.

Global trade and activity slowed and trade tensions escalated…

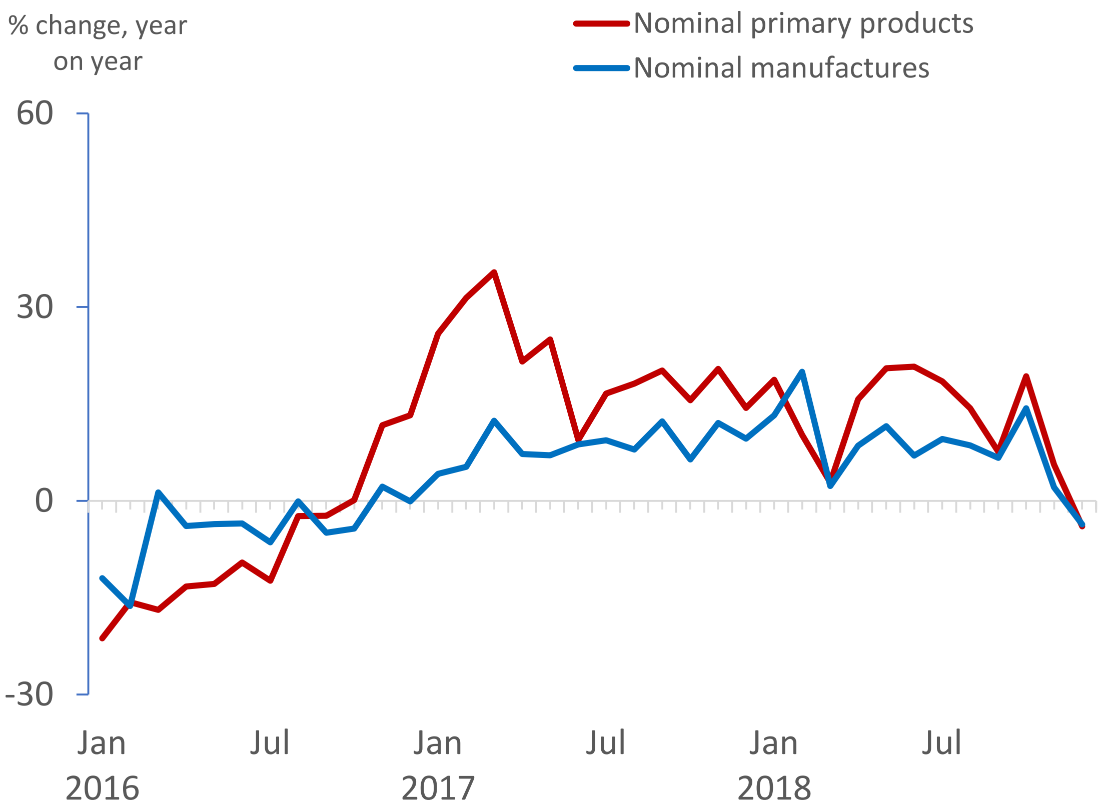
Global activity indicators



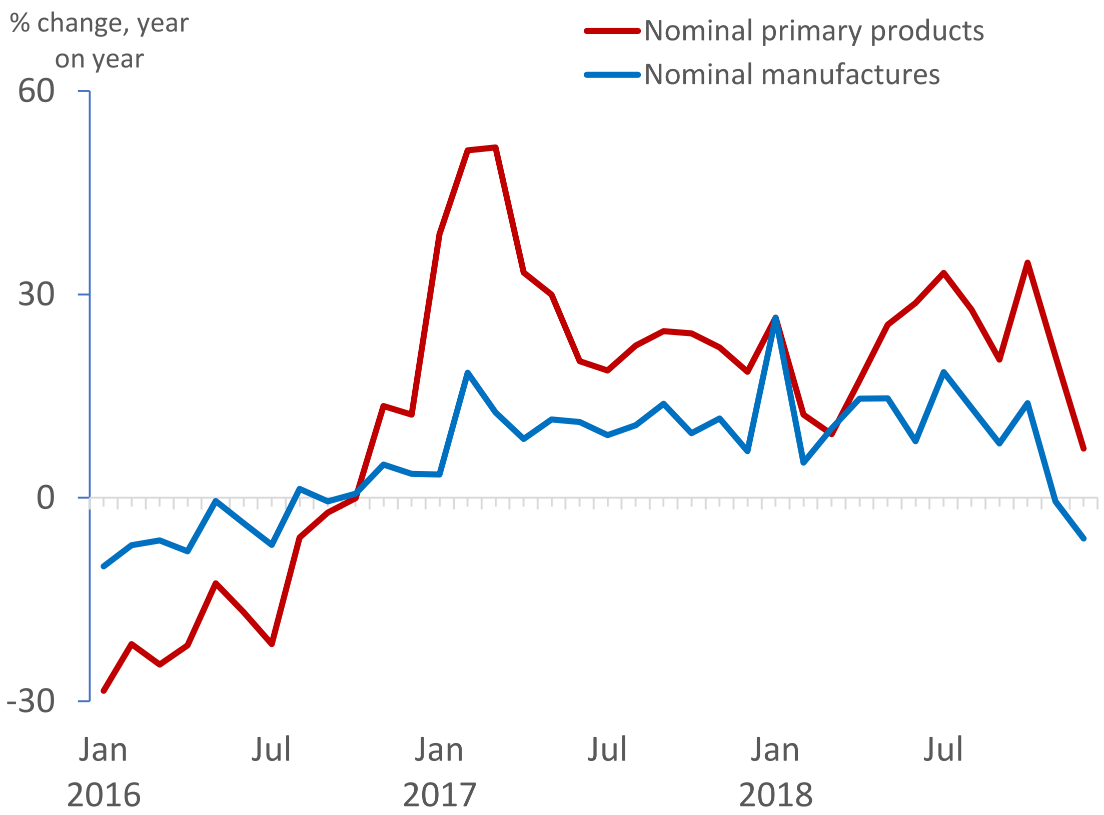
PMI = purchasing managers' index, PRC = People's Republic of China, sa = seasonally adjusted, US = United States.
Sources: Haver Analytics; CEIC Data Company.

…which weighed on the region's exports…

Export growth, by product categories



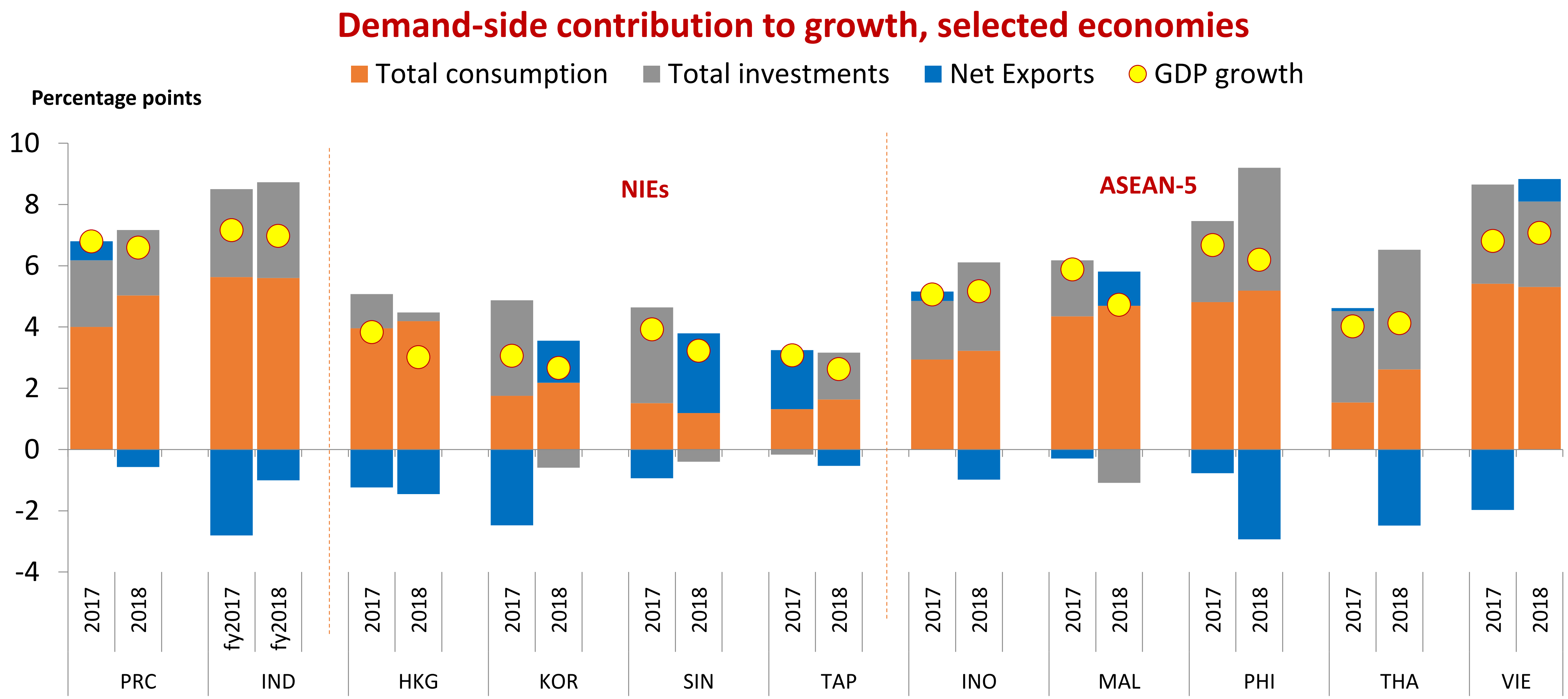
Import growth, by product categories



Primary products refer to food and live animals; beverages and tobacco; crude materials , inedible, except fuels; mineral fuels, lubricants and related materials; and animal and vegetable oils, fats and waxes.
Manufactured goods refer to chemicals and related products; manufactured goods, classified chiefly by material; machinery and transport equipment; miscellaneous manufactured articles; and commodities and transactions not classified elsewhere in the SITC.

Note: Refers to data for 10 developing Asian economies, namely, Hong Kong, China, India, Indonesia, Malaysia, PRC, Philippines, Republic of Korea, Singapore, Taipei,China, and Thailand.
Source: Staff estimates using data from CEIC Data Company and Haver Analytics.

…but domestic demand has supported the region's growth



fy = fiscal year

Notes: ASEAN = Association of Southeast Asian Nations; HKG = Hong Kong, China, IND = India, INO = Indonesia, KOR = Republic of Korea, MAL = Malaysia, NIEs = newly industrialized economies, PHI = Philippines, PRC = People's Republic of China, SIN = Singapore, TAP = Taipei,China, THA = Thailand, VIE = Viet Nam. Components do not add up to total due to a statistical discrepancy.

Data for India are in fiscal years which covers the period 1 April to 30 March.

Source: Haver Analytics (accessed 10 March 2019); ADB estimates.

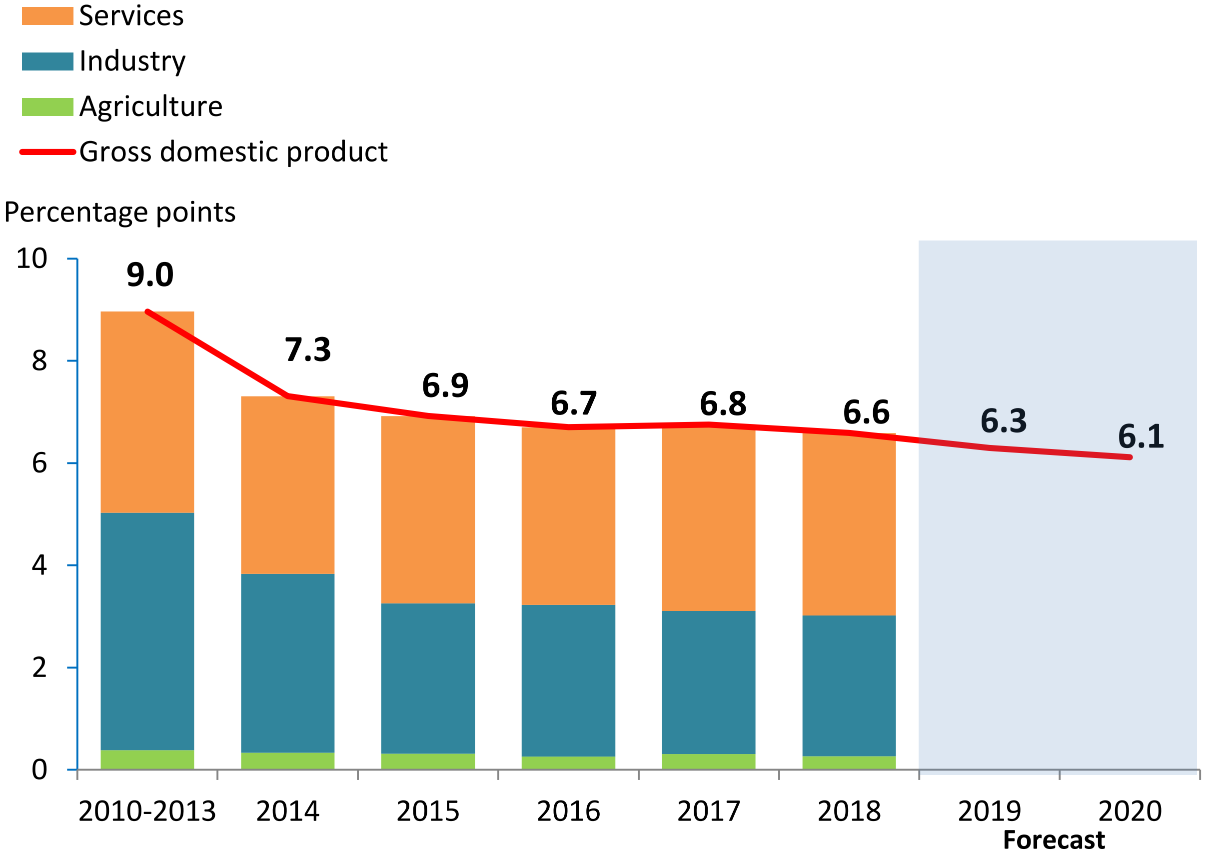
Developing Asia's more open sub-regions will see more of a slowdown in 2019

	2018	*2019*	*2020*		2018	*2019*	*2020*
East Asia	**6.0**	**5.7** ↓	**5.5** ↓	**South Asia**	**6.7**	**6.8** ↑	**6.9** ↑
Hong Kong, China	3.0	2.5 ↓	2.5	Bangladesh	7.9	8.0 ↑	8.0
People's Republic of China	6.6	6.3 ↓	6.1 ↓	India	7.0	7.2 ↑	7.3 ↑
Republic of Korea	2.7	2.5 ↓	2.5	Pakistan	5.2	3.9 ↓	3.6 ↓
Taipei,China	2.6	2.2 ↓	2.0 ↓				
				Central Asia	**4.4**	**4.2** ↓	**4.2**
Southeast Asia	**5.1**	**4.9** ↓	**5.0** ↑	Azerbaijan	1.4	2.5 ↑	2.7 ↑
Indonesia	5.2	5.2	5.3 ↑	Kazakhstan	4.1	3.5 ↓	3.3 ↓
Malaysia	4.7	4.5 ↓	4.7 ↑				
Philippines	6.2	6.4 ↑	6.4	**The Pacific**	**0.9**	**3.5** ↑	**3.2** ↓
Singapore	3.2	2.6 ↓	2.6	Fiji	3.0	3.2 ↑	3.5 ↑
Thailand	4.1	3.9 ↓	3.7 ↓	Papua New Guinea	0.2	3.7 ↑	3.1 ↓
Viet Nam	7.1	6.8 ↓	6.7 ↓				
Developing Asia	**5.9**	**5.7** ↓	**5.6** ↓	**Excluding NIEs**	**6.4**	**6.2** ↓	**6.1** ↓

Note: Red arrow= lower than the previous year. Green arrow = higher than the previous year. No sign = no change.
Source: *Asian Development Outlook 2019* database.

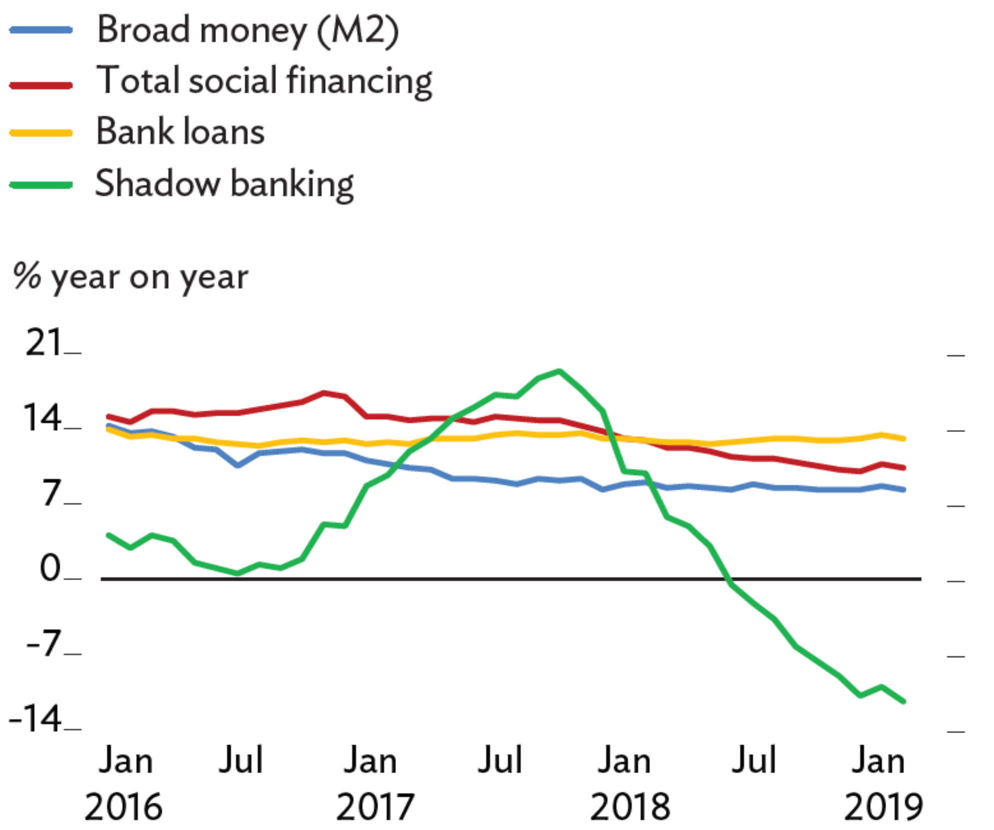
PRC moderation reflects both structural factors and policy tightening

Supply-side contribution to growth



Source: National Bureau of Statistics.

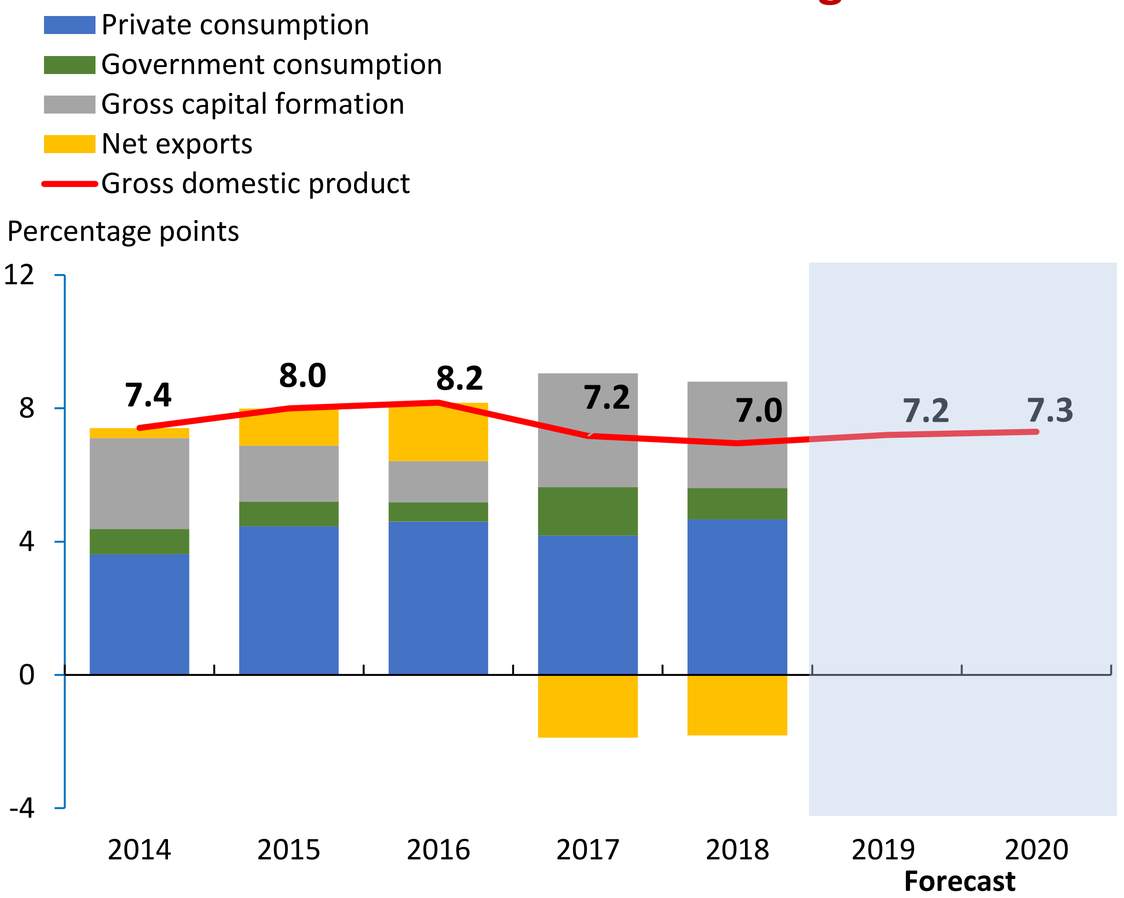
Growth of broad money, total social financing, bank loans, and shadow banking



Sources: People's Bank of China; ADB estimates.

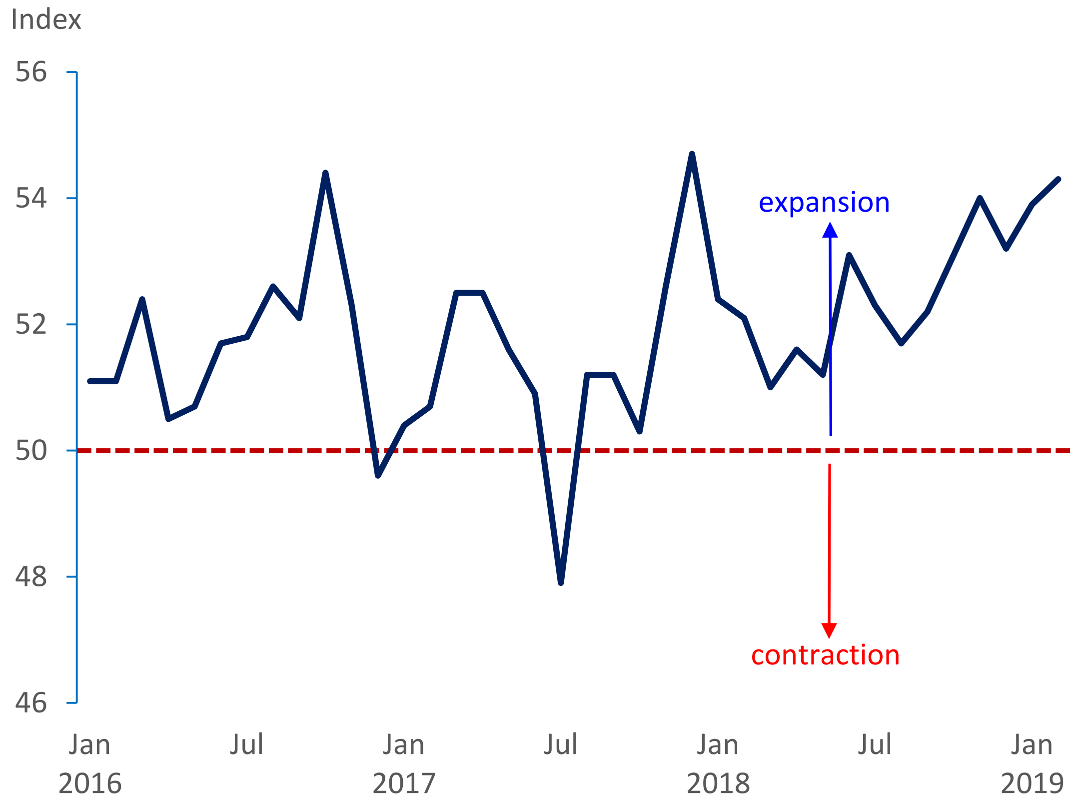
In India, domestic demand remains strong and will be supported by policy easing going forward

Demand-side contribution to growth



Years are in fiscal years which cover the period 1 April to 30 March..
Source: *Asian Development Outlook database*.

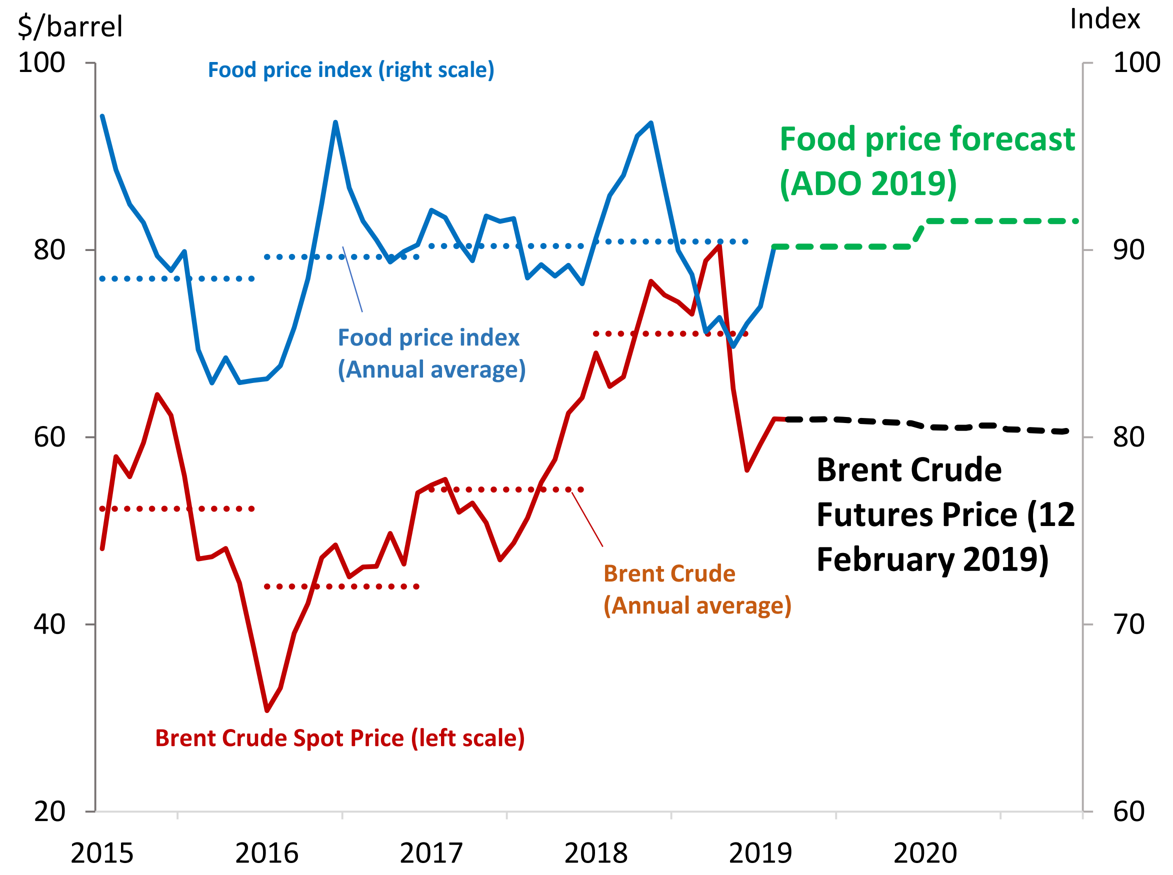
Purchasing manager's index, Manufacturing



Source: Bloomberg (accessed 6 March 2019).

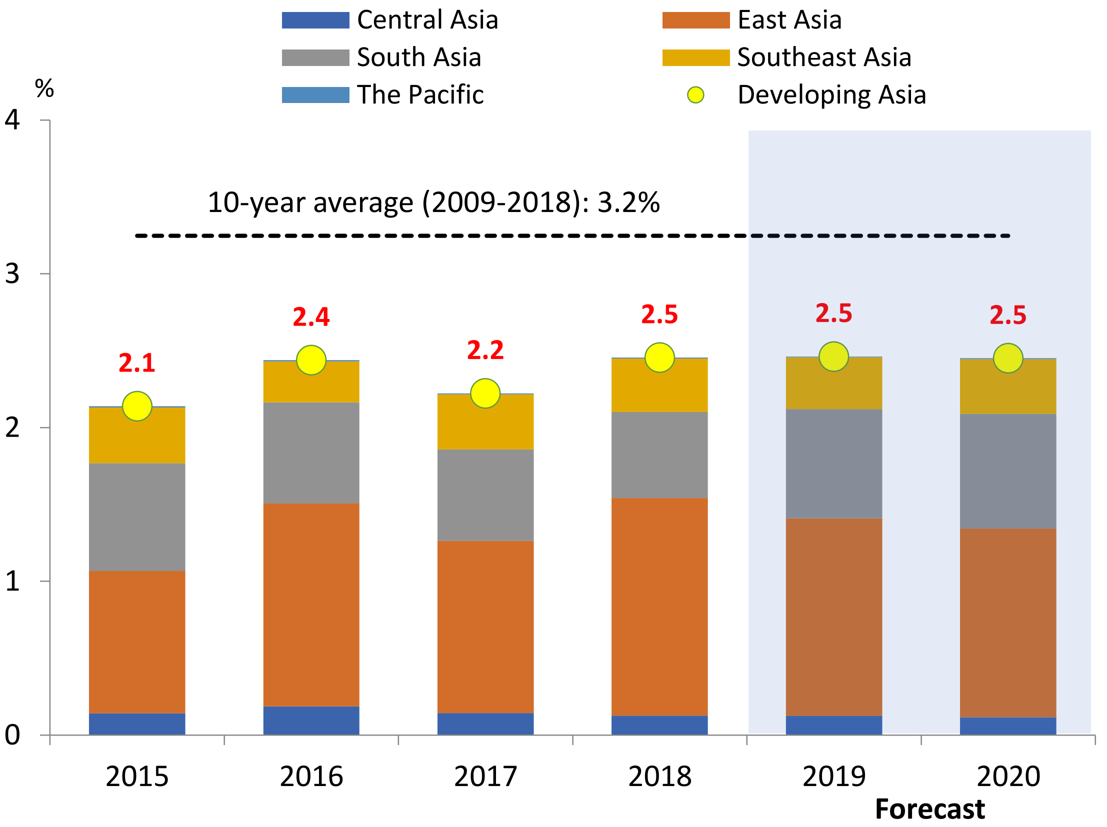
Stable food and fuel prices to keep inflation in check

Brent crude and food price



Source: Bloomberg.

Inflation and sub-regional contributions, developing Asia



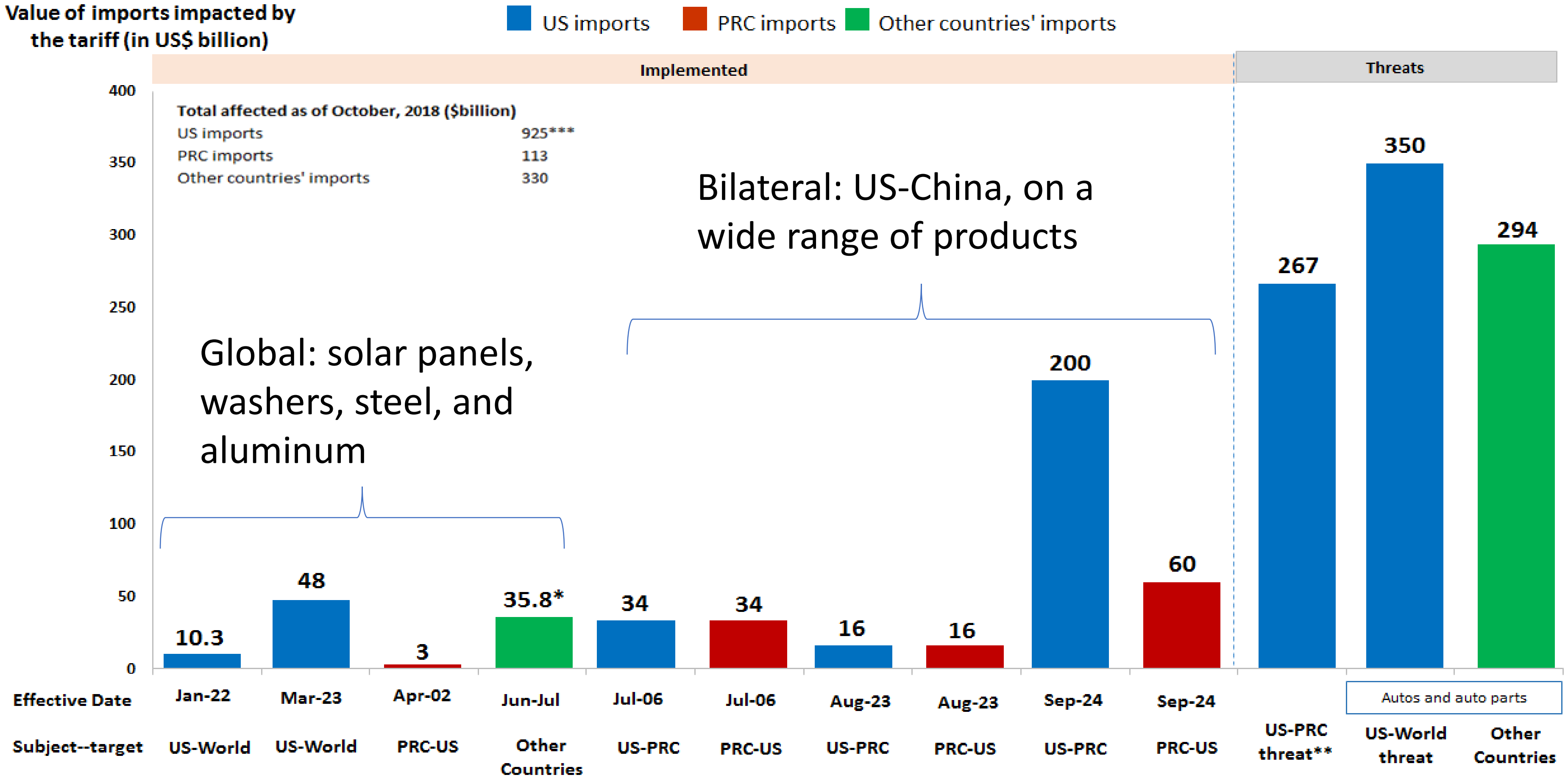
Source: *Asian Development Outlook 2019* database.

Risks remain tilted to the downside

- The greatest risk centers on prolonged US-PRC trade tensions, which heighten uncertainty
- Growth in the advanced economies and the PRC may slow by more than expected
- Rapid Fed hike less likely, but risk of financial volatility remains
- Disasters triggered by natural hazards as growing medium-term risks for developing Asia

The Trade Conflict and its Implications

The trade conflict escalated and became more bilateral in late 2018…

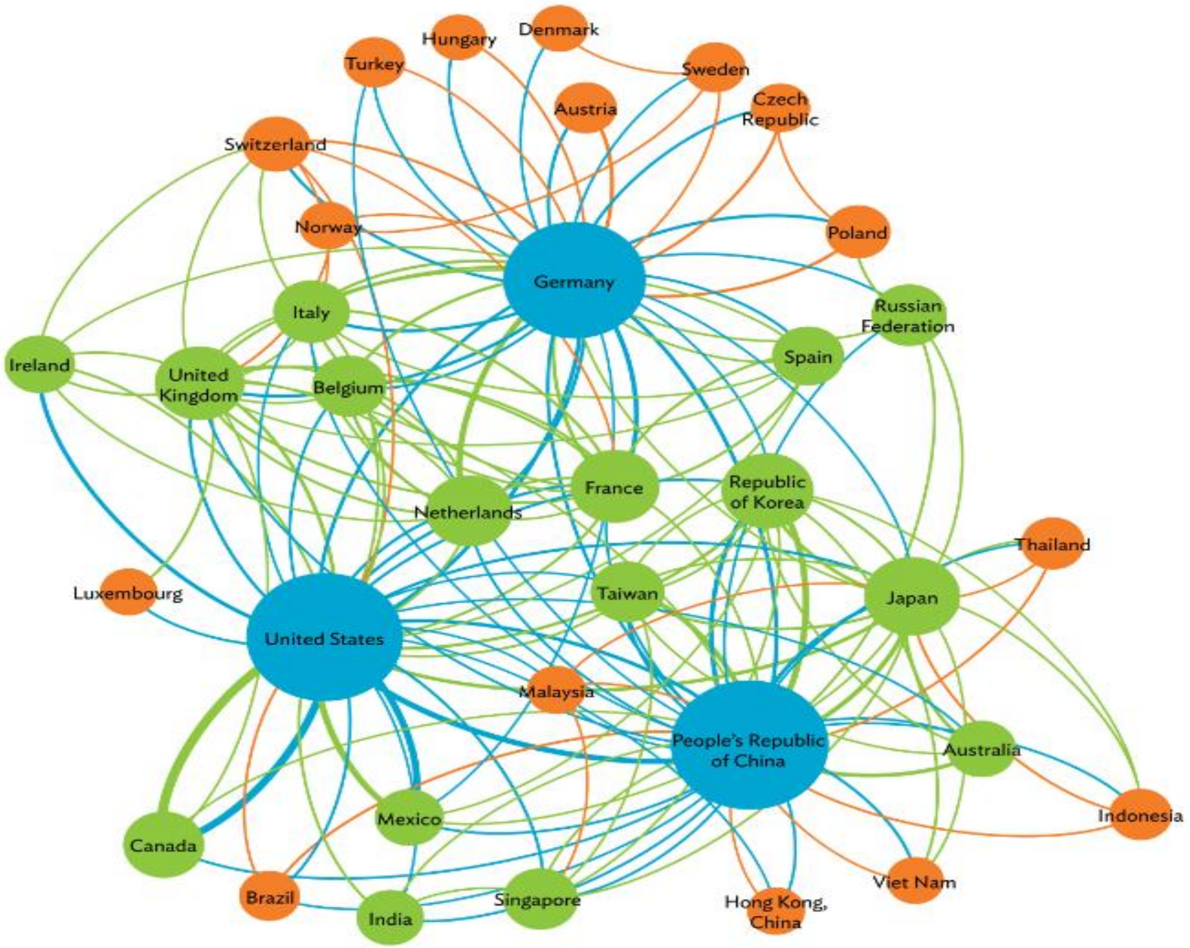


PRC = People's Republic of China, US = United States,

Note: *The $35.8 billion in retaliatory tariffs against US steel and aluminum tariffs were by Canada ($16.6 billion), India ($10.6 billion), the European Union (EU) ($3.2 billion), Mexico ($3 billion), Turkey ($2.31 billion), and the Russia Federation ($87.6 million). It excludes pending cases filed by EU ($4.1 billion) and Japan ($1.9 billion) via the World Trade Organization dispute settlement mechanism. **The PRC has so far retaliated tit for tat. Continued tit for tat would require retaliation by $17 billion. The PRC has not yet announced a list, but such tariffs are assumed under the bilateral escalation scenario.

***The $925 billion in total affected US imports as of October 2018 includes all US implemented and threatened tariffs against PRC and other countries.

…which is worrisome, because the PRC and the US serve as important hubs in global value chains.



- The US and PRC are two of the three global manufacturing hubs for global value chains.
- An escalated trade war between the two can potentially disrupt the existing network of global value chains, which could reduce global production and trade activity.

Note: Chart shows the top 35 countries in MRIOT in terms of GVC participation. Node size is based on GVC participation, measured by the sum of backward and forward participation. Blue nodes are the top 3 countries in terms of GVC participation; green nodes, the next 16; and orange, the following 16. Line thickness indicates the size of bilateral intermediate goods exports, where lines are only shown when these exports exceed $10 billion. Line color is based on color of source node.
Source: Authors' calculations.

Methodology

Objective

- Evaluate the global, regional, country- and sector-specific impacts of the current trade conflict

Channels

- Quantify the **direct impact of tariffs**, at the product level
- Examine **indirect impact via production linkages**, using international input-output data and models
- Allow for possible **trade redirection** toward suppliers not hit by tariffs

Scenarios

- Examine impact of **current scenario**, which includes all implemented measures as of March 2019; a **bilateral escalation scenario** where 25% tariffs are imposed on *all* US-PRC trade; and **"worse-case" scenario** that adds a 25% tariff on *all* autos/parts

Data

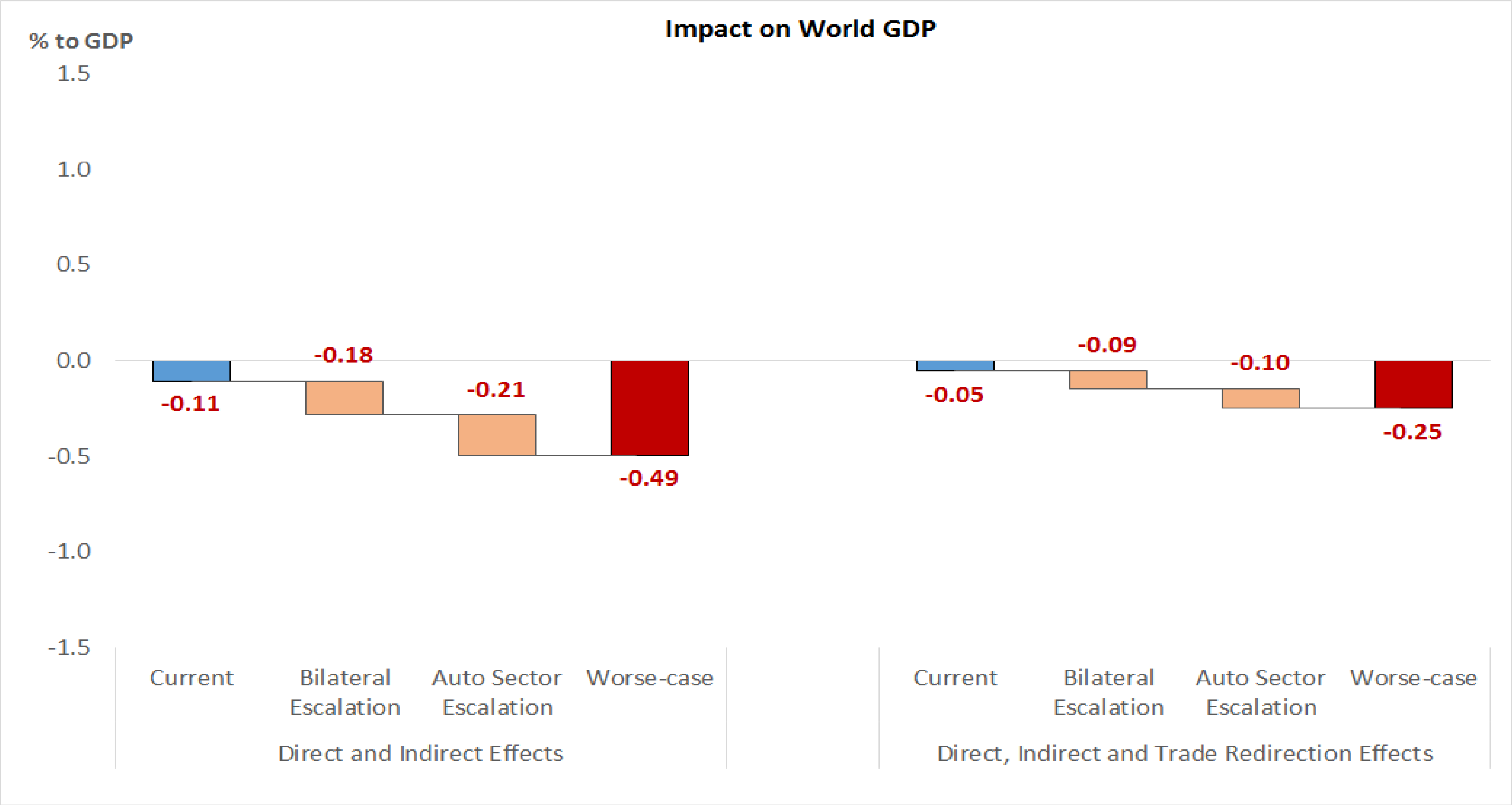
- ADB Multi-Regional Input-Output Table (2017); covers whole economy (35 sectors) in 62 countries plus one that captures "rest of the world"; 90% of world GDP, 24 economies in developing Asia*

ADB

Sectoral impacts for 40 countries and regions at https://data.adb.org/dataset/trade-conflict-impact

* Bangladesh, Bhutan, Brunei Darussalam, Cambodia, the People's Republic of China, Fiji, Hong Kong, China, India, Indonesia, Kazakhstan, Republic of Korea, Kyrgyz Republic, Lao People's Democratic Republic, Malaysia, Maldives, Mongolia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taipei,China, Thailand and Viet Nam

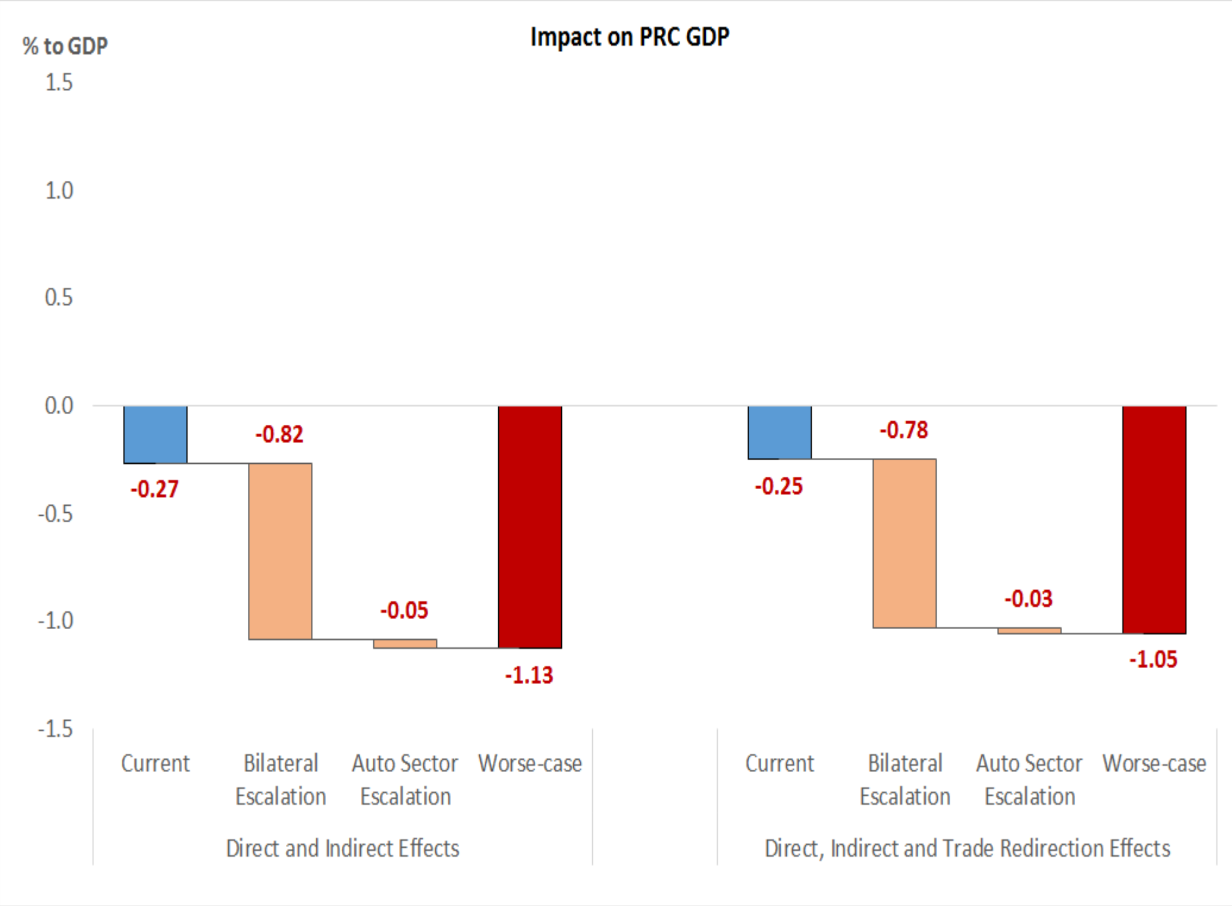
Global effects: small impact under current scenario, but escalation presents substantial risks

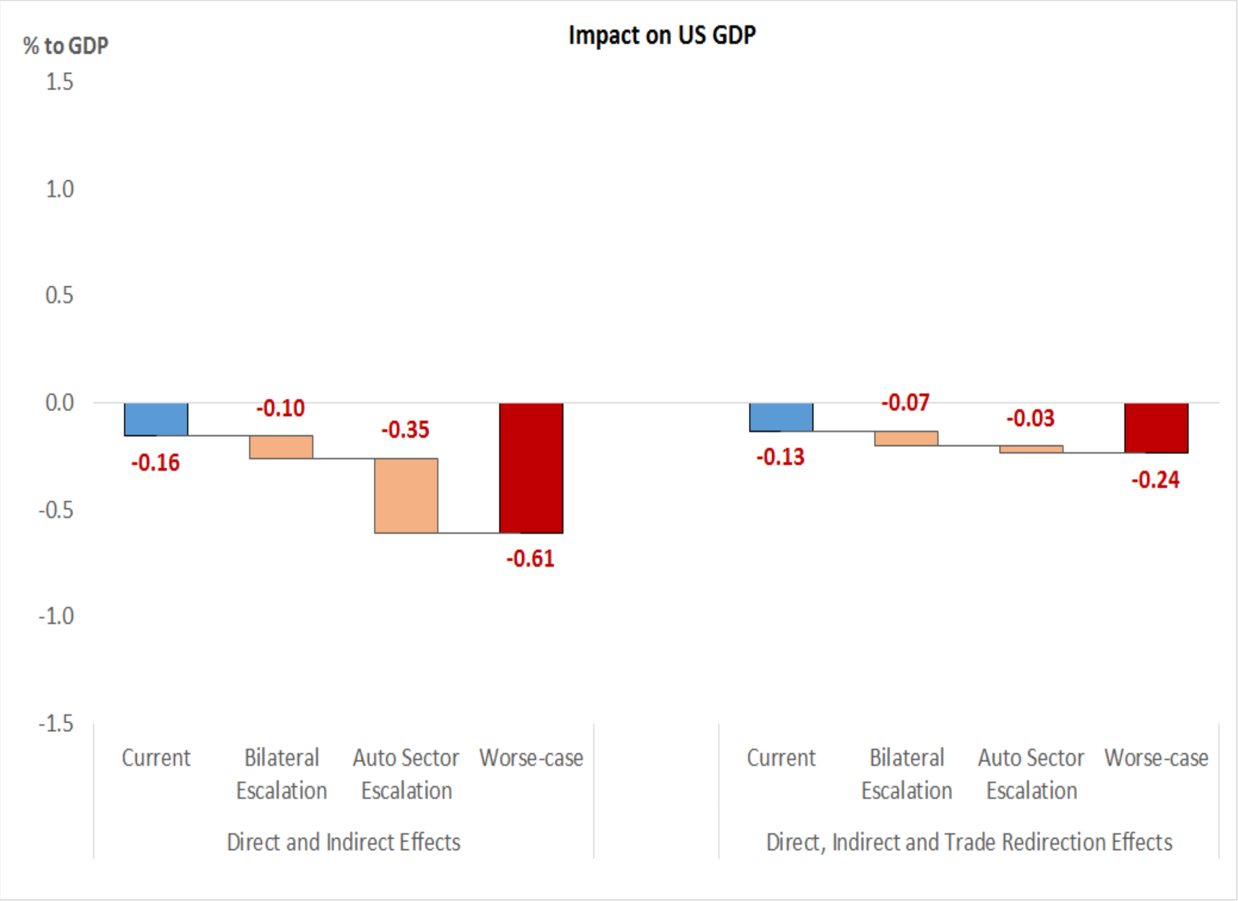


Note: The blue bars represent the estimated GDP impact under the current scenario. The subsequent two peach bars represent the incremental impact brought about by the US-PRC trade threats (25% on all bilateral exports) and the auto sector (tariffs on all auto and auto parts traded globally) escalation respectively. The red bars represent the sum of all the impacts under the worse-case scenario.

Source: Staff calculations.

The PRC and the US are negatively affected in each scenario, with a larger impact on the PRC





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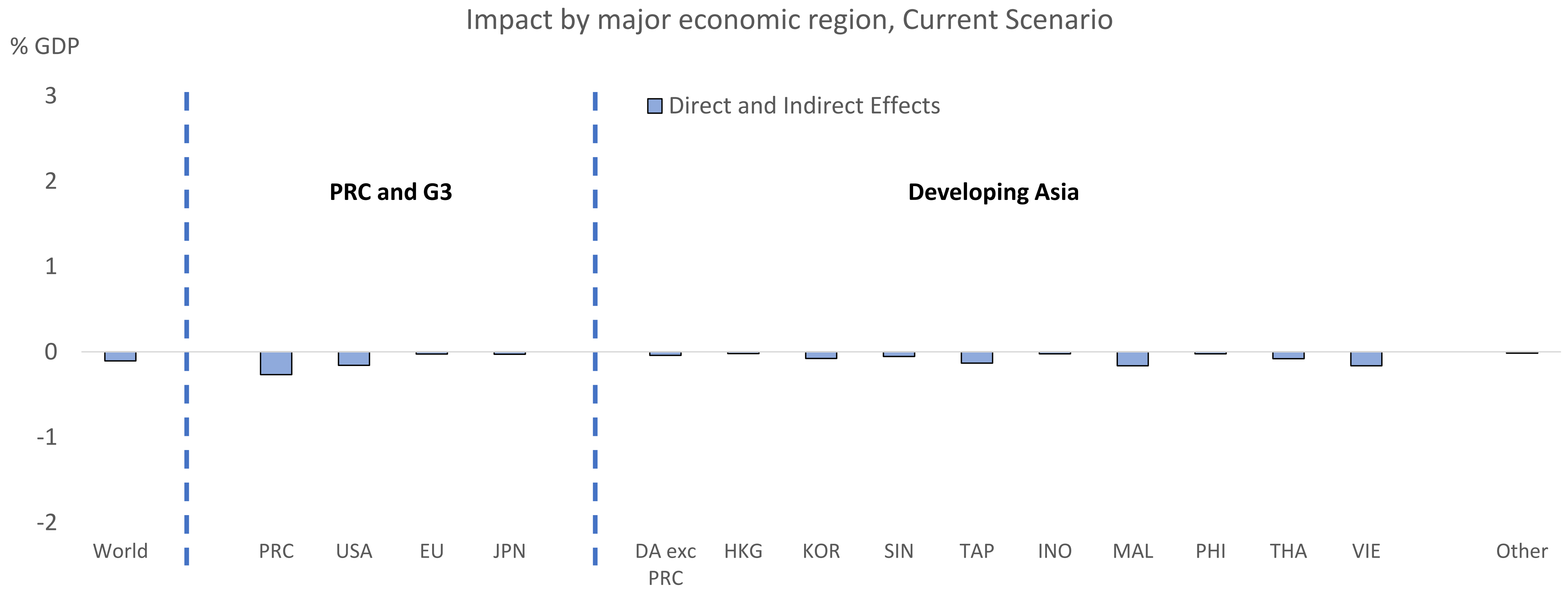
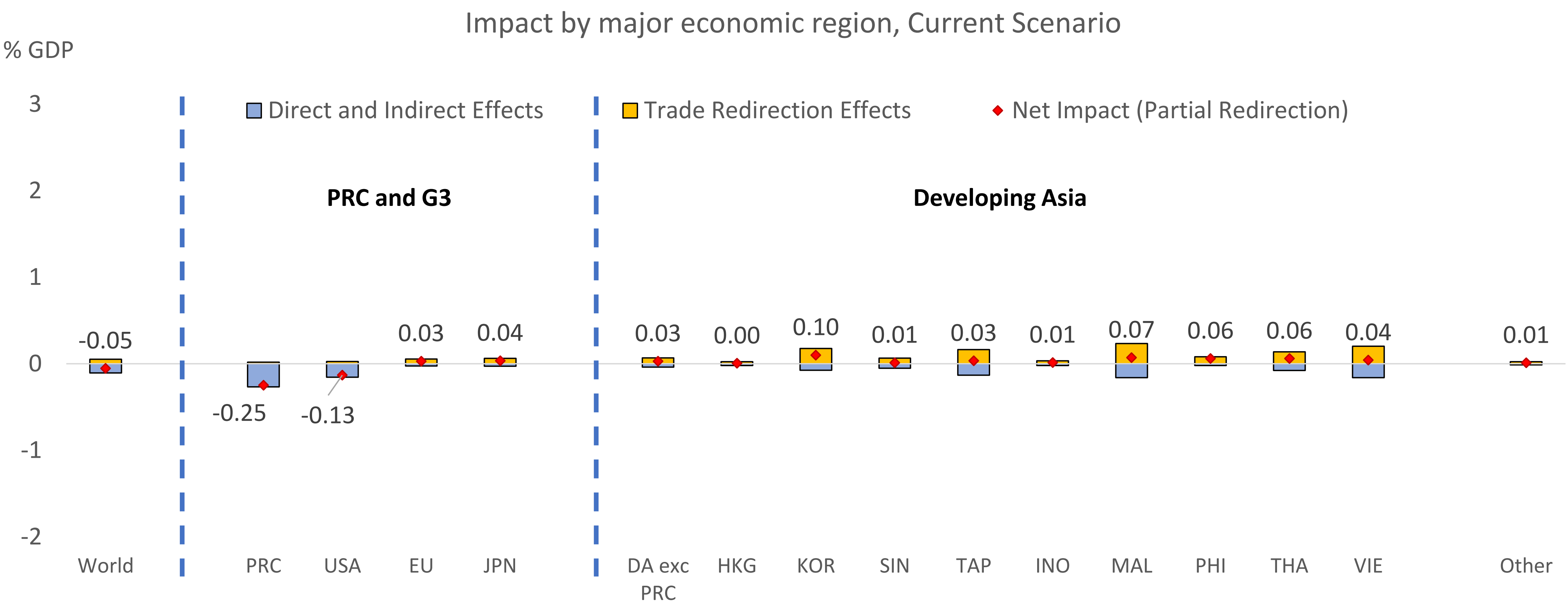
Impact on others: effects through direct (tariff) and indirect (prod. linkages) channels is negative and small…



Note: DA = developing Asia; PRC = People's Republic of China; G3 = European Union, Japan, and United States; EU = European Union; HKG = Hong Kong, China; INO = Indonesia; JPN = Japan; KOR = the Republic of Korea; MAL = Malaysia; PHI = the Philippines; SIN = Singapore; TAP = Taipei,China; THA = Thailand; USA = United States of America; VIE = Viet Nam. Other here refers to Bangladesh, Brunei Darussalam, Bhutan, Cambodia, Fiji, Kazakhstan, the Kyrgyz Republic, Lao People's Democratic Republic, the Maldives, Mongolia, Nepal, Pakistan, and, Sri Lanka.

Source: Staff calculations.

…and can *potentially* be offset by redirection of trade and production.



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Source: Staff calculations.

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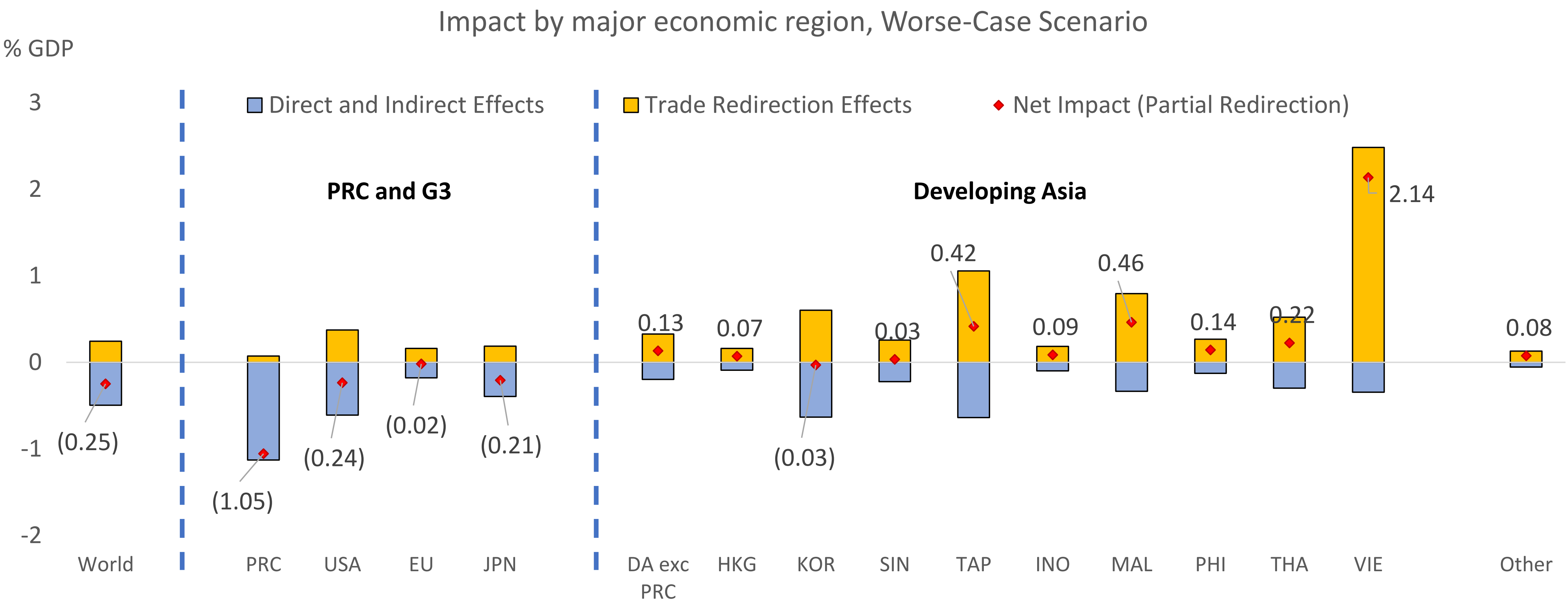
Under the worse-case scenario the patterns are similar, but the magnitudes are larger.



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Source: Staff calculations.

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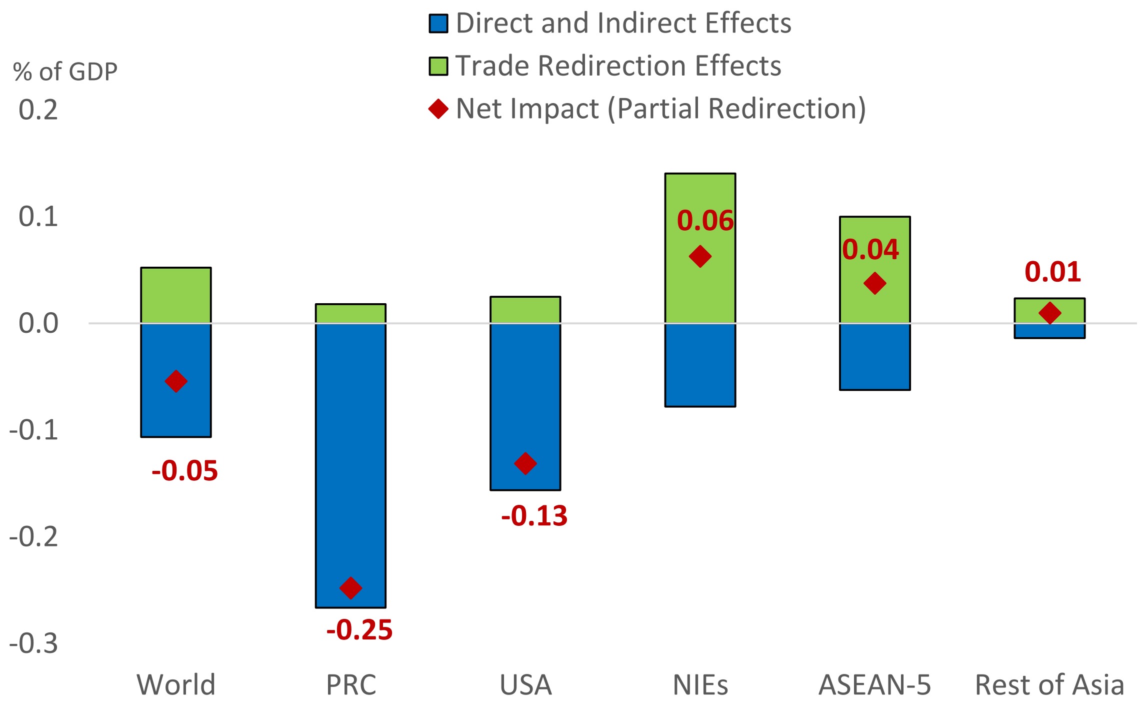
Under the current scenario, early signs of redirection of production facilities to the rest of developing Asia.

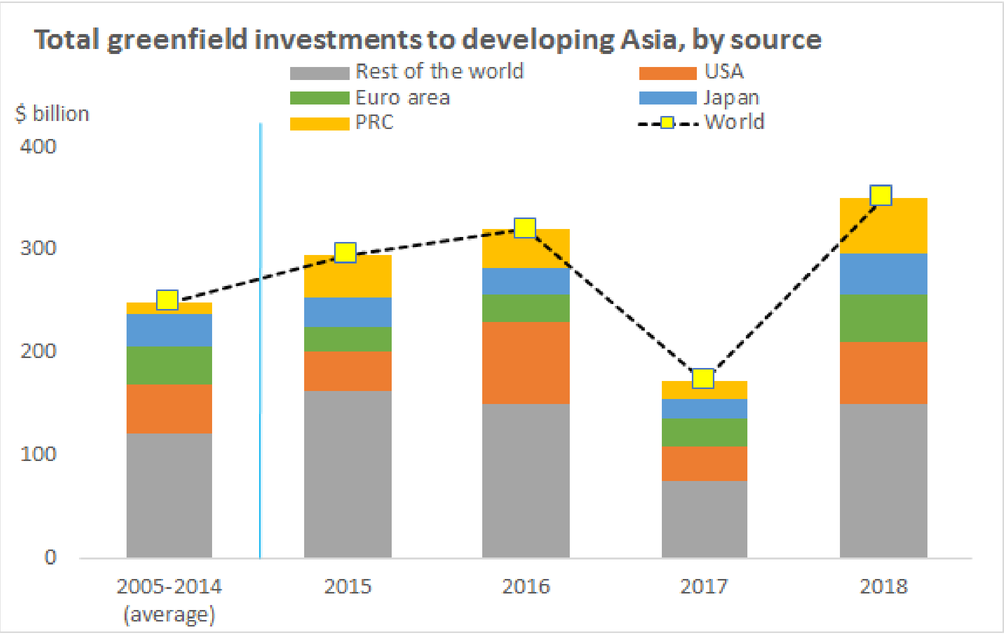
GDP impact of trade conflict by economic region



NIEs = newly industrialized economies of Hong Kong, China; Republic of Korea; Singapore; and Taipei,China. **ASEAN-5** = Indonesia, Malaysia, Philippines, Thailand, and Viet Nam. **Rest of Asia** = Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, India, Lao People's Democratic Republic, Maldives, Mongolia, Pakistan, and Sri Lanka.

Source: ADB Staff estimates.

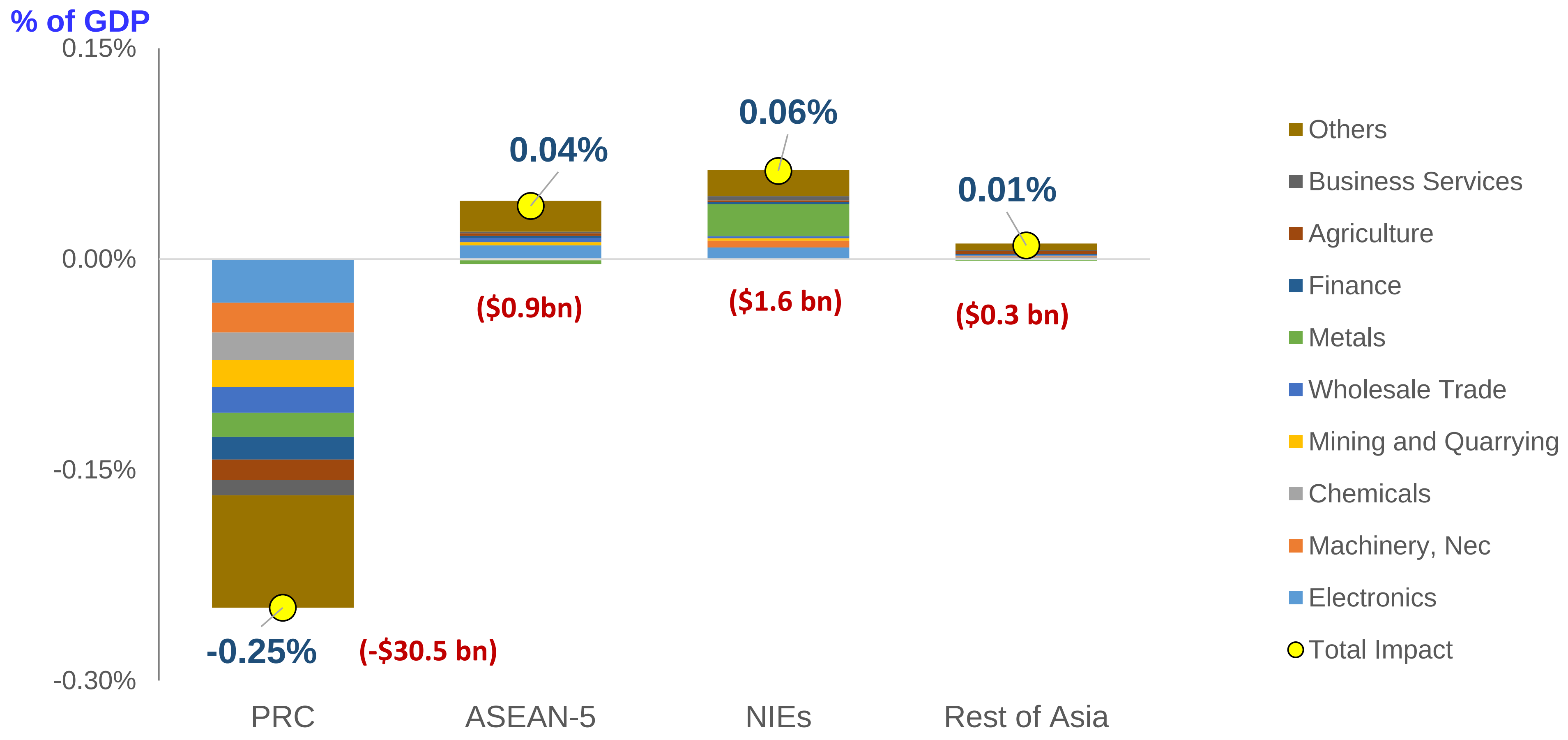
FDI inflows to developing Asia, by source



Source: Staff calculations using data from fDi Markets (available: https://www.fdimarkets.com/).

Diverse sectors affected, but electronics and machinery the most.

GDP impact of trade conflict, by sector under current tariffs



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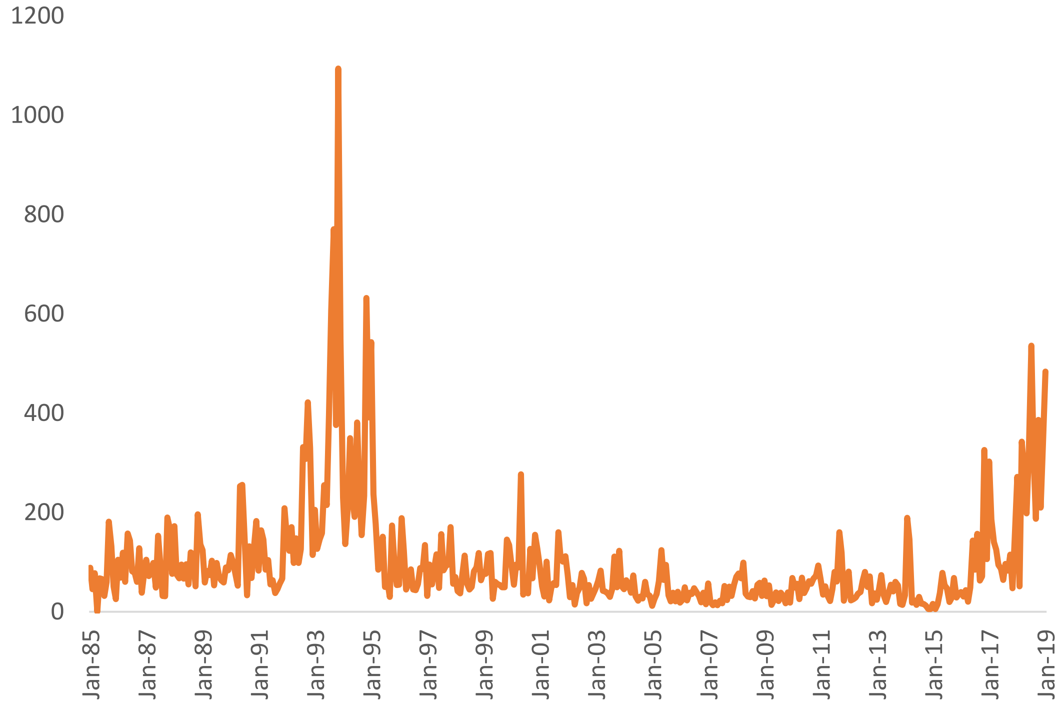
Source: ADB Staff estimates.

US Trade Policy Uncertainty (TPU) has increased over the past 2 years…

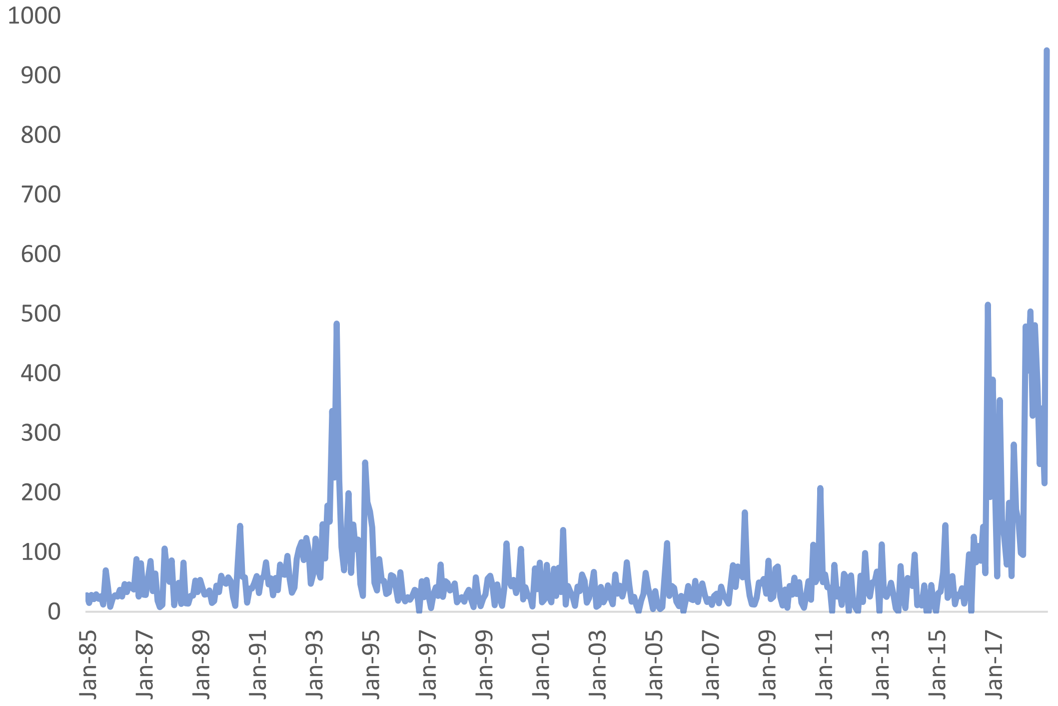
US Trade Policy Uncertainty, 1985-2019



Note: TPU is a news-based indicator that measures the degree of uncertainty about trade policy. For more information on how the indicator is constructed see Baker, Bloom, and Davis (2016).
Source: www.policyuncertainty.com.

…and US TPU vis-à-vis Asia is at an all-time high.

US TPU vis-à-vis Asia, 1985-2019

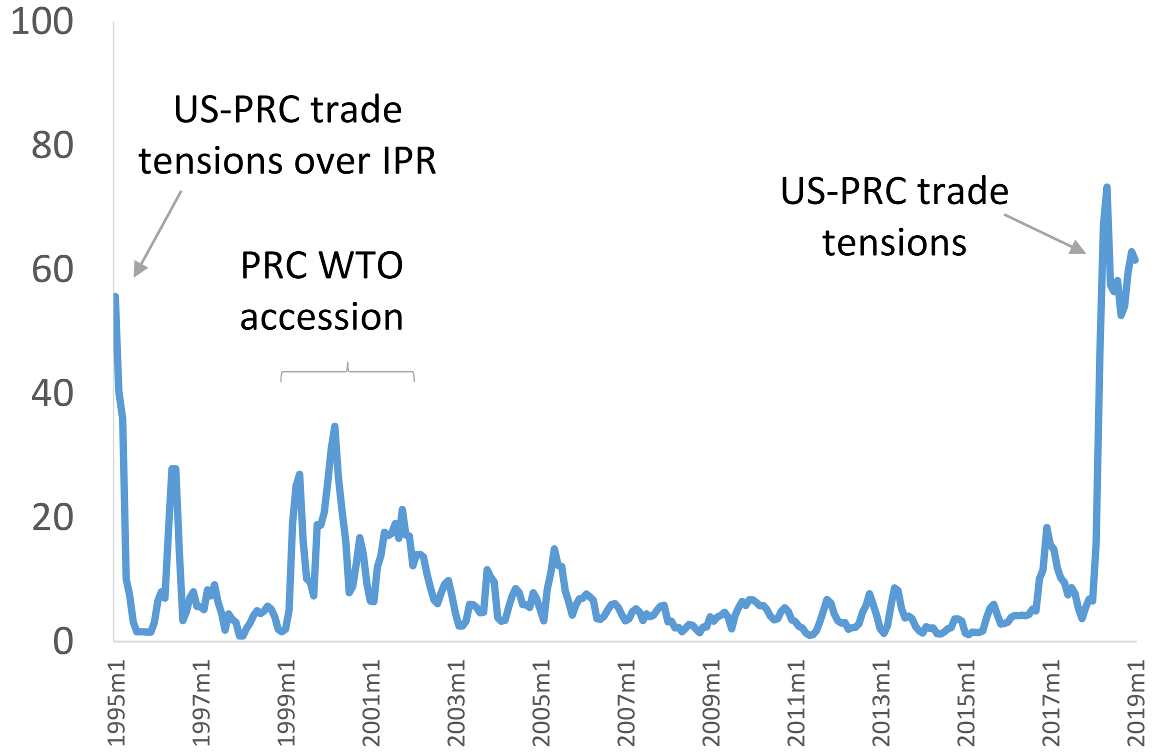


Note: A similar algorithm to Baker, Bloom, and Davis (2016) is used to construct US TPU vis-à-vis Asia. See Abiad, et al. (forthcoming)
Source: ADB staff estimates.

Trade policy uncertainty in the PRC is also at all-time highs…

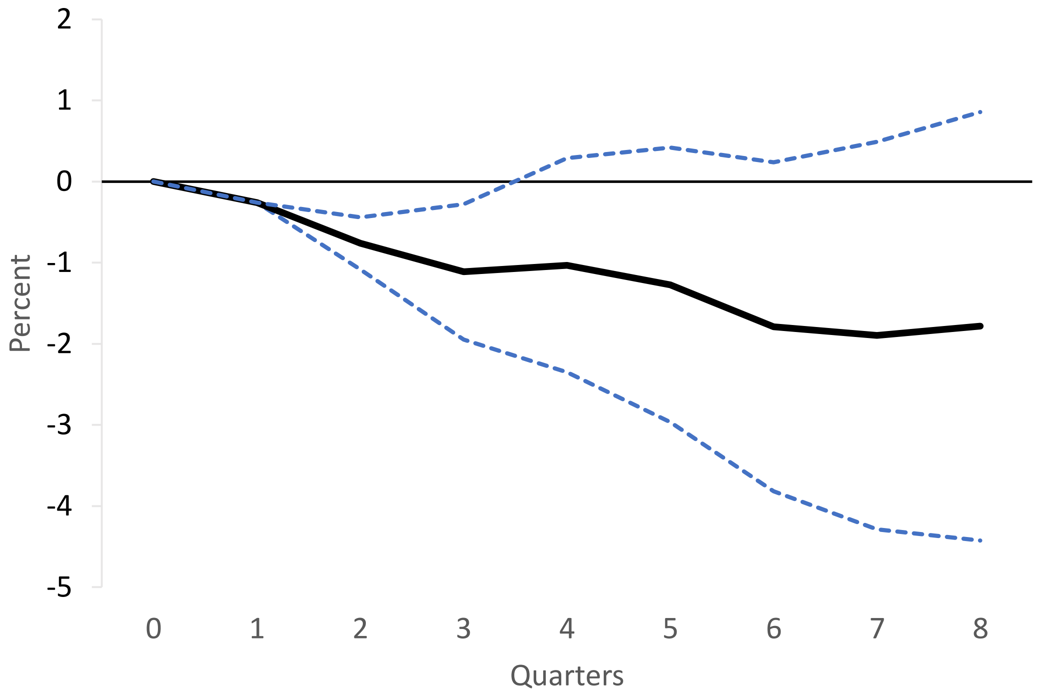
…which can have adverse effects on investment.

PRC: Trade Policy Uncertainty, 1995-2019



Source: ADB staff estimates, based on methodology of Hlatshwayo (2018).

PRC: Estimated Effect of TPU Shocks on Investment



Note: Chart shows response of investment to TPU shocks, based on a VAR and using the local projections method of Jorda (2005). See Abiad et al. (forthcoming).
Source: ADB staff estimates.

Theme Chapter:

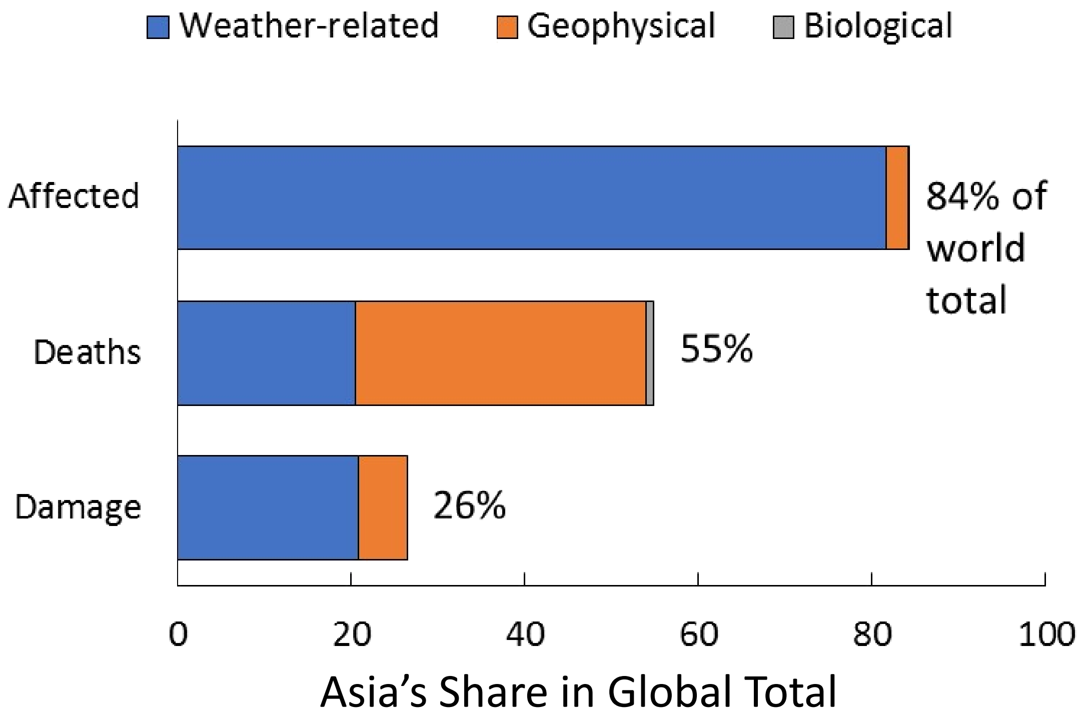
Strengthening Disaster Resilience

Asia is particularly susceptible to disaster risk

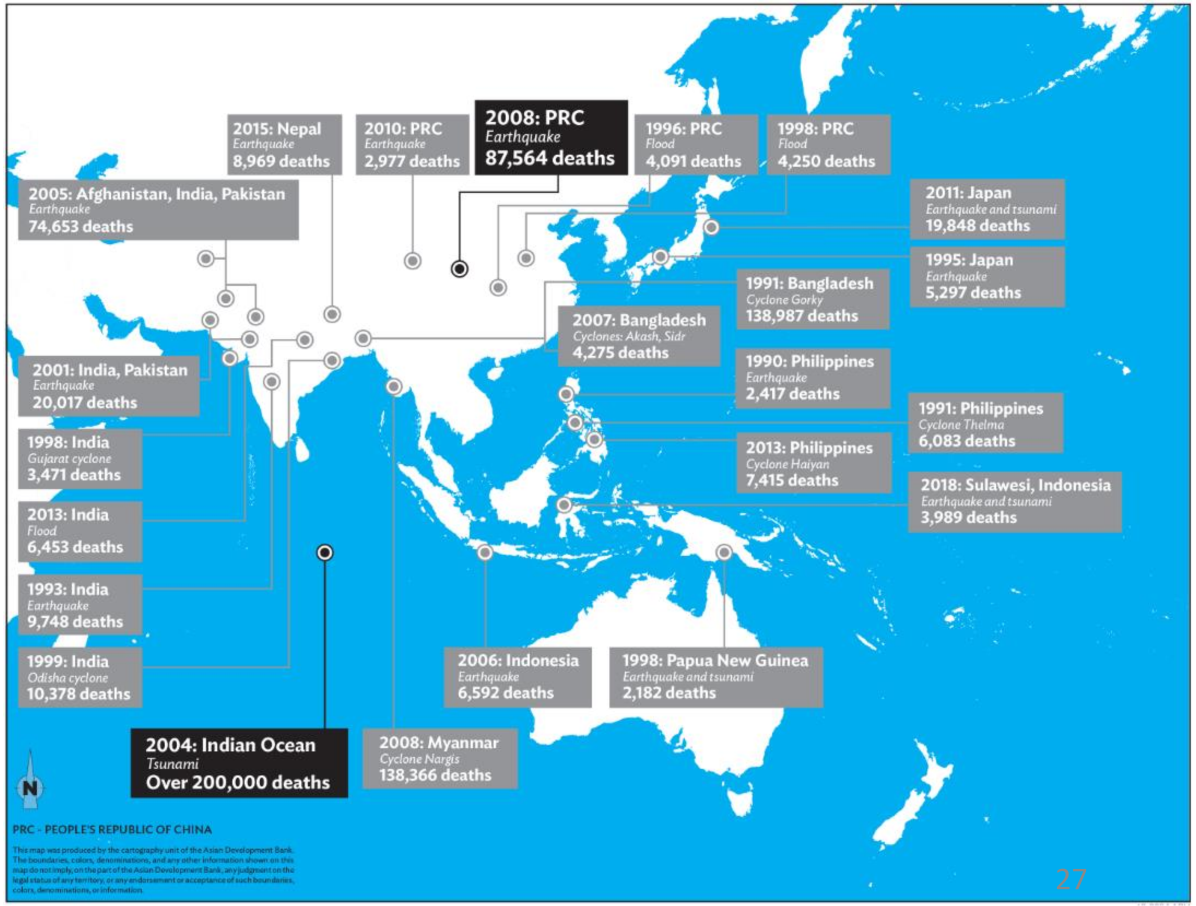
Four in five people affected by natural hazards live in Asia…

…and disasters from natural hazards occur across the region

Disaster impacts in developing Asia by type (2000–2018)



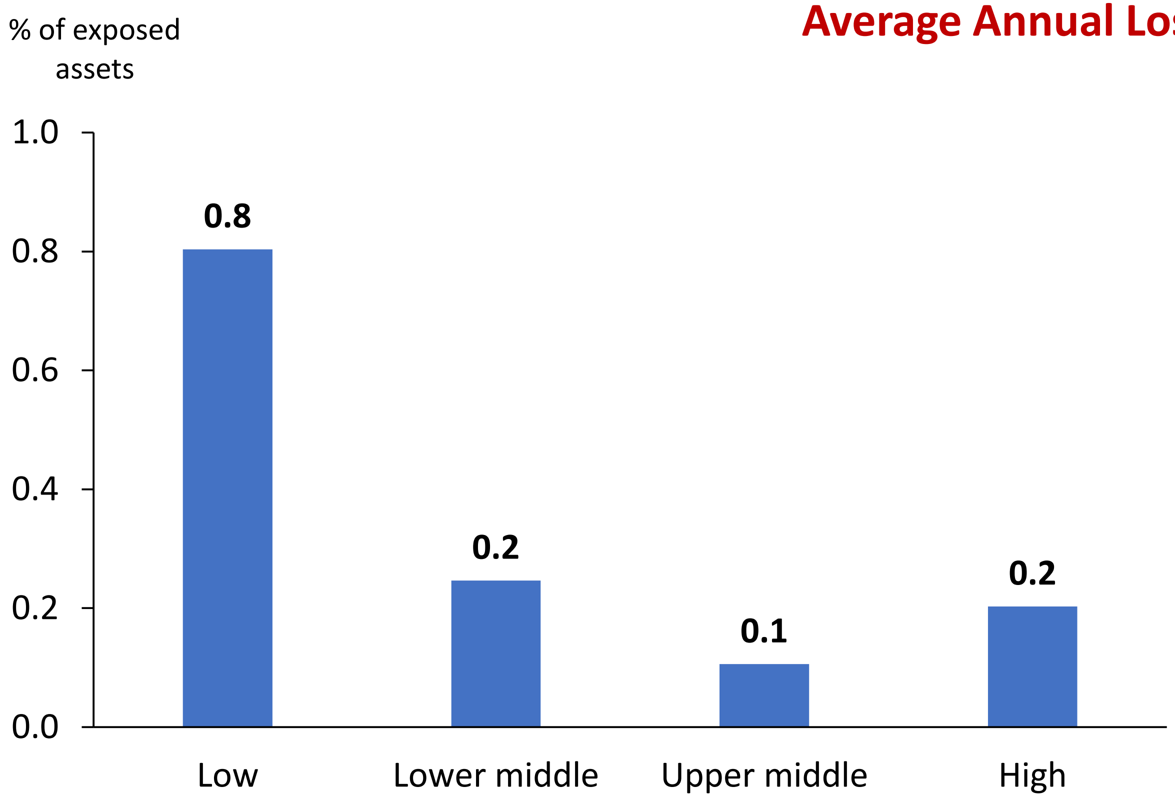
Highest death tolls from disasters in Asia since 1990



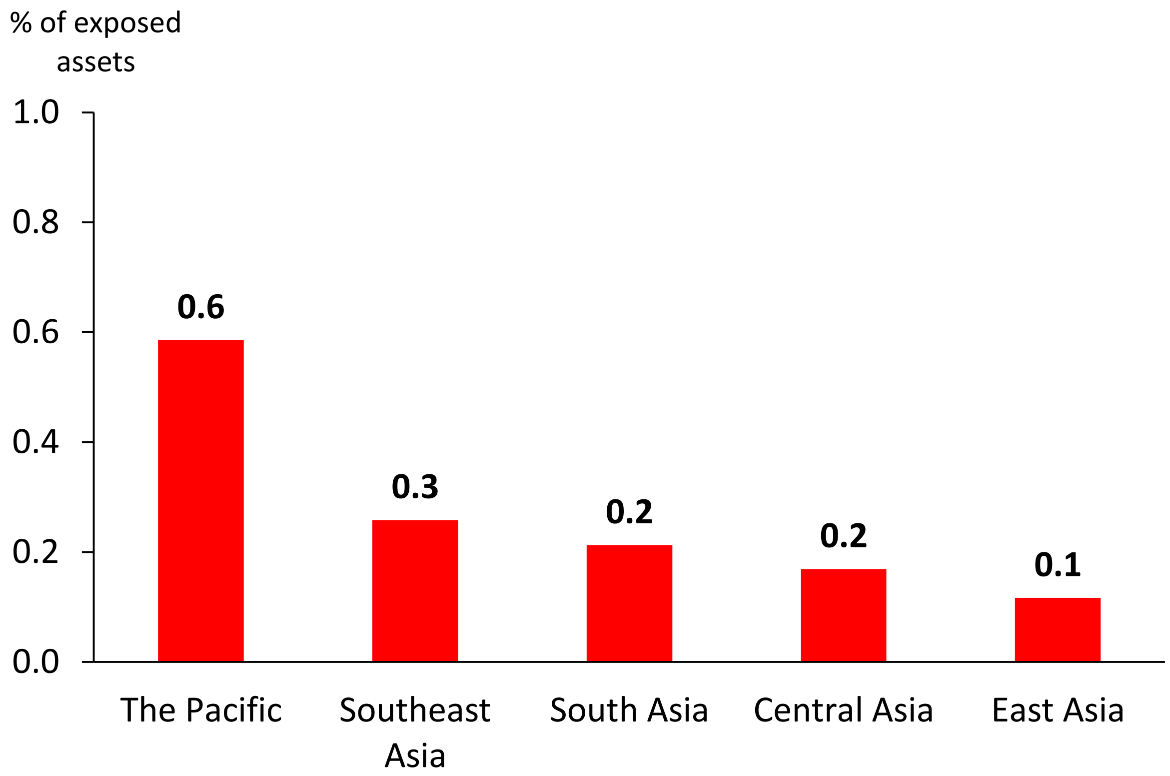
Source: EM-DAT

and disasters hit poor and small economies the hardest

Average Annual Losses in Developing Asia



By income



By region

Source: UNISDR 2015.

Disaster risks are rising because vulnerable populations are increasingly exposed to hazards…

Hazards

Exposure

Vulnerability

Direct

Mortality

Displacement

Asset damage

Indirect

Foregone economic activity

Spillovers

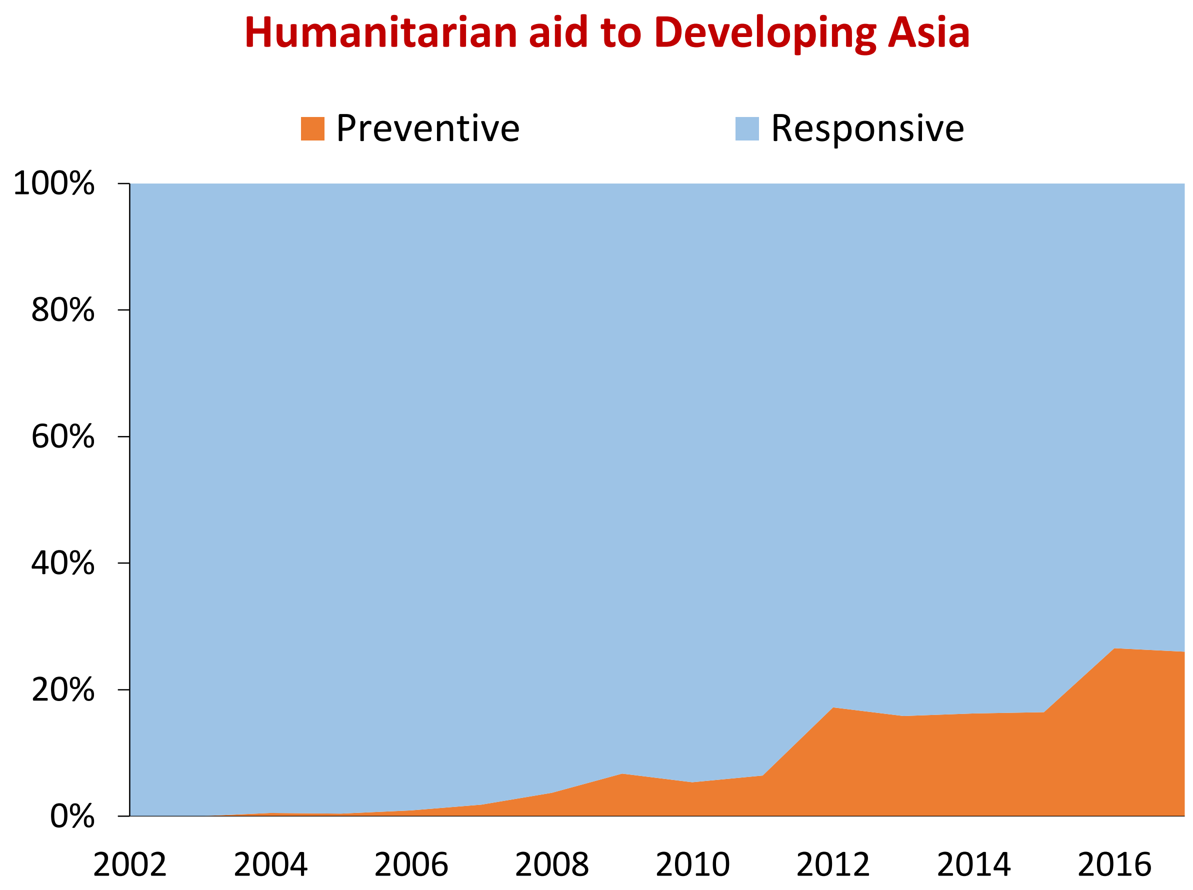
Time
- Industrial shifts
- Inter-generational

Space
- Supply chains
- Migration

…so what is needed to reduce impact is ***strengthened disaster resilience***

Three keys to strengthening disaster resilience: #1. Mainstream disaster risk reduction

- Integrate disaster resilience into development and investment plans (Sendai Framework for Disaster Risk Reduction DRR)
- Increase spending on prevention vs. response
- Focus on preventive investments that can yield multiple dividends



Source: OECD. Query Wizard for International Development Statistics.

#2. Take a risk-layered approach to disaster risk financing

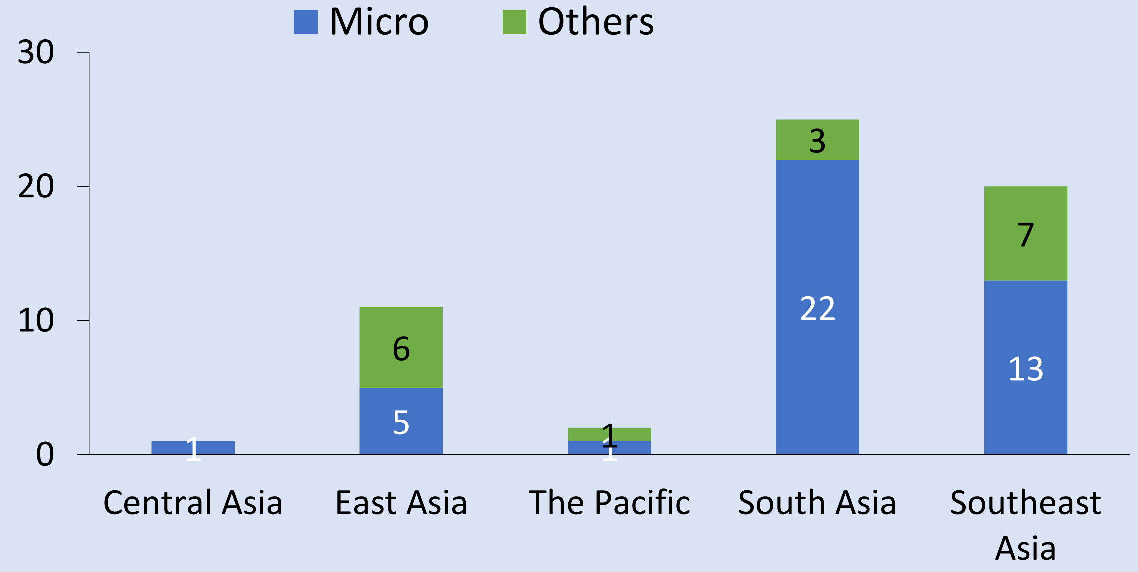
The middle layer of risk is most suited for transfer through disaster insurance…

…which is spreading across the region, but remains limited.

Layered approach to disaster risk financing

- ❑ Disaster risk cannot be eliminated entirely
- ❑ Risk retention vs. transfer

Disaster insurance programs



- ❑ Still limited: only 8% of losses are insured
- ❑ 80% of insurance programs are subsidized

Source: Surminski, Panda, and Lambert (forthcoming).

#3. Build Back Better (BBB) to enhance resilience

- BBB for a recovery that is not just complete, but superior to pre-disaster
  - Increased resilience
  - Revitalized livelihoods, economies, environment
- "Better" is Speed, Safety, Inclusiveness, Opportunity
- Speed must be balanced against the other objectives

Key Messages

- **Developing Asia's growth to moderate to 5.7% in 2019 and 5.6% in 2020 amid weaker global demand and trade tensions**
- **PRC moderation partly reflects efforts to control financial risks; India set to rebound as consumption strengthens**
- **Inflation to remain subdued at 2.5% in 2019 and 2020**
- **The primary risk still centers on the trade conflict, with uncertainty heightened by protracted negotiations**
- **Asia must strengthen its disaster resilience given growing risks posed by natural hazards**

THANK YOU

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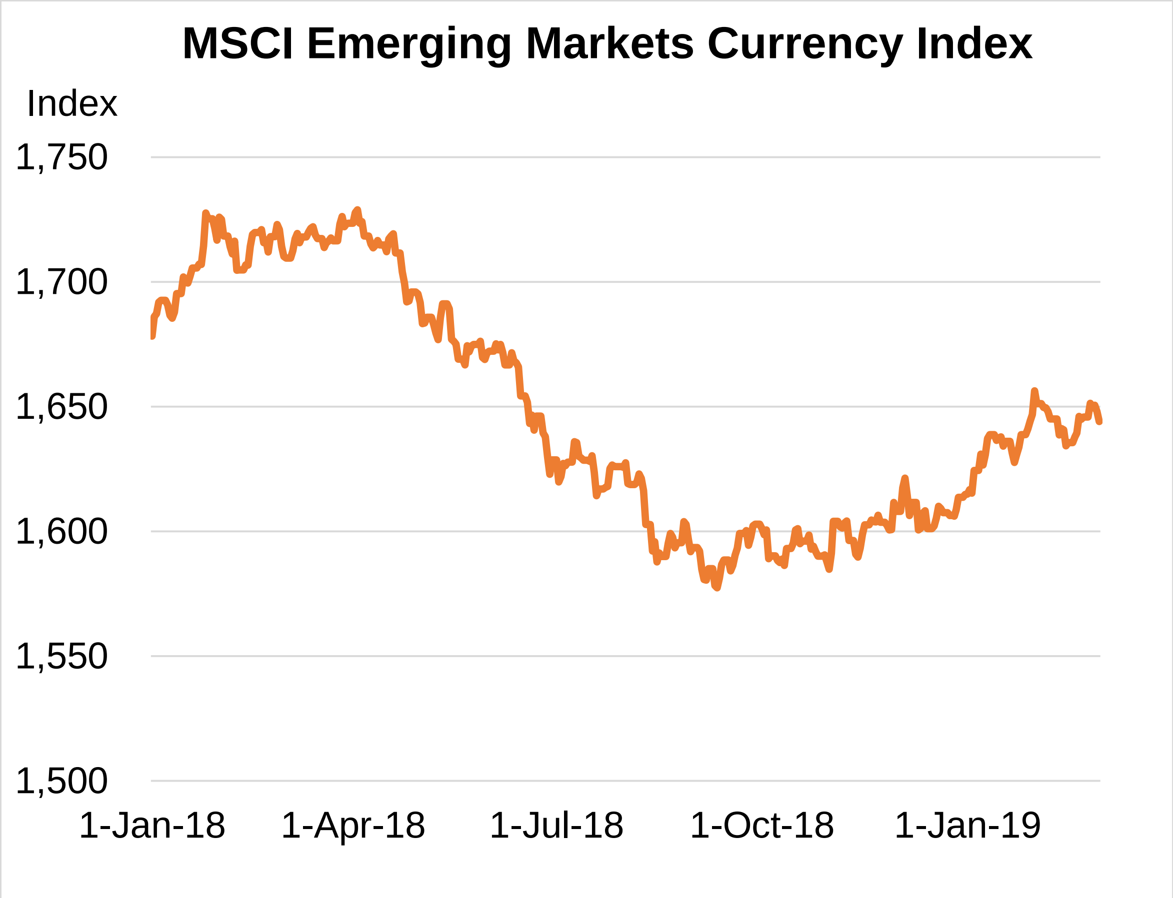
https://www.adb.org/publications/series/asian-development-outlook

Appendix Slides

On the upside, emerging-market currencies have bounced back….



MSCI = Morgan Stanley Capital International.

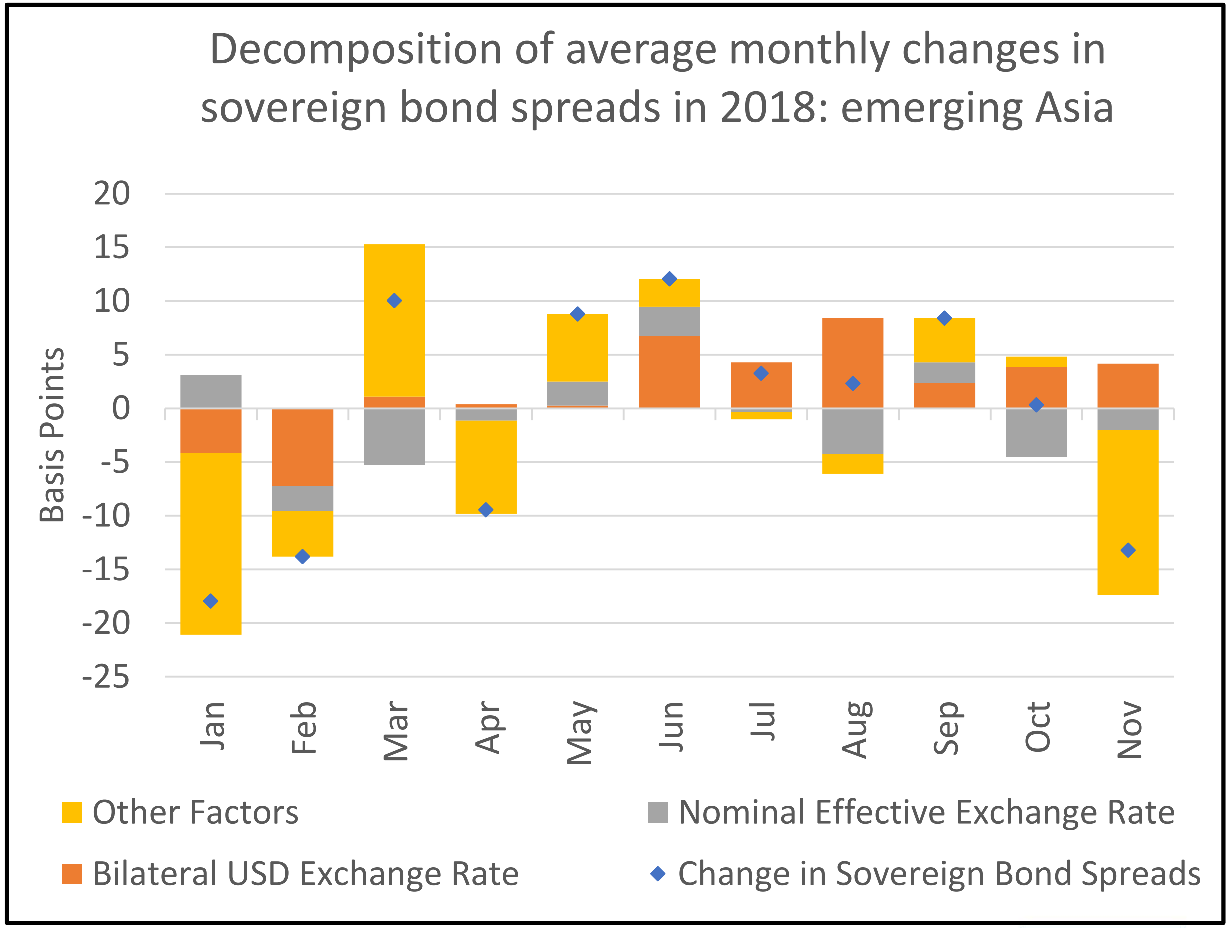
Notes: MSCI Emerging Market Currency Index measures the total return of 25 emerging market currencies relative to the US dollar where the weight of each currency is equal to its country weight in the MSCI Emerging Markets Index. Data are from 1 January 2018 to 1 March 2019.

Source: Bloomberg LP.

- Since 4Q 2018, emerging-market currencies strengthened tangibly and risk aversion receded
- Moderation of pace of US interest rates in will further boost investor confidence in emerging market
- Although potential sources of volatility remain, EM FX markets are likely to be more stable in 2019

Exchange rates have implications through financial and trade channels

- Empirical analysis of selected emerging Asian economies shows that **exchange rates affect sovereign credit risk premiums** through two competing channels.
  - A 1% bilateral depreciation against the US dollar widens sovereign bond spreads by approx. 4.2 bps points – dominated by financial channel
  - A 1% depreciation of the nominal effective exchange rate narrows local currency spreads by approximately 7.2 bps – dominated by trade channel
- Strengthening domestic financial resilience with an **appropriate policy mix and regional policy dialogue** can dampen the impact of external funding conditions on domestic financial markets.

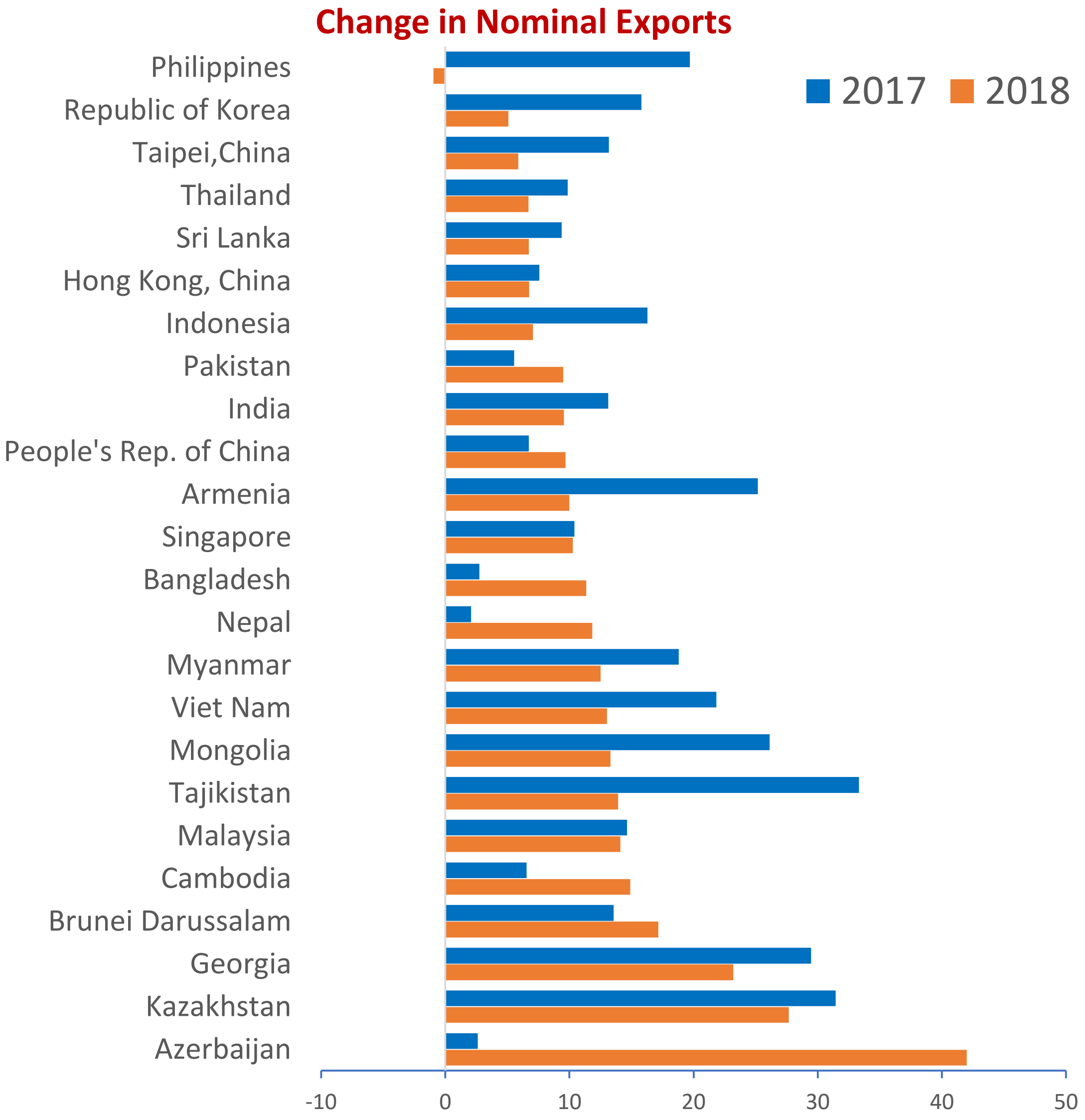


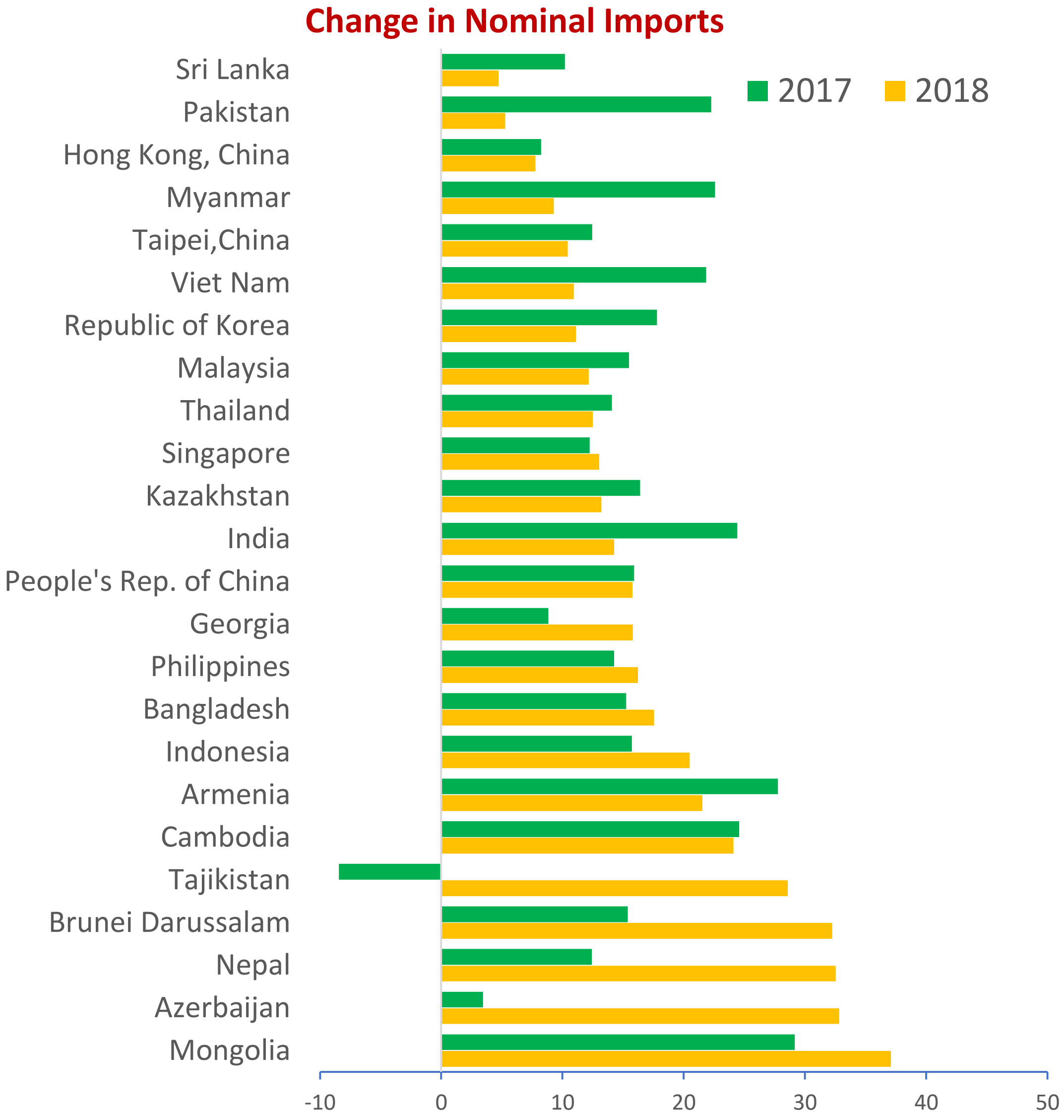
Notes: ADB computation based on Lee, Rosenkranz, and Pham (2019). Regression analysis is based on 8 selected emerging Asian economies—the People's Republic of China, India, Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand— using monthly data from December 2006 to August 2018.
Data source: Bank for International Settlements; Bloomberg; Haver Analytics; and International Monetary Fund (accessed January 2019)

ADB

Option 1

…as external demand slows.

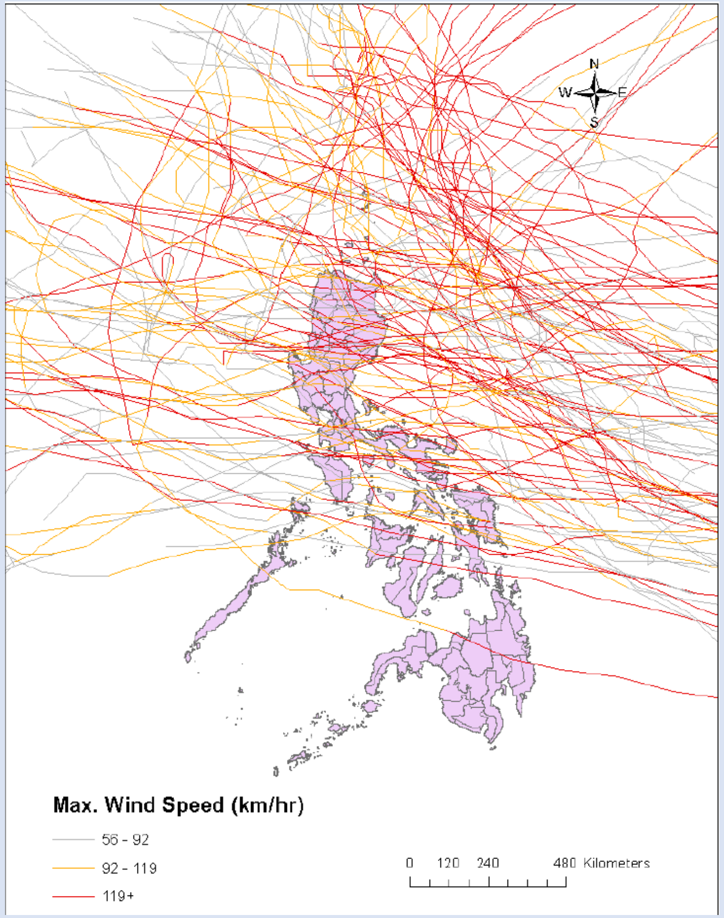




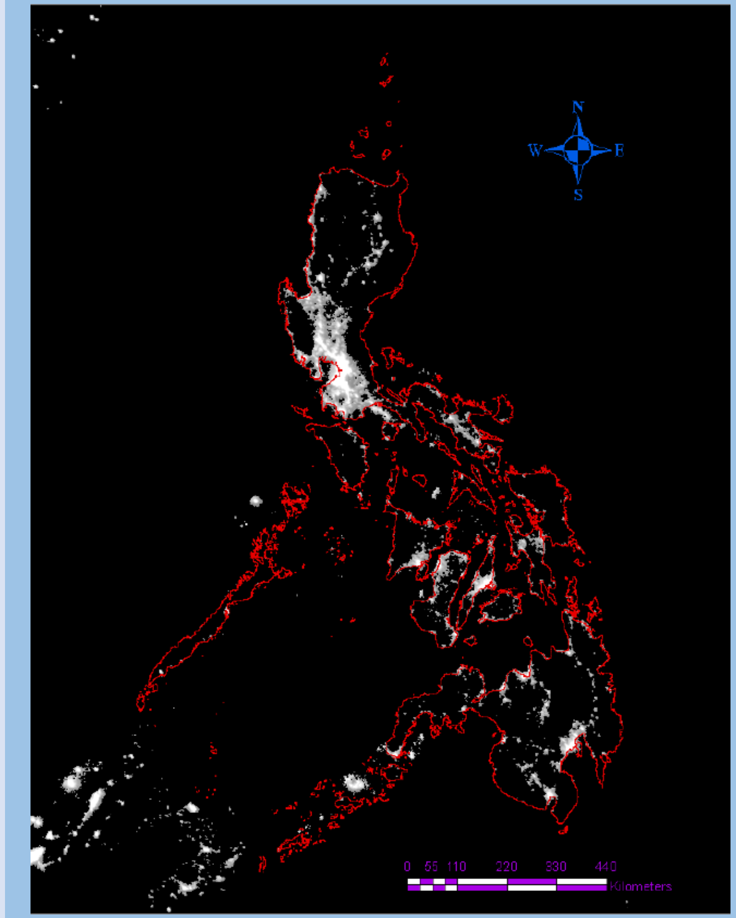
Sources: CEIC Data Company and Haver Analytics (accessed 11 March 2019).

Immediate losses on local economic activity can be substantial

Tropical Storms, 1987–2013

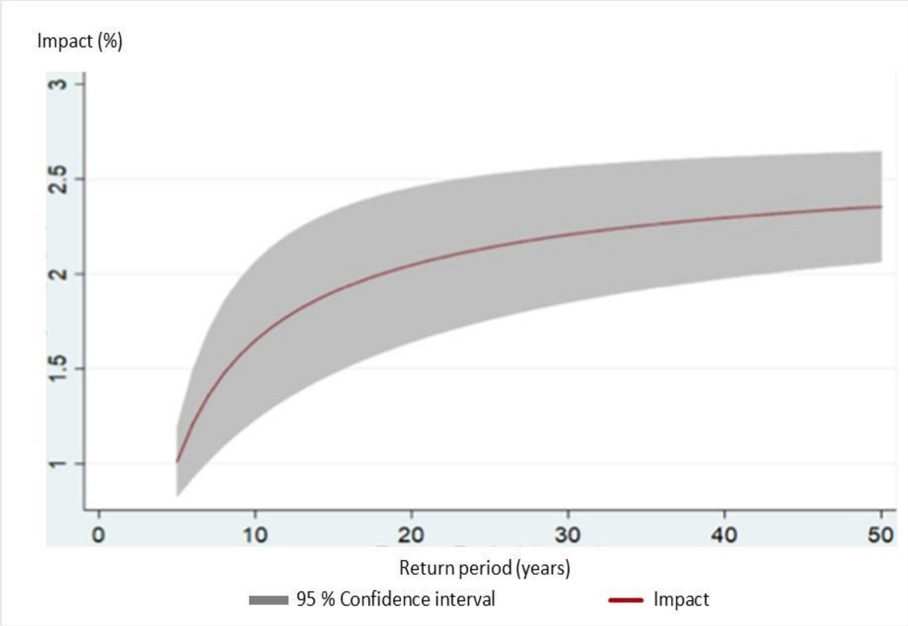


Night light intensity Philippines, 2013



- Local economic impacts 1.7%, up to 23%
- Localized and short-lived

N-year return period national losses



Source: Strobl, forthcoming