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Can the United States "Decouple" from China?

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Conscious decoupling or crash out?

- What is decoupling? What would it look like?
- Which goods does the US trade with China?
- US-China trade war – what have we done?
- Do tech supply chains make decoupling difficult?
- Has US and Chinese policy already promoted decoupling?

Are US-China relations the 1st fault line?

Last week at the Paris Peace Forum:

United Nations Secretary-General Antonio Guterres described a world riven by five fissures. The first is a "fault line" between the United States and China, whose economic, technological and geopolitical rivalry threatens to split the planet into "**two separate and competing worlds**"—each with its own trade and financial systems, internet and artificial intelligence platforms, and military alliances and strategies. ...

What is decoupling?

As the song says, breaking up is hard…

- Some trade relationships are relatively easy to break (e.g. commodity flows) but finding new suppliers takes time
- Some supply relations take longer to shift, but value chains are simple (e.g. apparel)
- Some trade relationship are complex and may not be broken except with prohibitive tariffs or bans (e.g. tech)
- Trade is hardly the only form of interdependence
  - FDI, VC, R&D – all large and cooperative/competitive

Some decoupling scenarios

- Limited decoupling, forced in carefully defined spheres (e.g. telecoms)
- Broader and vaguer decoupling induced by policy uncertainty about which sectors are targeted
- Decoupling caused by deliberate import substitution in “national interest” sectors (e.g. electronic vehicles)
- Broad entry prohibitions leading to “hard decoupling” as in Chinese internet isolation (hard localization)

Which goods does the US trade with China?

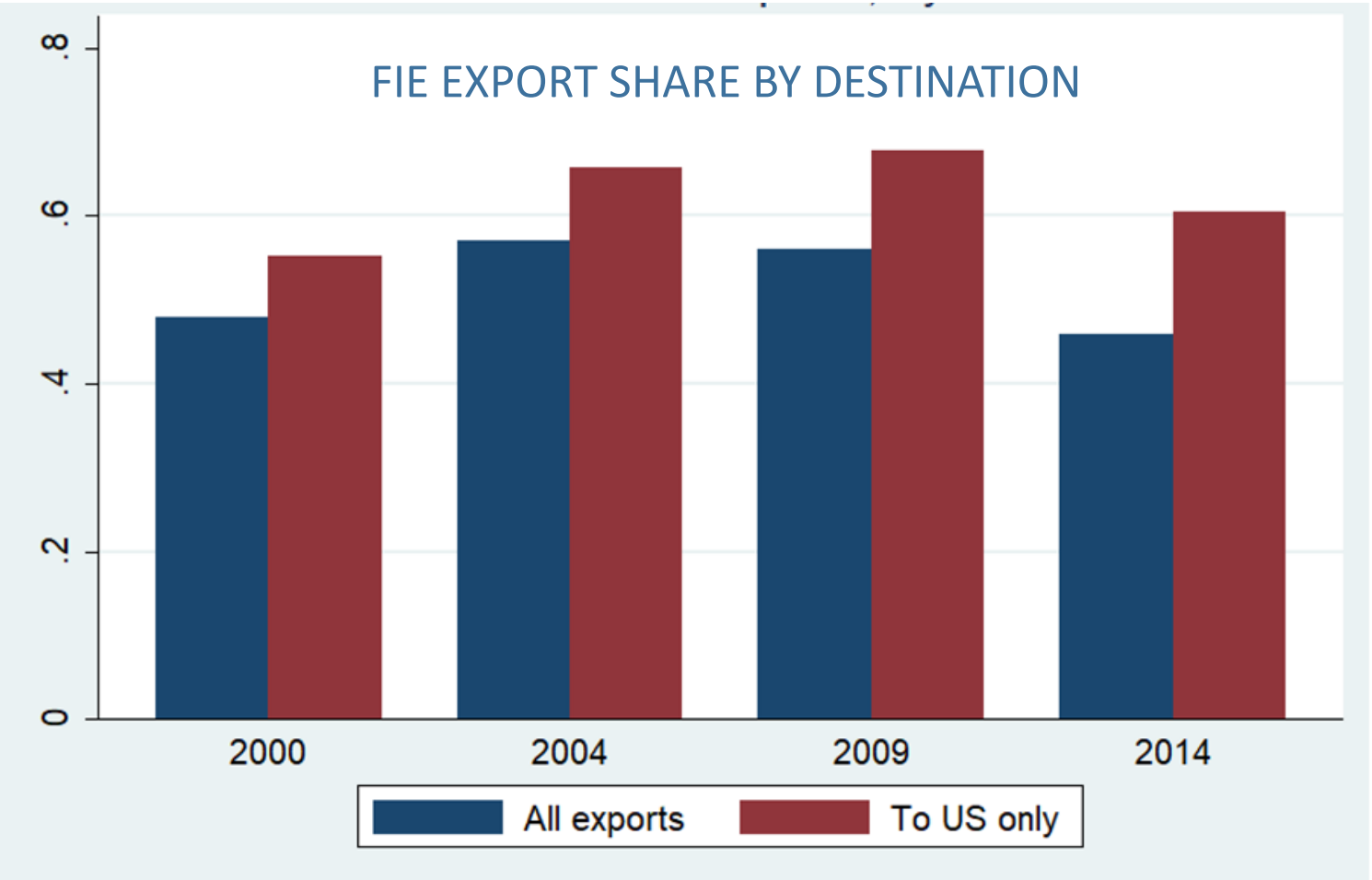
US imports from China are concentrated in a few sectors

Table 1 Share of all and targeted US imports from China, selected industrial sectors and tariff rounds (percent)

NAICS code	Sector	Share of US imports, 2017 (1)	Share of targeted imports		
			Before September 1, 2019 (2)	September 1, 2019 round (3)	December 15, 2019 round (4)
315	Apparel and accessories	5.8	1.0	24.6	1.4
333	Machinery, except electrical	7.0	12.5	4.7	1.1
334	Computer and electronic products	36.5	29.0	24.6	60.8
335	Electrical equipment, appliances, and components	8.7	13.7	2.9	5.9
339	Miscellaneous manufacturing	8.2	1.0	11.7	16.3

Notes: Table includes all sectors that account for at least 5 percent of the value of 2017 US imports from China. 2017 US imports by North American Industrial Classification System (NAICS) 3-digit sector, and 2017 US imports by HS 10-digit are from USITC Dataweb, https://dataweb.usitc.gov. Calculations apply the schedule of actual and proposed tariffs from Chad P. Bown, https://www.piie. com/blogs/trade-and-investment-policy-watch/trumps-fall-2019-china-tariff-plan-five-things-you-need-know. Targeted shares calculated using imports targeted by the Section 301 tariffs, matched to NAICS industries using Justin Pierce and Peter Schott's "A Concordance Between Ten-Digit U.S. Harmonized System Codes and SIC/NAICS Product Classes and Industries," https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-conte...

FIEs provide a large share of china's exports



Supply links run through MNE value chains

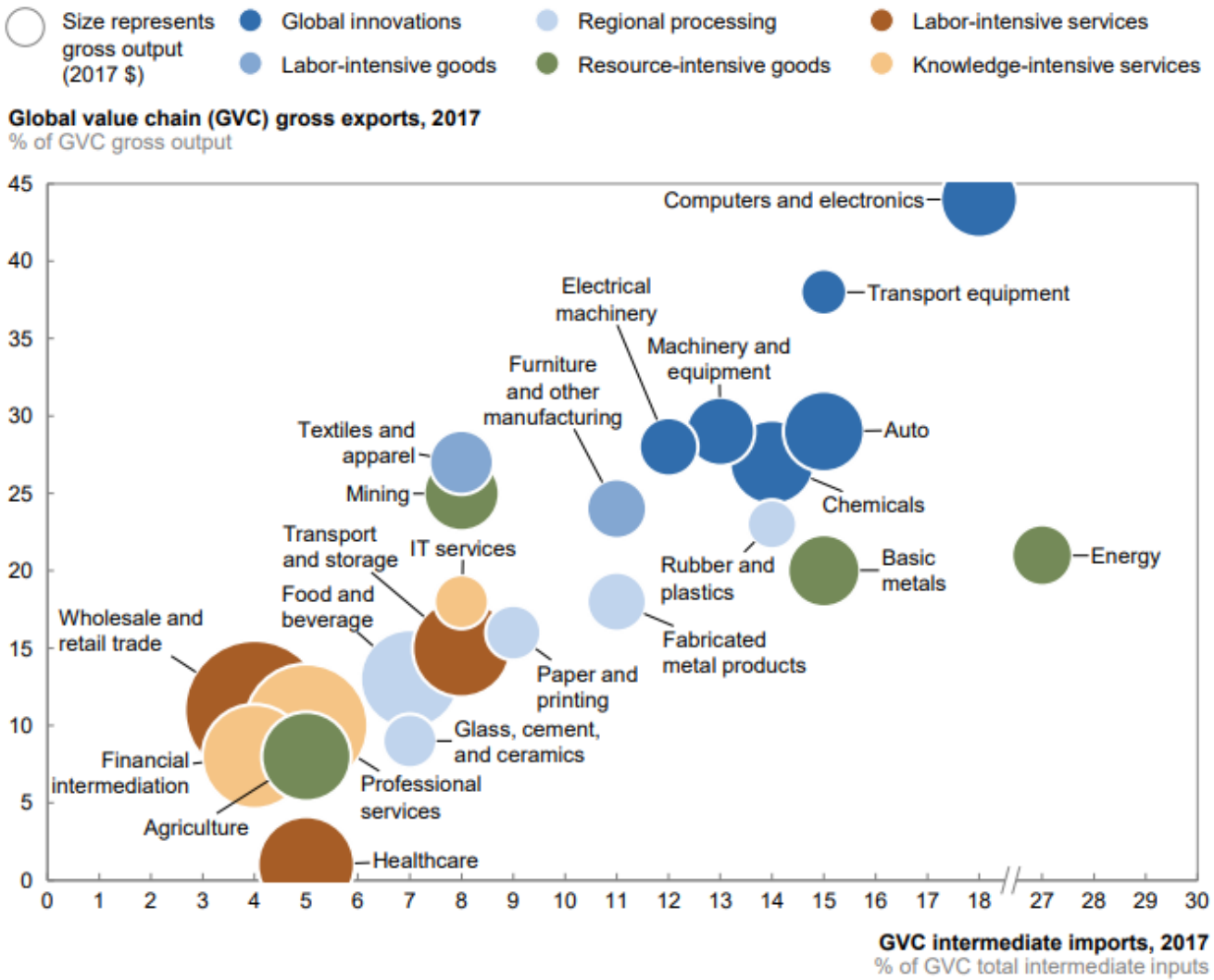
Table 2 Characteristics of US imports from China in selected NAICS sectors (percent)

NAICS code	Sector	Share of sector's imports hit by September 1 and December 15, 2019 tariffs (1)	Share of sector's imports that are US related-party trade (2)	Estimated share of sector's imports		
				From FIEs (3)	From WOFEs (4)	From JVs (5)
315	Apparel and accessories	92.5	4.8	37.5	27.1	10.4
333	Machinery, except electrical	17.8	31.0	59.4	47.8	11.6
334	Computer and electronic products	63.5	38.7	88.6	68.5	20.1
335	Electrical equipment, appliances, and components	27.2	20.2	61.1	47.9	13.2
339	Miscellaneous manufactured commodities	88.2	20.5	52.9	45.7	7.3

FIE = foreign-invested enterprise; JV = joint venture; WOFE = wholly owned foreign enterprise; NAICS = North American Industrial Classification System
Notes: See table 1 for source of trade data. Targeted value, related-party trade shares are based on 2017 import values. US Census data are used to calculate related-party trade, https://relatedparty.ftd.census.gov. Imports from FIEs refer to imports shipped to the United States by FIEs operating in China, including those registered in Hong Kong, Macau, and Taiwan. Estimated foreign shares based on analysis of 2013 China Customs Records of Chinese exports to the United States at the HS 6 level of detail.

Exhibit 2

Trade intensity is highest in global innovations value chains and generally much lower in service value chains.



SOURCE: World Input-Output Database; McKinsey Global Institute analysis

China supplying larger value added share

iPhone 3G (2009)	iPhone X (2018)
• Assembly (Foxconn) Total value added: $6.5, 3.6% of the bill of materials.	• Assembly (Foxconn) • Functional parts for touchscreen module (Anjie Technology) • Filter for 3D sensing module (Crystal Optech) • Coil module for wireless charging (Lushare Precision) • Printed circuit board (M-Flex) • Speakers (Goertek) • RF antenna (Shenzhen Sunway) • Battery pack (Sunwada) • Glass cover (Lens Technology) • Stainless frame (Kersen Technology) • Camera module (O-Filem) Total value added: $104, 25.4% of the bill of materials.

Source: Yuqing Xing, 2019, https://voxeu.org/article/how-iphone-widens-us-trade-deficit-china-0

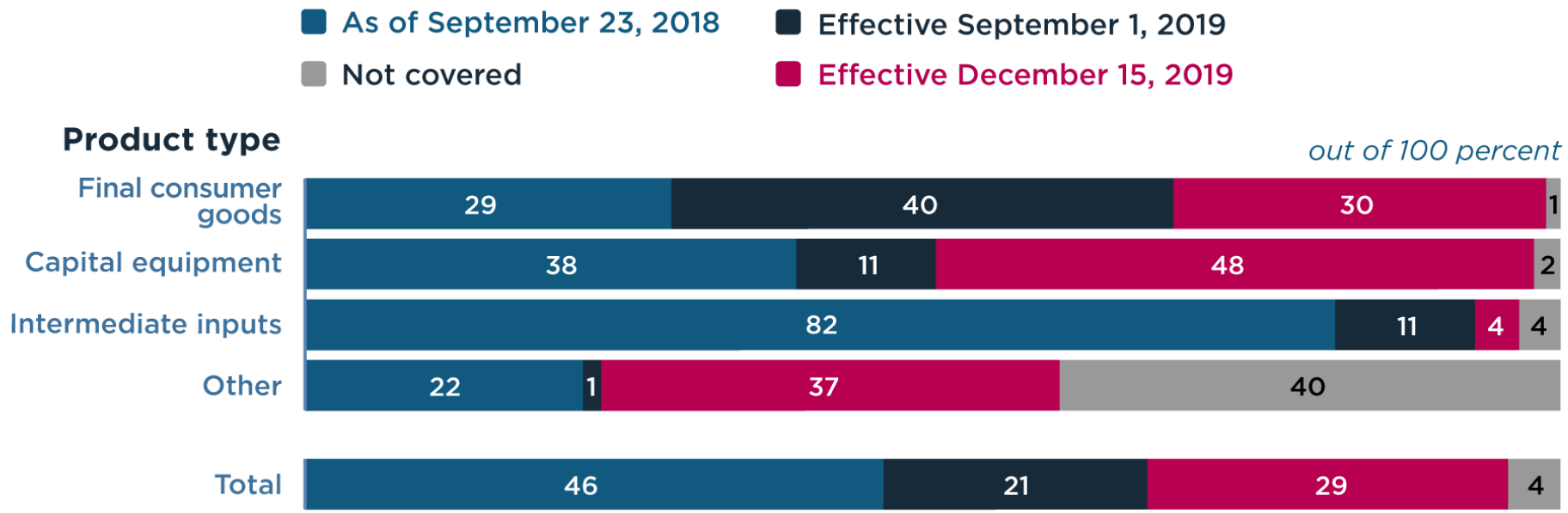
US-China trade war – what have we done?

Some current and pending US actions against China

- Anti-dumping duties affecting about 9 percent of Chinese exports to the US.
- Punitive tariffs on $250 billion imports under steel and intellectual property (section 301) cases.
- New 15% tariff on additional $112 billion of Chinese exports in September
- Planned additional 15% tariff on additional $160 billion in December.

China tariffs hit producers first, now consumer goods hit harder

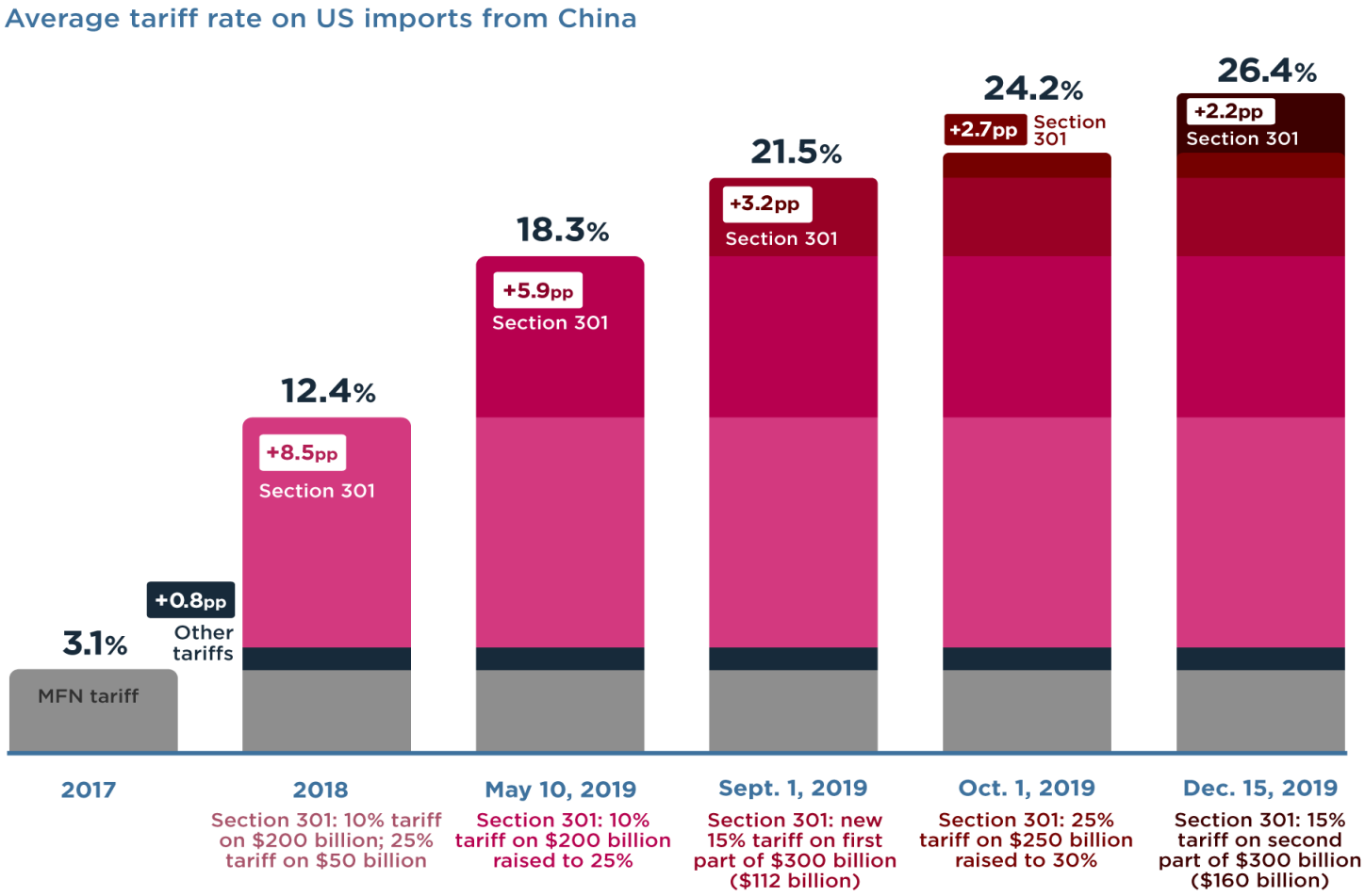
Percent of US imports from China subject to Section 301 tariffs



Note: Numbers may not sum to 100 due to rounding.

Source: Updated on August 23, 2019, from Bown (2019).

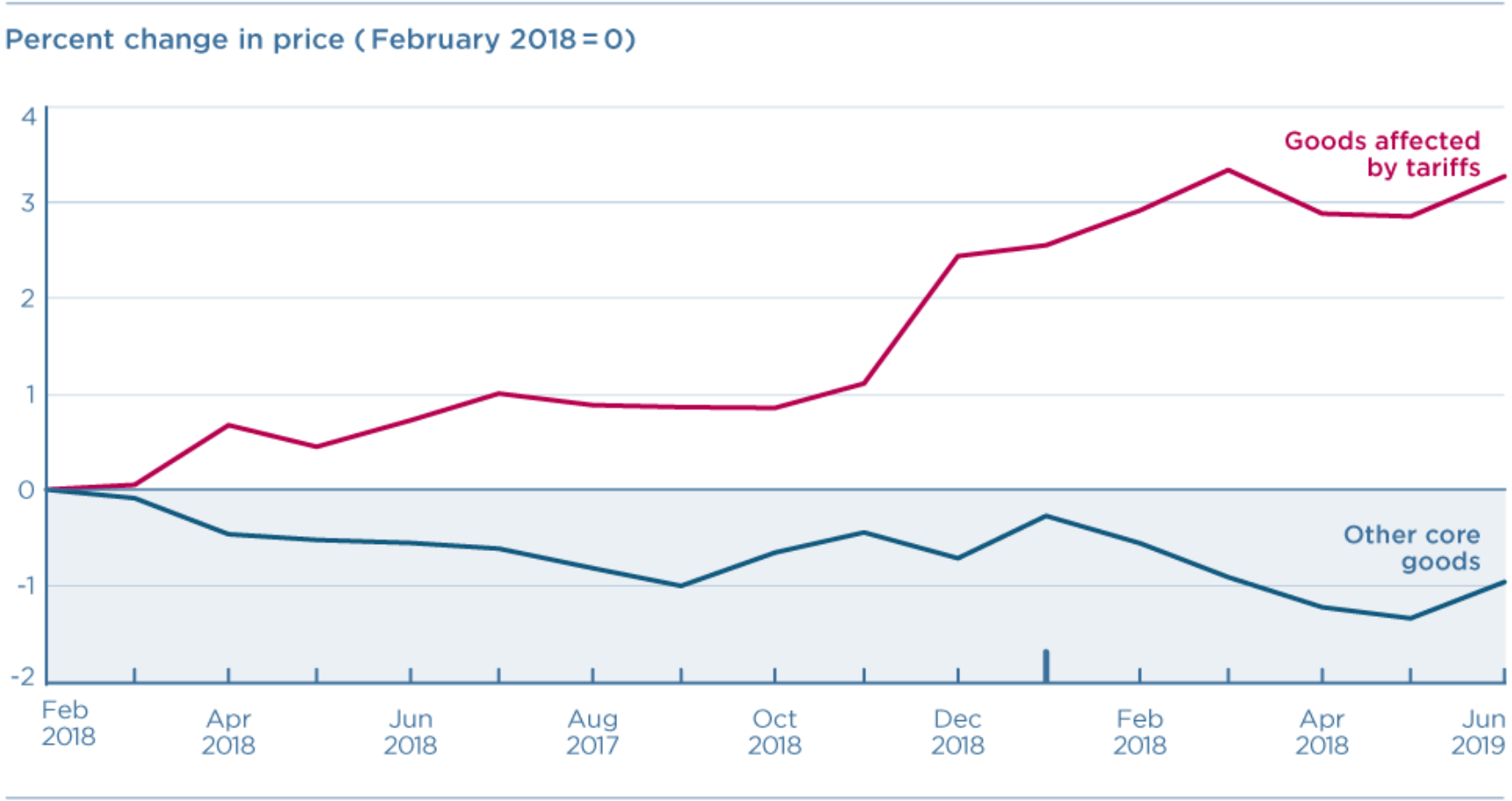
Average tariffs on China 26 % by December 15, covering 96.8% of imports from China



pp = percentage points;
MFN = most favored nation

Source: Updated on September 17, 2019, from Bown (2019).

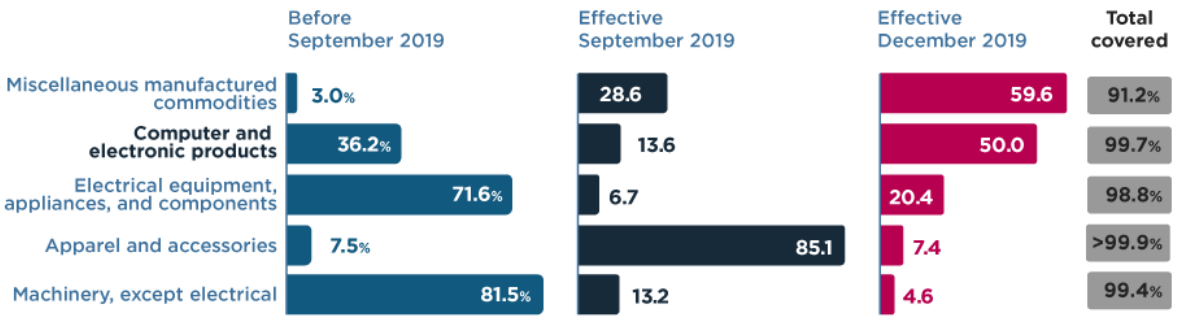
Higher US prices due to tariffs



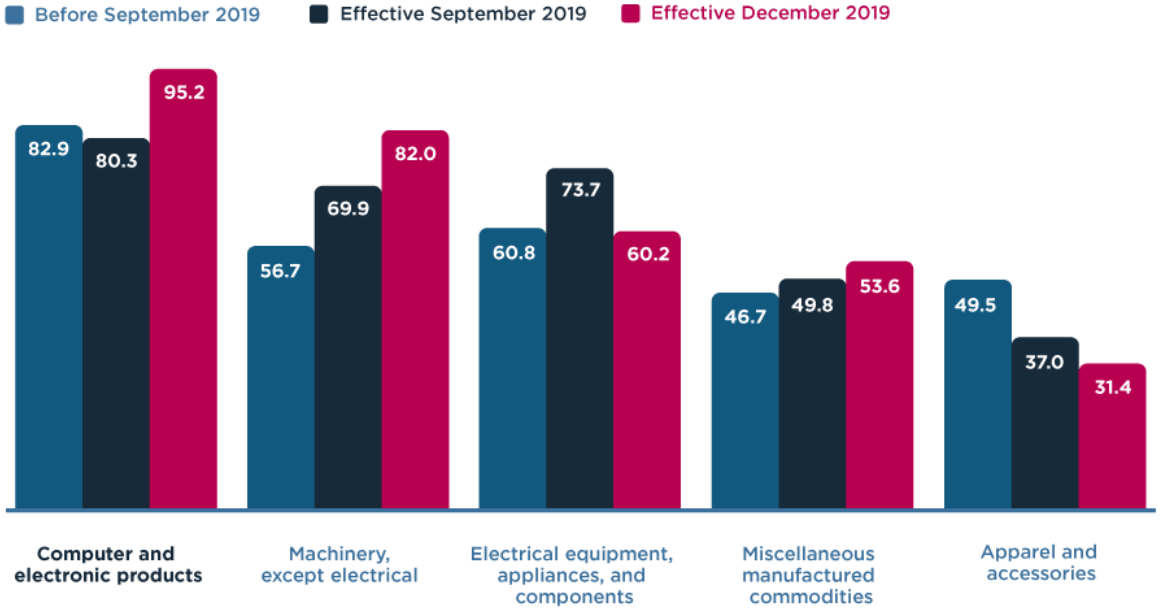
Source: Labor Department via Goldman Sachs

Tech supply chains hit hard and more pain may lie ahead

a. Percent of US imports in sector targeted by Section 301 tariff round



b. Percent of targeted US imports made in non-Chinese owned factories, by tariff round



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Sources: Based on data from USITC Dataweb, USTR, and Chinese Customs. For methodology, see https://www.piie.com/publications/policy-briefs/trump-tariffs-primarily-hit-multinational-supply-chains-harm-us

Table 1

Impact of tariffs on real exports (continued)

c. Scenario 3: December 2019 plus adjusmtent cost

Exporting country/region	Destination country/region (percent change in real exports)											
	NAFTA		Europe		East and Southeast Asia		All Other		Total		United States	China and Hong Kong
United States		0.56	-0.11		-4.33			0.09	-1.05		0.00	-14.73
Canada		0.29	-1.36		-1.30		-1.51		-0.28		0.35	-0.92
Mexico	-0.14		-3.23		-3.19		-2.86		-0.81		0.05	-3.35
Europe		1.84	-0.16		-0.63		-0.26		-0.04		2.15	-1.05
China and Hong Kong	-9.23			4.12		3.19		3.71		0.39	-11.16	2.06
Japan		2.67	-0.60		-1.04		-0.67		-0.22		3.11	-1.30
South Korea		2.60	-0.39		-0.85		-0.47		-0.19		3.17	-1.07
Other high-income Asia		3.02	-0.30		-0.61		-0.21		-0.08		3.52	-0.81
Low-income Asia		3.15	-0.62		-0.81		-0.48		-0.15		3.63	-0.95
Central America		1.23	-0.82		-1.28		-0.86		-0.05		1.39	-2.17
Latin America		0.11	-0.91			0.39	-0.52		-0.23		0.25	1.39
India		2.00	-0.72		-0.56		-0.71		-0.17		2.19	-0.16
Africa		0.51	-0.19		-0.48		-0.18		-0.10		0.55	-0.54
Russia		0.52	-0.02		-0.38		-0.05		-0.05		0.55	-0.62
Middle East and North Africa		1.10	-0.12		-0.31		-0.08		-0.03		1.18	-0.95
Other countries		2.19	-0.87		-0.61		-0.55		-0.17		2.70	-0.41
All countries	-0.37			0.05	-0.52			0.20	-0.14		-0.67	-1.84

NAFTA = North American Free Trade Agreement

Note: The observed increased trade from China and Hong Kong to China arises because of increased trade between China and Hong Kong.

Source: Authors' calculations.

Same CGE model shows all goods sectors and services hurt by trade war

c. Scenario 3: December 2019 plus adjustment costs

	United States			China and Hong Kong		
	Production	Exports	Imports	Production	Exports	Imports
Agriculture	-0.77	-3.23	-0.45	-0.27	0.39	-3.24
Mining	-0.22	-0.80	-0.26	0.23	1.63	-1.23
Intermediate manufactured goods	-0.39	-0.81	-0.85	-0.05	0.56	-1.69
Final manufactured goods	-0.65	-1.31	-1.05	-0.18	0.05	-2.02
Traded services	-0.25	-0.39	-0.05	-0.03	1.77	-2.27
Low-trade services	-0.12	-0.18	0.05	-0.53	1.57	-2.20

Note: Manufactured goods are aggregated to either intermediate or final manufactured goods. Intermediate input demand accounts for more than 75 percent of final demand in the base data for the aggregate category intermediate manufactured goods. Low-trade services have less than 5 percent of imports as a share of final demand and exports as a share of production.

Source: Authors' calculations.

Do tech supply chains make decoupling difficult?

MNEs are key to GVCs and decoupling

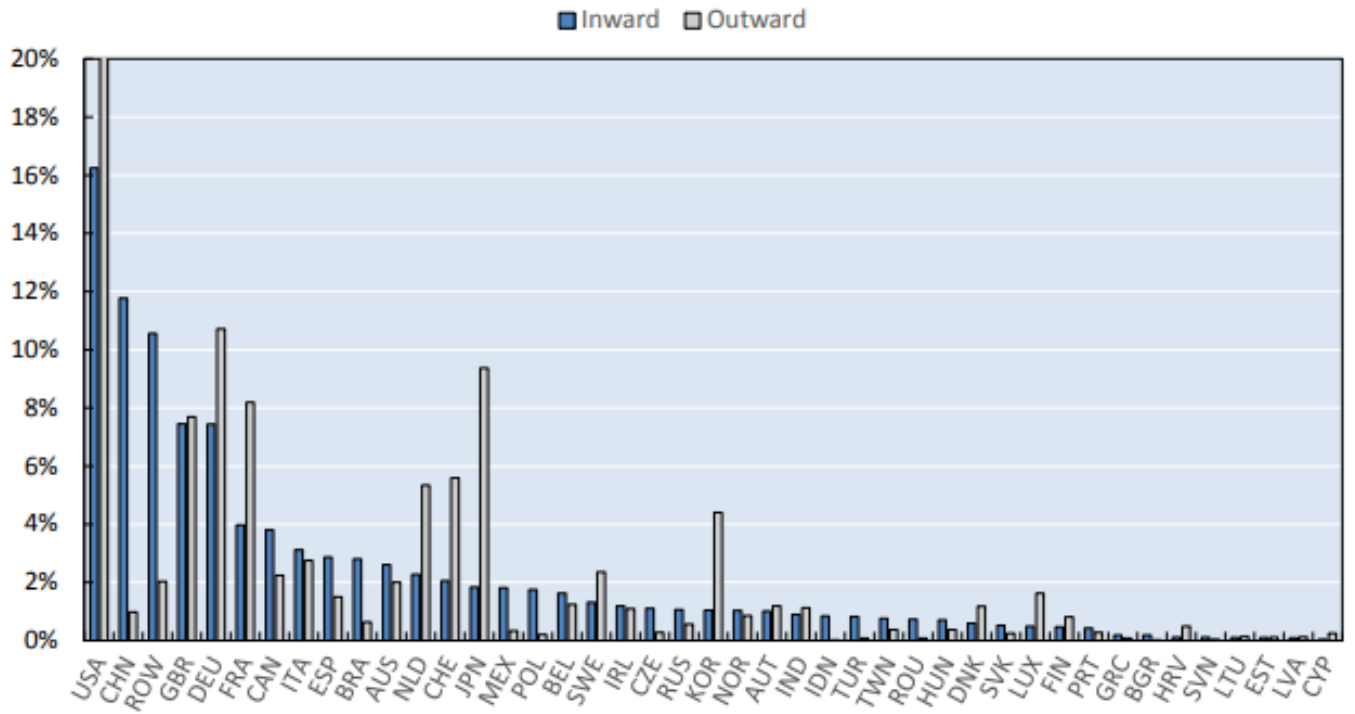
Global value chains characterized by (Antràs, 2015)

1. Customized production
2. Sequential production decisions going from the buyer to the suppliers;
3. High contracting costs;
4. Global matching of goods, services, production teams and ideas.

All four point to the substantial power that MNEs have in coordinating GVCs and selecting where to locate tasks.

Both the US and China play big MNC roles

Figure 7. The share of countries in the global output by foreign affiliates (inward and outward), 2014



Note: Note by Turkey

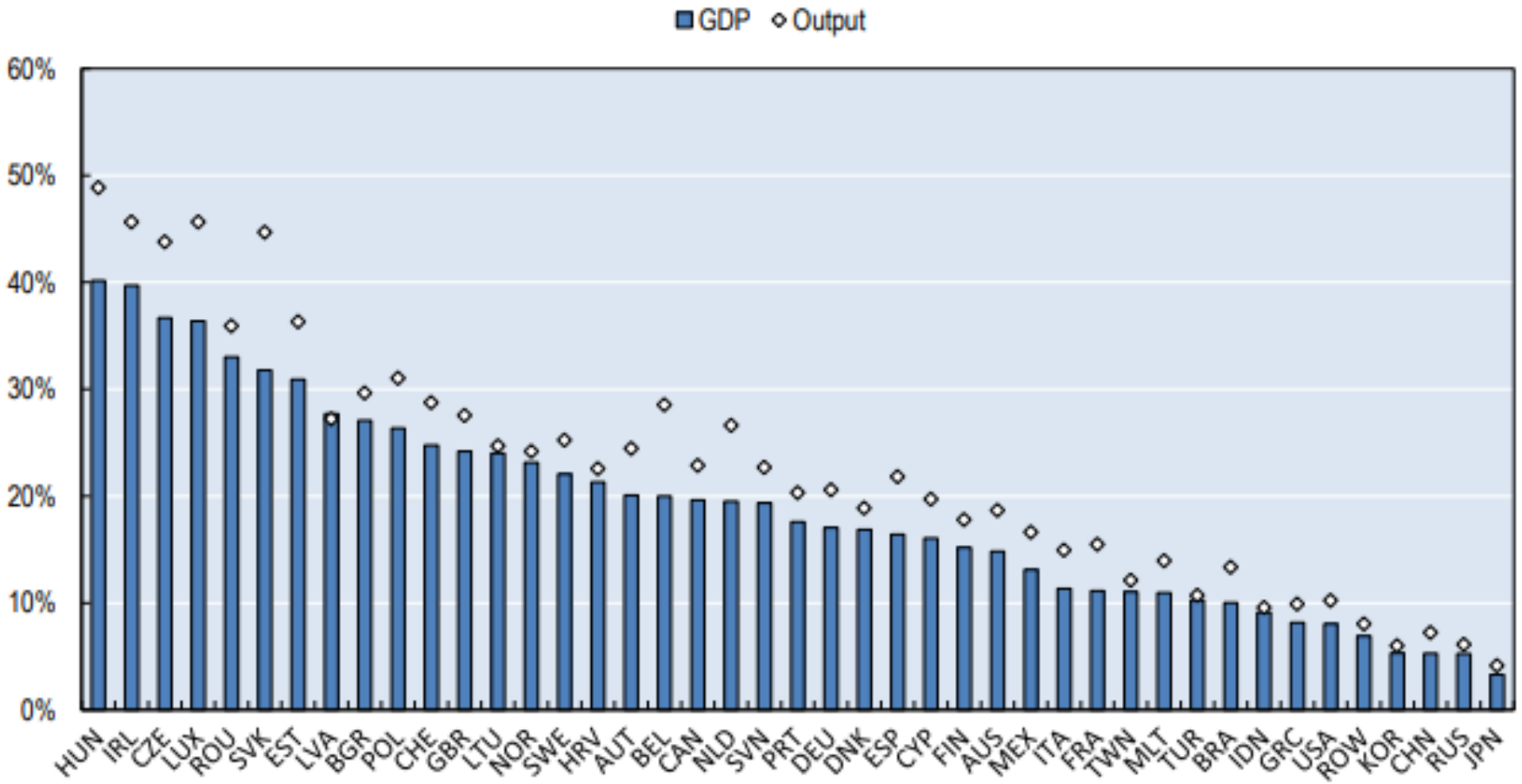
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union

Source: Cadestin, et al, 2018

But affiliate GDP share low in both

Figure 11. The share of foreign affiliates in GDP and gross output, by country, 2014

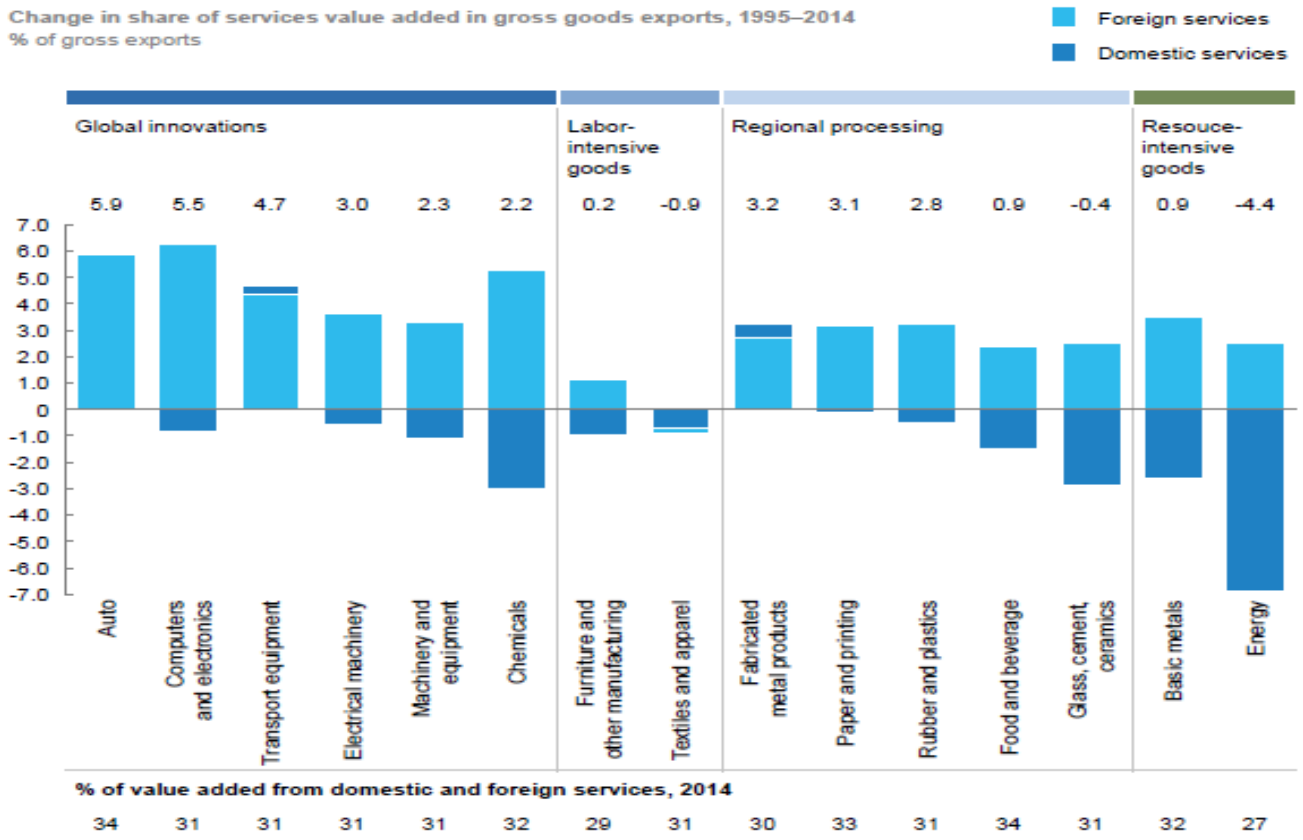


Source: Cadestin, et al, 2018

Services growing role in exports

Exhibit 9

Value added from services has increased significantly in all goods value chains, and imported services are substituting for domestic services.



SOURCE: World Input-Output Database; McKinsey Global Institute analysis

Has US and Chinese policy already promoted decoupling?

Main US complaints about IPR

- Main US complaints (Section 301) are that China

  (1) forces technology transfer from US companies through JV requirements; (current talks)

  (2) pays US companies too little to license their IP; (case at WTO)

  (3) engages in predatory outward investment; (new US legislation revises CFIUS process)

  (4) sponsors cyber-theft of US IP; (high-level negotiation & law enforcement)

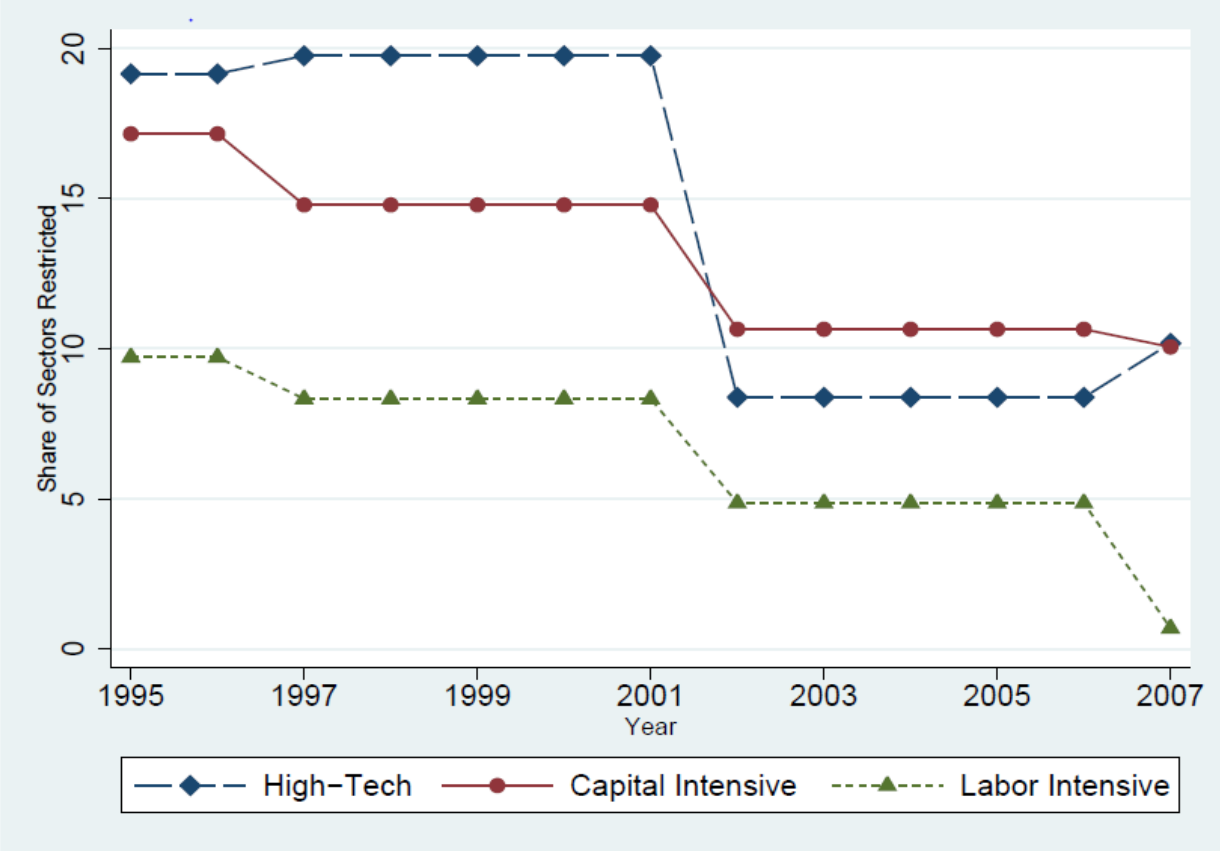
There was no secret about who brought what to the FDI party

- Western documents and guidance made clear that Western parties typically brought technology, Chinese partners brought land & labor.
- This arrangement worked for over a decade, even as Western firms experienced IPR violations.
- China sweetened the deal in many cases by lowering the cost of entry, especially in high-tech sectors. Exports soared and so did profits.

10% of high-tech sectors had equity caps

(sources: Liang, Lovely & Zhang, 2019)

Share of Sectors Designated Restricted, by Group, 1995-2007



(a) Restricted

Why is the US contesting these policies?

- Chinese domestic firms have become better competitors. Imitation and invention combined and industrial subsidies led to overcapacity.
- Changes in Chinese innovation policy after 2006.
- Made in China 2015 sounded an alarm bell for the West: spread fear that China will lock them out of the growing market and then export out.
- Service sector barriers remain high as US export growth increasing concentrated there; security concerns extend frictions beyond trade realm.

Chinese progress on IP protection

- For China, continuing cost of IP theft outweighed:
  - IP theft source of conflict not only with US, but also with Japan and EU.
  - Domestic inventors need protections enforced.
  - With “emerging sectors” need for transfer may be less than need for domestic subsidies.

- Chinese legal architecture already changing:
  - Opening of specialized IP courts in 2014, national IP appeals court, within SPC, under consideration.
  - Recent announcement of punishment for repeat offenders.

2019 Chinese foreign investment law

- Swift passage of the Foreign Investment Law was an explicit signal to the foreign business community.
- It hits the right themes — national treatment, intellectual property rights, market access, no forced technology transfer — but the language is vague.
- Foreign companies will want to see how the law is implemented, but there is some optimism.
- The new Law should be conducive to China receiving more foreign direct investment, a good proportion of which will be an integral part global value chains.

US focus has shifted to tech security

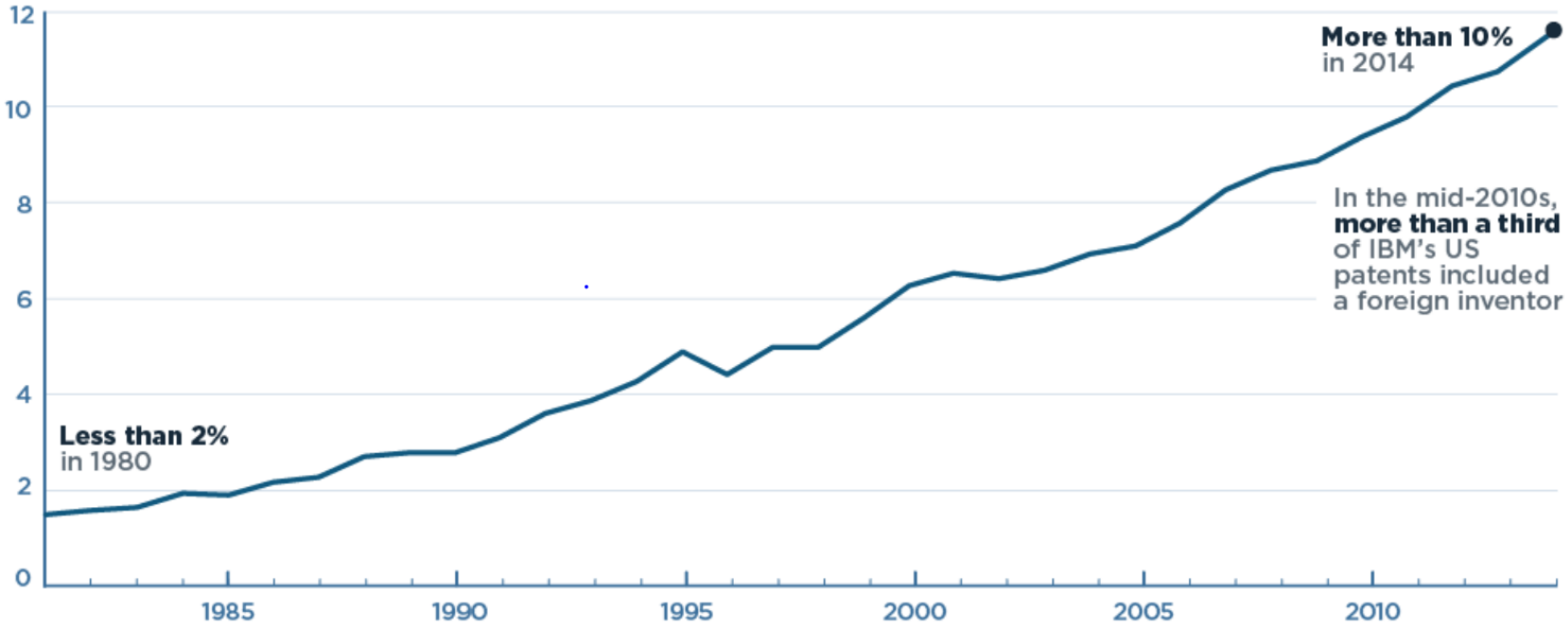
- New focus fraught with tensions and broad executive branch power
- Very broad scope for policies that promote decoupling
- Export control policies may have potent impact on exports, imports and MNC firm organization:
  - “entities list” will limit US tech exports
  - Ban on Chinese content in US networks – 5G equipment or full IoT?

Talent – the scarcest resource

- AI ecosphere is global and talent comes from all countries, with China an important source and destination of skilled engineers and scientists
- Intellectual returnees have played major role in Chinese industrial upgrading.
- Training Chinese students major Western export.

US Multinational Corporations Are Increasingly Using International Teams for Inventions

Percent of US patents granted to US MNCs with inventors from more than one country



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MNC = multinational corporation

Source: PIIE Policy Brief, *The Rise of Global Innovation by US Multinationals Poses Risks and Opportunities*.

Tech start-up funding may be hurt

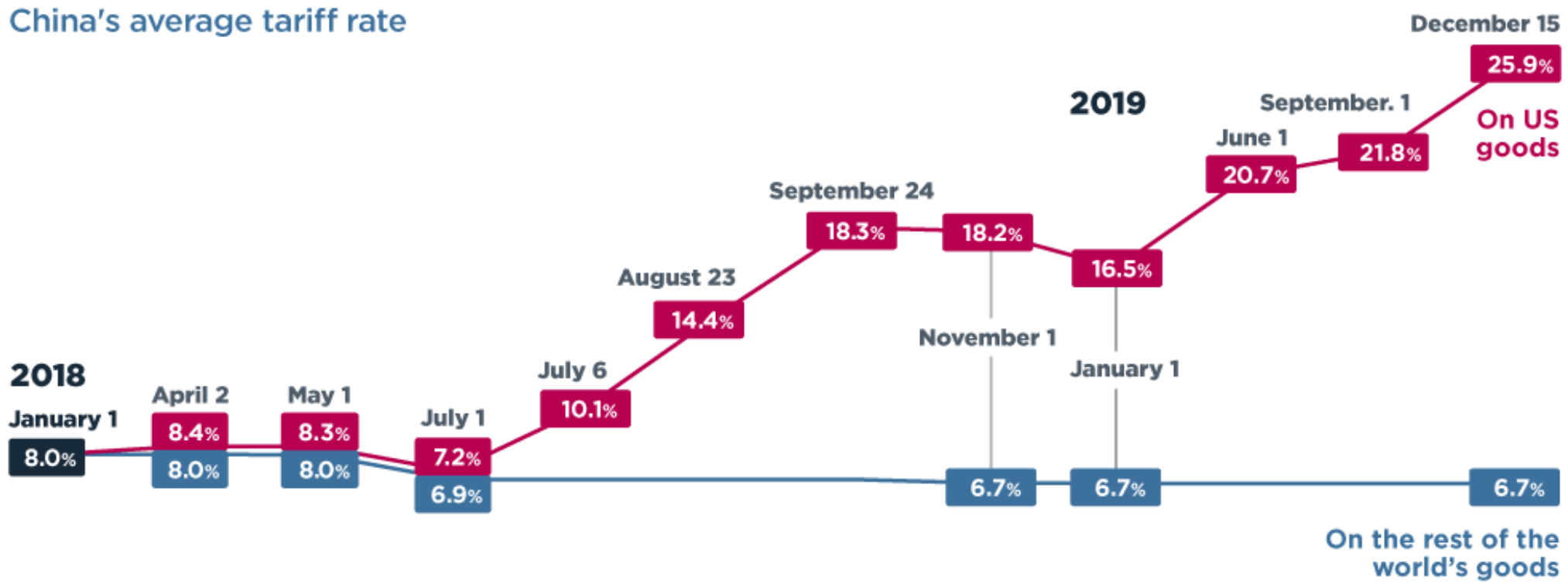
- CFIUS review concerns already collapsing Chinese investment in US based tech startups.
- Pushing startups offshore, reducing cooperation with US firms in the ecosystem.
- Will Chinese advancement slow or will ideas move outside US orbit?

Works Cited

- Antràs, P. 2015. Global Production: Firms, Contracts, and Trade Structure. Princeton, NJ: Princeton University Press.
- Cadestin, C., et al. (2018), "Multinational enterprises and global value chains: New Insights on the trade-investment nexus", OECD Science, Technology and Industry Working Papers, No. 2018/05, OECD Publishing, Paris, https://doi.org/10.1787/194ddb63-en.

Looking forward to the conversation!

China Is Raising Tariffs on the United States and Lowering Them for Everybody Else



Source: See Figure 1 of Chad P. Bown's blog, "US-China Trade War: The Guns of August"

The US has won most disputes with China brought to the WTO

WTO disputes between China and the United States, 2002-18

	United States	China
Total number of WTO cases	23	15
Settled via/during consultation	9	1
Ruling favoring complainant	10	4
Ruling favoring respondent	0	1
Split decision	0	3
Pending	4	6

Average number of months from initial consultation to settlement

United States	China
8	2

Average number of months from initial consultation to panel decision

United States	China
28	26

Source: World Trade Organization (WTO); US Trade Representative (USTR) Trade Policy Agenda and Annual Report (various issues).