

**Cross-Sector - Global**

# Global Trade Monitor – July 2019

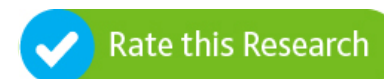
Escalating trade tensions weigh on global growth and supply chains

**SECTOR IN-DEPTH**

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17 JULY 2019

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Key messages

# Key messages

1

## **Escalation of US-China tensions has clouded the global economic outlook**

Trade tensions have created significant uncertainty and reversed emerging signs of stabilization in global growth. Further crystallization of trade risks could leave a lasting impact on the global economy

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2

## **Potential US auto tariffs and further US-China tensions represent the two main near-term risks to our current baseline**

Auto tariffs could disrupt as much as \$500 billion of trade flows and would be credit negative for the global auto industry and for large auto manufacturing countries, including the US, Germany, Japan and Korea. The US and China failed to reach a trade agreement in May-June, and even though the two countries have extended the negotiations, further tariff increases are now more likely

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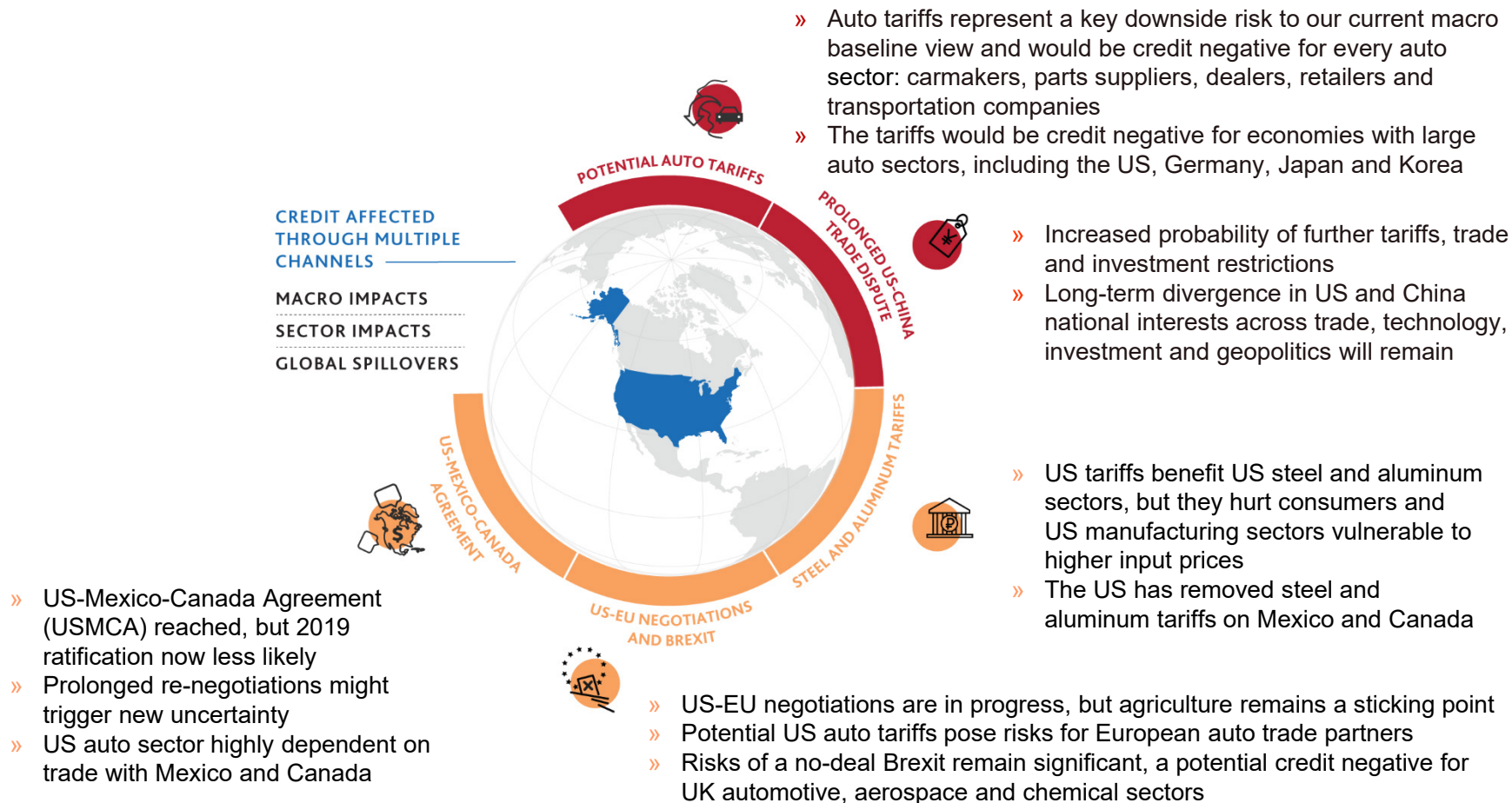
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## **Significant sector and regional impacts are likely, including shifting supply chains**

Uncertainty will continue to affect business investment. Continued trade tensions and prolonged use of tariffs will hurt industries that use more expensive imported or domestically produced inputs. Protected industries will benefit. The disruption will be higher in Asia given the region's integration in global supply chains, although some Asian countries would benefit from shifts in supply chains away from China




# Key trade hotspots

## Challenges and opportunities






Source: Moody's Investors Service

# US trade restrictions on the rise

 Increased
  Decreased
  Unchanged

Trade risks	Trade actions	Current and future developments
<b>US - China</b>	Trade negotiations between the US and China have been extended, but the likelihood of further tariff escalation remains high.	Our baseline expectation is no further tariffs escalation, but current tariffs will remain in place for a prolonged period. Modest concessions in the ongoing US-China trade dispute will not bridge the wide gulf in the two countries' respective economic, political and strategic interests.
<b>US - EU</b>	US-EU trade negotiations have reached an impasse, with agriculture remaining the main sticking point. A long-running dispute over aircraft subsidies remains unresolved.	No US-EU agreement could lead to the US imposing additional tariffs, including auto tariffs, on EU trading partners.
<b>US – Australia</b>	The US administration is considering imposing tariffs on aluminum imports from Australia.	Australia was granted exception from the steel and aluminium tariffs, imposed in 2018, causing a surge in Australian aluminium exports to the US. Nevertheless, Australia accounts for a small share of US aluminium imports at around 6% of total. The US administration has decided not to take action for now.
<b>US – India</b>	India's designation as a beneficiary developing country under the Generalized System of Preferences was terminated on June 5, 2019. In response, India increased tariffs on a range of US goods imports into India on June 16.	The trade action on India was in response to US concerns over inadequate market access for US companies, price controls on medical devices, and a range of tariffs on US technology related exports. Further US-India negotiations are likely.
<b>US – Mexico/China/Vietnam</b>	The US imposed anti-subsidy duties on steel imports from Mexico and China. Concurrently, the US administration added levies of more than 400% on steel imports from Vietnam, alleged to be rerouted from other South Asian nations.	The US targeted fabricated structural steel from Mexico and China because of government subsidies for exporting companies from both countries. The US imposed tariffs on steel products from Vietnam, which are believed to originate from other Southeast Asian countries, processed minimally in Vietnam and shipped to the US to avoid higher duties.
<b>UK - EU</b>	With the second extension to the Brexit process, both the UK and the EU have clearly indicated that they wish to avoid a damaging no-deal outcome. However, recent events including the poor performance of the ruling Conservative party in the May 2019 local and European elections, and Prime Minister Theresa May's subsequent resignation – have increased the likelihood of the UK leaving the EU without any agreement in October.	Our base case continues to be that the UK and the EU will reach an agreement to preserve many – but not all – of their current trading arrangements. However, the risk of a no-deal Brexit has increased.
<b>Japan – Korea</b>	Japan announced on July 1 that it will tighten controls on exports of key semiconductor and display materials to Korea.	Effective July 4, Japan will remove Korea from a "white" list of countries that have minimum trade restrictions, which could slow or even stop export of supplies to Korean manufacturers.

# US trade restrictions on the rise

 Increased
  Decreased
  Unchanged

Trade risks	Trade actions	Current and future developments
<b>US – Trade partners</b>	The US Commerce Department concluded an investigation into uranium, its latest investigation under Section 232.	Facing a mid-July deadline on uranium tariffs, President Trump decided not to impose quotas on imports of uranium and reportedly stated that he did not agree with the commerce secretary's findings that foreign uranium poses a threat to national security.
<b>EU – South America</b>	The European Union and South American bloc Mercosur agreed a free-trade treaty on June 28.	The trade deal includes a free trade chapter with tariff advantages that will enter into force once it is ratified by all EU and Mercosur member states.
<b>Pan-Africa</b>	The African Continental Free Trade Area (AfCFTA) was officially launched at the 12th Extraordinary Summit of the African Union (AU) on July 7.	AfCFTA is designed to address lagging intra-regional trade, which has the potential to improve the region's credit profiles. However, infrastructure deficiencies and non-tariff barriers will limit the upside.
<b>EU – Vietnam</b>	The European Union and Vietnam signed a free trade agreement and an investment protection agreement on June 30, 2019.	The EU's main exports to Vietnam are high tech products, including electrical machinery and equipment, aircraft, vehicles, and pharmaceutical products. Vietnam's main exports to the EU are telephone sets, electronic products, footwear, textiles and clothing, coffee, rice, seafood, and furniture.
<b>Canada, Mexico, US</b>	The US administration removed steel and aluminum tariffs on Canada and Mexico, which in turn reversed retaliatory trade measures previously imposed on the US.	US and Mexico reached an agreement on how to address immigration issues, averting new tariffs on Mexican exports. Mexico has 45 days to prove that it is meeting US demands or the US could impose new tariffs.
<b>US – Japan</b>	The US and Japan agreed to accelerate trade negotiations from July to speed up progress towards a two-way trade agreement.	The US and Japan will hold vice ministerial-level and working-level trade talks on July 24-26, followed by a potential meeting by ministers from both sides in an attempt to quickly advance progress in trade talks. An agreement could lead to an exemption from auto tariffs.
<b>EU – Japan</b>	The EU and Japan's Economic Partnership Agreement entered into force on February 1, 2019.	The agreement lowers or removes existing trade barriers on EU and Japanese exports to each other.



# USMCA outcome important to regional growth

- » Removal of steel and aluminum tariffs on Canada and Mexico make a USMCA deal (NAFTA 2.0) ratification more likely
- » We expect continued negotiations to eventually deliver a revised USMCA. This could lead to auto tariffs exemptions for Canada and Mexico
- » Our base case is that USMCA will be renegotiated with agreement on rules of origin, conflict resolution, agriculture and government procurement, and expanding sector coverage
- » In the event of failed negotiations, the impact on regional growth is likely to be limited if trade moves to WTO tariffs, but a complete breakdown of the agreement and the imposition of high tariff rates across countries could result in recession scenarios

EXHIBIT 1

## US auto sector most dependent on trade within NAFTA



Source: Moody's Investors Service

# Milestones to watch



Source: Moody's Investors Service

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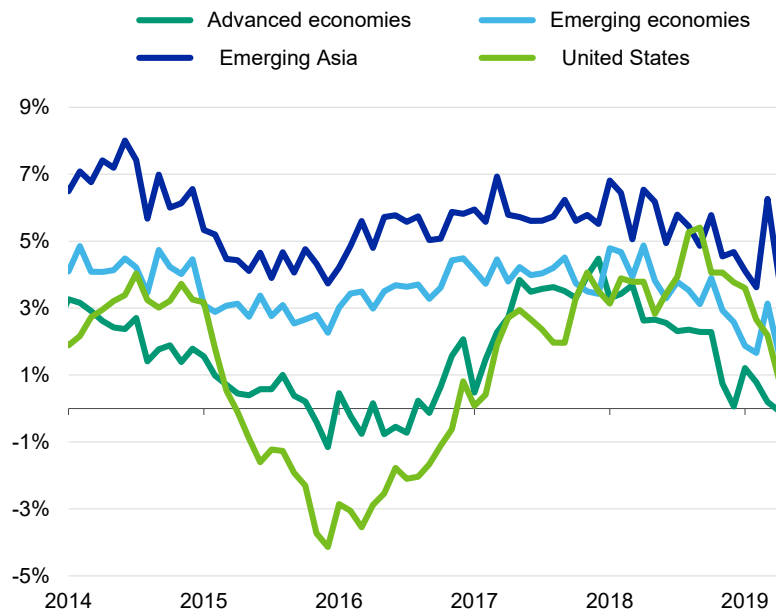
Trade watch

# Global growth prospects are at risk from increasingly uncertain US trade policy

- » Manufacturing activity has slowed across regions
- » Global trade growth has slowed sharply to zero in April

EXHIBIT 2

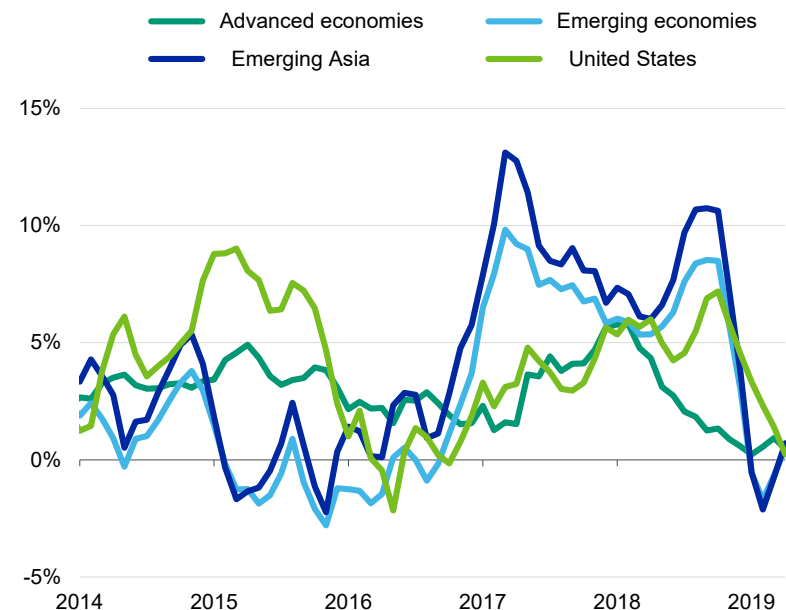
Industrial production excl. construction  
(growth rate in %)



Sources: CPB World Trade Monitor, Financial Times/London metals exchange

EXHIBIT 3

Import volume growth  
(in % yoy, 3-month moving average)

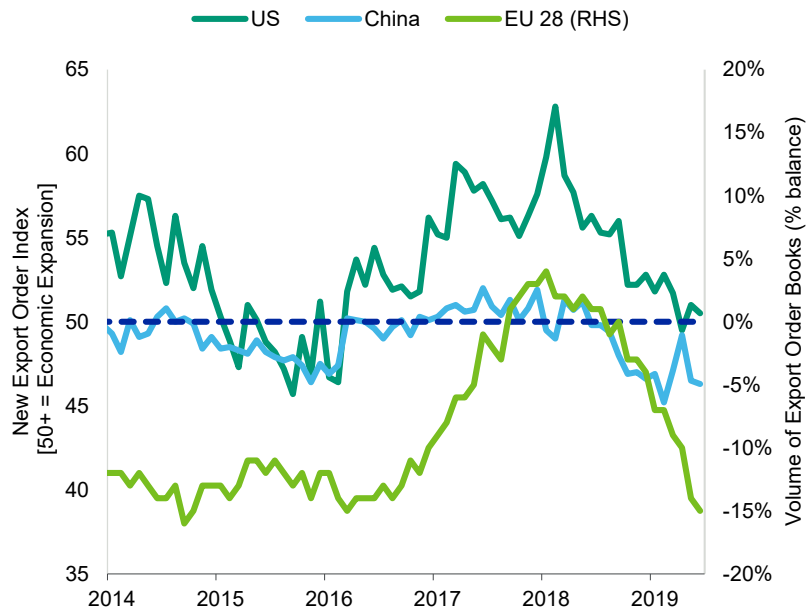


# US trade activity has slowed as uncertainty continues to affect business decisions

- » New export orders continue to decline across regions
- » US new export orders are now stagnant and leading indicators point to a further decline

## EXHIBIT 4

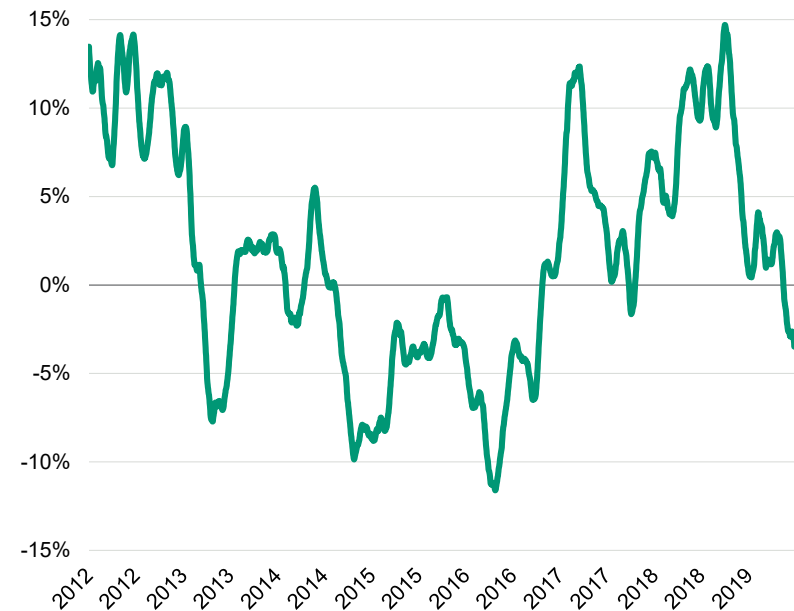
### New export orders



## EXHIBIT 5

### QuantCube US trade leading indicator (yoy % change)

#### US trade activity index – shipping\*

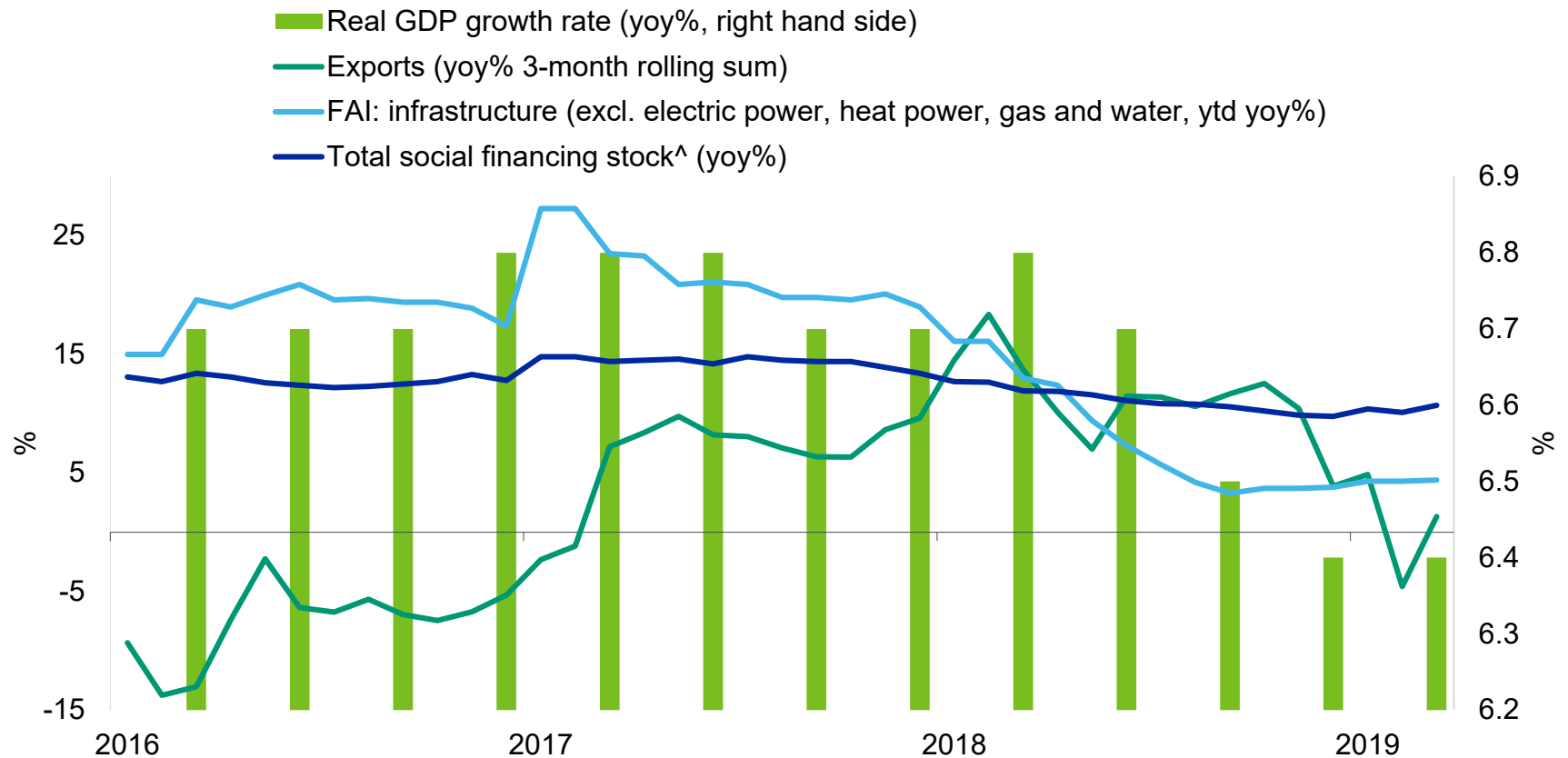


\*The QuantCube Global Trade Index is a real-time indicator quantifying the external trade activity of a country, by analyzing shipping data from ports all over the world (real-time tracking of 60,000+ ships worldwide). It tracks the evolution of official external trade numbers with a correlation to total country turnover up to 90% (turnover = importations + exportations). It is a 1-month leading economic indicator by construction.

Sources: Haver Analytics, QuantCube

# In China, declining exports are adding to already slowing economic activity, driven by domestic factors

EXHIBIT 6



\*Since July 2018, the People's Bank of China (PBOC) incorporated "Asset-backed Securities of Depository Financial Institutions" and "Loans Written off" into total social financing. Since September 2018, the PBOC incorporated "Local government special bonds" into total social financing.  
Sources: People's Bank of China, Haver Analytics, Moody's Investors Service

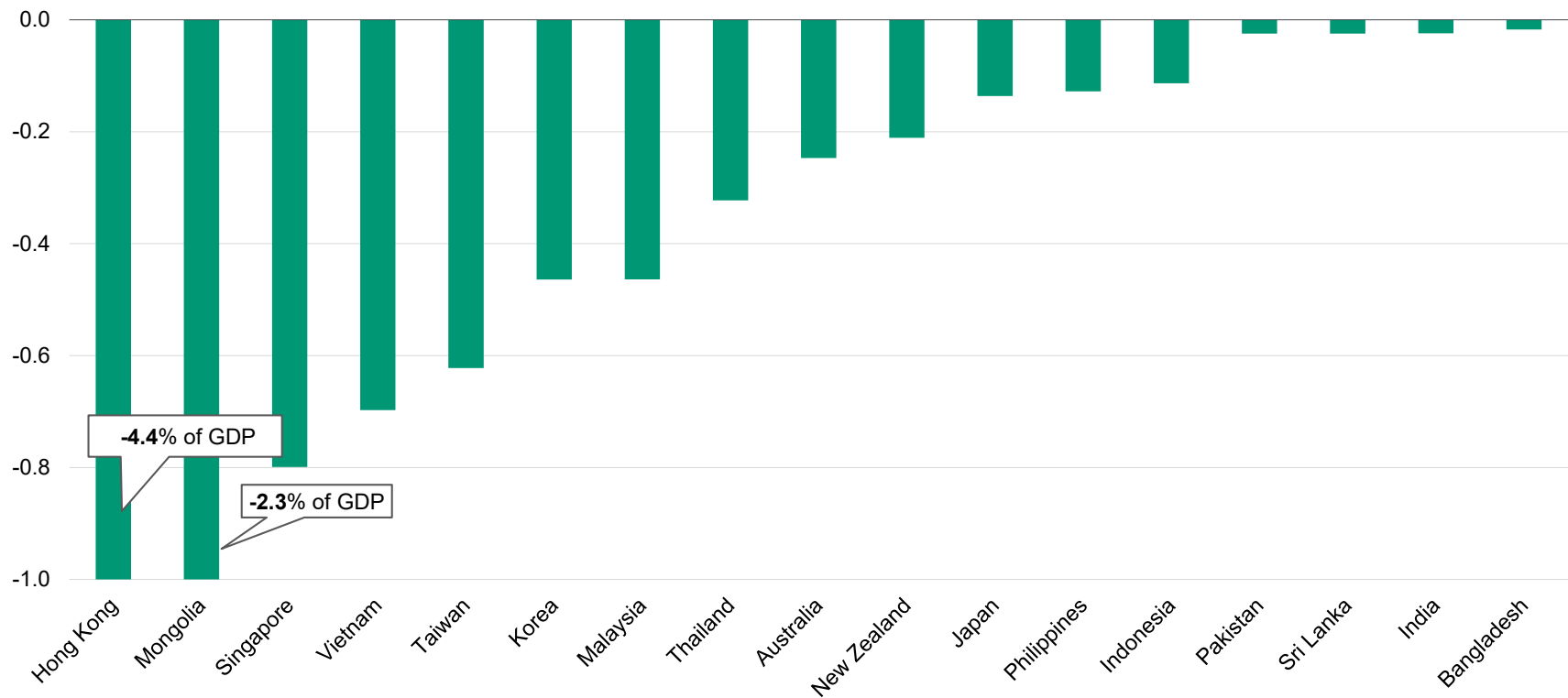
# Asia exposed to slower demand from China

Hong Kong, Mongolia, Singapore and Vietnam are the most vulnerable to a drop in Chinese demand

## EXHIBIT 7

### Loss of exports in the event of a slowdown in demand from China, as a % of GDP

Direct impact of a slowing in China's import growth to 5%, half the 9.9% increase in 2018



Source: Moody's Investors Service

# Longer-term production relocation would offset the shock for Thailand, Vietnam and Taiwan

## EXHIBIT 8

### Measures of relocation potential

Country	Export Similarity Index (score)	Labor Cost (\$ nominal wage, % of China)	Manufacturing GDP (\$ billion)	Logistics Performance Index (score)	Ease of Doing Business (score)	Exports to China (% of GDP)
Thailand	0.35	46	123	3.4	78.5	12.5
Vietnam	0.43	26	34	3.3	68.4	14.6
Taiwan	0.35	179	182	3.6	80.9	22.5
Malaysia	0.32	84	70	3.2	80.6	13.5
Hong Kong	0.39	220	3	3.9	84.2	54.1
Korea	0.37	340	422	3.6	84.1	24.8
India	0.28	20	390	3.2	67.2	4.2
Japan	0.33	325	1,042	4.0	75.7	19.0
Indonesia	0.22	22	205	3.2	68.0	13.7
Singapore	0.28	413	58	4.0	85.2	13.9
Philippines	0.22	26	61	2.9	57.7	11.7
New Zealand	0.11	371	20	3.9	86.6	22.3
Sri Lanka	0.16	26	16	2.6	61.2	3.7
Australia	0.10	430	76	3.8	80.1	29.6
Pakistan	0.11	18	37	2.4	55.3	6.9
Macao	0.20	198	0			21.9
Cambodia	0.14	26	4	2.6	54.8	6.2
Bangladesh	0.11	16	43	2.6	42.0	2.5
Mongolia	0.02	42	1	2.4	67.7	85.0
Fiji	0.10	63	0	2.4	61.2	3.6
Maldives	0.00		0		54.4	0.1
Papua New Guinea	0.02		0	2.2	60.1	15.5
Solomon Islands	0.01		0	2.6	59.2	65.9

#### Memo:

China	6,190	3,559	3.6	73.6
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Notes: The Export similarity index measures the composition of export baskets between two countries by comparing the underlying shares of each product category in each country's total exports; a higher value denotes a high degree of substitution between that country and China. Labor cost is the mean nominal monthly wage in US dollars for each country as compared to that for China in 2017, or the latest available. Logistics performance and Ease of doing business refers to each country's latest scores in the World Bank's respective reports in those areas. Exports to China as a share of GDP shows 2017 data.

Source: World Bank, ILO Global Wage Report 2018/19, Moody's Investors Service



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US-China trade  
relations remain  
contentious

# About half of US and Chinese imports from one another are now tariffed, most under a 25% rate

Size of 2018 China and US bilateral trade relative to trade with the rest of world

EXHIBIT 9

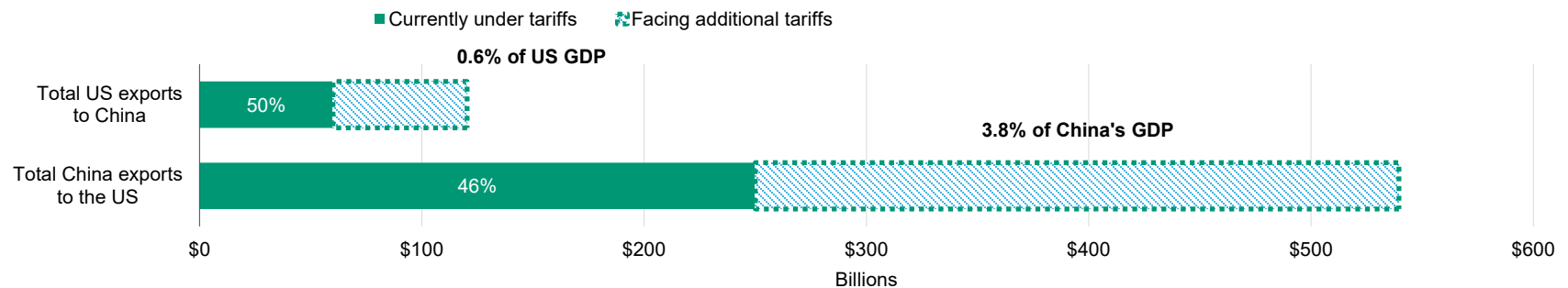


EXHIBIT 10

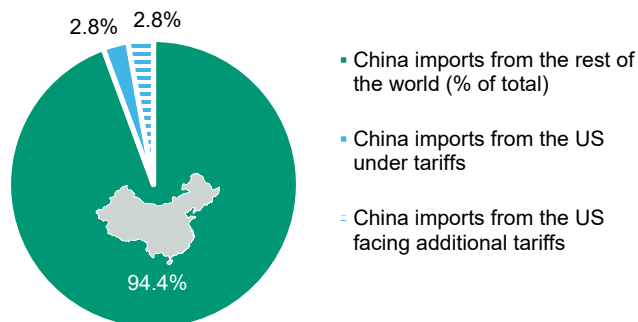
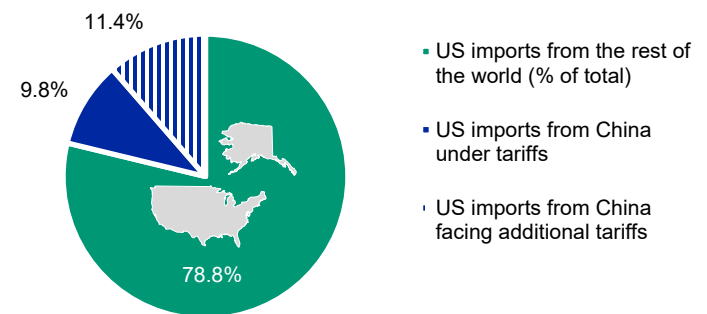
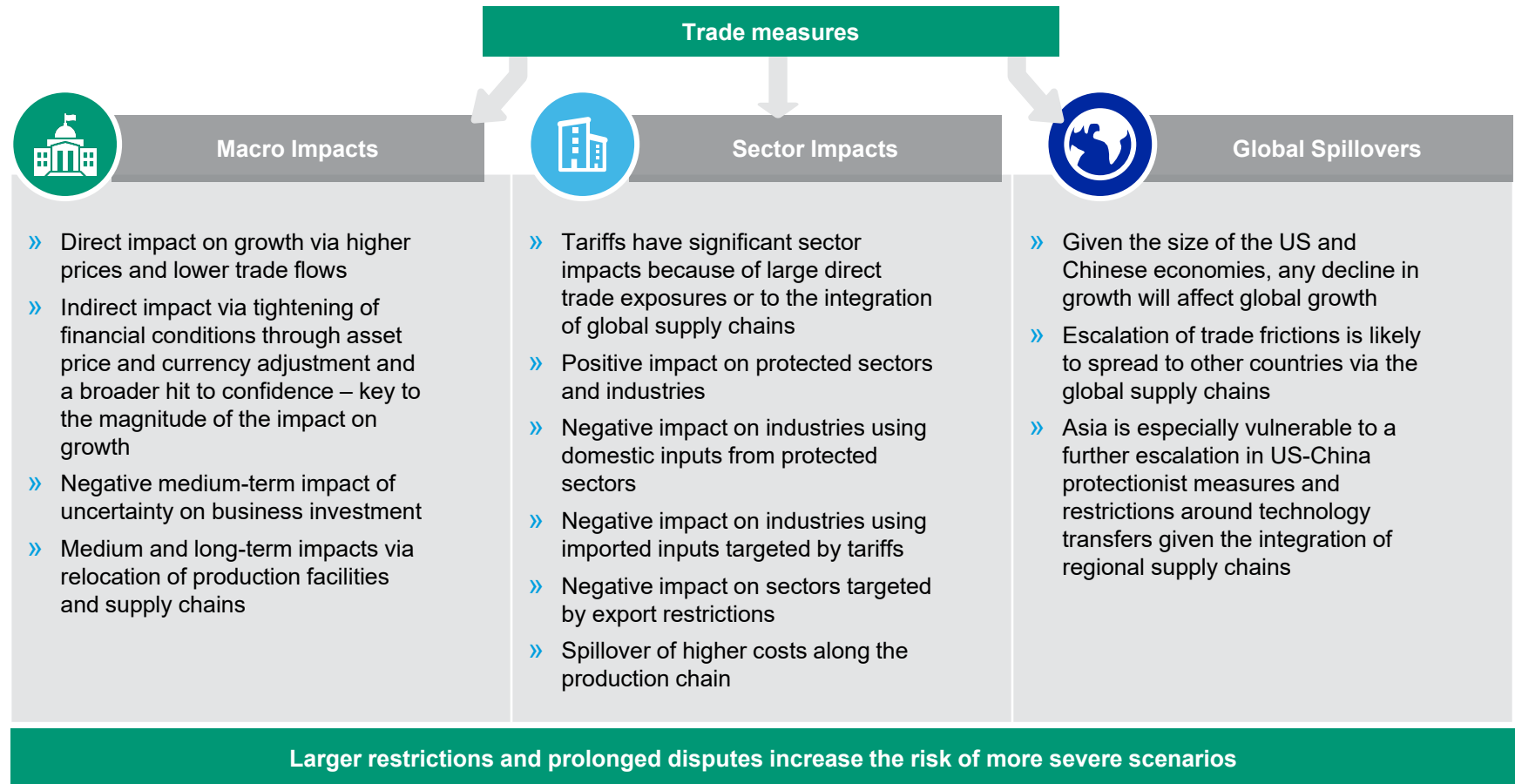


EXHIBIT 11



Source: Moody's Investors Service

# Trade tensions will spread through the global economy via multiple channels



Source: Moody's Investors Service

# Macro impacts – three possible scenarios for the outcome of the US-China trade dispute

The “Status quo” is our baseline scenario, but the risk of escalation is high

## SCENARIO 1 Status quo (45% probability)

**25% tariffs on \$250 billion of US imports from China remain**

- » No trade deal, but no further escalation of tensions as trade talks continue
- » Threat remains of 25% tariffs on all imports from China, but these tariffs not implemented
- » Trade with China remains a contentious issue
- » No auto tariffs
- » No new tariffs on US imports from Mexico

## SCENARIO 2 Hardened stance (40% probability)

**25% tariffs on all of US imports from China; China retaliates**




- » US and China impose 25% tariffs on all imports from the other
- » Trade with China remains a contentious issue
- » No auto tariffs
- » No new tariffs on US imports from Mexico

## SCENARIO 3 Significant softening (15% probability)

**US and China reach a deal**

- » US President Trump and China President Xi reach mutual understanding, followed by a trade deal that ends hostilities
- » Trade policy uncertainty remains
- » Threat of new tariffs on US imports from Mexico not applied

# Trade frictions - macro impact estimates

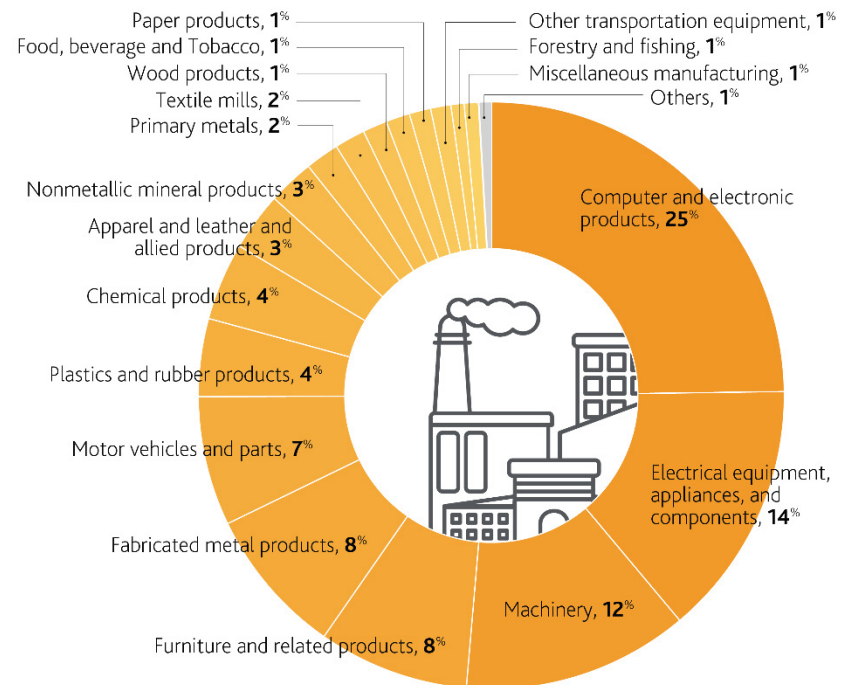
	<b>SCENARIO 1</b> <b>Status quo</b> <b>(45% probability)</b>	<b>SCENARIO 2</b> <b>Hardened stance</b> <b>(40% probability)</b>	<b>SCENARIO 3</b> <b>Significant softening</b> <b>(15% probability)</b>
<b>GROWTH IMPACT</b> 	<ul style="list-style-type: none"> <li>» <b>0.1 pp</b> shaved from US growth and <b>0.2 pp</b> from China growth over four quarters</li> <li>» Fiscal stimulus in China will offset some of the adverse impacts of trade</li> <li>» Expect <b>2.3%</b> and <b>1.7%</b> US growth and <b>6.2%</b> and <b>6.0%</b> China growth in 2019 and 2020 respectively</li> </ul>	<ul style="list-style-type: none"> <li>» <b>0.3 pp</b> shaved from US growth and <b>0.5 pp</b> from China growth over four quarters</li> <li>» Higher fiscal stimulus in China will only partially offset adverse effects on growth</li> </ul>	<ul style="list-style-type: none"> <li>» Upside to US, China and global growth</li> <li>» Major downside risk avoided</li> </ul>
<b>INFLATION</b> 	<ul style="list-style-type: none"> <li>» Higher prices passed on to businesses and consumers</li> <li>» US inflation is <b>20 bp</b> higher a year later</li> </ul>	<ul style="list-style-type: none"> <li>» Higher prices passed on to businesses and consumers</li> <li>» US inflation is <b>50 bp</b> higher a year later</li> </ul>	<ul style="list-style-type: none"> <li>» US inflation remains anchored around 2%</li> </ul>
<b>FED STANCE</b> 	<ul style="list-style-type: none"> <li>» The Fed will look past the temporary increase in prices</li> <li>» A rate cut is possible if financial conditions deteriorate significantly</li> </ul>	<ul style="list-style-type: none"> <li>» The Fed will cut rates by 50 bp</li> </ul>	<ul style="list-style-type: none"> <li>» The Fed will maintain the fed funds rate at the current level</li> <li>» A rate hike in 2020 is not out of question if the economy surprises to the upside</li> </ul>

# US to keep tariffs in place on more than \$250 billion of Chinese imports

- » More than half of the targeted imports represent intermediate inputs, which are used by a variety of US sectors
- » Largest categories include computers and electronics, electrical equipment and components, furniture, machinery, fabricated metal products, autos and auto parts, chemicals, plastics and rubber, apparel and leather, and mineral products

**EXHIBIT 12**

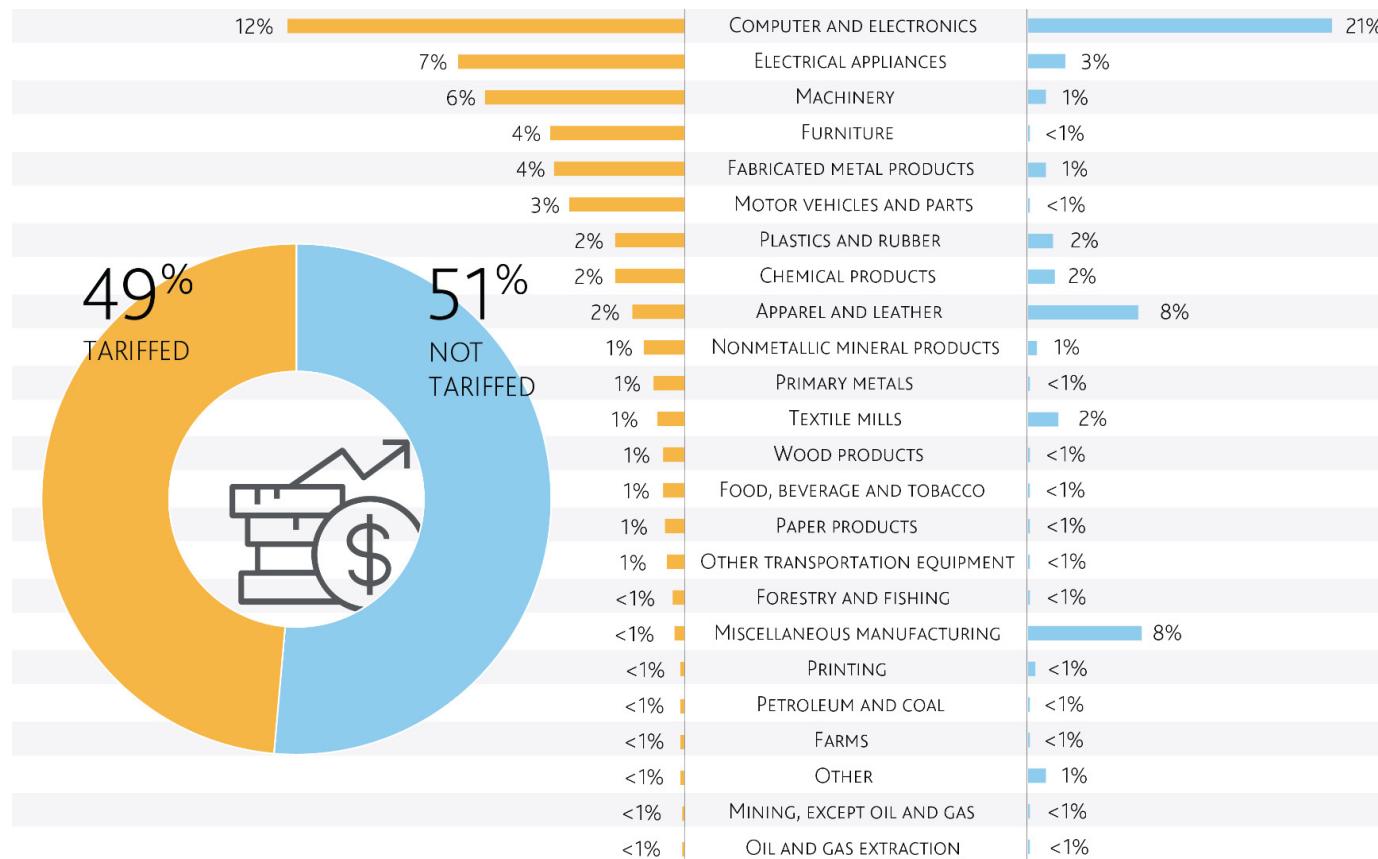
## Distribution of tariffed products by commodity type



Source: Moody's Investors Service calculations, based on the 17 September tariff list (USTR) and BEA 71-industry import input-output use tables, 2016

# Potential further broadening of US tariffs would affect more US consumer goods

EXHIBIT 13



Sources: Trade statistics for international business development, UN Comtrade, Moody's Investors Service

# Chinese tariffs on more than \$100 billion of US imports target array of goods; impact spread out

## EXHIBIT 14

Most exposed are US liquefied natural gas, computer, electronics, vehicles, machinery, and agricultural products

Products by industry	Employment per industry (2016 data)	Targeted exports		
		as % of total US exports	as % of industry output	as % of total sector exports
Computer and electronics	1,048	0.6%	3.0%	7%
Chemicals	811	0.6%	1.3%	8%
Motor vehicles and parts	209	0.6%	1.2%	8%
Machinery	1,080	0.5%	2.2%	7%
Crops (incl. soybeans)	1,188	0.3%	3.1%	9%
Other manufacturing	591	0.2%	2.2%	4%
Food, beverage, tobacco	1,554	0.2%	0.3%	4%
Electrical equipment	383	0.2%	2.3%	5%
Paper products	371	0.2%	1.5%	11%
Fabricated metal products	1,425	0.1%	0.7%	5%
Primary metals	378	0.1%	0.9%	5%
Forestry, fishing	22	0.1%	3.5%	26%
Plastics and rubber	699	0.1%	0.7%	5%
Oil and gas extraction	180	0.1%	0.6%	6%
Wood products	392	0.1%	1.3%	22%
Mining, except oil and gas	181	0.1%	1.4%	6%
Nonmetallic mineral products	408	0.1%	1.0%	8%
Petroleum and coal products	112	0.1%	0.2%	1%
Apparel and leather	161	0.0%	2.2%	5%
Textile mills	229	0.0%	0.8%	4%
Printing	447	0.0%	0.2%	4%
Furniture	389	0.0%	0.1%	3%
Other transportation equipment	489	0.0%	0.0%	1%

Sources: Trade statistics for international business development, UN Comtrade, Moody's Investors Service

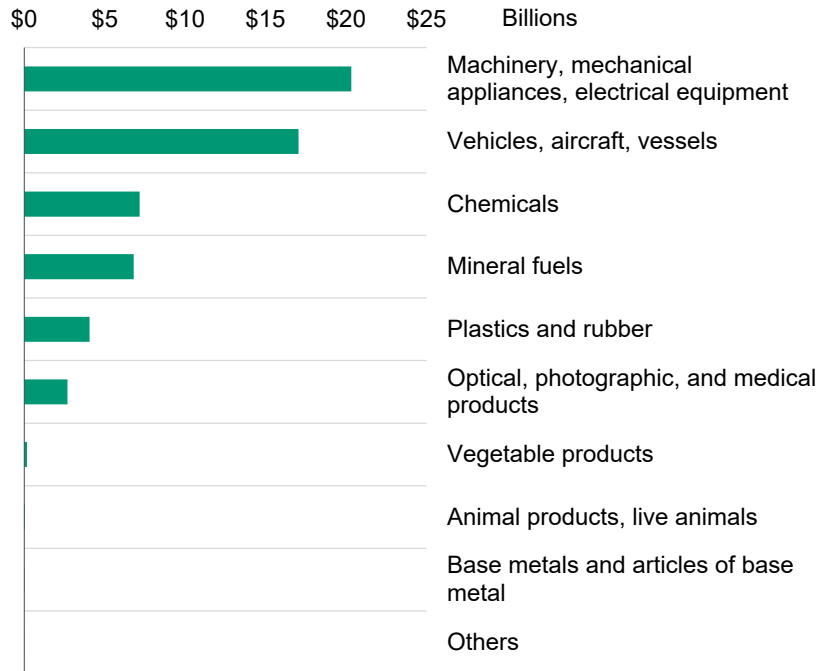


# Potential further broadening of Chinese tariffs could affect crude oil, semiconductors & aircraft

Roughly \$50 billion in Chinese imports from the US not tariffed yet

**EXHIBIT 15**

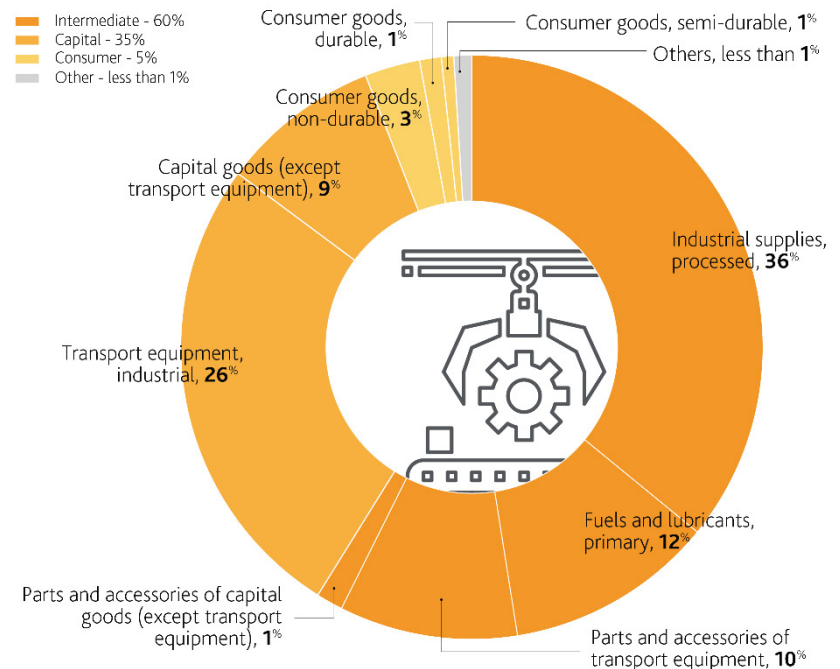
Chinese imports from the US not subject to China's retaliatory tariffs



Sources: Trade statistics for international business development, UN Comtrade, Moody's Investors Service

**EXHIBIT 16**

2018 Chinese imports from the US, not subject to China's retaliatory tariffs, by product type



# US export and investment controls on Chinese companies may disrupt certain industries

- » In June 2019, the US Department of Commerce restricted the sale of US products to Huawei Technologies Co. and five other Chinese tech entities (Higon, Sugon, Chengdu Haiguang Integrated Circuit, Chengdu Haiguang Microelectronics Tech, and Wuxi Jiangnan Institute of Computing Technology)
- » On July 29, the administration added a provision that US companies can be issued with licenses to sell products to Huawei, as long as the transactions do not present a “great, national emergency problem”
- » The shift on Huawei is positive for certain EMS providers and distributors, which had few options to minimize their exposure to the sales ban. EMS providers and distributors viewed the Huawei and other sales bans as applying to all subsidiaries of a US company, whether or not the subsidiaries are located in the US
- » More than 50% of imports from China under US tariffs fall within the most patent-intensive industries, as identified by the US government
- » Export restrictions on technologically advanced products and licensing could disrupt US tech industries with extensive involvement in China
- » Curtailing Chinese direct investment in the US tech sector and retaliatory response might dampen investment, financing conditions and growth potential of affected sectors and companies

EXHIBIT 17

Industry	<div> <div>High impact</div> <div>Medium impact</div> <div>Low impact</div> <div>No impact</div> </div>	
	Limited Restrictions	Severe Restrictions
Semiconductor integrated circuits (ICs)	Medium impact	High impact
Semiconductor capital equipment (SemiCap)	Low impact	Medium impact
Electronic manufacturing services (EMS)	Low impact	Medium impact
Robotics and advanced automation	Low impact	Medium impact
Rail equipment suppliers	Low impact	Medium impact
New energy vehicles	Low impact	Medium impact
Aircraft components	Low impact	Medium impact
Maritime vessels and equipment	No impact	Low impact
Agricultural machinery	No impact	Low impact
Pharmaceuticals	No impact	Low impact
Chemicals	No impact	Low impact

Sources: Trade statistics for international business development, UN Comtrade, Moody's Investors Service

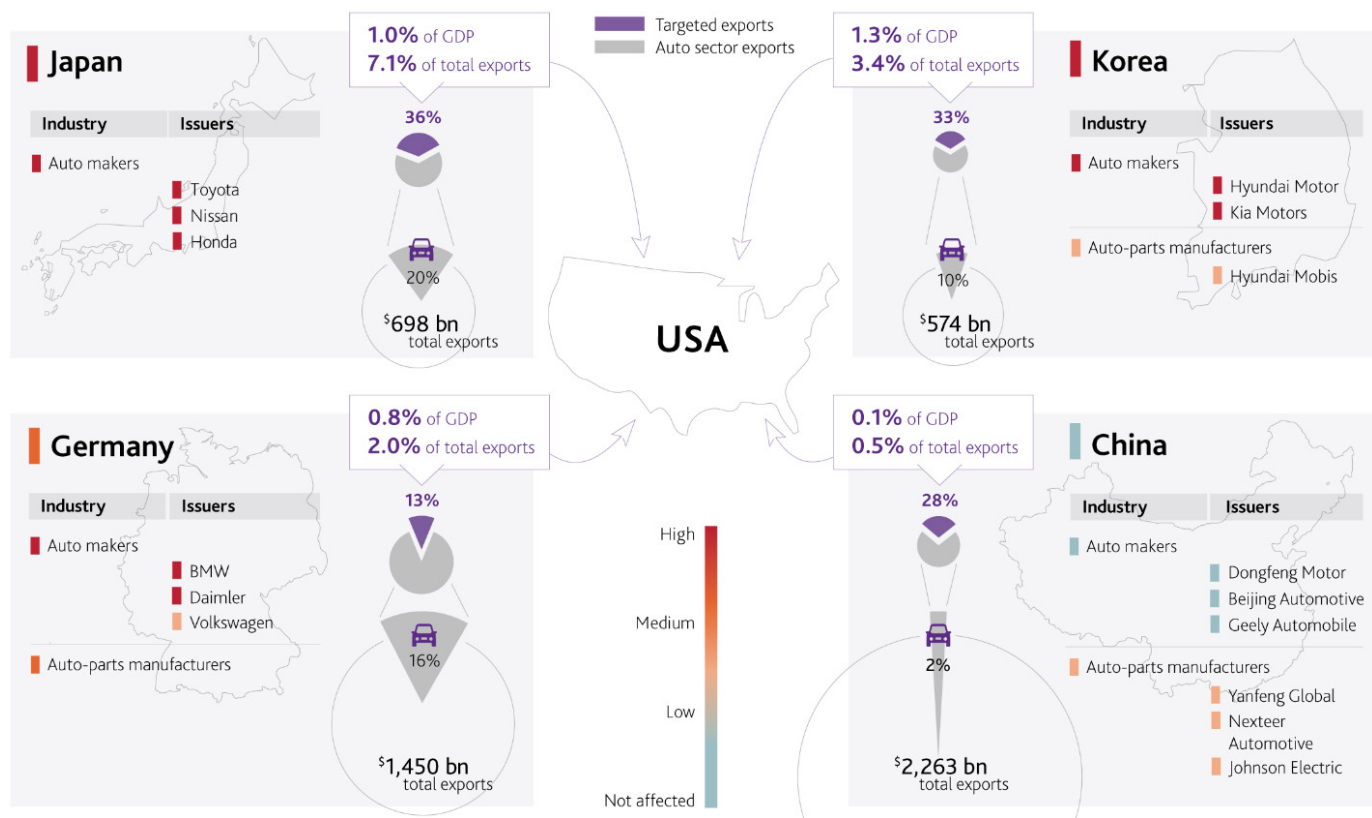
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Auto tariffs and  
Brexit-related risks  
persist

# Auto tariffs postponed but risks persist

## EXHIBIT 18

Outside of North America, auto tariffs would weigh on auto sectors in Germany, Japan and Korea



See [US auto tariffs would pose risks to global growth and weigh on auto sectors in Germany, Japan and Korea](#), April 2019

Sources: UNCTAD, Moody's Investors Service

# Potential US auto tariffs would crystalize a key risk to global growth

- » US auto tariffs of 25% could result in a 0.2-0.3 percentage point loss of export revenue for Germany, Japan and Korea, the largest US auto trading partners outside of North America, and the same decline in their GDP
- » Indirect impact could surpass the estimated direct effect because auto manufacturing is among the most deeply integrated sectors in an economy

EXHIBIT 19

Targeted auto exports to the US (autos, auto parts and trucks) (in blns)	Country	Impact on the economy				Industry impact			Direct effect on growth
		Share of GDP	Industry significance for the economy	Share of total exports	Industry employment	Share of industry value added	Share of industry exports	Domestic content of auto exports	
		US exports as % of country GDP	Auto industry value added as % of total economy value added	US exports as % of total exports	Auto industry employment as % of total economy employment	US auto exports as % of industry value added	US auto exports as % of total auto exports	Domestic value added of auto industry exports	
\$74.8	Mexico	6.5%	3.9%	18.3%	2.1%	3.5%	80.3%	52.6%	-1.1%
\$55.7	Canada	3.4%		13.3%	1.0%		94.0%	54.1%	-0.6%
\$49.4	Japan	1.0%	3.3%	7.1%	8.3%	3.2%	36.1%	89.6%	-0.3%
\$28.8	Germany	0.8%	4.9%	2.0%	2.3%	4.9%	12.5%	74.5%	-0.2%
\$19.6	Korea	1.3%	4.4%	3.4%			32.6%	72.2%	-0.3%
\$11.7	China	0.1%		0.5%			28.2%	84.2%	0.0%
\$9.4	UK	0.4%	1.5%	2.1%	1.0%	1.5%	18.7%	69.0%	-0.1%
\$5.4	Italy	0.3%	1.4%	1.1%	1.0%	1.4%	14.7%	67.5%	-0.1%
\$2.1	Sweden	0.4%	2.9%	1.4%	1.6%	2.9%	12.8%	71.1%	-0.1%
\$1.6	Slovakia	1.7%	4.4%	1.9%		4.4%	7.5%	40.1%	-0.2%
\$1.4	India	0.1%		0.5%			11.8%	76.5%	0.0%
\$1.2	Turkey	0.1%		0.8%		0.0%	5.7%	73.6%	0.0%
\$0.9	Spain	0.1%	1.6%	0.3%	1.1%	1.6%	1.7%	57.5%	0.0%
\$0.9	Netherlands	0.1%	0.5%	0.2%	0.4%	0.5%	6.6%	60.4%	0.0%
\$0.9	Austria	0.2%	1.4%	0.5%	0.9%	1.4%	6.8%	55.4%	0.0%
\$0.7	Hungary	0.5%	4.8%	0.6%	2.4%	4.8%	3.6%	39.6%	-0.1%
\$0.6	Belgium	0.1%	0.8%	0.2%	0.8%	0.8%	1.5%	38.9%	0.0%

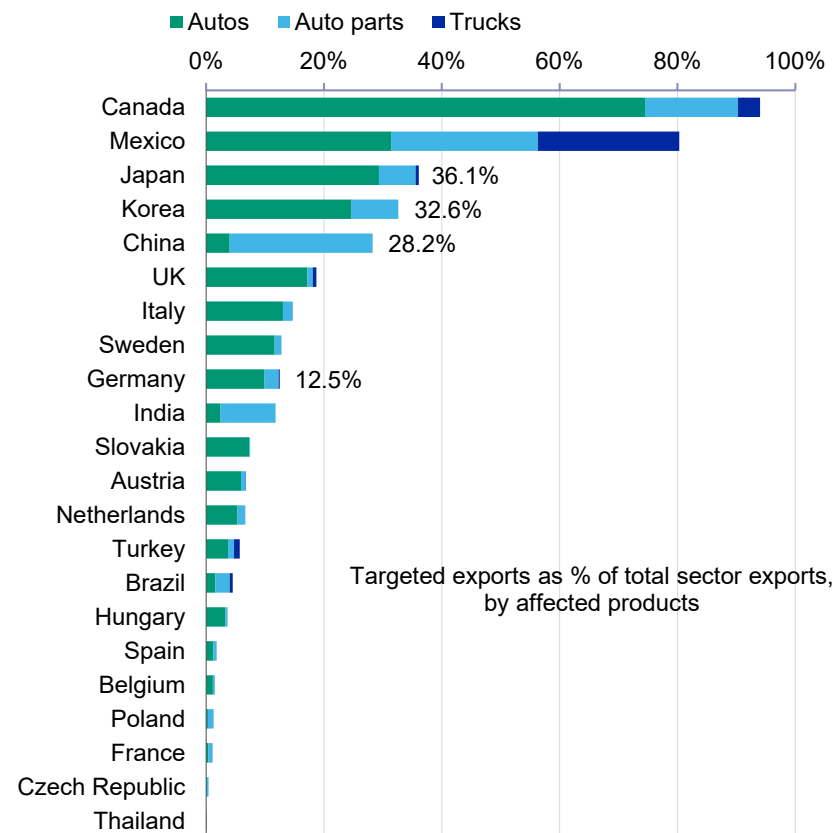
Sources: UNCTAD, OECD, TIVA 2018 database, Haver Analytics, German federal statistical office, Japan Automobile Manufacturers Association, Moody's Investors Service

See [US auto tariffs would pose risks to global growth and weigh on auto sectors in Germany, Japan and Korea](#), April 2019

# Potential US tariffs on imported vehicles and parts negative for most of the industry

- » Tariffs on imported vehicles and parts would be **negative for almost every auto sector group**: carmakers, parts suppliers, dealers, retailers and transportation companies
- » **US automakers are** dependent on imports from Mexico and Canada to support US operations
- » **USMCA** includes provision to exclude Mexico and Canada from auto tariffs
- » **European automakers** without US plants would suffer disproportionately. **Japanese carmakers** would need to significantly adjust production
- » Only **Chinese automakers** would be unaffected, with majority of exports absorbed by emerging markets
- » The largest **parts suppliers** match automakers' production and vehicles and may struggle to adapt following any tariffs. Avoiding these costs may disrupt the supply chain
- » Most rated **US auto dealers** are heavily weighted toward imports, vulnerable to tariffs
- » **Korean automakers** might increase US production, but it would prove insufficient to cover current US sales

EXHIBIT 20



Sources: US Department of Commerce; US Census Bureau, Foreign Trade Division; Moody's Investors Service  
See [Potential US tariffs on imported vehicles, parts credit negative for most of industry](#), June 2018

# Extension of Brexit process has postponed EU exit date until October, but uncertainty remains

- » The delay helped to avoid a no-deal Brexit in April, which would have had a significantly negative impact on the UK economy
- » However, uncertainty remains given that the UK Parliament has still not agreed on terms for leaving the EU. Moreover, recent events including the poor performance of the ruling Conservative party in the May 2019 local and European elections, and Prime Minister Theresa May's subsequent resignation – have increased the likelihood of the UK leaving the EU without any agreement in October
- » A no-deal Brexit would be credit negative for an array of UK issuers. The auto, aerospace and chemical sectors would be the most severely affected, owing to higher costs of trade and potential disruptions to logistics and supply chains

## EXHIBIT 21

Impact could be felt through different transmission channels, with severity depending on the specific sector

Sector	New tariffs and logistical disruption	Sterling depreciation	Regulatory changes	Weaker UK macroeconomic conditions	Labour shortage	Overall impact
Automotive	High	Mixed	Medium	High	Medium	High
Aerospace and electrical machinery	High	Mixed	High	High	Medium	High
Chemicals	High	Mixed	High	Medium	Medium	High
Airlines	Low	Negative	High	High	Low	High
Retail	High	Negative	Low	Medium	Medium	Medium
Food and agricultural products	High	Mixed	Medium	Low	High	Medium
Textile and apparel	Medium	Negative	Low	High	Medium	Medium
Pharmaceuticals	Medium	Mixed	High	Low	Medium	Medium
Tobacco and beverages	Medium	Negative	Low	High	Low	Medium
Mining and quarrying	High	Mixed	Low	Medium	Medium	Medium
Health services	Low	Mixed	High	Medium	High	Medium
Education	Low	Positive	Medium	Medium	High	Low

Source: Moody's Investors Service

See [Cross Sector - UK: Probability of a 'no-deal' Brexit has risen, would be negative for an array of issuers](#), October 2018

[Government of United Kingdom – Aa2 Stable: Annual credit analysis](#), July 2019

# Moody's related publications

## Sector research

- » [Technology – US: Easing of Huawei sales ban is positive for EMS providers and tech distributors](#), July 2019
- » [Qorvo Inc.: Despite significant exposure to Huawei ban and US-China trade tensions, leverage will remain modest](#), June 2019
- » [Global Macro Outlook: Global growth prospects at risk from increasingly uncertain US trade policy](#), June 2019
- » [Semiconductors – US: Chip companies have limited exposure to Huawei; will manage through the sales ban](#), May 2019
- » [Global Trade Monitor – April 2019: Uncertainty over the outcome of trade negotiations poses a key risk to the global economic outlook](#), April 2019
- » [US auto tariffs would pose risks to global growth and weigh on auto sectors in Germany, Japan and Korea](#), April 2019
- » [Cross Sector - UK: Extension of Brexit process avoids imminent no-deal outcome, but uncertainty remains](#), April 2019
- » [UK Brexit Monitor \(Slides\)](#), March 2019
- » [Automotive manufacturing - Global, Outlook update: Changing outlook to negative amid continued weak demand](#), March 2019

## Topic pages

- » [Rising Trade Tensions](#)
- » [The Big Picture](#)
- » [Growth](#)



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