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Moody’s Teleconference November 2018

2019 Global Macroeconomic and Sovereign Outlook

14-15 November 2018

Key messages

1. **Global growth will decelerate across both advanced and emerging markets in 2019. While growth in advanced countries will still be solid, emerging market prospects will diverge**

2. **The 2019 sovereign outlook is still stable, but credit risks will build. The window for addressing credit challenges, including high debt levels, is closing as the risk of tail events is rising**

3. **Rising risks stem from further escalation of trade tensions, sharper-than-expected financial market adjustment to monetary policy normalization, a faster-than-expected slowdown in China and an escalation of political tensions**

1

Macroeconomic outlook:

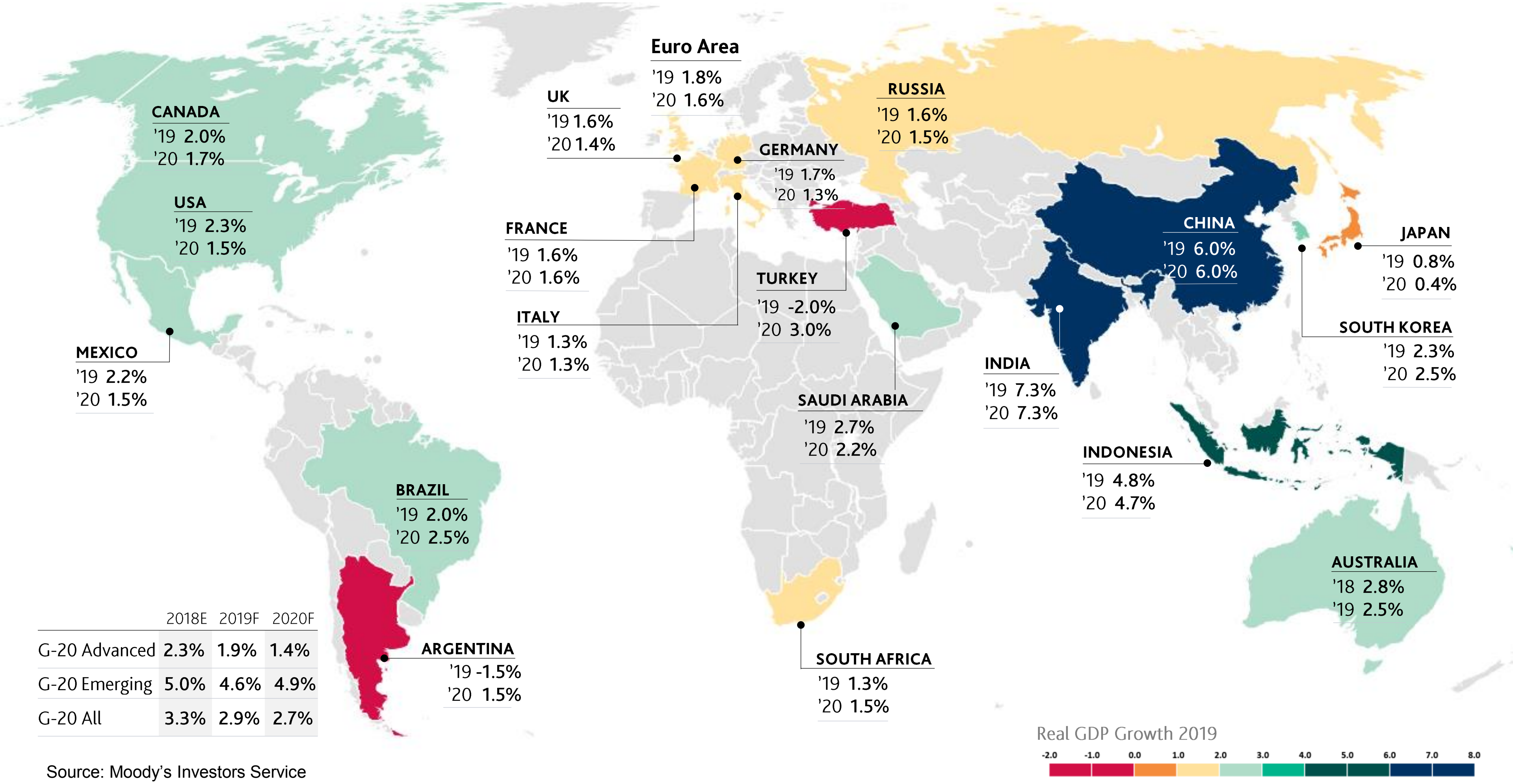
What will drive growth lower over the next two years?

Will tighter monetary policy cause the next downturn?

Will a trade war sink the global economy?

Economic growth will decelerate across advanced and emerging market economies

Global Macro Outlook (November 2018 Update): Real GDP growth forecasts (%) for G20 economies



	2018E	2019F	2020F
G-20 Advanced	2.3%	1.9%	1.4%
G-20 Emerging	5.0%	4.6%	4.9%
G-20 All	3.3%	2.9%	2.7%

Source: Moody's Investors Service

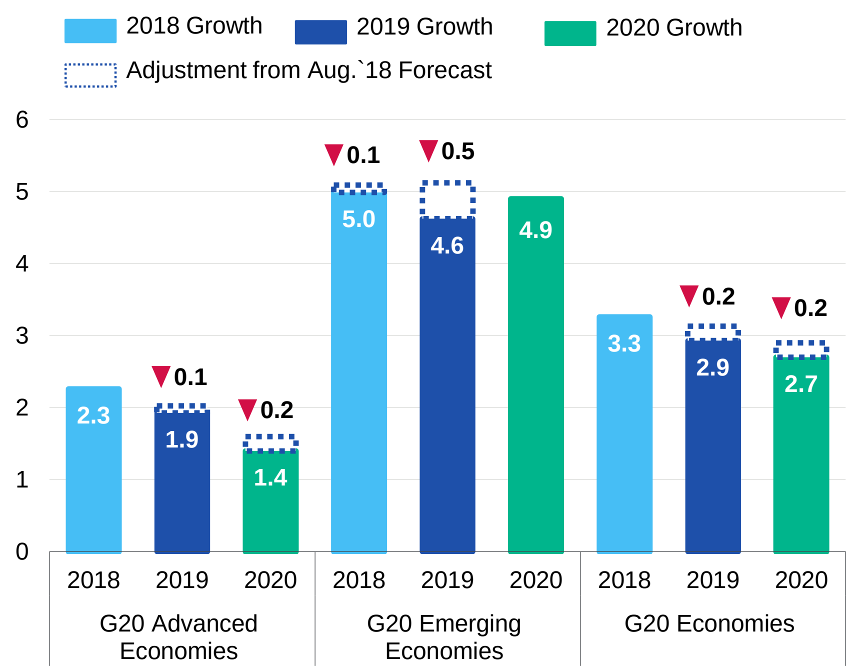
Economic growth will decelerate over 2019-20

» Global economic growth has passed the peak

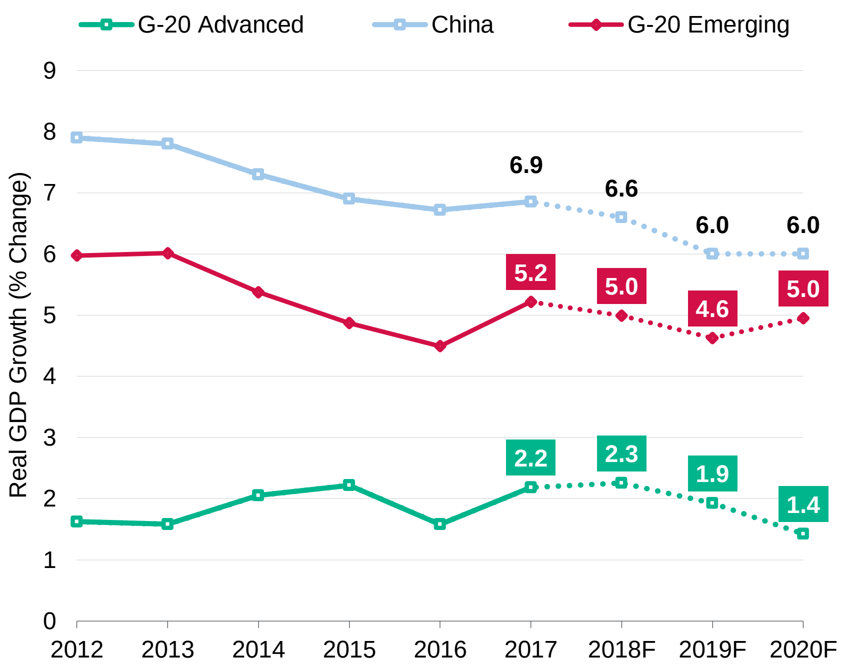
» Slowdown in G-20 advanced economies driven primarily by weaker US growth

» Slowing of economic activity in China and contractions in Turkey and Argentina will pull down aggregate G-20 emerging markets growth in 2019

Global growth will decelerate in 2019



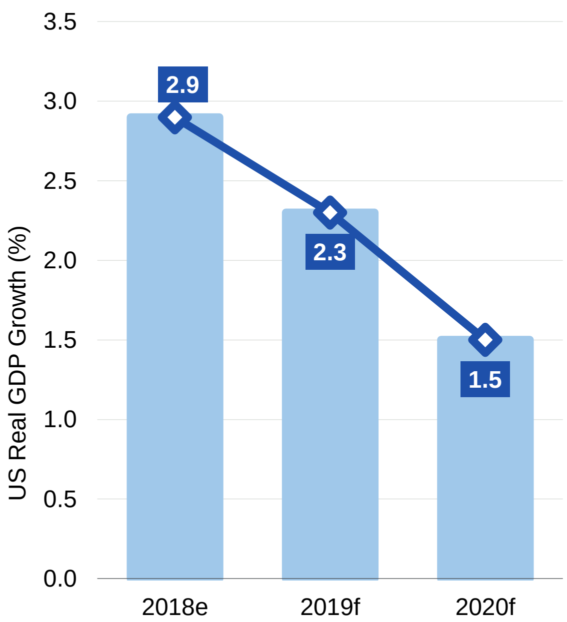
Slowdown in G-20 advanced economies driven primarily by weaker US growth

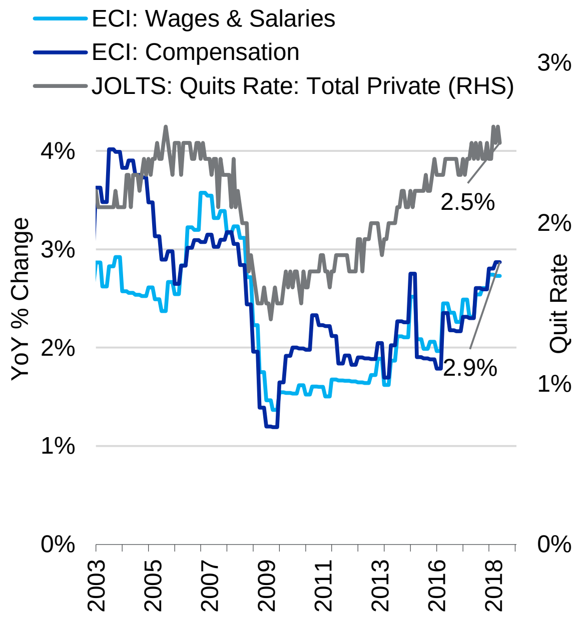


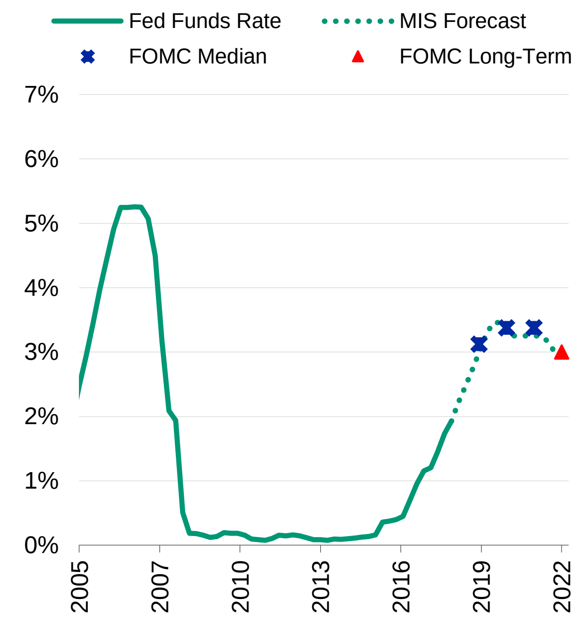
Source: Moody's Investors Service

The current US expansion will likely continue into 2019 to become the longest recorded

- But waning fiscal impulse, increasingly restrictive monetary policy, trade policy uncertainty and late-cycle dynamics will contribute to slower growth in 2019 and 2020
- In addition to rising interest rates, companies are facing prospects of higher imported input prices as a result of tariffs and rising costs of hiring and retaining workers amid a tight labor market
- The Fed will carefully calibrate monetary policy to deliberately dampen growth and elongate the current expansion by preventing excessive inflationary pressures from taking root



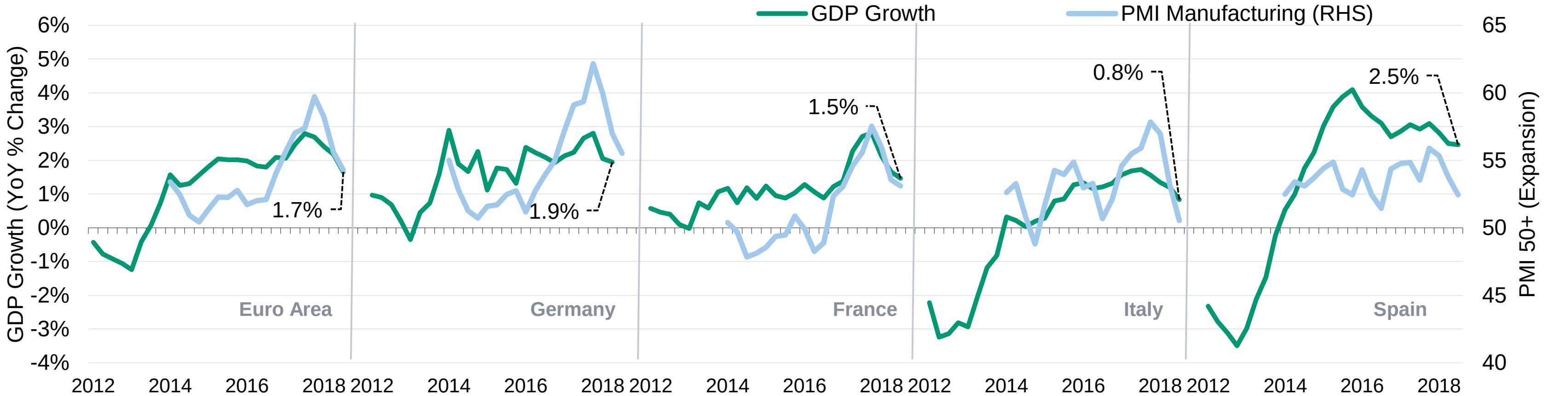




Source: Moody's Investors Service

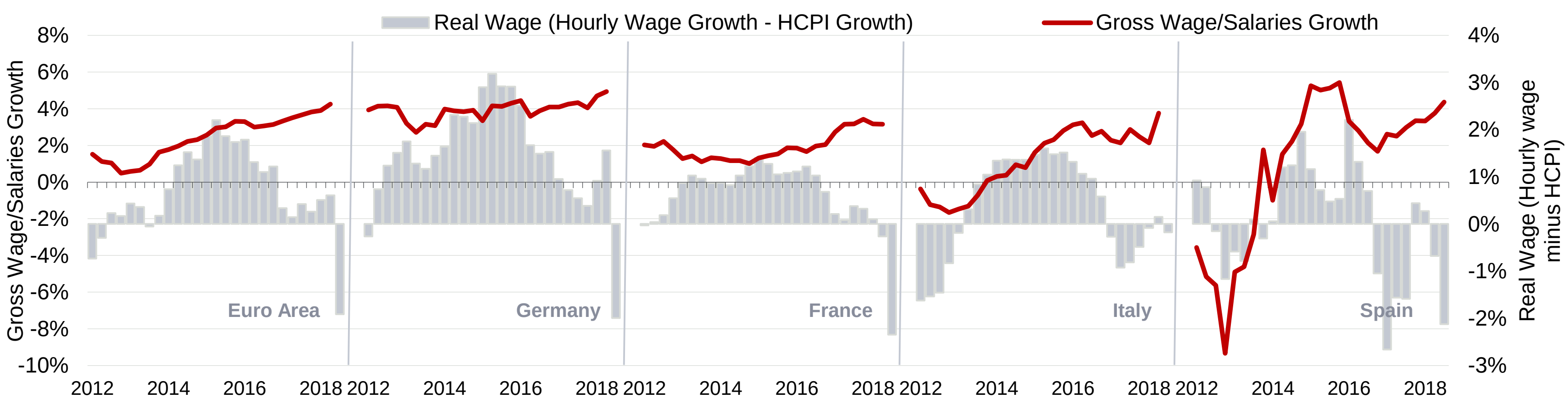
Euro area continues to grow, but political risk could weigh on sentiment

Euro area growth has steadily slowed … consistent with the pullback in the PMI and business sentiment



Source: Haver Analytics, National Sources, HIS Markit

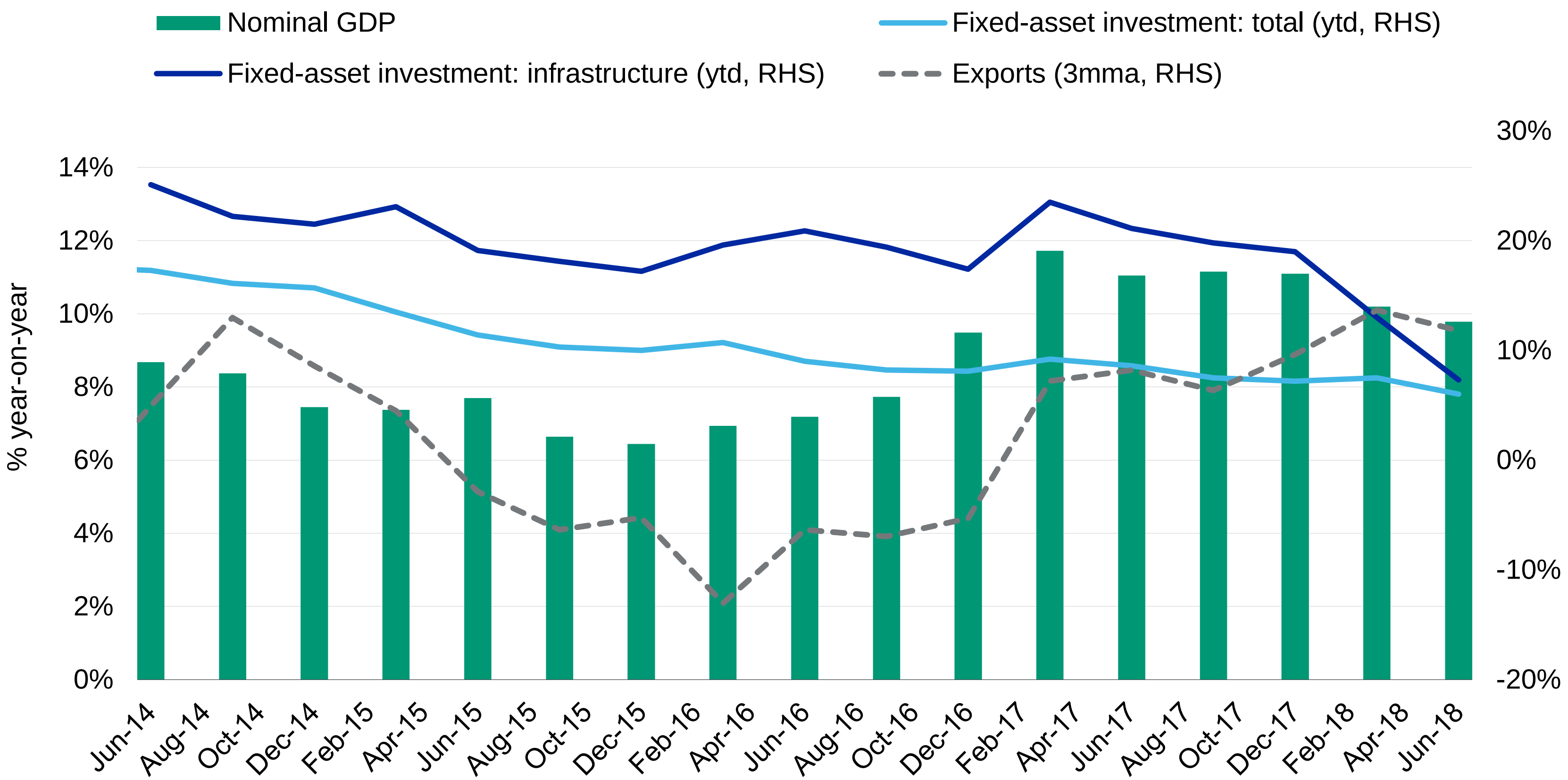
Real hourly wage growth remains muted



Sources: Statistical Office of the European Communities/Haver Analytics

China’s economic growth is softening on weaker domestic demand and exports

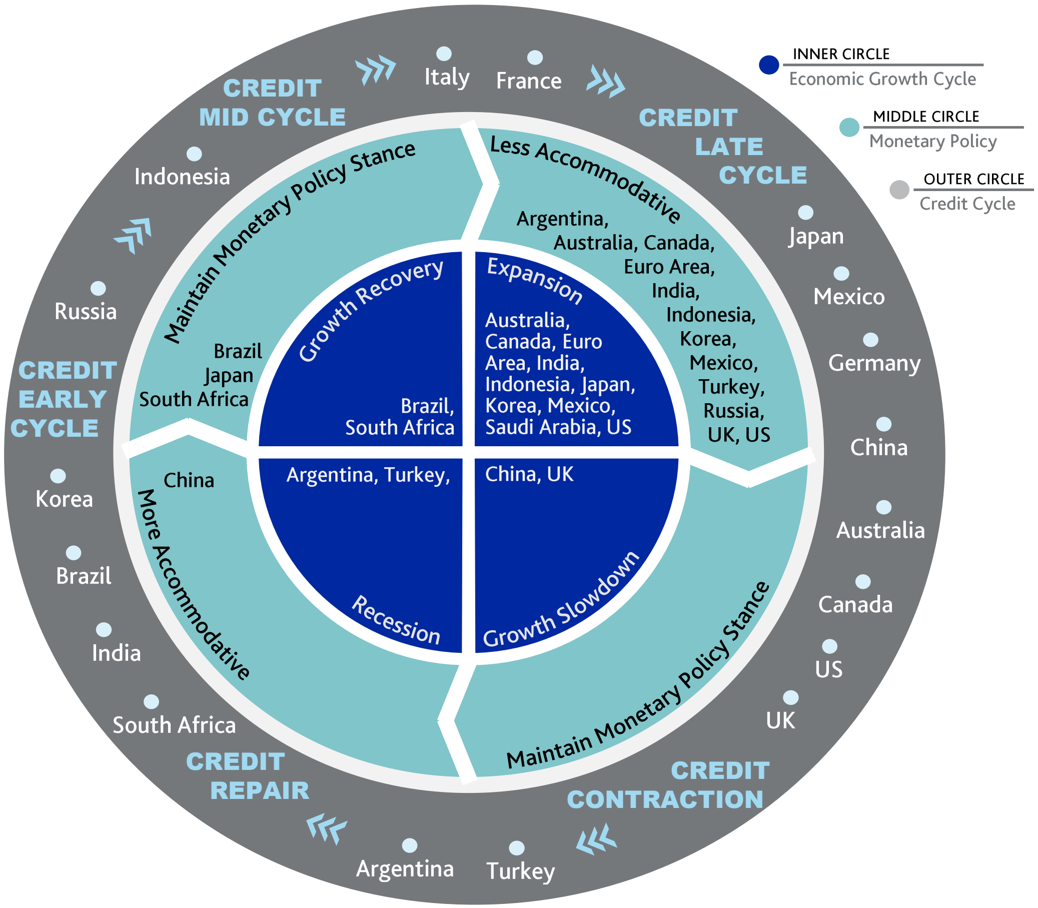
GDP and major macro indicators showed weakness in Q2 2018



Sources: Moody’s Investors Service, National Bureau of Statistics and Haver Analytics

Global financial conditions will continue to tighten in 2019 and 2020

- Monetary policy normalization in advanced economies will continue in 2019 and 2020
- There will be limited scope for additional monetary easing in emerging markets
- Term premia and credit spreads will rise globally; volatility will return to normal levels
- Tightening funding conditions will create liquidity headwinds for emerging market countries that rely heavily on external funding



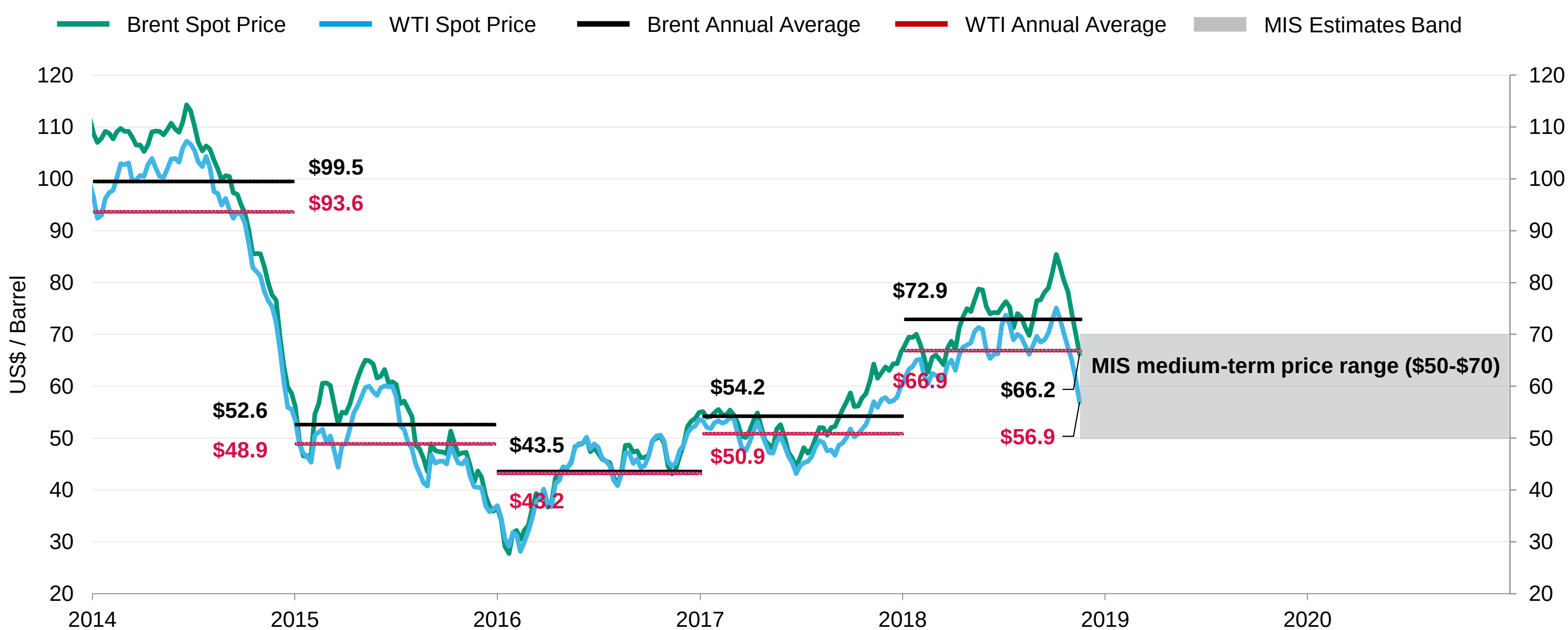
Source: Moody's Investors Service

Oil prices will remain volatile around current levels in the near term

» Oil prices have climbed down recently from highs reached in October due to supply concerns. We expect oil prices will remain volatile around current levels

» Our medium-term price range for West Texas Intermediate (WTI) crude is **$50-$70** per barrel

Global oil spot prices & WTI and our medium-term expectation



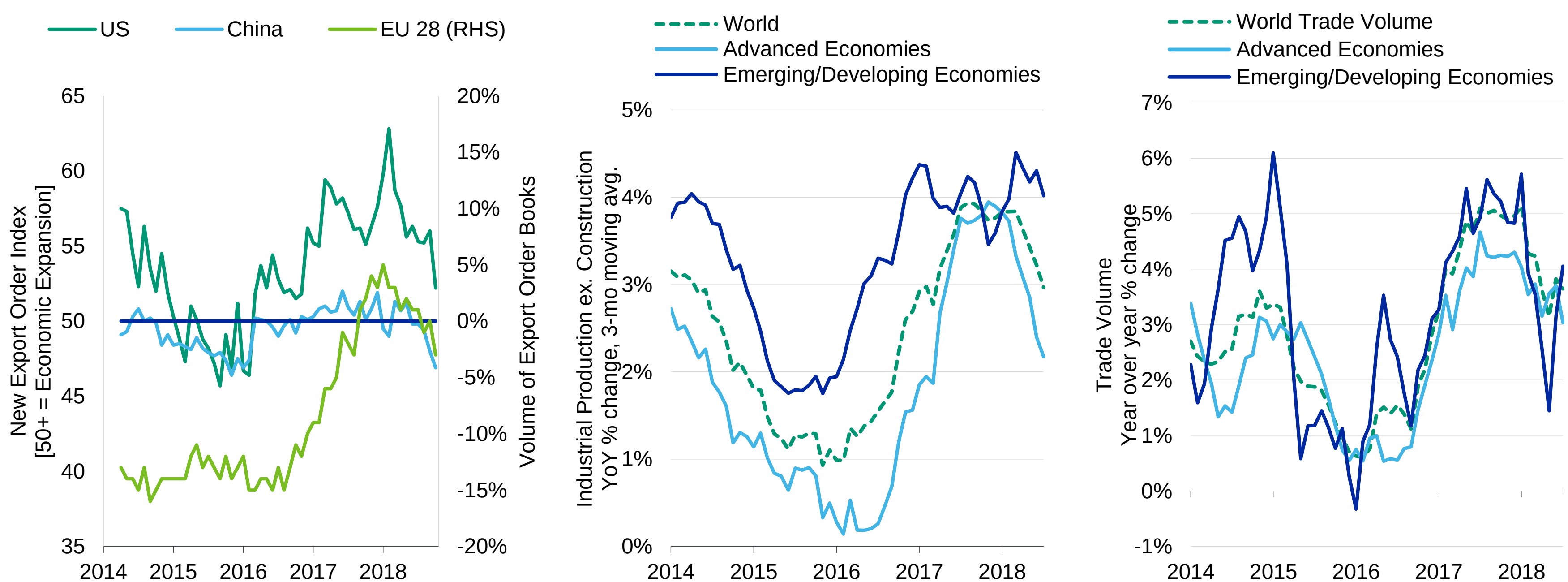
Sources: Haver Analytics, Moody's Investors Service

Industrial activity and trade growth are decelerating

» US trade restrictions are starting to adversely affect economic activity and trade flows

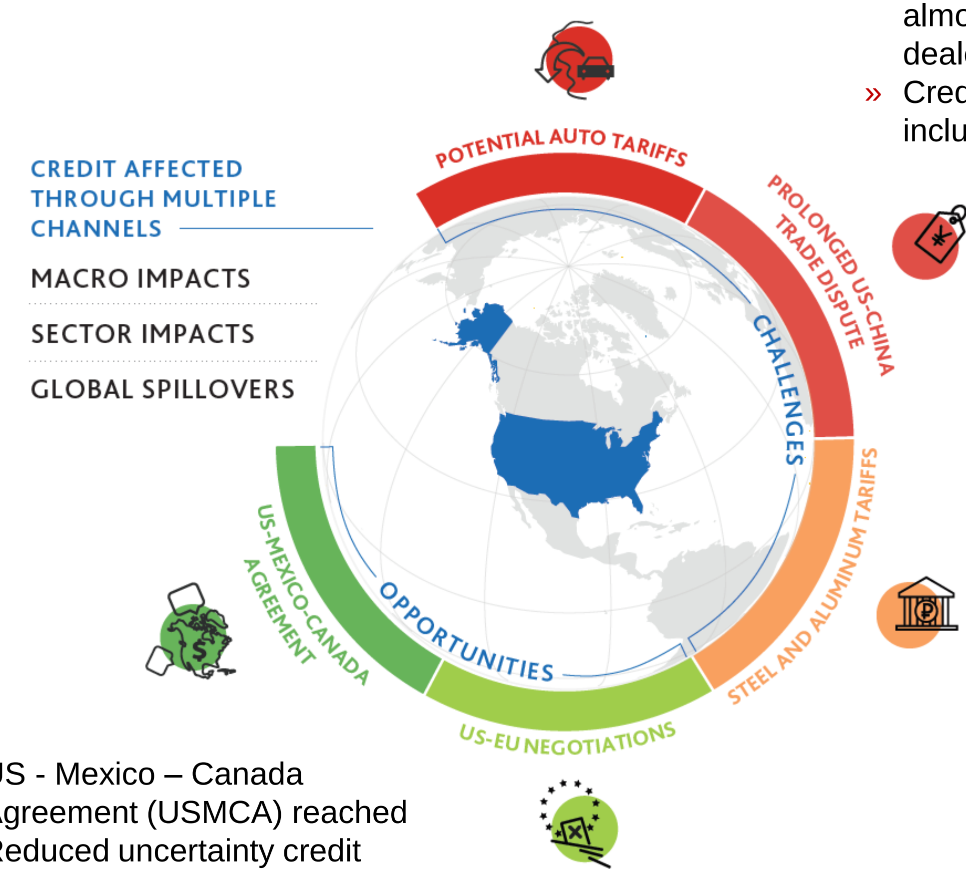
» Trade and geopolitical disputes between the US and China will worsen in 2019 and continue to weigh on the outlook for investment, industrial production and global trade growth

Global trade volume and industrial production levels are slowing amid rising trade tensions



Sources: Haver Analytics, CBP Netherlands

Key trade hotspots



- Auto tariffs on US imports would be credit negative for almost every auto sector – carmakers, parts suppliers, dealers, retailers, and transportation companies
- Credit negative for economies with large auto sectors, including the US, Japan and Germany

- A prolonged US-China trade dispute and rising geopolitical tensions is now our baseline
- Significant sector and regional impacts are likely, including unintended consequences on domestic supply chains
- Asia most vulnerable to spillovers

- US tariffs will benefit US steel and aluminum sectors
- But will hurt US manufacturing sectors vulnerable to higher input prices and consumers
- US tariffs are prompting retaliatory response from trade partners

- US - Mexico – Canada Agreement (USMCA) reached
- Reduced uncertainty credit positive for Mexico and Canada
- US auto sector most dependent on trade within NAFTA (USMCA)

- US – EU negotiations in progress
- EU to increase imports of soybeans and liquefied natural gas from the US

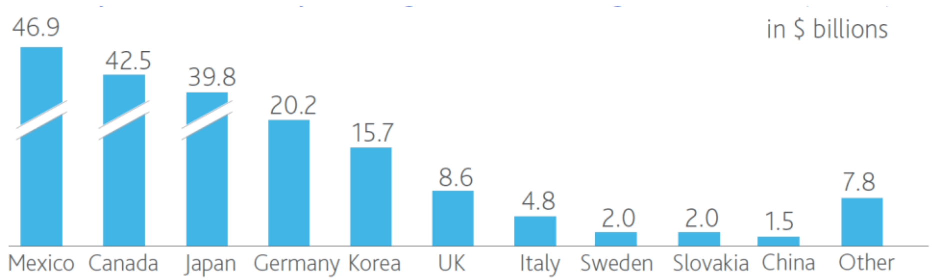
Source: Moody's Investors Service

Trade tensions will escalate in 2019

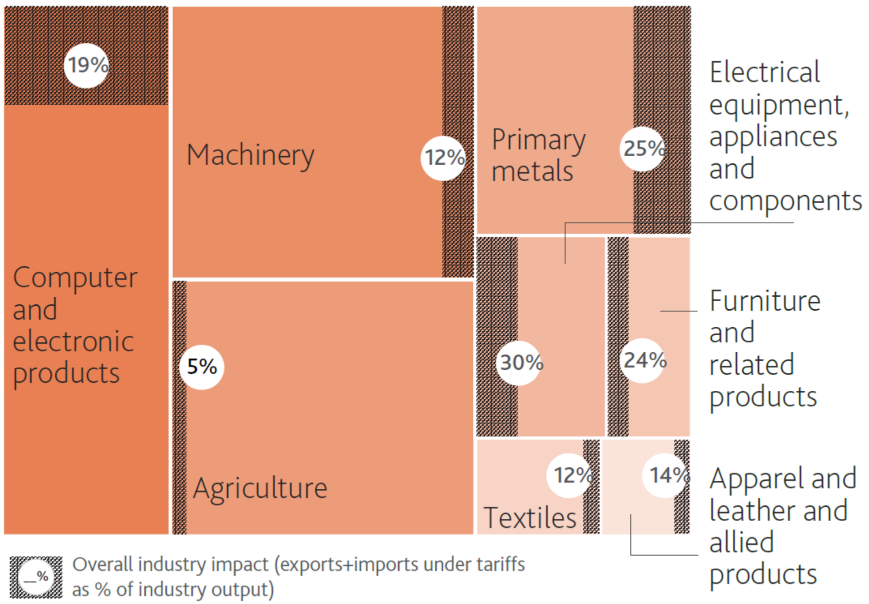
» Trade tensions will reshape trade flows and global supply chains with positive and negative credit effects across sectors

Trade milestones to watch

US imports of new passenger cars and light vehicles (2017)



Most-affected US sectors by retaliatory tariffs

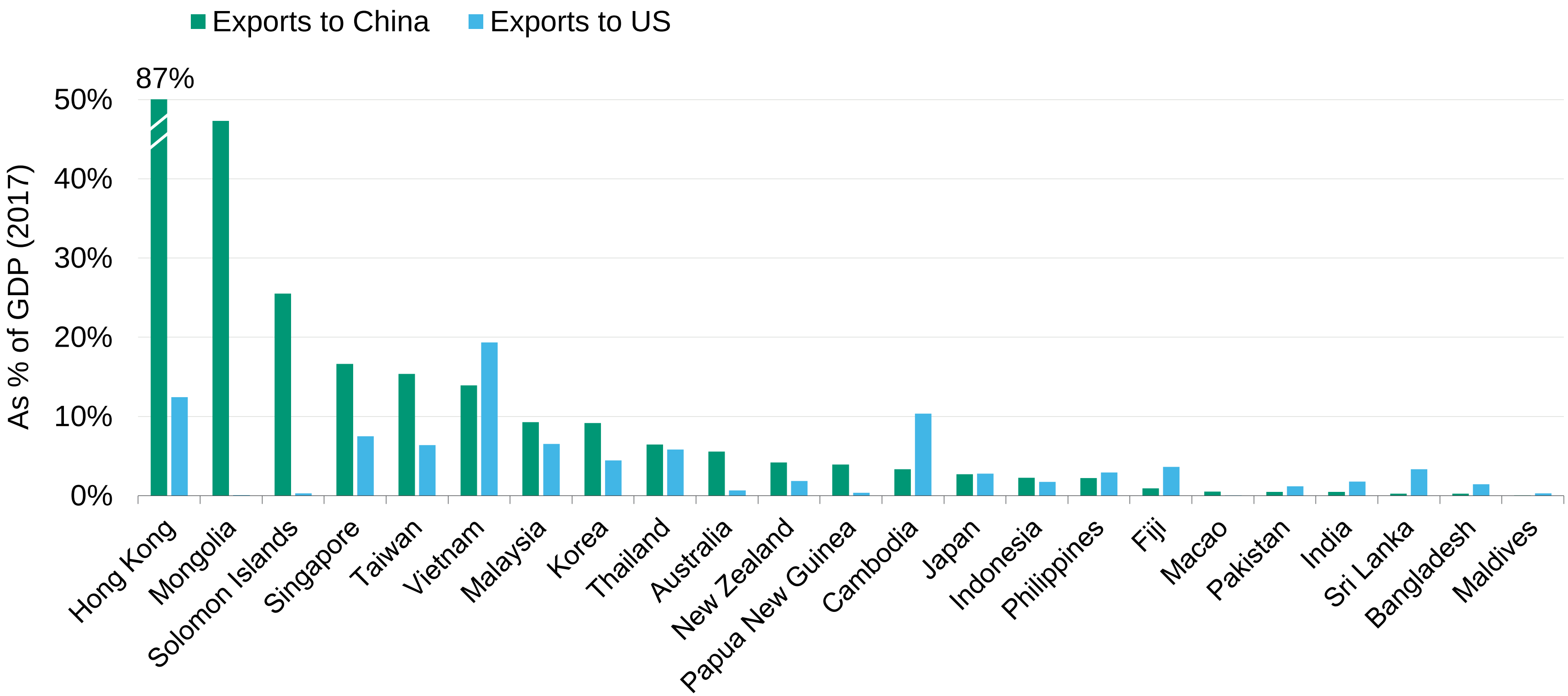


See the latest infographic: "Trade tensions will escalate in 2019," 8 November 2018

Sources: Moody's Investors Service, US Department of Commerce, Bureau of the Census, Foreign Trade Division, International Trade Centre

Escalation of US-China trade dispute will likely cause disruption in Asia

Share of exports to China and US remains high in some Asian economies
(% of GDP)



Sources: International Monetary Fund, Haver Analytics, Moody's Investors Service

US-China trade tensions will affect rest of Asia through supply chains

Selected Asian economies and their supply chain linkages to China

	Directly exposed	Indirectly exposed through supply chains and intermediate goods exports to China						Exposure lessened	
	Exports to the US as % of GDP (2017)	Exports to China as % of GDP (2017)	Exports of all intermediate goods to China as % of GDP (2016)	Exports of primary industrial supplies (intermediate) to China as % of GDP (2016)	Exports of processed industrial supplies (intermediate) to China as % of GDP (2016)	Exports of parts and accessories of capital goods (except transport equipment) to China as % of GDP (2016)	Electronic parts export to China as % of total exports to China (2016)	Exports to the EU as % of GDP (2017)	
Singapore	7.9%	17.6%	10.5%	0.1%	3.5%	6.1%	45.4%	10.4%	Trans-shipment Hubs
Hong Kong	12.7%	89.2%	75.4%	0.6%	20.1%	53.7%	63.4%	14.3%	
Taiwan	6.5%	15.6%	22.0%	0.1%	5.0%	16.8%	55.3%	4.8%	Manufacturing Economies
Korea	4.5%	9.2%	6.3%	0.0%	2.6%	3.1%	46.5%	3.4%	
Malaysia	6.6%	8.8%	6.5%	0.6%	2.2%	2.9%	44.7%	7.3%	
Japan	2.8%	2.7%	1.5%	0.1%	0.7%	0.5%	23.4%	1.6%	
Thailand	6.1%	6.7%	4.2%	0.6%	2.2%	1.1%	13.4%	5.3%	
Philippines	2.9%	2.2%	1.2%	0.2%	0.1%	0.7%	41.1%	2.8%	
Vietnam	19.8%	14.2%	6.5%	0.5%	3.2%	1.8%	22.5%	18.3%	
India	1.9%	0.5%	0.3%	0.1%	0.2%	0.0%	4.0%	2.1%	
Bangladesh	1.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	
Sri Lanka	3.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	3.7%	
Australia	0.6%	5.5%	4.1%	3.1%	0.3%	0.0%	0.7%	0.9%	Non-Manufacturing, resource
Indonesia	1.8%	2.3%	1.6%	0.1%	0.6%	0.0%	5.6%	1.6%	
New Zealand	1.9%	4.3%	1.4%	0.9%	0.3%	0.0%	0.5%	1.7%	

Sources: Trade Maps, International Trade Center (ITC), UN Comtrade, International Monetary Fund, Moody's Investors Service

2

Global sovereign outlook:

What is the likelihood of downward rating adjustments for sovereigns in 2019?

What impact will higher US interest rates have on EMs?

What are the sources of political risk and what are their implications for sovereigns?

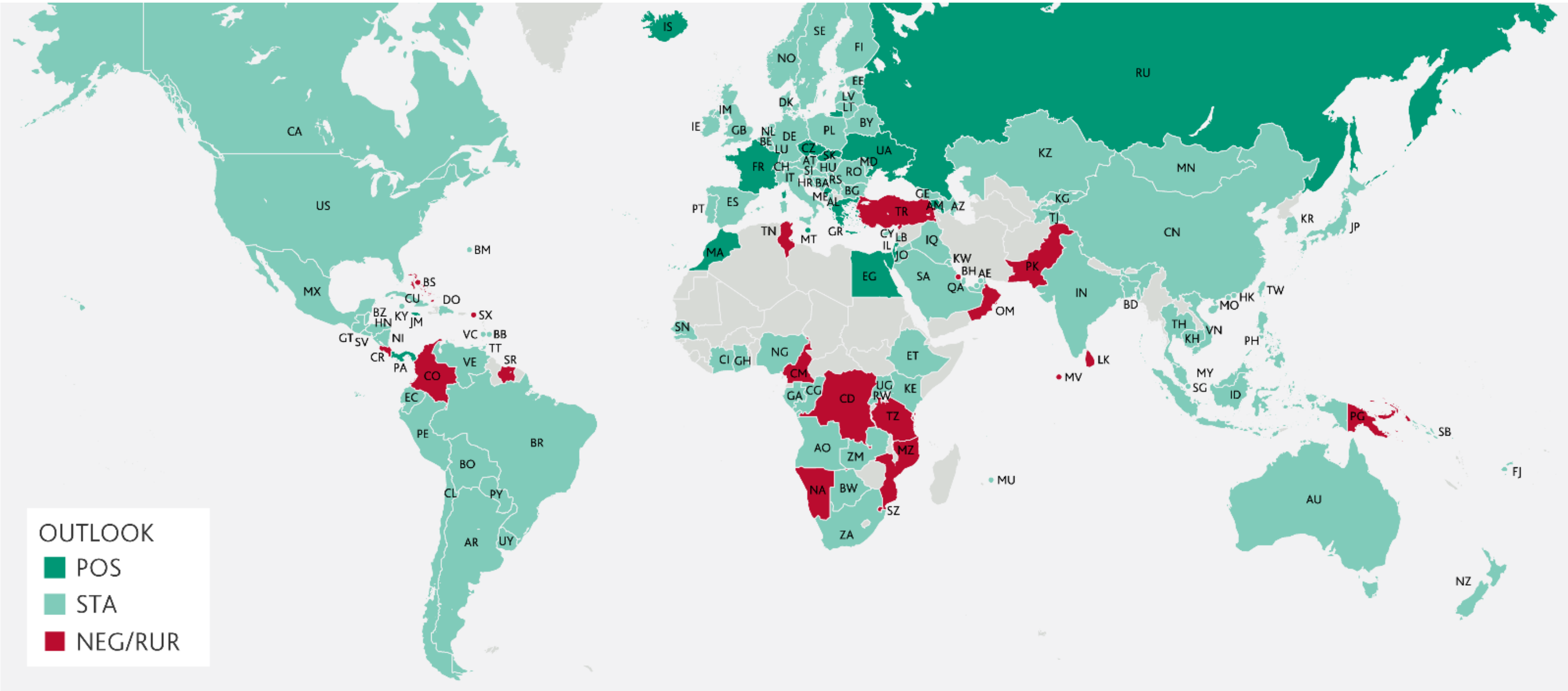
Stable global sovereign outlook

- 75% of sovereigns have a stable outlook
- 14% have a negative outlook (or are on review for downgrade)
- 11% have a positive outlook

Source: Moody's Investors Service

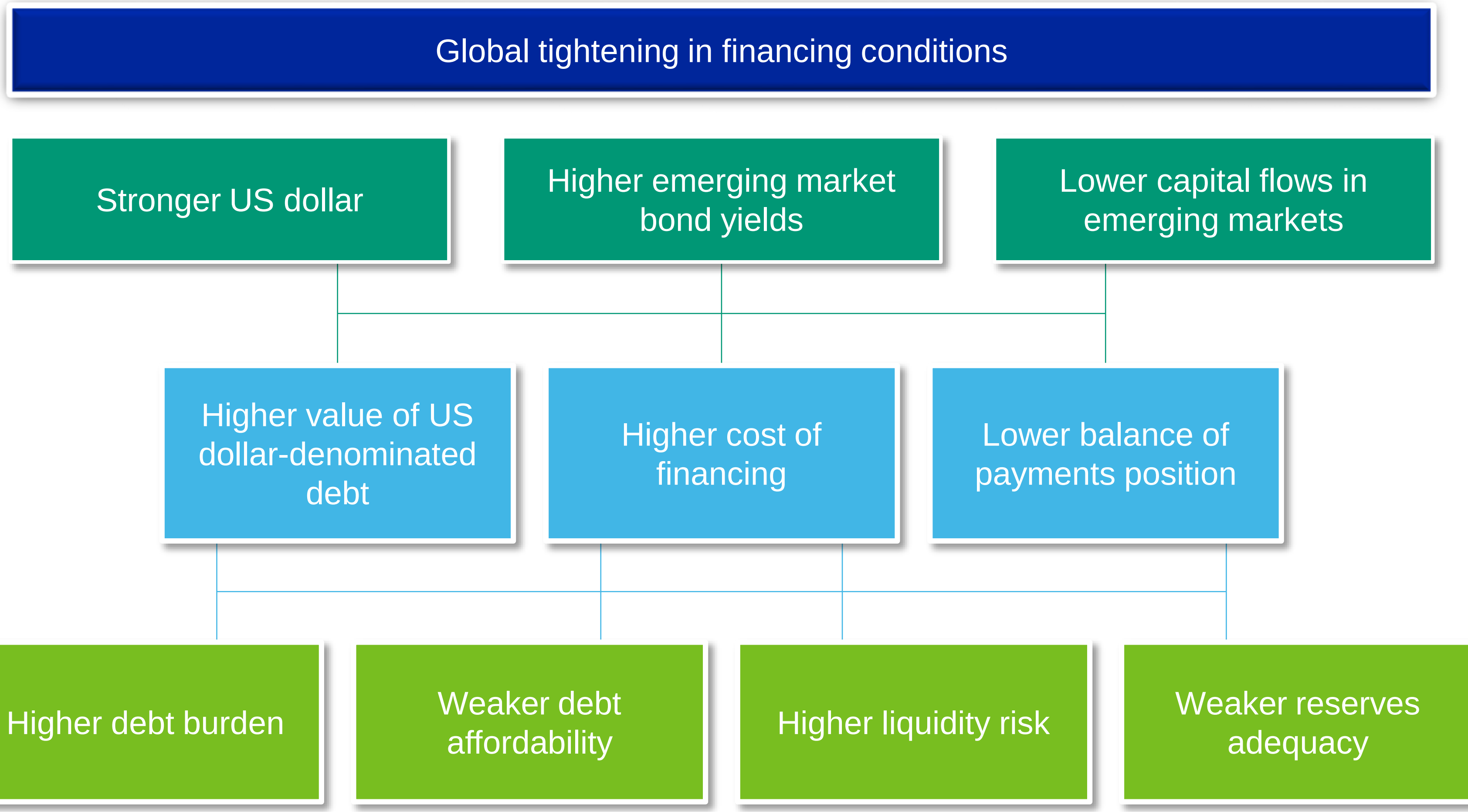
Positive, negative outlooks regionally concentrated

- The overall stable outlook balances the continued but slowing growth in the global economy against rising uncertainty over longer-term economic and financial stability
- Negative outlooks are mainly in the regions that exhibit the broadest range of fundamental weaknesses – sub-Saharan Africa, Latin America and the Caribbean – and at the low end of the rating scale



Source: Moody's Investors Service

Credit impact of tightening funding conditions



Source: Moody's Investors Service

External vulnerability highest for frontier markets

» Countries with large current account deficits, high external debt repayments and substantial foreign-currency government debt are most exposed

		Vulnerabilities				
		Current Account Balance (% of GDP)	External Debt (% of GDP)	External Vulnerability Indicator	Govt. FC Debt (% of Total Gov. Debt)	Weighted Average Term to Maturity (Years)
Country	Rating Outlook	2018	2017	2018	2017	2018
Mongolia	B3 STA	-8.8%	242%	145%	80%	3
Georgia	Ba2 STA	-7.0%	114%	154%	79%	10
Belarus	B3 STA	-2.7%	73%	331%	93%	3
Tunisia	B2 STA	-9.5%	84%	220%	69%	7
Jordan	B1 STA	-9.6%	72%	102%	44%	5
Lebanon	B3 STA	-19.3%	109%	111%	41%	5
Maldives	B2 NEG	-21.3%	38%	78%	38%	4
Sri Lanka	B1 NEG	-2.5%	59%	197%	46%	6
Albania	B1 STA	-6.8%	72%	107%	48%	9
Moldova	B3 STA	-7.3%	86%	102%	52%	8
Turkey	Ba3 NEG	-4.5%	53%	229%	39%	6
Ukraine	Caa2 POS	-3.0%	104%	354%	65%	6
Serbia	Ba3 STA	-5.4%	78%	59%	77%	4
Bahrain	B2 NEG	-2.9%	181%	2247%	48%	6
Zambia	Caa1 STA	-2.5%	71%	146%	59%	8
Pakistan	B3 NEG	-4.6%	27%	84%	30%	4
Tajikistan	B3 STA	-4.0%	78%	447%	78%	18
Armenia	B1 POS	-3.0%	91%	116%	83%	9
Croatia	Ba2 STA	2.5%	87%	85%	76%	5
Hungary	Baa3 STA	2.1%	89%	135%	23%	4
Kazakhstan	Baa3 STA	-2.9%	103%	126%	36%	8
Romania	Baa3 STA	-3.7%	53%	115%	52%	5

High Vulnerability
Medium Vulnerability
Low Vulnerability

Note: External Vulnerability Indicator is calculated as: (short-term external debt + currently maturing long-term debt + total nonresident deposits over one year) / official foreign exchange reserves.

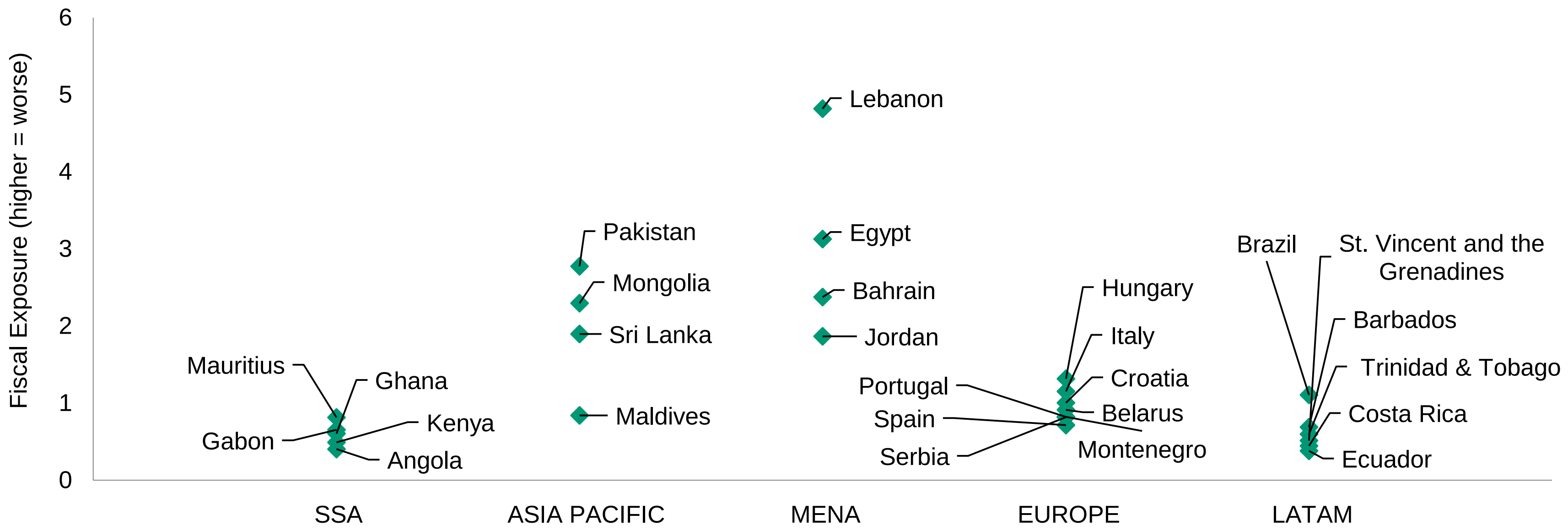
See Sovereigns – Global: US dollar appreciation raises credit risk for sovereigns with large external funding needs

Sources: Moody's Investors Service, IMF and World Bank

Sovereigns most exposed to spike in debt costs are in MENA and APAC

» Quantifying the implications of a sharp and sustained rise in the cost of new debt, we find that 8 of the 10 most exposed sovereigns are in the Middle East and North Africa (MENA) and Asia Pacific (APAC).

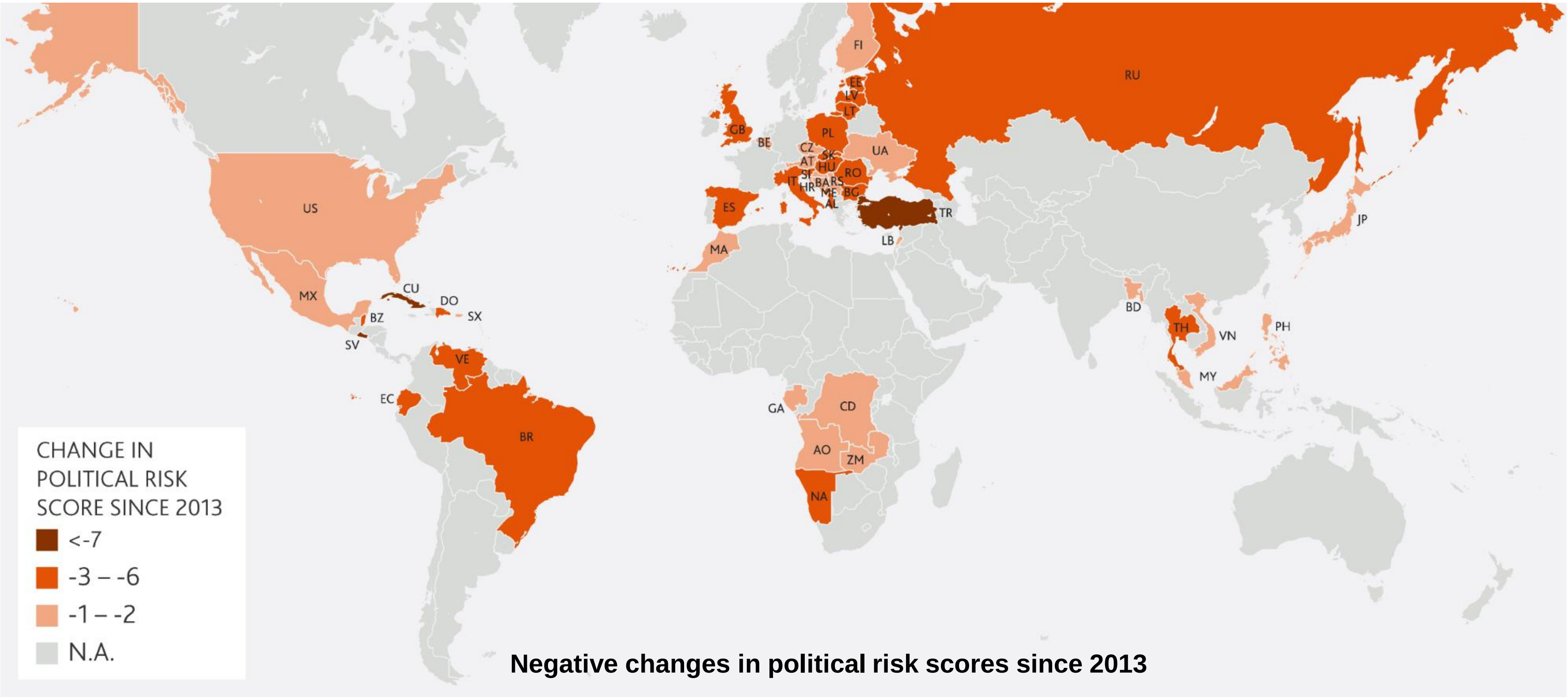
Most exposed sovereigns by region



Note: The value of the fiscal exposure index is each country's average of the Z-scores (number of standard deviations from the mean) of the changes from the baseline of the four metrics that enter our fiscal strength assessment, i.e., debt to GDP, debt to revenue, interest to GDP and interest to revenue). We use the 2021 value of the index in the moderate shock to rank fiscal exposure. Additionally, we have removed the US, Canada, and Japan because the probability of the shocks occurring is very low.
See: Sovereigns - Global: Weakest MENA and APAC sovereigns would be most sensitive to an interest rate shock, May 2018
Source: Moody’s Investors Service

Politics - key downside risk

- While relatively few sovereigns have direct exposure to political risks, the crystallization of these risks could have material spillover effects globally
- The most potent, far-reaching source of geopolitical risk in 2019 will be US trade policy. Other geopolitical risks, including in the Korean peninsula and the Middle East, remain
- Domestic political factors also continue to pose idiosyncratic challenges



Negative changes in political risk scores since 2013

Source: Moody's Investors Service

Appendix

Six main themes will shape global credit in 2019 and beyond

FINANCIAL STABILITY

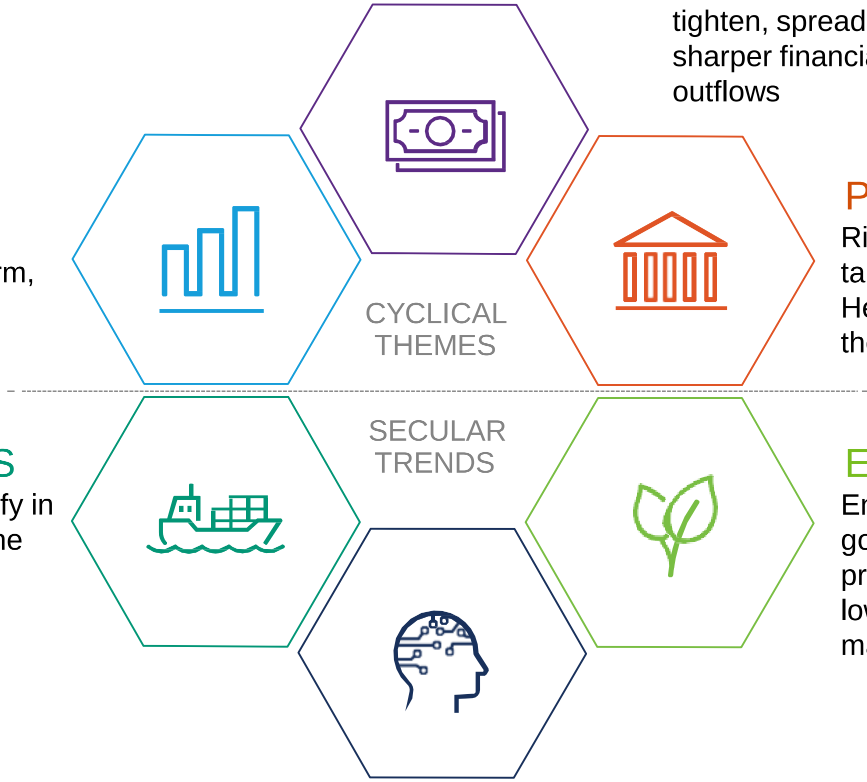
Financial conditions and liquidity will gradually tighten, spreads and market volatility will rise. Risks of sharper financial markets adjustment and capital outflows

GROWTH

Economic growth will decelerate, inflation will firm, trade growth will slow in 2019

POLITICAL RISKS

Rising political and geopolitical risks take center stage in 2019. Heightened political risks will pose the greatest source of uncertainty



TRADE TENSIONS

Trade tensions will intensify in 2019. US trade policy is the most potent, far-reaching source of global risk with significant sector and regional impacts

ESG RISKS

Environmental, social and governance risks will become more prominent in 2019. The transition to a low-carbon economy will most materially influence credit in 2019

TECHNOLOGY AND INNOVATION

Technology and innovation have the potential to reshape the credit landscape. Digital technologies can lead to productivity improvements but also disruptions

See our report [2019 Outlook – Global credit conditions to weaken amid slowing growth and rising risks]

Source: Moody's Investors Service.

Global Macro Outlook (November 2018 Update)

Economies	Real GDP Growth % 17	18E	19F	20F	Inflation % change (Dec/Dec) [2] Target	17	18E	19F	20F	Unemployment Rate % 17	18E	19F	20F	Monetary policy 18E	19F	20F
G-20 Advanced	2.2	2.3	1.9	1.4												
US	2.3	2.9	2.3	1.5	2.0%	2.1	2.3	2.1	2.1	4.4	3.8	3.7	4.0	▲	▲	▲
Euro area [1]	2.5	2.0	1.8	1.6	2.0%									▲	▲	▲
Japan	1.7	1.1	0.8	0.4	2.0%	1.1	1.2	2.5	0.8	2.9	2.6	2.6	2.6	■	■	■
Germany	2.5	1.8	1.7	1.3	2.0%	1.7	2.2	2.2	1.9	3.8	3.4	3.2	3.4			
UK	1.7	1.3	1.6	1.4	2.0%	2.7	2.3	2.0	1.9	4.3	4.2	4.3	4.4	▲	▲	▲
France	2.2	1.7	1.6	1.6	2.0%	1.2	1.9	1.9	1.5	9.4	9.1	8.6	8.1			
Italy	1.5	1.0	1.3	1.3	2.0%	0.9	1.1	1.5	1.5	11.3	10.5	10.3	10.1			
Canada	3.0	2.1	2.0	1.7	2.0% (+/-1.0%)	1.9	2.4	2.1	2.0	6.3	5.9	5.9	5.9	▲	▲	▲
Australia	2.3	3.0	2.8	2.5	2.0%- 3.0%	1.9	2.3	2.5	2.5	5.6	5.6	5.5	5.5	▲	▲	▲
South Korea	3.1	2.5	2.3	2.5	2.0%	1.5	1.9	2.0	2.1	3.7	4.0	4.1	4.2	▲	▲	▲
G-20 Emerging	5.3	5.0	4.6	4.9												
China	6.9	6.6	6.0	6.0	3.0%	1.8	2.5	2.8	2.8	--	--	--	--	▼	■	▲
India	6.7	7.4	7.3	7.3	4% (+/-2.0%)	4.3	4.8	4.9	5.0	--	--	--	--	▲	▲	▲
Brazil	1.0	1.8	2.0	2.5	4.5% (+/-1.5%)	2.9	4.0	4.5	4.5	--	--	--	--	■	■	▲
Russia	1.5	1.8	1.6	1.5	4.0%	2.5	4.0	4.6	4.0	--	--	--	--	▲	▲	▲
Mexico	2.0	2.3	2.2	1.5	3.0% (+/-1.0%)	6.8	4.9	4.2	3.8	--	--	--	--	▲	▲	■
Indonesia	5.1	5.1	4.8	4.7	3.5% +/-1.0%	3.6	3.5	3.8	5.0	5.4	5.2	5.0	5.0	▲	▲	▲
Turkey	7.4	1.5	-2.0	3.0	5.0% (+/-2.0%)	11.9	27.0	18.0	12.0	--	--	--	--	▲	▲	▲
Saudi Arabia	-0.7	2.5	2.7	2.2		-1.1	2.6	1.0	2.0	--	--	--	--			
Argentina	2.9	-2.5	-1.5	1.5	25-9%/15-9% [3]	24.8	45.0	30.0	20.0	--	--	--	--	▲	▲	▲
South Africa	1.3	0.5	1.3	1.5	3.0% - 6.0%	4.5	5.3	5.3	5.4	--	--	--	--	▲	▲	▲
G-20 All	3.3	3.3	2.9	2.7												

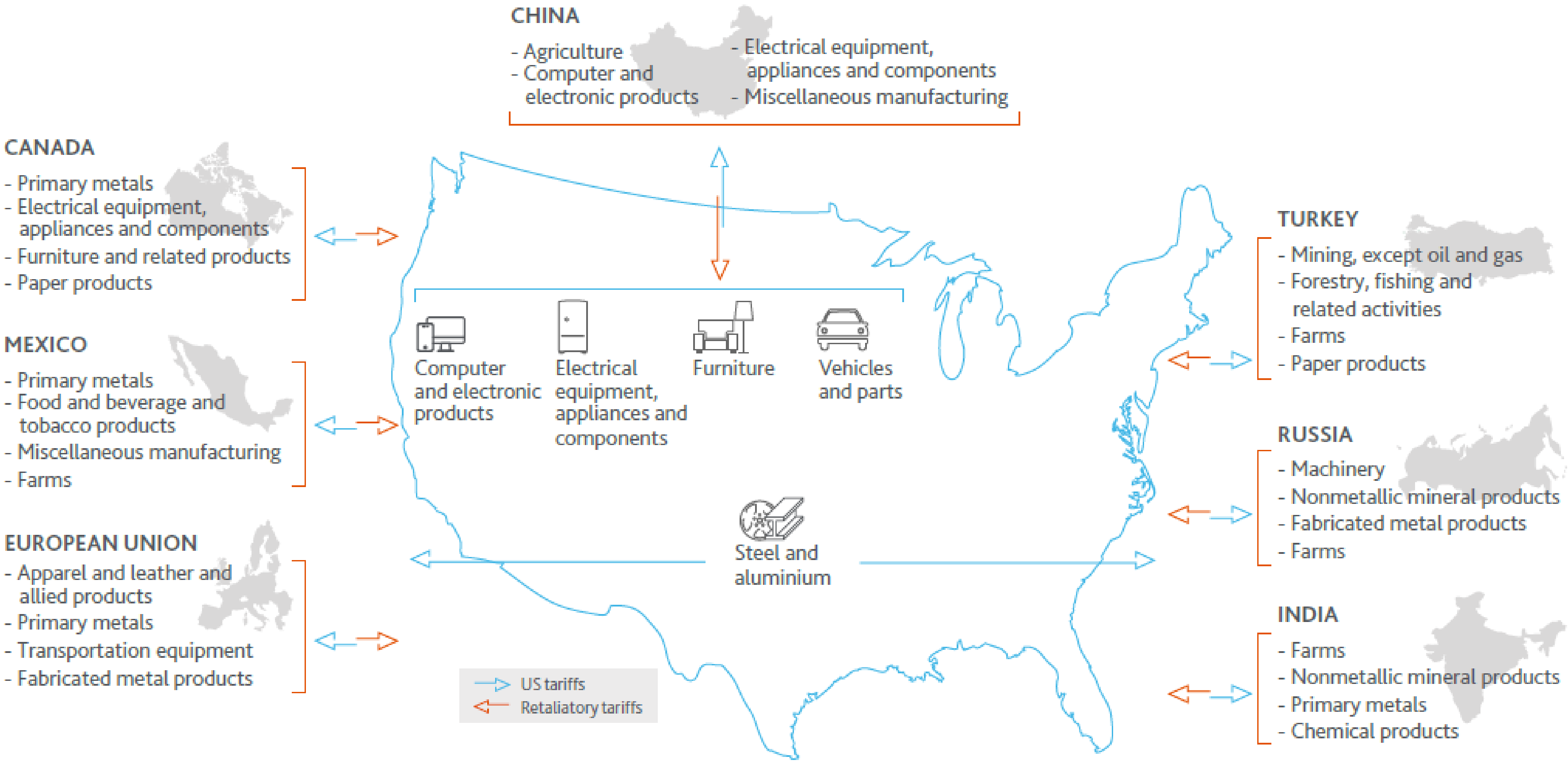
An improvement (upward adjustment) from August 2018 Global Macroeconomic Outlook.
A deterioration (downward adjustment) from August 2018 Global Macroeconomic Outlook.

▲ Tightening ▼ Accommodative
■ Maintain current policy

1. G-20 Euro Area forecasts include 19 countries. 2. CPI for Euro Area reflects average. 3. The authorities are using the inflation band based on numerical guideline.
Source: Moody's Investors Service. See Global Macro Outlook 2019-2020: Global growth to decelerate amid tightening global liquidity and elevated trade tensions, November 2018

Trade tensions will reshape trade flows and global supply chains across various sectors

» Unintended consequences for supply chains as most tariffed products are intermediate goods



Source: Moody's Investors Service. See our report [Global Trade Monitor – October 2018]

Moody's related publications

- » 2019 Outlook – Global credit conditions to weaken amid slowing growth and rising risks, November 2018
- » Global Macro Outlook 2019-2020: Global growth to decelerate amid tightening global liquidity and elevated trade tensions, November 2018
- » Sovereigns – Global 2019 outlook still stable, but slowing growth signals increasingly diverging prospects, November 2018
- » Cross-Sector – Global: Global Trade Monitor: Escalating tensions will have unintended consequences for supply chains, October 2018

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- » 2019 Outlooks
- » The Big Picture
- » Growth
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