



# Overview

## European Auto Industry Update

Justin Cox, Director Global Production  
ECG Spring Congress, Madrid  
May 25<sup>th</sup> 2018

# Outline

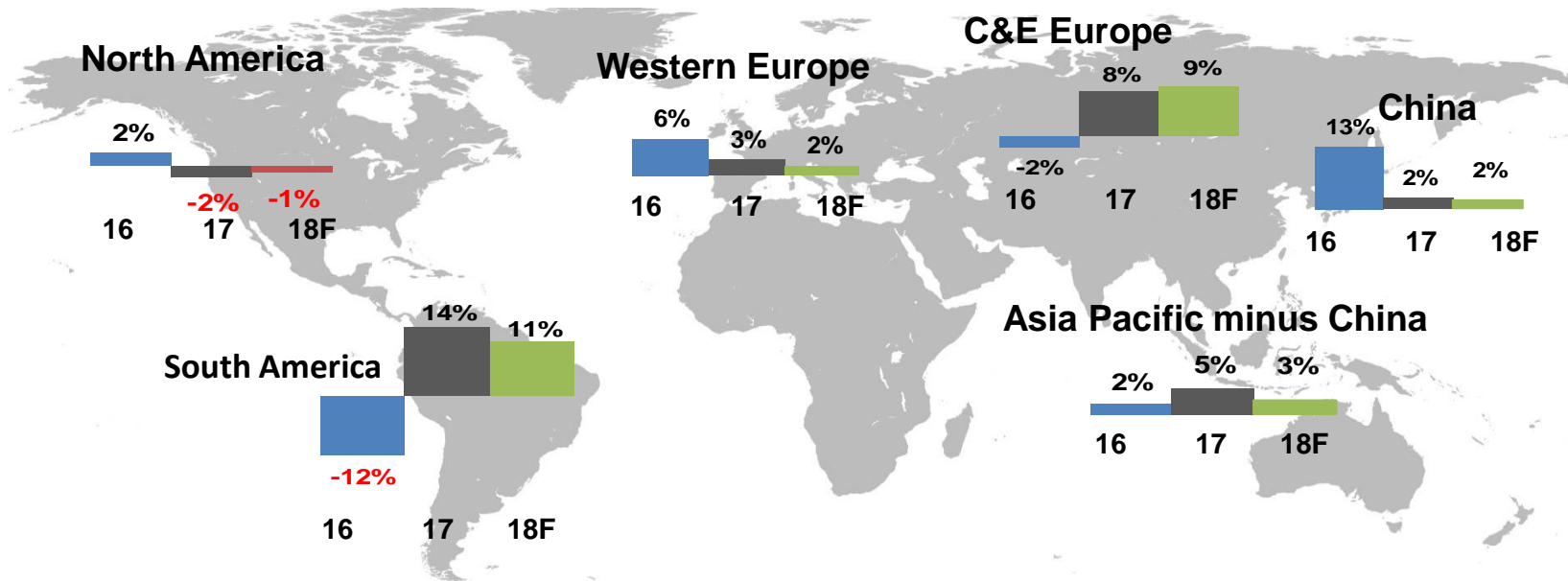
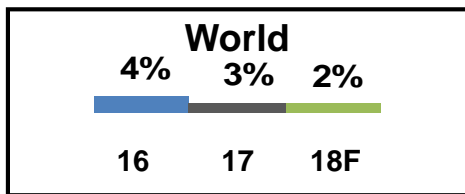
Global Environment  
Key Risk for Europe  
Outlook

# Economic Round-up: Near-term

Real GDP Growth	2015	2016	2017	2018
USA	2.9%	1.5%	2.3%	2.8%
Argentina	2.6%	-1.8%	2.9%	2.8%
Brazil	-3.5%	-3.5%	1.0%	2.4%
Japan	1.4%	0.9%	1.7%	1.5%
ASEAN	4.5%	4.6%	5.2%	5.0%
China	6.9%	6.7%	6.9%	6.4%
India	7.5%	7.9%	6.2%	7.3%
Eurozone	2.0%	1.8%	2.5%	2.2%
Russia	-2.8%	-0.2%	1.7%	1.8%
UK	2.3%	1.9%	1.8%	1.7%
World	2.8%	2.4%	3.0%	3.2%

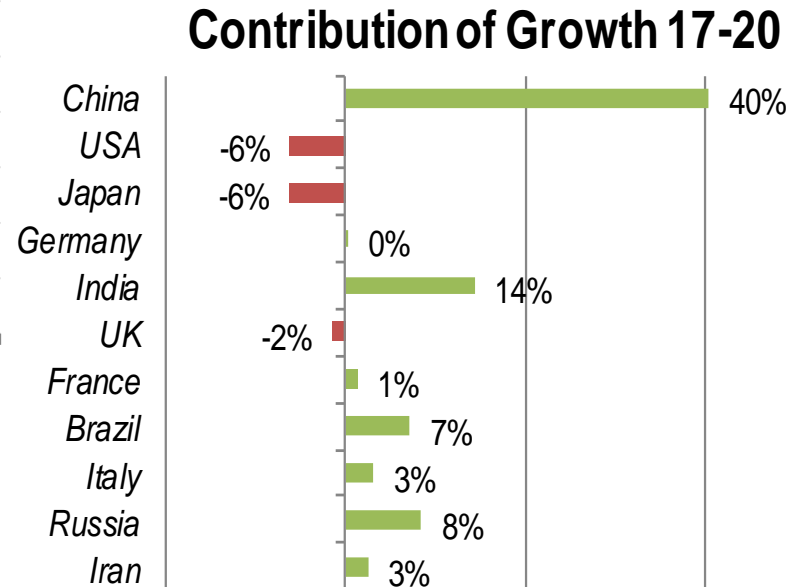
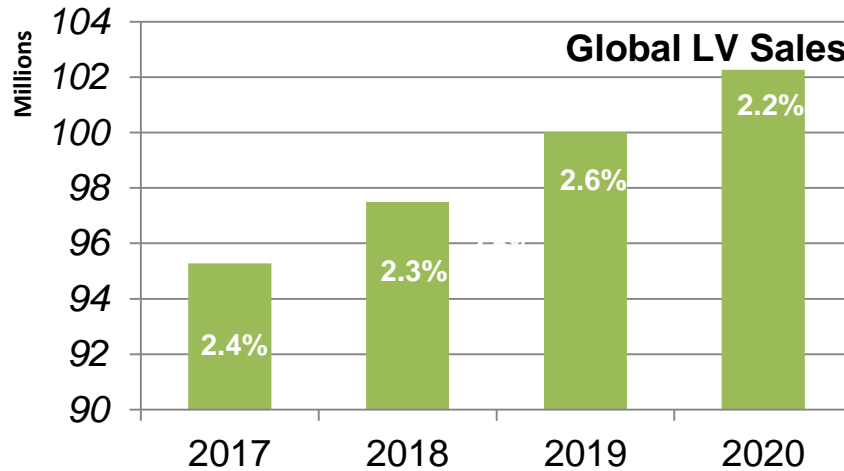
Source: Oxford Economics

# 2018 LV sales: 97.5 mn, +2.3% from 2017



# Global Sales : Short run

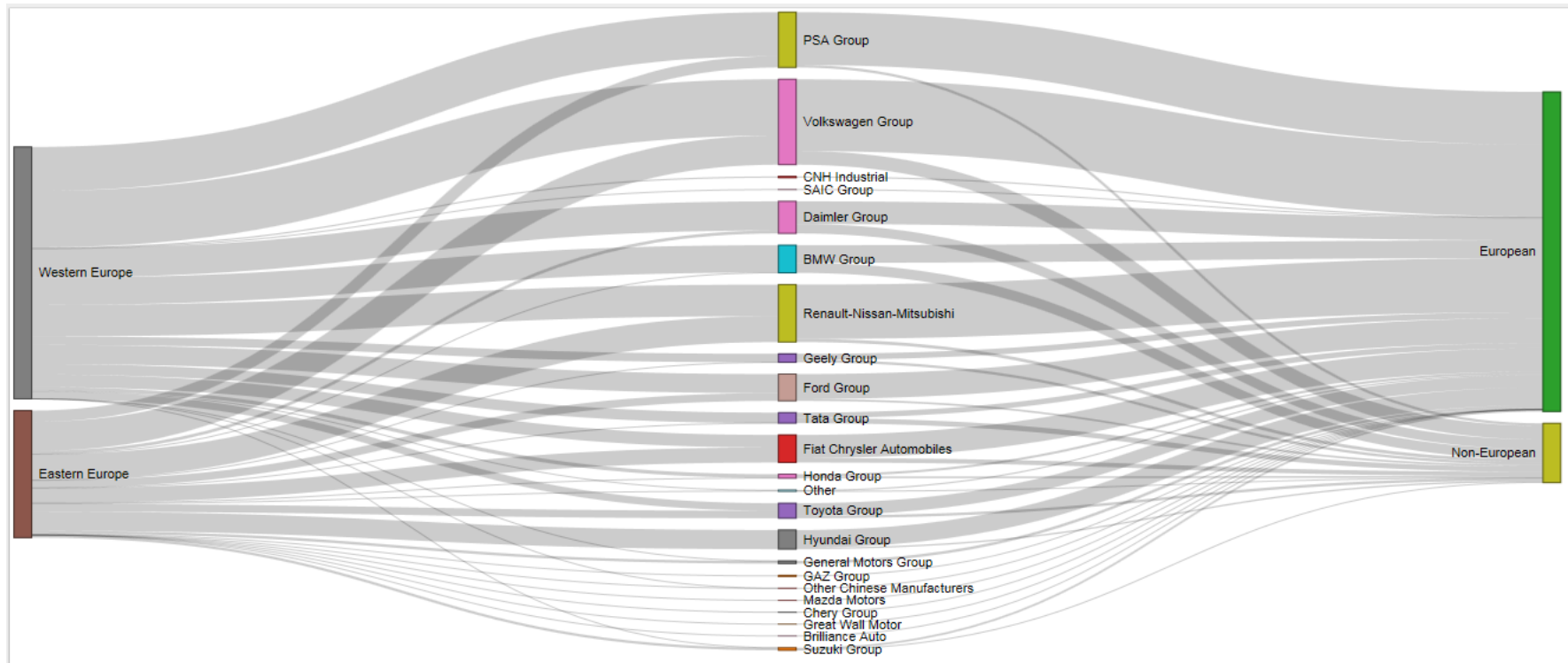
## China still dominates growth contribution as mature markets fade



- Short-term outlook remains positive
- 2018 slow: China 'hangover' and fading US/UK market
- 2019 pick-up: China pace returns
- Risks: Trade Tensions, Brexit, Russian isolation, Iran sanctions

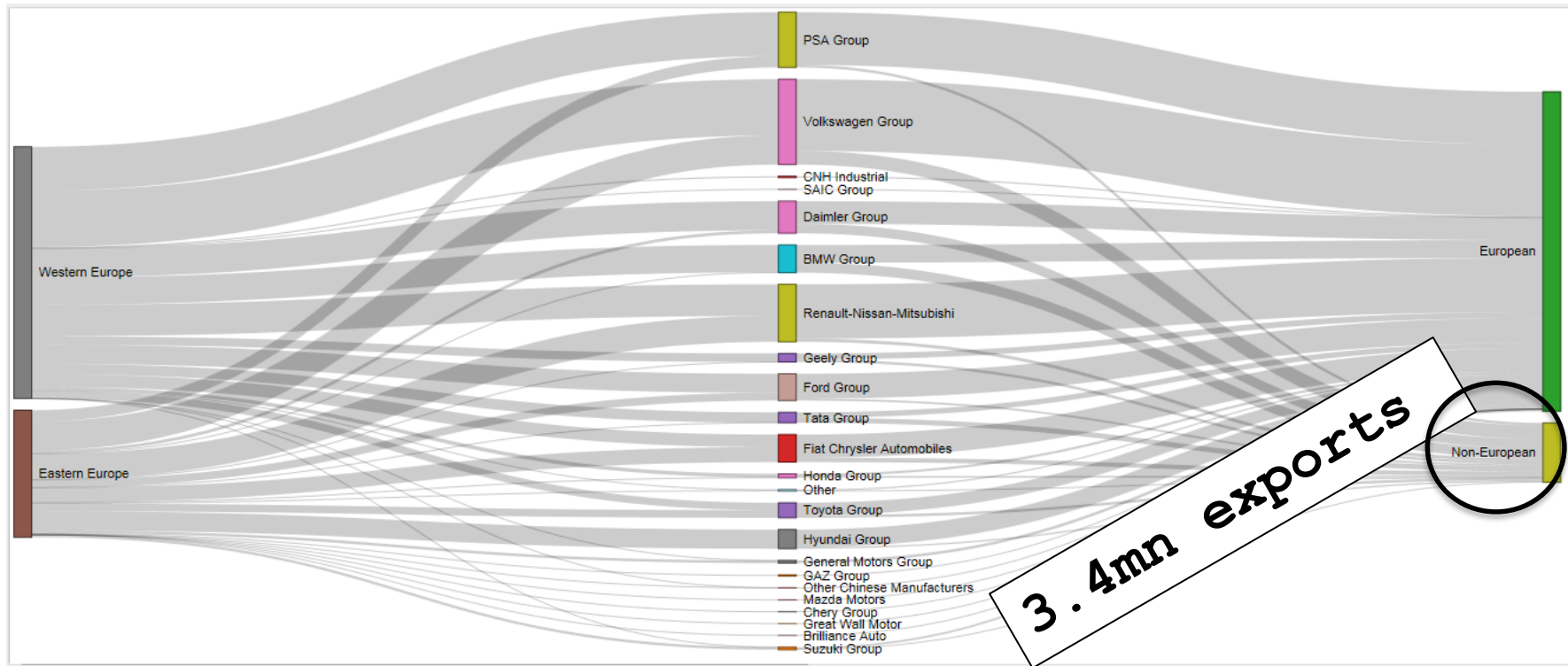
# Trade is complex...

## 2018 European Production Source and Destination by OEM Group



# Trade is complex...

## 2018 European Production Source and Destination by OEM Group

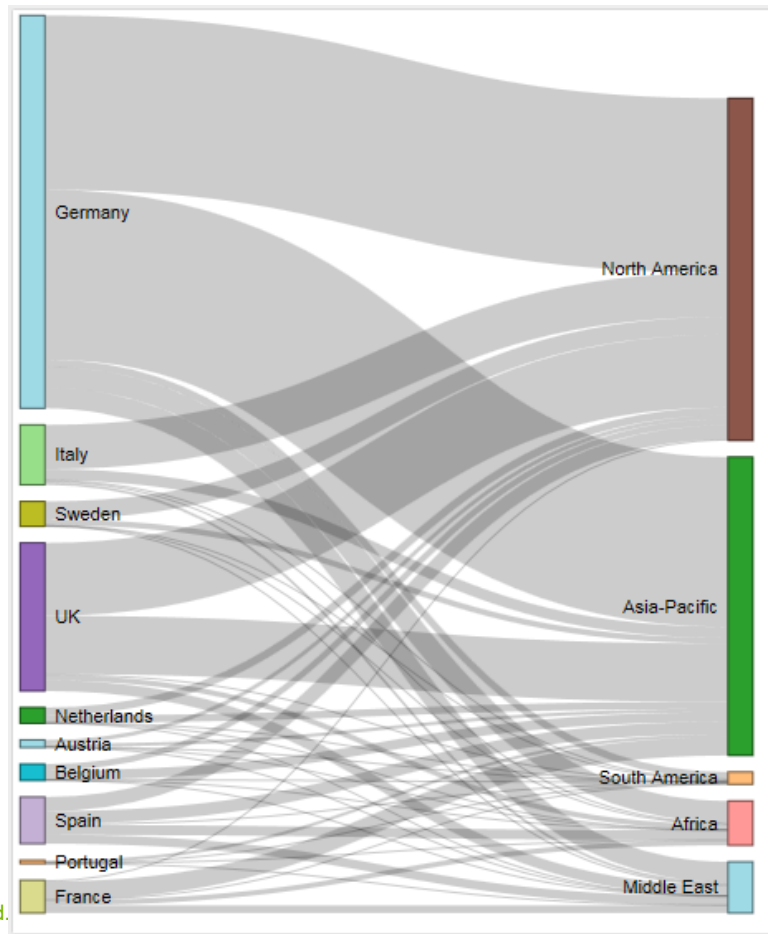


# 2018 W European Production flow to Non-European Markets...

## Europe's Exporters

*Percentage of LV output bound for non-European markets*

Germany: 25%  
UK: 30%  
Italy: 27%  
Spain: 6%  
France : 6%



## Europe's Importers

*Percentage of European exports by destination*

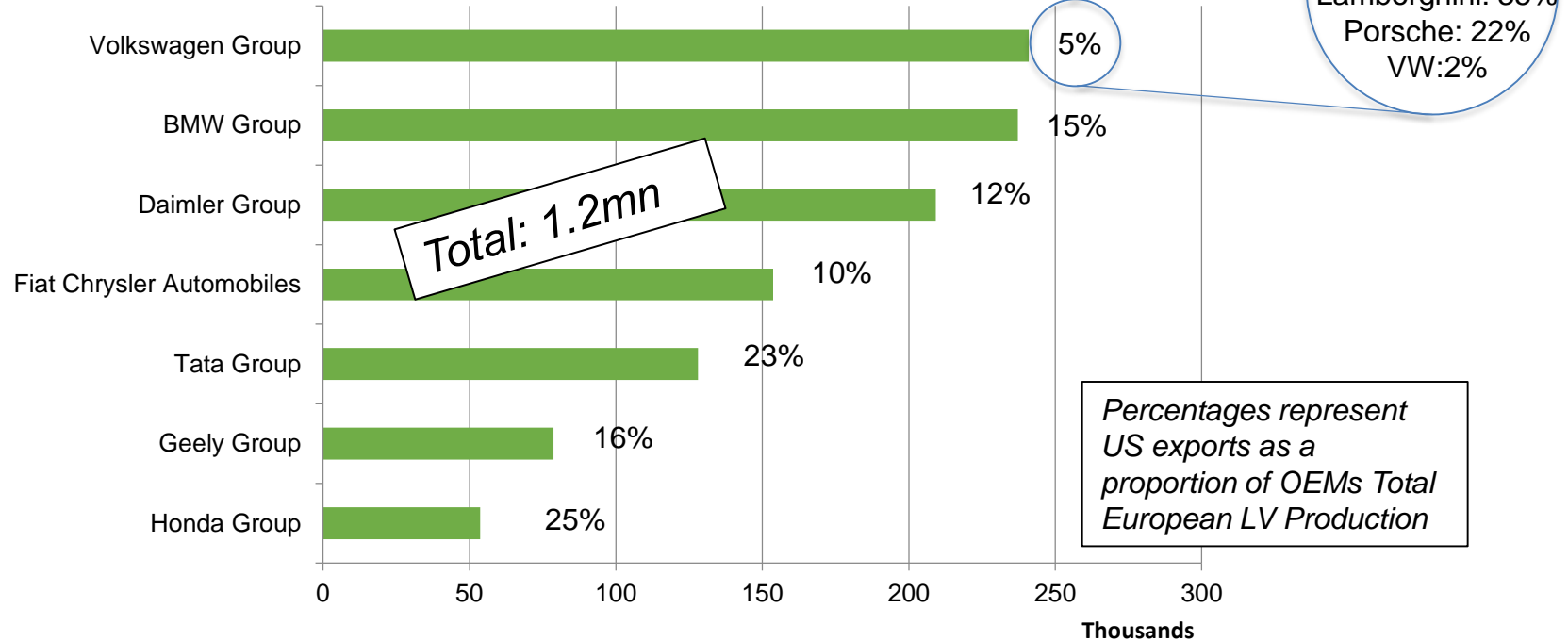
N America: 44%  
Asia: 38%  
Mid East: 10%  
Africa: 7%  
S America: 1%



# Risks: Trade



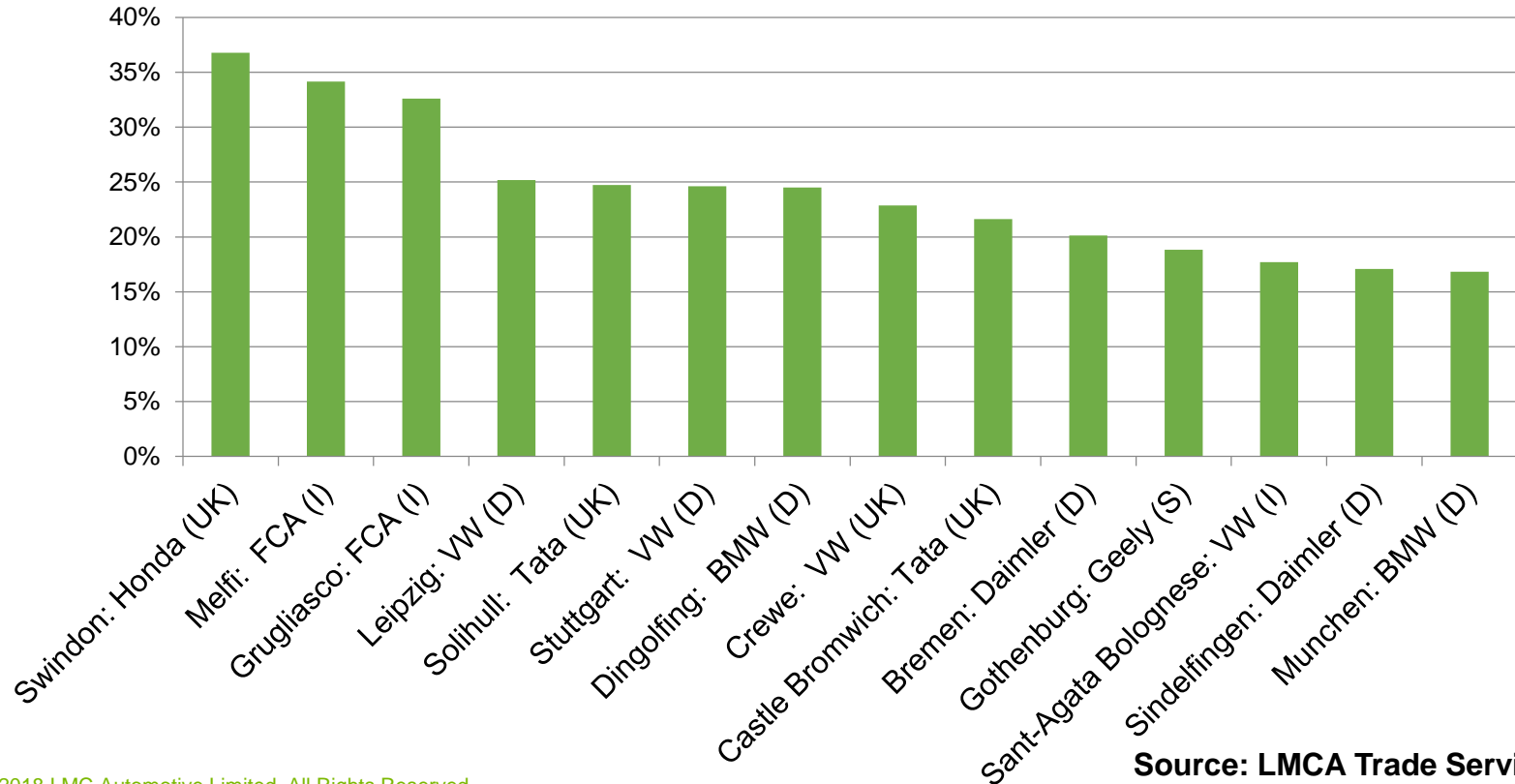
## 2018 Top European OEM Exporters to US by volume



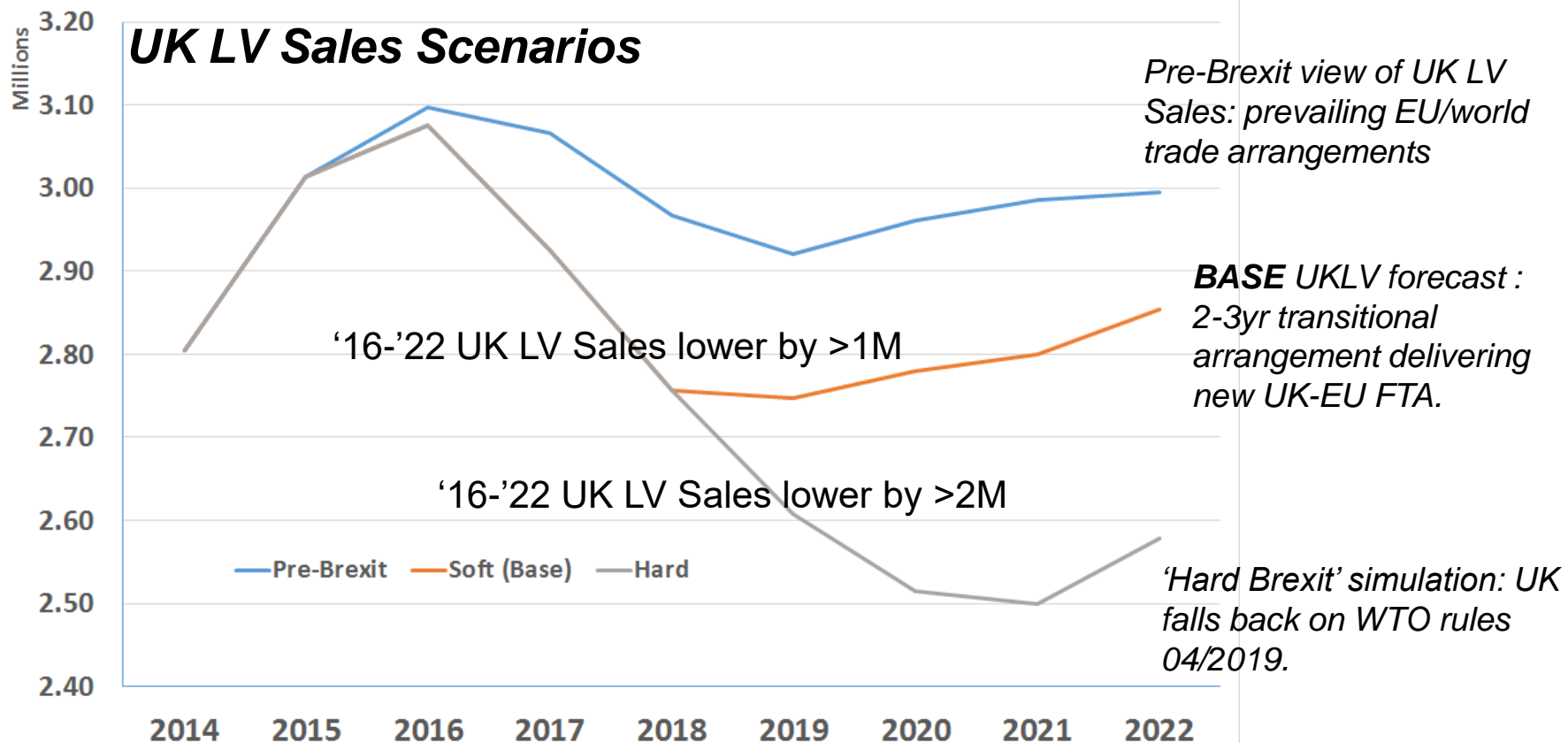
# Risks: Trade



## US-bound European LV exports as a percentage of 2018 plant output

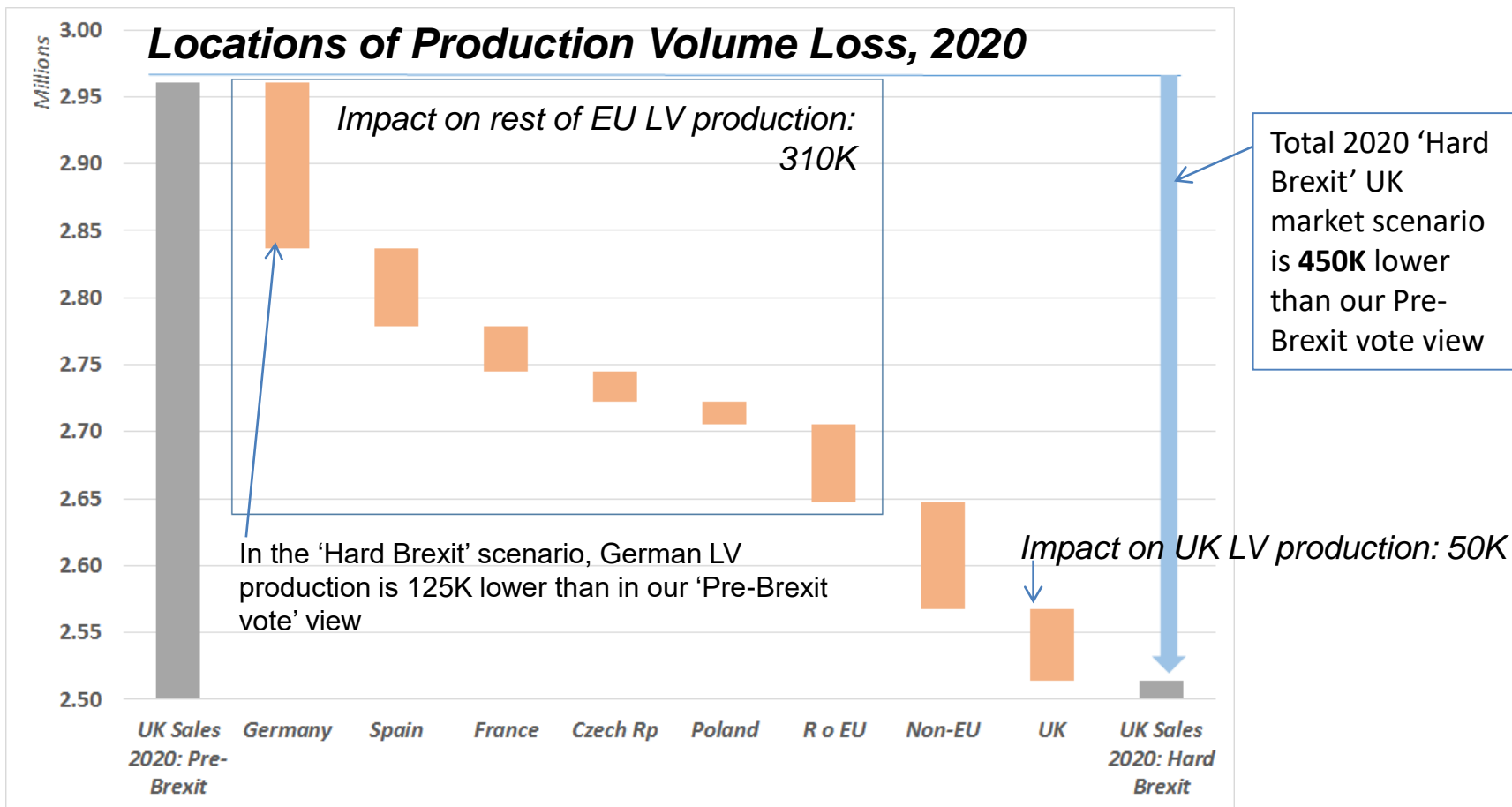


# Risks: Brexit



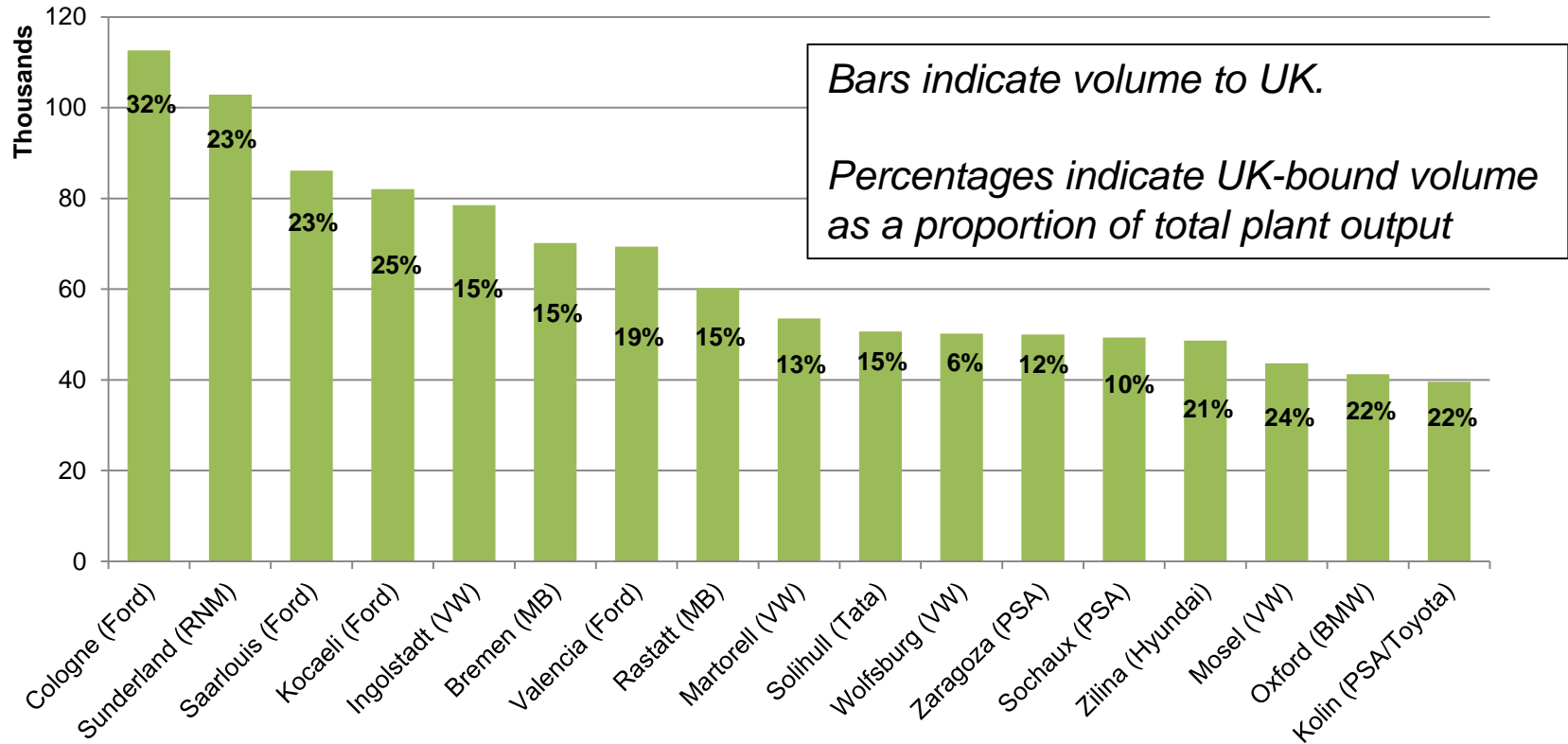
## Risks: Brexit

## 'Hard Brexit' Scenario:

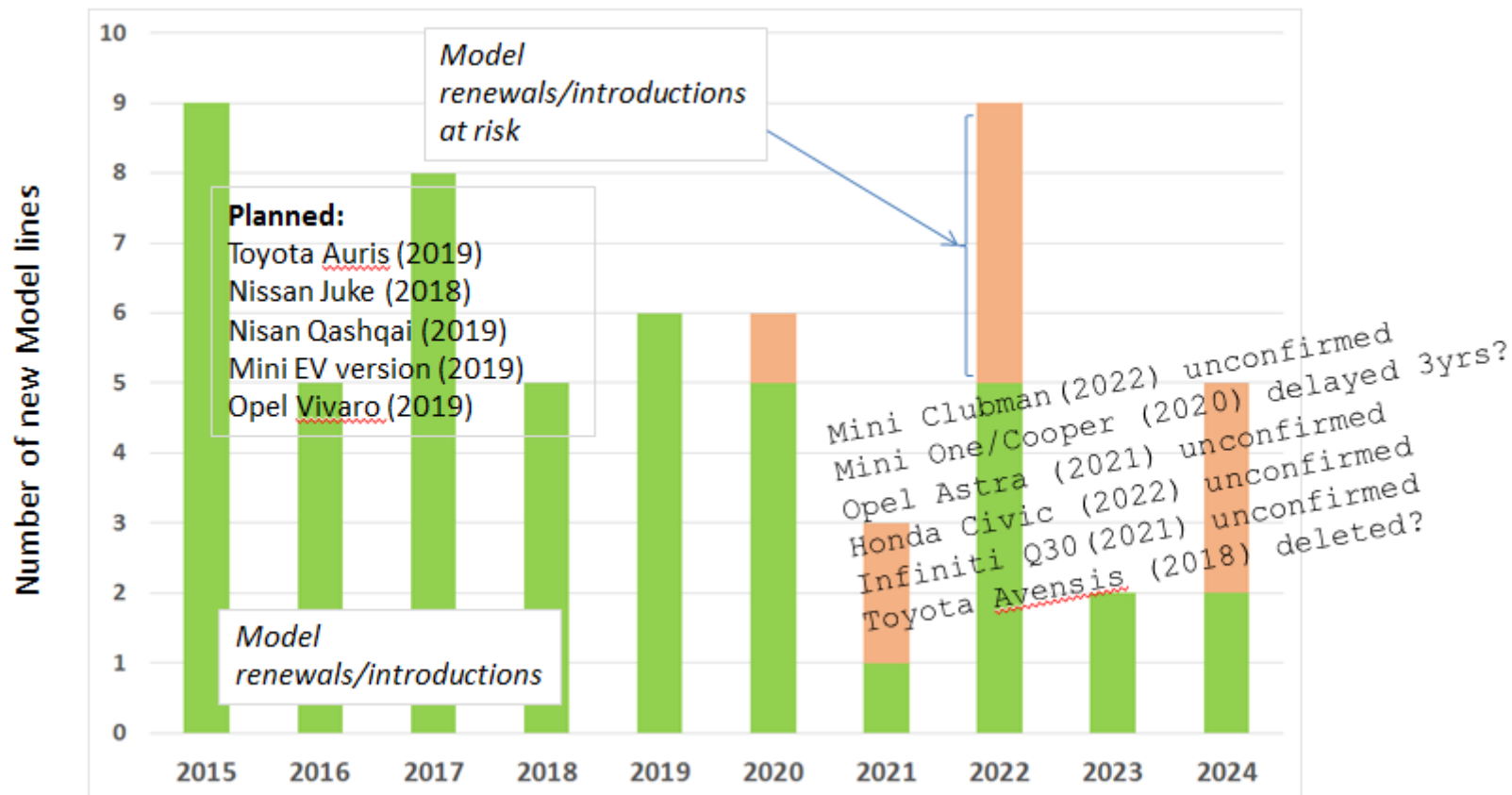


# Risks: Brexit

## 2018: Rank UK-bound production volume by plant

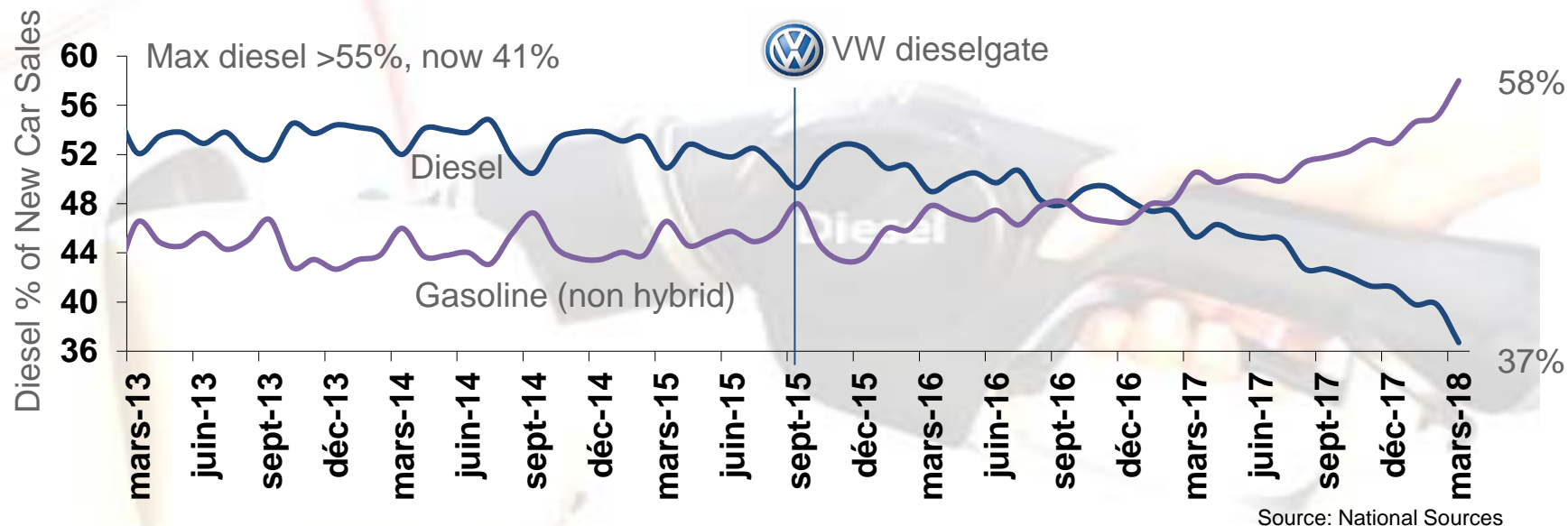


# Risks: Brexit, UK Model Cycle Impact



# Risk: Diesel Demonisation

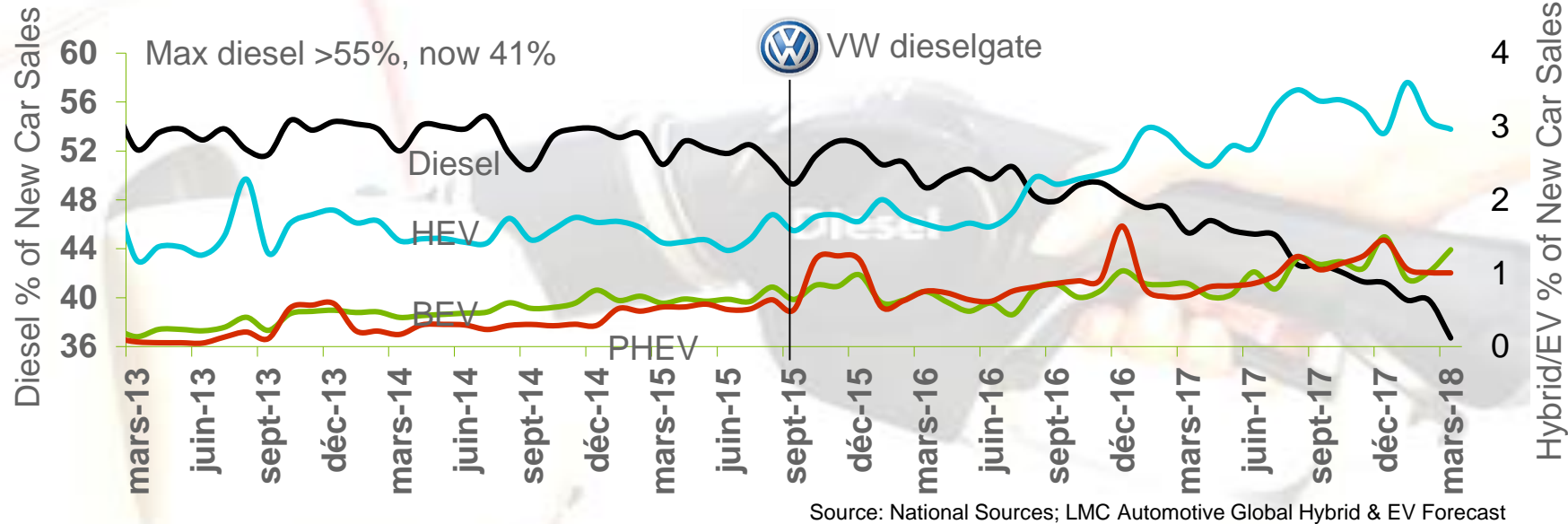
W. Europe Passenger Cars: Diesel versus Gasoline



- Of the 18pp diesel decline since peak, 15pp has gone to pure gasoline (non-hybrid)
- Car buyers may be willing to sacrifice fuel economy to avoid diesel

# Risk: Diesel Demonisation

## W. Europe Passenger Cars: Diesel versus Electrification

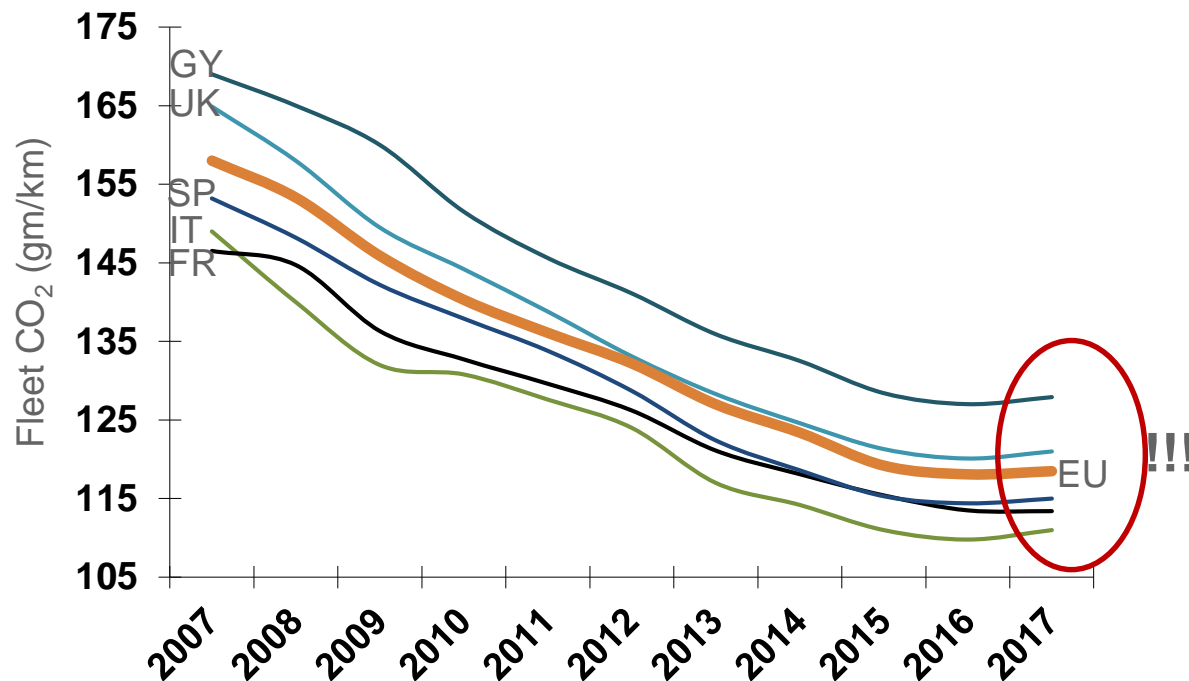


- So far, electrification is not reacting strongly to the decline in diesel
- FHEV is benefitting, but no real correlation between diesel decline and BEV increase



# Risk: Diesel Demonisation

## Pass Car CO<sub>2</sub> Emissions – Selected Markets



Source: European Environment Agency. 2017 figures are provisional.

- Decline in the diesel share diesel and the shift to less fuel efficient body styles (SUV) has led to slowdown in fleet CO<sub>2</sub> reduction rate
- 2017 fleet average emissions 0.4 gm/km up on 2016. Of the Big 5, only Italy achieved a decrease
- This is a potentially a big problem for OEMs (and policymakers)

# Risk: WLTP

Make	Model	Weight (kg)	Engine size (L)	Fuel type	Value (€)	NEDC (g/km)	WLTP (g/km)	Change (g/km)
Opel	Corsa	1,200	1.3	Diesel	10,800	91	105	14
Peugeot	308	1,400	1.2	Petrol	20,550	104	121	17
Volkswagen	Tiguan	1,700	2	Diesel	30,170	149	173	24
BMW	X5	2,300	3	Diesel	56,650	183	212	29
Citroen	Berlingo	1,600	1.6	Diesel	21,550	113	131	18
Ford	Transit	2,600	2	Diesel	27,290	162	189	27

- Introduction of uniform test protocol
- Global comparisons possible
- But emission results are 10-20% higher

# Risk: WLTP



Country	Impact if government does not respond	Our understanding of government response	Impact given our understanding
Germany	Minimal - small increase in annual tax	Unlikely that the government will respond given the minimal expected impact	Minimal
France	Moderate - registration tax would increase noticeably, annual tax increase would be small	No response so far	Moderate
Italy	None - tax does not depend on emissions	No need for a response	None
Spain	Moderate - Vehicles that jump up emissions bands will see notable registration tax increases	No response so far	Moderate
United Kingdom	Moderate - registration tax would increase notably for most vehicles	The government has said cars will be attributed a rating equivalent to what it would achieve under NEDC	Minimal
Outliers: Netherlands Denmark Norway	High - registration taxes depend heavily on emissions (fuel economy in Denmark's case)	No response so far	Severe

# Outline



Global Environment

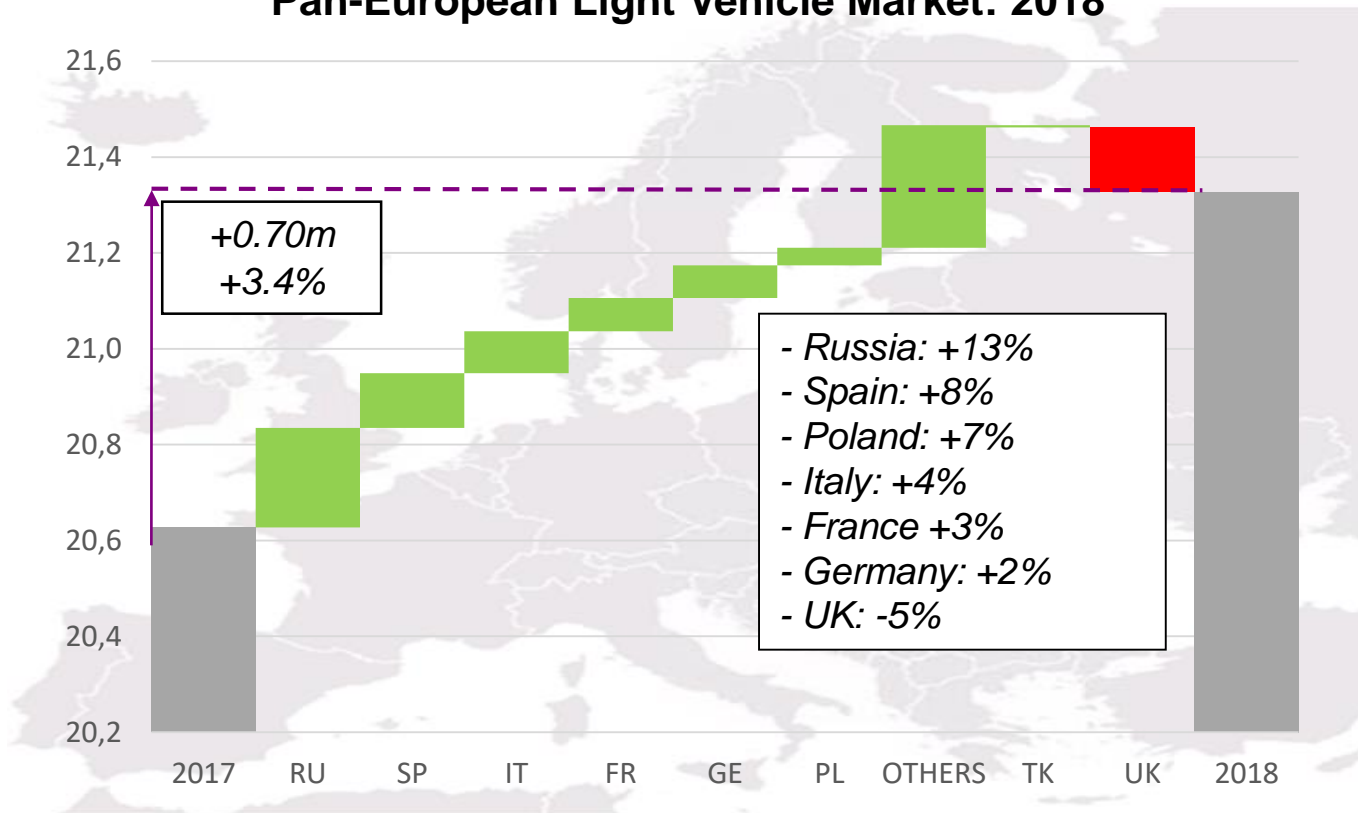
Key Risk for Europe

**Outlook**

# Short-run Sales Outlook

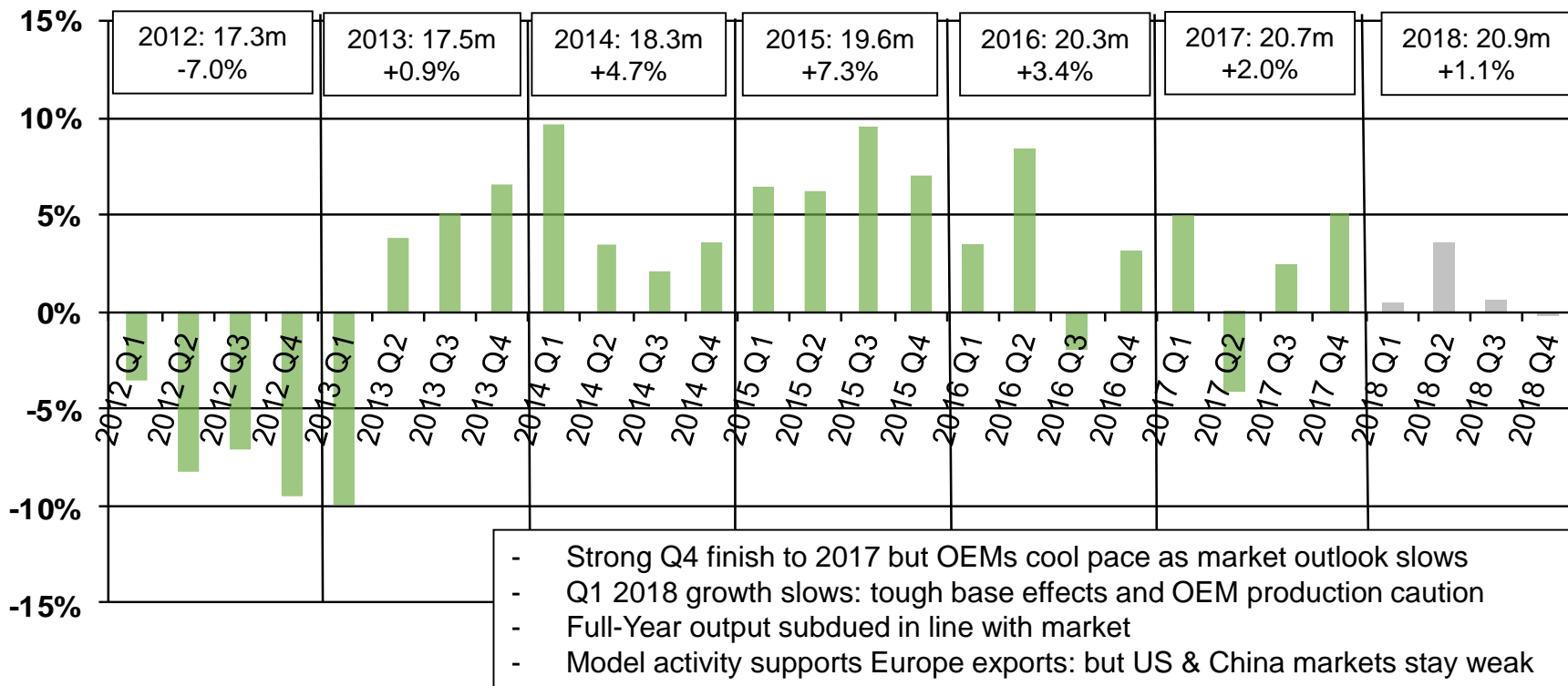


## Pan-European Light Vehicle Market: 2018



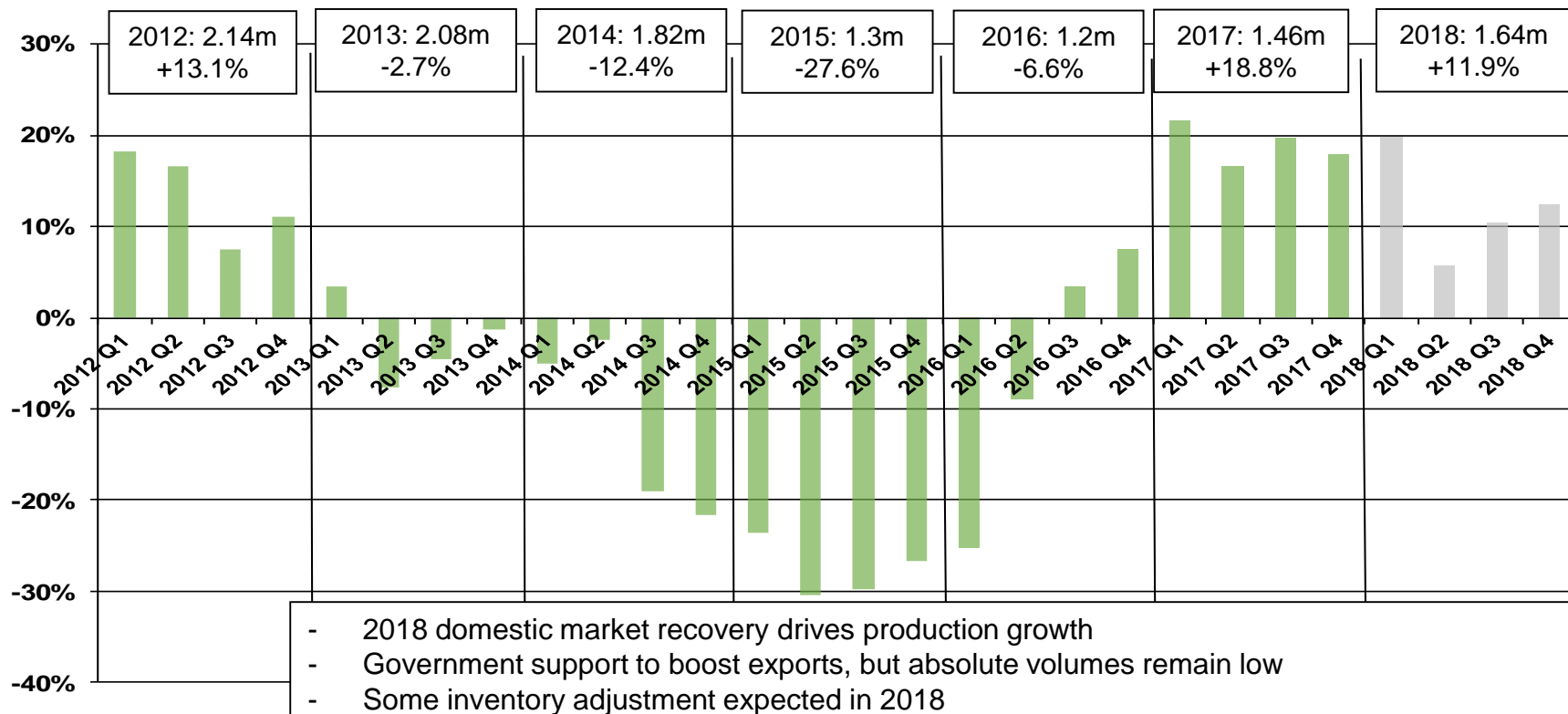
# Short-run: Production Outlook

## European LV Production Growth (excluding Russia)



# Short-run Production Outlook

## Russian LV Production Growth



# Short-Run : Europe Inventories

## European Vehicle Inventory Assessment Overview Selected Group

	End-of-Period Inventory Measure						
	Inventory Holding			Days Supply			
	000s						
	2018(Q1)	2018(Q2)	2018(Q3)	2018(Q1)	2018(Q2)	2018(Q3)	
BMW Group	425	393	402	59	61	59	57
Daimler Group	482	464	436	62	62	56	56
Fiat Chrysler Automobiles	393	340	342	61	66	56	*61
Ford Group	336	333	305	63	62	63	*59
PSA Group	682	664	595	59	67	60	*59
Renault-Nissan Group	754	756	737	56	65	57	*61
Tata Group	149	145	139	64	63	57	61
Volkswagen Group	1,140	1,183	1,092	55	62	57	54
Europe	4,956	4,887	4,631	58	63	58	57
*Partial data received from Company Quarterly financial Results							

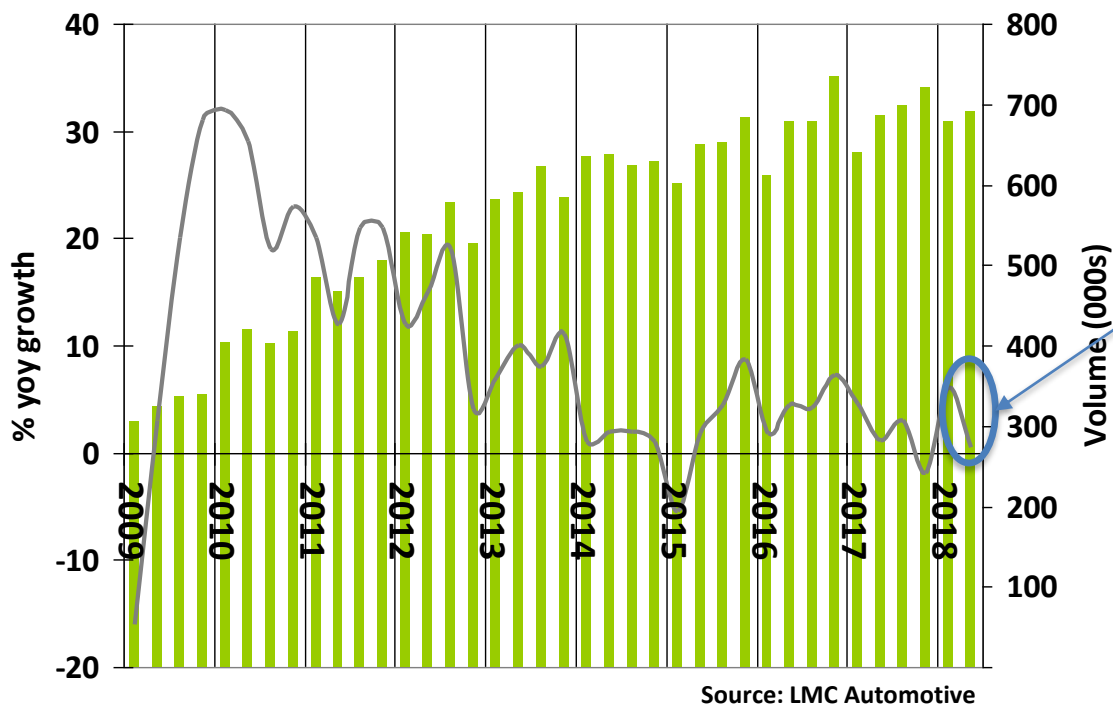
Source: LMC Automotive

- Generally, OEMs maintain firm control of inventories
- No Red flags



# Short Run: European Exports (NA,SA,Asia):

*Mixed start to 2018*

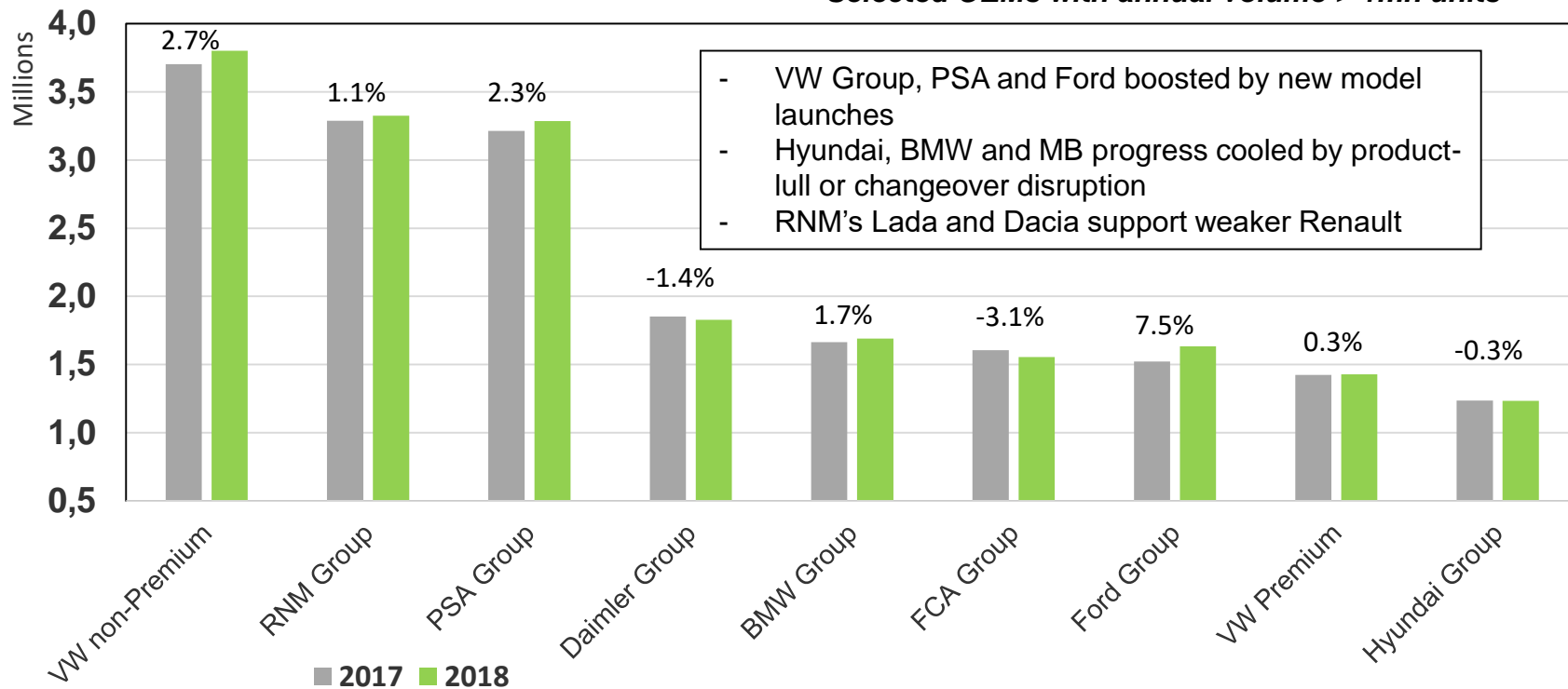


*Soft markets in China and USA but model activity at FCA, Volvo and JLR are supporting exports into Q1 2018*

# Short Run: OEM Production Outlook

## Pan-European\* Production: key OEM Group 2018 v 2017

*Selected OEMs with annual volume > 1mn units*

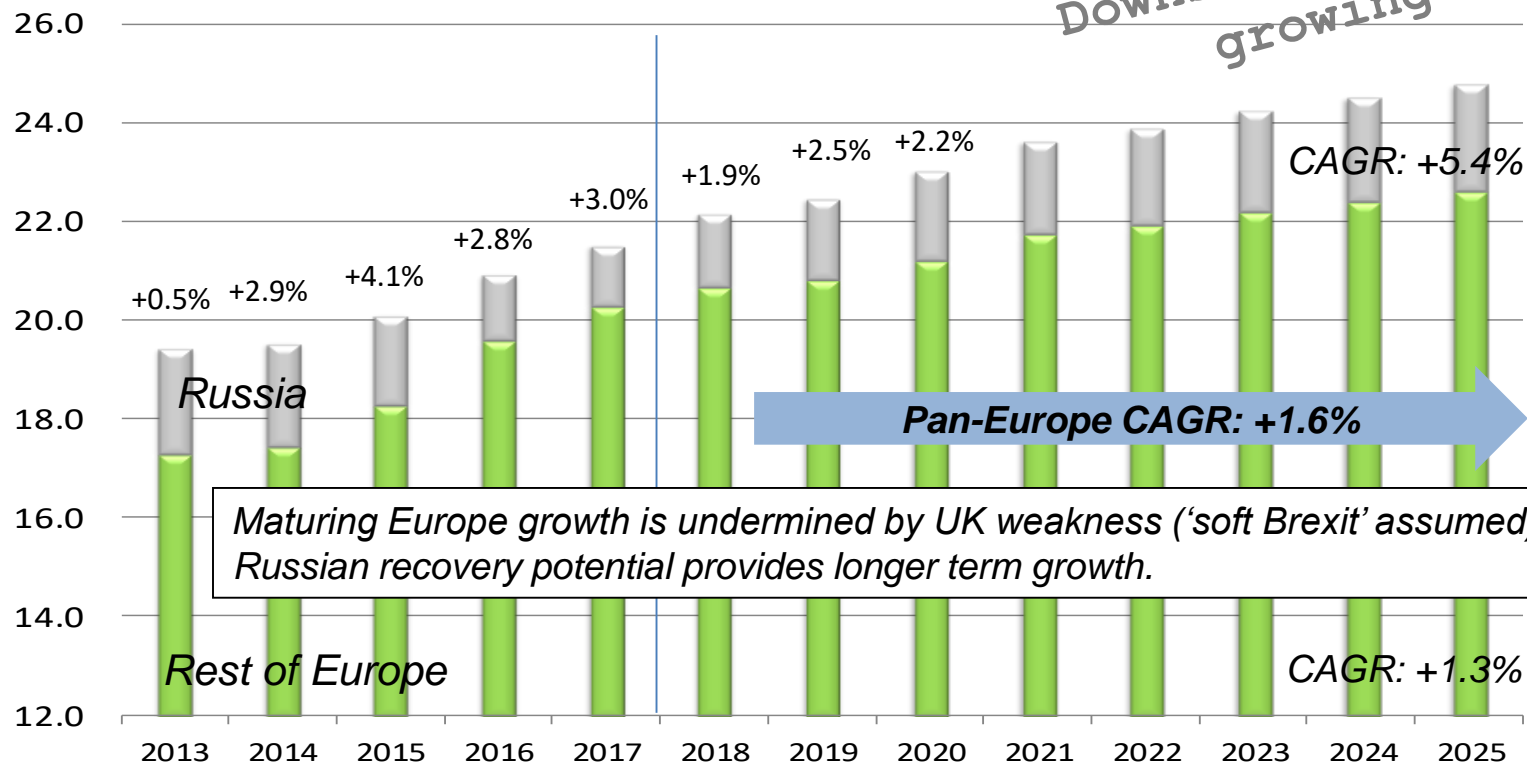


Total Growth (all OEMs): +1.9%

\*Includes Russia

# Medium Term Outlook: Base Scenario

## Pan European Light Vehicle production



# Summary

- *European auto-markets currently remain solid but cyclical position of key markets and Brexit-hit UK will slow the pace of growth.*
- *Global Risks centred around trade uncertainty are growing*
- *Production continues to broadly mirror the development of European demand as overseas localisation and a slower export markets ease European output for export.*
- *Medium term, the European market remains the key driver. Brexit will provide a drag. Russia's isolation threatens headline European LV growth*
- *Robust global trade remains a key foundation of current 'synchronised' regional economic growth but recent protectionist 'posturing' raises the risk of a wide-reaching trade-war. Europe's OEMs exposed.*



For experts<sup>7</sup>  
by experts

[forecasting@lmc-auto.com](mailto:forecasting@lmc-auto.com)

[lmc-auto.com](http://lmc-auto.com)

Oxford	+44 1865 791737
Detroit	+1 248 817-2100
Bangkok	+662 264 2050
Shanghai	+86 21 5283 3526

Thank you