



GLOBAL AUTOMOBILE BUMPY ROAD AHEAD

WEBINAR

Allianz Research/ Maxime Lemerle
Paris / September 2018, 25th



EXECUTIVE SUMMARY

01

THE AUTOMOTIVE MARKET IS SET TO GROW BY +3.0% IN 2018 COMPARED TO +3.1% IN 2017 AND TO SLOW DOWN TO +1.9% IN 2019, WITH NEW VEHICLE REGISTRATIONS EXPECTED TO EXCEED 100MN UNITS IN 2019, WORLDWIDE

02

MEDIUM-TERM PROSPECTS REMAIN FAVORABLE, WITH ANNUAL SALES TO REACH 110 MILLION UNITS BY 2022 MAINLY DRIVEN BY THE DEMAND IN CHINA AND TO A LESSER EXTENT INDIA

03

HOWEVER, FOR MANUFACTURERS AND SUPPLIERS, TRANSITION TO ELECTRIC VEHICLE AND PROTECTIONISM ARE LEADING TO GREATLY INCREASED UNCERTAINTY AND RISING COSTS, NOTABLY INPUTS COSTS, RELOCATION OF PRODUCTION AND UPHEAVAL OF SUPPLY-CHAINS

04

SOME CAR MAKERS WILL BE FORCED TO DEDICATE CAPEX TO MEETING SHORT TERM CHALLENGES AND THEREFORE NOT BE ABLE TO DEPLOY THE SIGNIFICANT AMOUNTS REQUIRED TO TAKE ADVANTAGE OF OPPORTUNITIES STEMMING FROM THE FUTURE OF MOBILITY

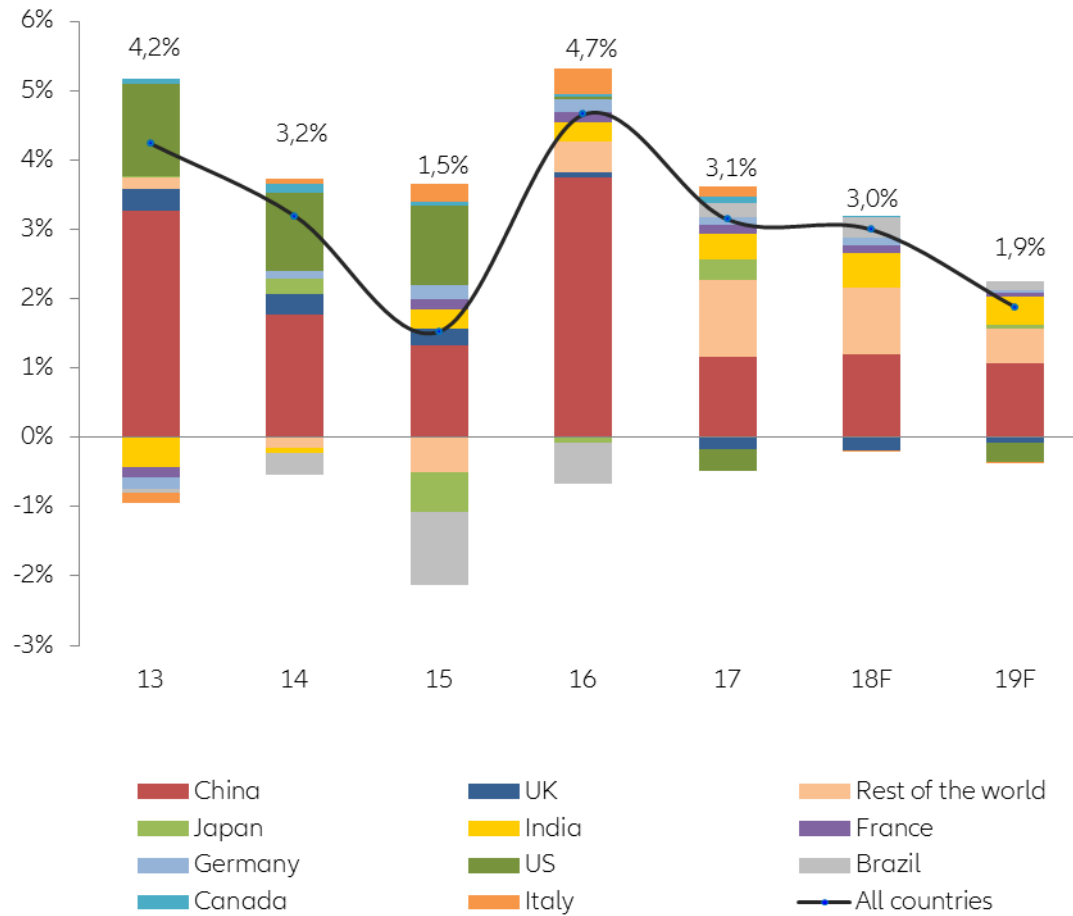
**GLOBAL AUTOMOTIVE CONTINUES TO
GROW, WITH STILL FAVORABLE MEDIUM-
TERM PROSPECTS MAINLY DRIVEN BY THE
DEMAND IN CHINA AND INDIA**

01

SHORT TERM FORECASTS: +3% IN 2018, +1.9% IN 2019



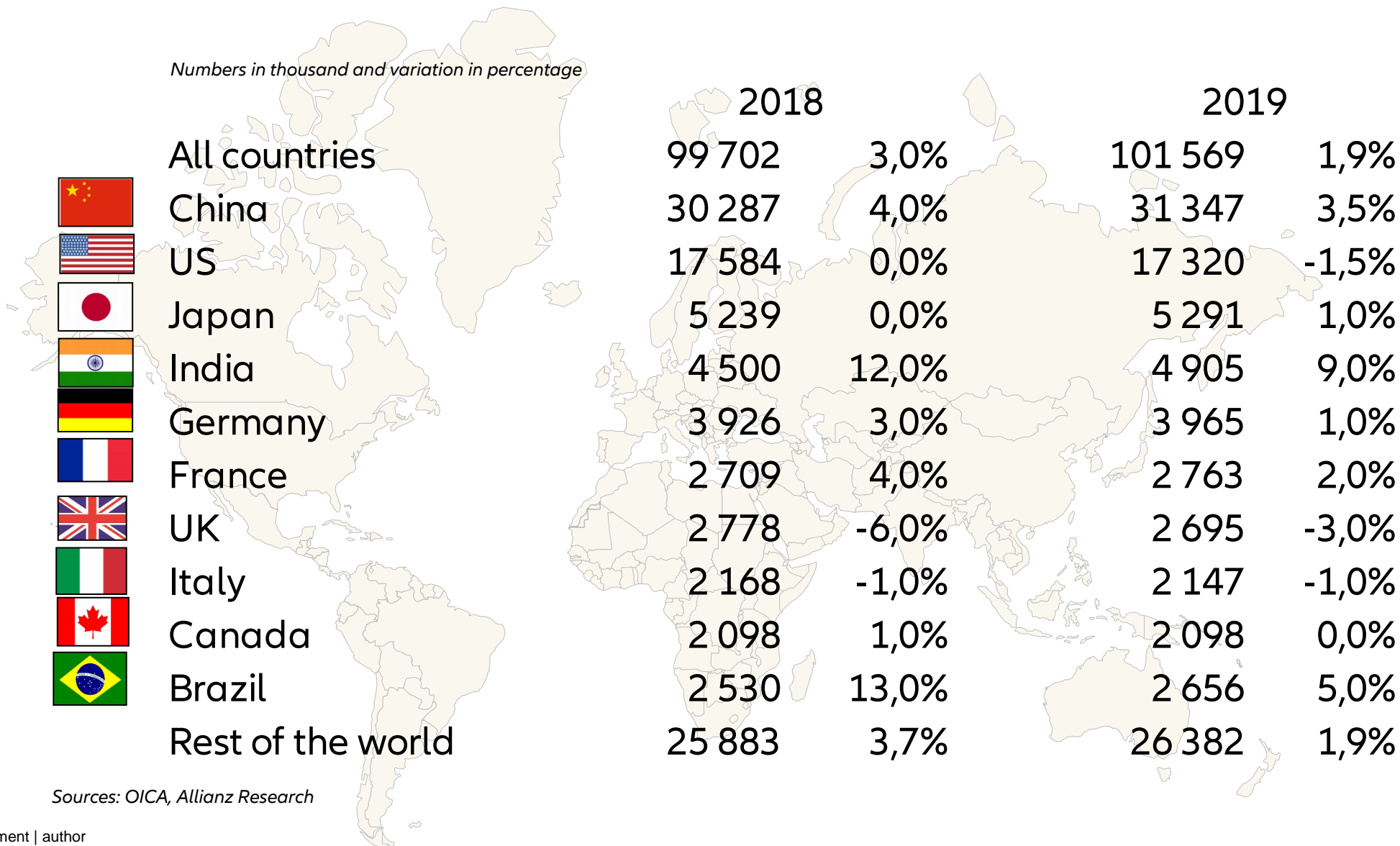
Contributions to Growth in Global Vehicle Sales (in pp)



- ✓ A healthy eight year recovery period
- ✓ A Dynamic H1-2018
- ✓ Still +3% in 2018 to 99.7mn units
- ✓ A slowdown in 2019 : + 1.9% to 101.6 mn units

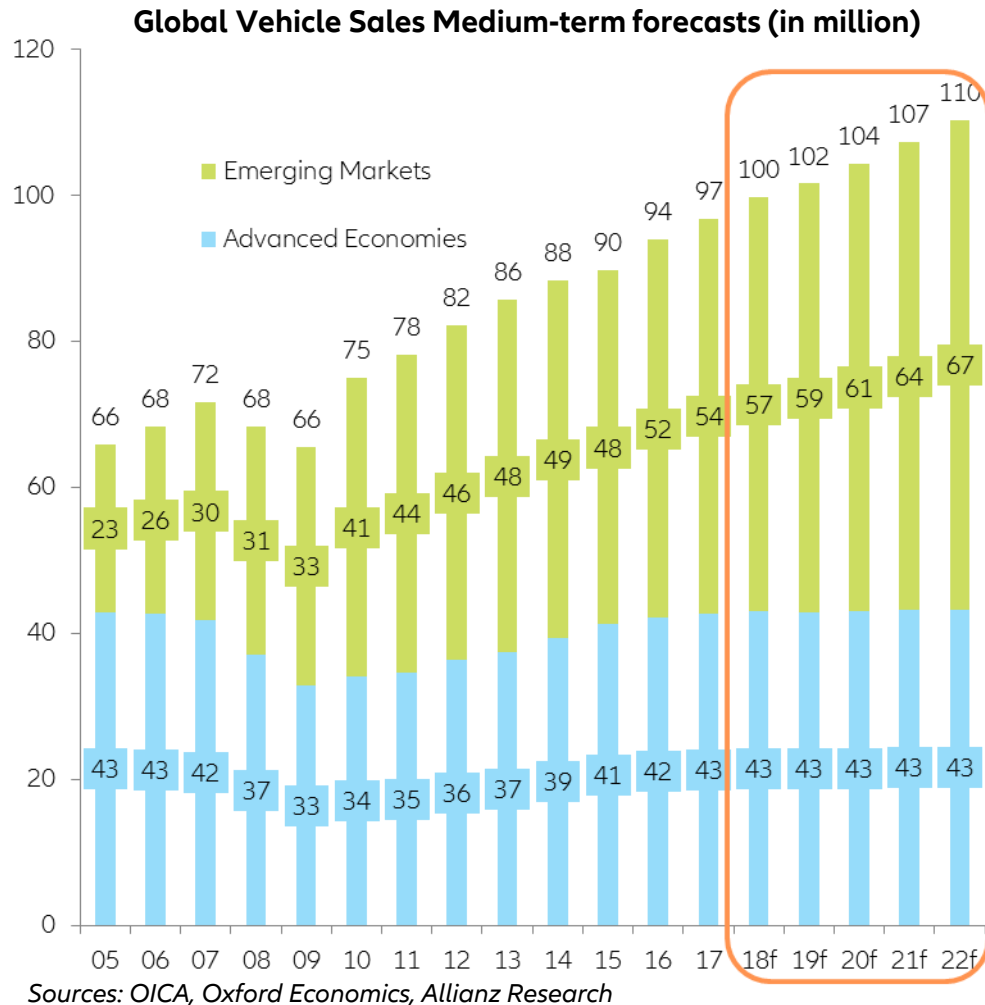
Sources: OICA, IHS, Bloomberg, Allianz Research

SHORT TERM FORECASTS: KEY MARKETS



Sources: OICA, Allianz Research

MEDIUM TERM FORECASTS: 110MN UNITS IN 2022



Low motorization rate



Economic growth



Growing middle-class




'Natural' needs for replacement




Consumer appetite for innovation and new technologies and services



'Environnemental' needs (consumer demand + regulation)



+ 6mn to 35mn
(47% of global growth)

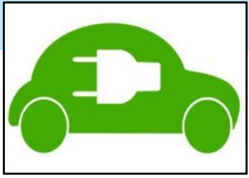


+2mn to 6mn
(13%)

**SHORT TERM TURBULENCE ON ELECTRIC
VEHICLE**

02

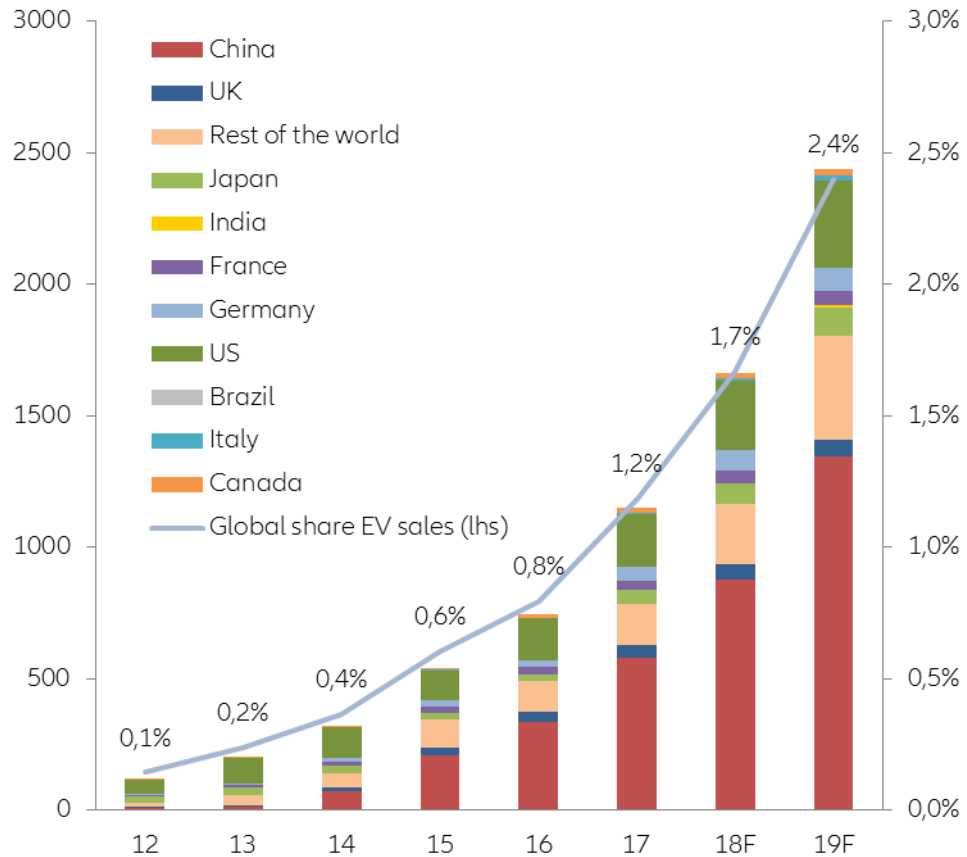




STRONG DOUBLE DIGIT MOMENTUM BUT STILL A LOW PENETRATION RATE



Global EV Sales (in thousand, and %)



+54% in 2017 to 1,150mn units (+36% in 2016)



Double digit expectations (+45% for 2018 and +46% for 2019) to almost 2,5mn units



Global EV fleet to climb from 3.1mn in 2017 to 7.2mn in 2019



China the first market (approx. 880K in 2018) and first contributor to growth (>50%)



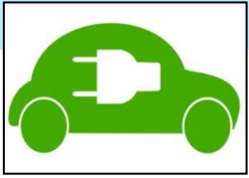
Low penetration rate at global and country levels (less than 1.7% expected in 2018)



The Norwegian exception (31%)



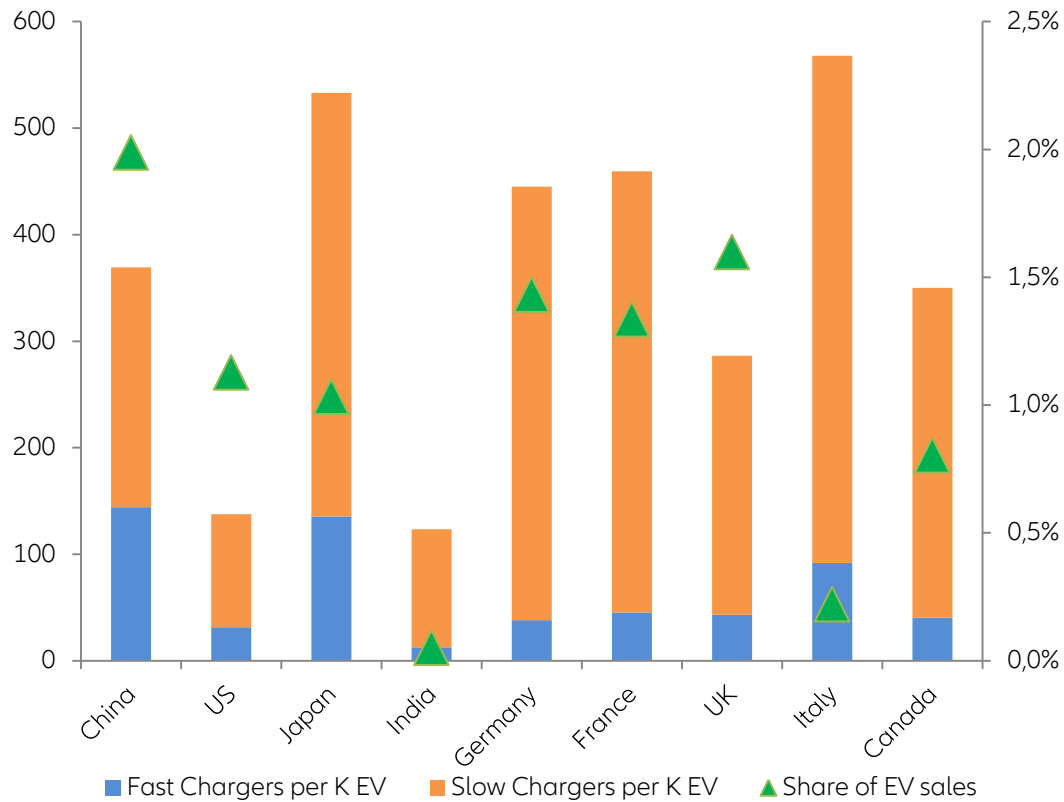
Sources: IAE-EV, EAFO, Allianz Research



TWO LIMITING FACTORS: CHARGING INFRASTRUCTURE+VALUE PROPOSITION



Charging infrastructure and share of EV sales



Sources: IAE-EV, Allianz Research

File name | department | author
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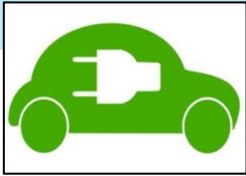
Declining but still expensive **battery cost** (from about 400~600 USD/kWh in 2016 to 250~300 USD/kWh in 2018 for the lithium-ion batteries, ie USD 15,000 per electric passenger car)



The key role of **financial incentives** (subsidies, tax exemptions)
Example: the Dutch case, with EV share dropping from 8.4% in 2015 to 2.2% in 2017



EV sales down
-44% in 2016
-54% in 2017

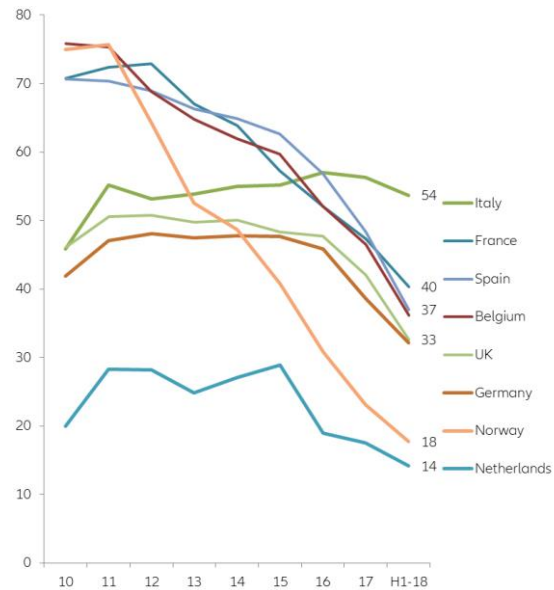


TWO NEW CHALLENGES: LESS TIME AND MORE COST OF ADAPTING



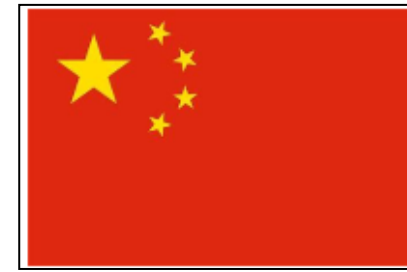
ACCELERATED END OF DIESEL

Market share of Diesel in new registrations (in %)



Sources: ACEA, Allianz Research

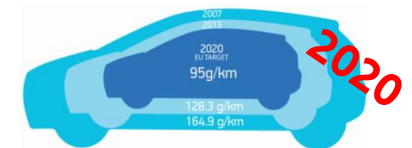
TIGHTENING OF REGULATIONS



2018
NEV scheme



2018
NEDC → WLTP
WORLDWIDE HARMONISED LIGHT VEHICLE TEST PROCEDURE



- Costly modifications of engines
- Accelerated sales in non-compliant models (discounts)
- Faster roll-out of new models (R&D, industrial deployment, marketing)
- Flexible platforms

**SHORT TERM TURBULENCE ON
INTERNATIONAL TRADE**

03





BREXIT-RELATED UNCERTAINTIES

A SIGNIFICANT MARKET + A MAJOR HUB



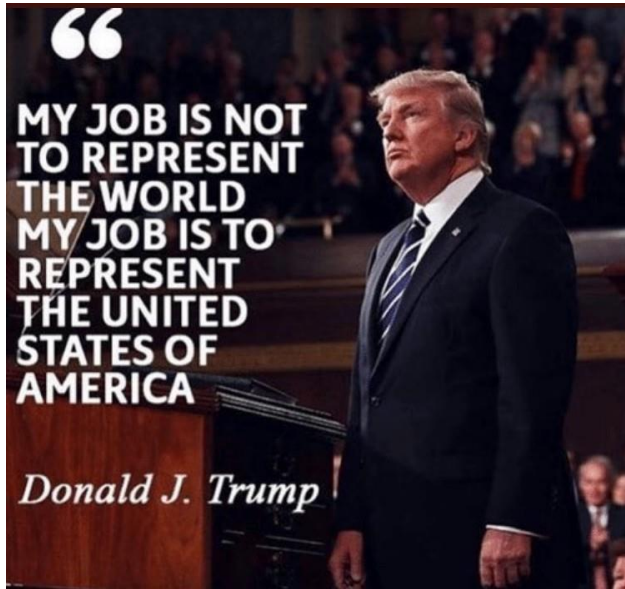
- ✓ **Annual sales to decline** -6% in 2018 and -3% in 2019 (-5% in 2017) to respectively 2.8mn and 2.7mn units (Central scenario = last minute agreement)
- ✓ **80% of the cars sold in the UK are imported** (imports totaled USD79.5bn in 2017), notably 66% from the EU
- ✓ **80% of the domestic production is exported** (Exports totaled USD52bn in 2017)
- ✓ Domestic production imports 3x more components from the EU than the export to the EU
- ✓ **Local-based foreign brands** have key positions (Japanese brands accounted for 40% in total production)



Investments in the sector
declined by
-46% in H1 18



TRUMP INITIATIVES SURROUNDING THE AUTO SECTOR



Donald J. Trump @realDonaldTrump · 1:22 PM - Apr 4, 2018

We are not in a trade war with China, that war was lost many years ago by the foolish, or incompetent, people who represented the U.S. Now we have a Trade Deficit of \$500 Billion a year, with Intellectual Property Theft of another \$300 Billion. We cannot let this continue!

139K 64.4K people are talking about this

Donald J. Trump @realDonaldTrump · 3:20 PM - Apr 4, 2018

When you're already \$500 Billion DOWN, you can't lose!

85.2K 40.2K people are talking about this

Donald J. Trump @realDonaldTrump · 09/09/2018

If the U.S. sells a car into China, there is a tax of 25%. If China sells a car into the U.S., there is a tax of 2%. Does anybody think that is FAIR? The days of the U.S. being ripped-off by other nations is OVER!

16,7K 32,7K 133K

Donald J. Trump @realDonaldTrump · 01/09/2018

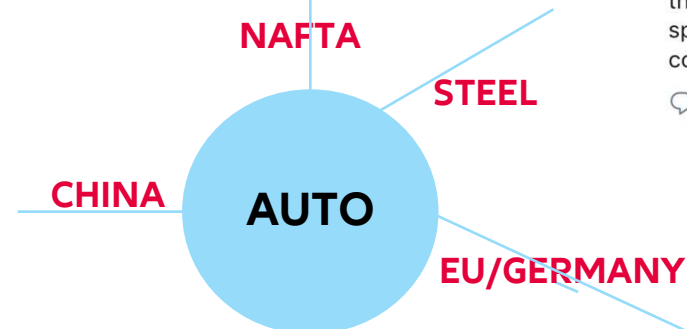
There is no political necessity to keep Canada in the new NAFTA deal. If we don't make a fair deal for the U.S. after decades of abuse, Canada will be out. Congress should not interfere w/ these negotiations or I will simply terminate NAFTA entirely & we will be far better off...

28,6K 25,8K 105K

Donald J. Trump @realDonaldTrump · 10h

Our Steel Industry is the talk of the World. It has been given new life, and is thriving. Billions of Dollars is being spent on new plants all around the country!

16,5K 13,6K 53,1K



**Art 232
(National security investigations)**

Donald J. Trump @realDonaldTrump · 09/09/2018

"Ford has abruptly killed a plan to sell a Chinese-made small vehicle in the U.S. because of the prospect of higher U.S. Tariffs." CNBC. This is just the beginning. This car can now be BUILT IN THE U.S.A. and Ford will pay no tariffs!

10,1K 20,3K 84,4K

Donald J. Trump @realDonaldTrump · 10h

Tariffs have put the U.S. in a very strong bargaining position, with Billions of Dollars, and Jobs, flowing into our Country - and yet cost increases have thus far been almost unnoticeable. If countries will not make fair deals with us, they will be "Tariffed!"

11,8K 13,6K 56,1K



TRUMP INITIATIVES UNCERTAINTIES ON TRADE (1)



Bilateral net balance in trade in automotive (USDbn, 2017)

| Partner | Brazil | Canada | China | France | Germany | India | Italy | Japon | Korea | Mexico | Russia | Spain | Tukey | UK | US | RoW | Total WORLD |
|-------------|---------|---------|----------|---------|-----------|----------|---------|-----------|----------|----------|---------|----------|---------|---------|----------|---------|-------------|
| Brazil | - | 5 | - 844 | - 282 | - 935 | - 150 | - 368 | - 839 | - 1028 | - 300 | 185 | - 111 | - 50 | - 182 | - 1292 | 7 034 | 878 |
| Canada | 5 | - | - 58 | - 82 | - 3 250 | - 140 | - 341 | - 4 788 | - 2 324 | - 3 829 | 39 | - 133 | - 90 | - 871 | 7 613 | - 295 | - 8 502 |
| China | 844 | 58 | - | 143 | - 21 508 | 1 370 | - 1 238 | - 8 048 | - 1 175 | 725 | 1 410 | - 40 | 533 | - 4 412 | 3 759 | 28 111 | - 1 487 |
| France | 282 | 82 | - 143 | - | - 7 634 | - 180 | - 694 | - 1 231 | - 540 | - 48 | 305 | - 4 138 | - 1 487 | 1 884 | 92 | - 2 941 | - 16 412 |
| Germany | 935 | 3 250 | 21 508 | 7 634 | - | 149 | 6 688 | 3 811 | 3 613 | - 1 678 | 3 927 | - 170 | 2 488 | 22 789 | 22 701 | 27 784 | 125 403 |
| India | 150 | 140 | - 1 370 | 180 | - 149 | - | 112 | - 351 | - 1 394 | 598 | - 1 332 | - 1 113 | - 1 013 | - 1 115 | - 61 | 7 483 | 13 895 |
| Italy | 368 | 341 | 1 238 | 694 | - 6 688 | - 112 | - | 610 | - 593 | - 22 | 283 | - 2 648 | - 1 794 | 253 | 5 028 | - 1 014 | - 5 258 |
| Japon | 839 | 4 788 | 8 048 | 1 231 | - 3 811 | 351 | 610 | - | 697 | 3 124 | 3 363 | 1 170 | 735 | 2 021 | 49 038 | 49 788 | 121 989 |
| Korea | 1 028 | 2 324 | 1 175 | 540 | - 3 613 | 1 394 | 593 | - 697 | - | 1 910 | 2 461 | 742 | 689 | 751 | 17 614 | 20 089 | 46 288 |
| Mexico | 300 | 3 829 | - 725 | 48 | 1 678 | - 598 | 22 | - 3 124 | - 1 910 | - | 72 | - 389 | - 89 | 139 | 61 528 | 1 789 | 61 148 |
| Russia | - 185 | - 39 | - 1 410 | - 305 | - 3 927 | 1 332 | - 283 | - 3 363 | - 2 461 | - 72 | - | - 293 | - 230 | - 852 | - 514 | - 3 472 | - 17 532 |
| Spain | 111 | 133 | 40 | 4 138 | 170 | 1 113 | 2 648 | - 1 170 | - 742 | 389 | 293 | - | 208 | 3 487 | 678 | 6 608 | 16 718 |
| Tukey | 50 | 90 | - 533 | 1 487 | - 2 488 | 1 013 | 1 794 | - 735 | - 689 | 89 | 230 | - 208 | - | 1 731 | 1 038 | 4 738 | 6 152 |
| UK | 182 | 871 | 4 412 | - 1 884 | - 22 789 | 1 115 | - 253 | - 2 021 | - 751 | - 139 | 852 | - 3 487 | - 1 731 | - | 6 783 | - 7 451 | - 27 628 |
| US | 1 292 | - 7 613 | - 3 759 | - 92 | - 22 701 | 61 | - 5 028 | - 49 038 | - 17 614 | - 61 528 | 514 | - 678 | - 1 038 | - 6 783 | - | 10 017 | - 165 078 |
| RoW | - 7 034 | 295 | - 28 111 | 2 941 | - 27 784 | - 7 483 | 1 014 | - 49 788 | - 20 089 | - 1 789 | 3 472 | - 6 608 | - 4 738 | 7 451 | - 10 017 | - | - 146 483 |
| Total WORLD | - 878 | 8 502 | 1 487 | 16 412 | - 125 403 | - 13 895 | 5 258 | - 121 989 | - 46 288 | - 61 148 | 17 532 | - 16 718 | - 6 152 | 27 628 | 165 078 | 146 483 | - |



US: world's biggest importer
(USD291bn in 2017, i.e. 20% of global imports)



US: biggest deficit in auto trade
(USD165bn in 2017)



TOP 3 imbalances:
US-Mexico (USD62bn)
US-Japan (USD49bn)
US-Germany (USD23bn)

Sources: UNCTAD, Allianz Research



TRUMP INITIATIVES

UNCERTAINTIES ON TRADE (2)



Pending threat on US import duties with EU

A 20-point in US import tariffs

> +EUR6.5K (average price of a EU car imported to the US)

> -270K cars imported

> -EUR10bn shortfall for the European auto industries



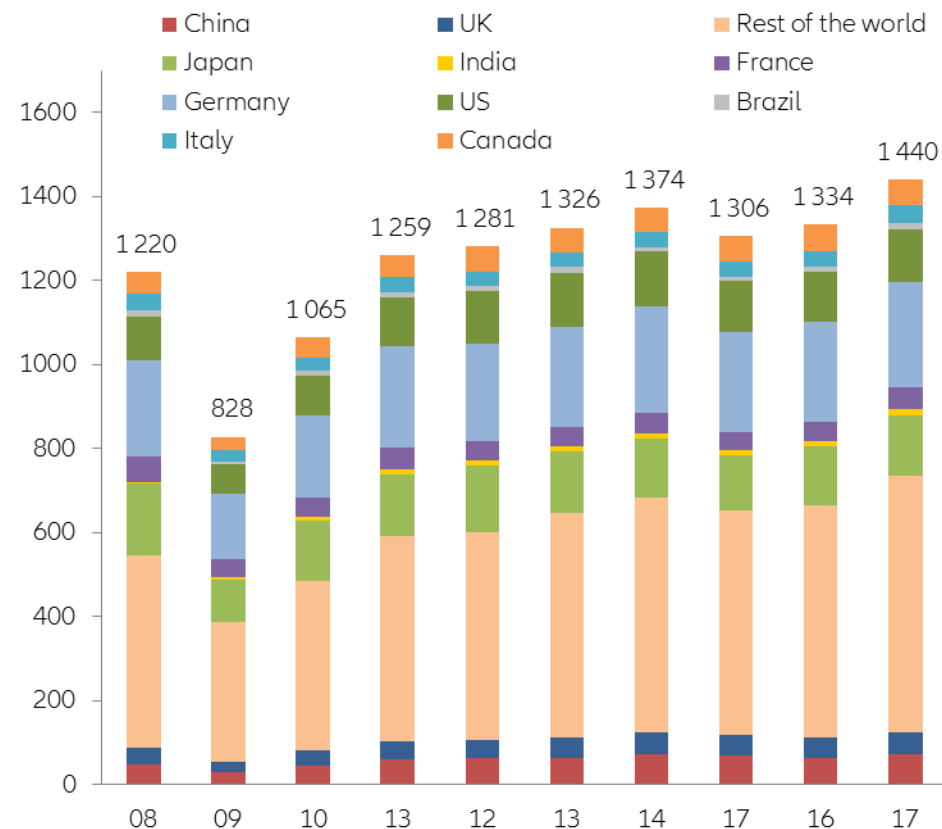
Trade escalation with China / retaliation

> US-made vehicles are now subject to 40% tariffs



Global exports to decelerate further than current expectations (from +8% in 2017 to +5.5% in 2018 and +4.8% in 2019 to USD1,600bn)

Global exports in Automotive (USDbn)



Sources: UNCTAD, Allianz Research



TRUMP INITIATIVES: UNCERTAINTIES ON STRATEGIES OF GLOBAL PLAYERS

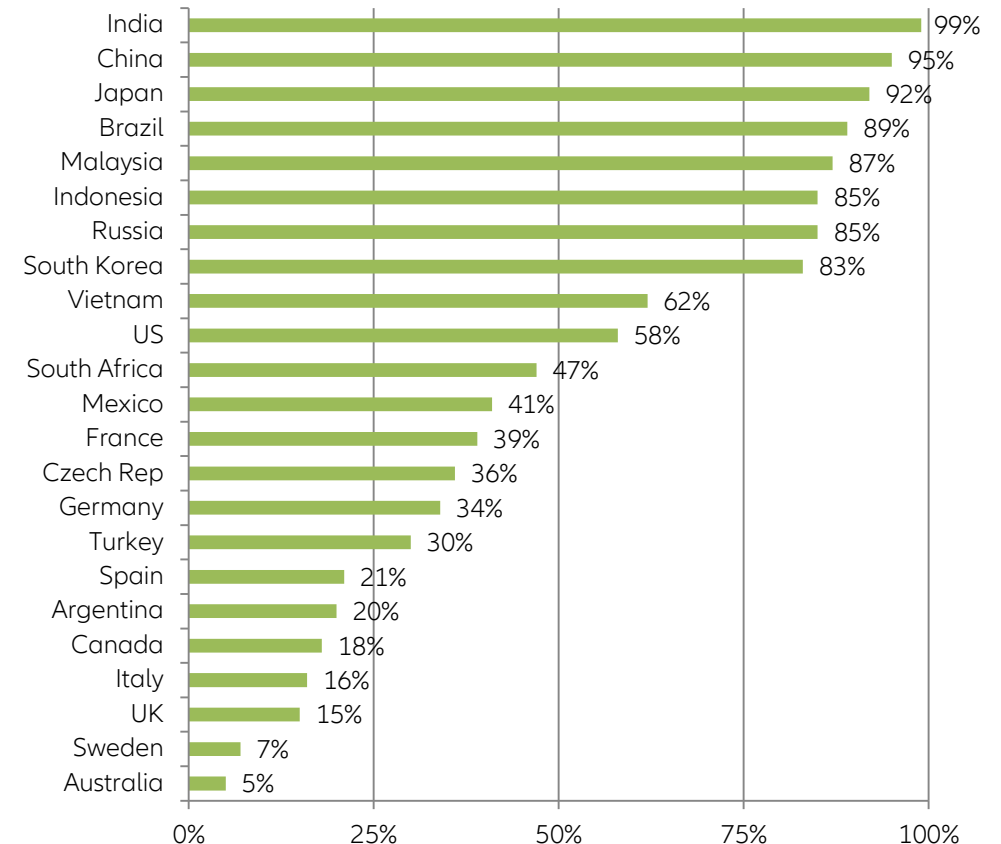


FROM INPUT COST TO SELLING PRICE ?

RELOCATION OF PRODUCTION ? UPHEAVAL OF SUPPLY-CHAINS ?

- ✓ Resp. 25% and 10% tariffs on steel and aluminium
- ✓ Metals > 50% of the car components
- ✓ Already a +USD250 increase in cost of producing a new car in the US
- ✓ Tariffs escalation on a variety of parts and components used in respective local-based assembly lines

Percentage of locally-produced cars on total sales



Sources: JATO, Allianz Research

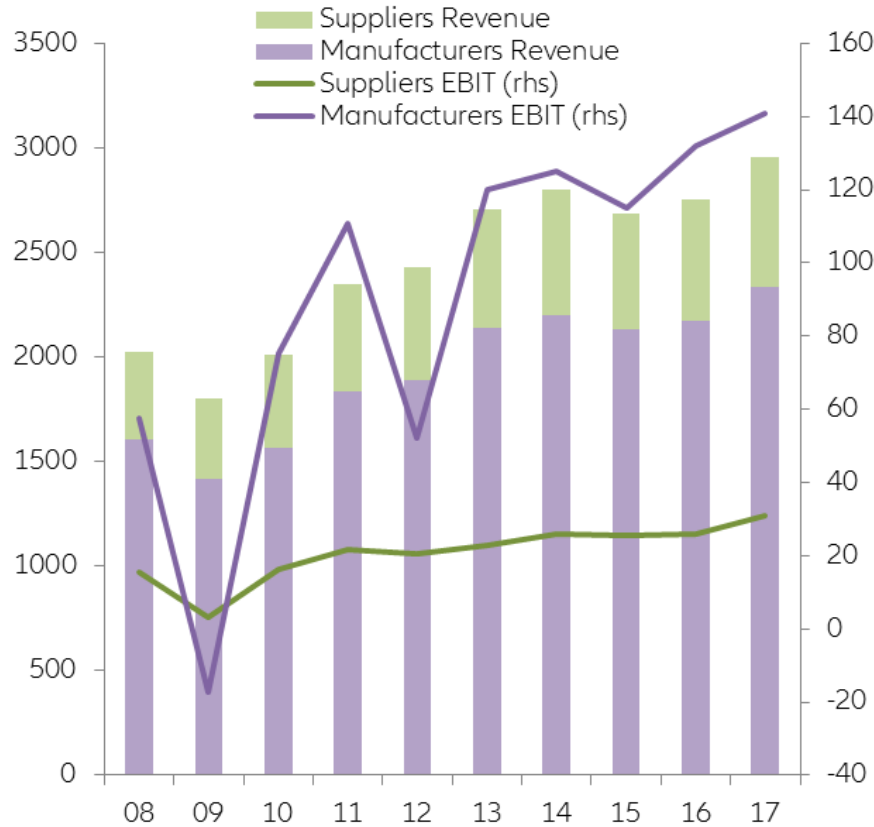
**WEAKER MARGIN, CAPEX
UNDER CLOSER WATCH**

04



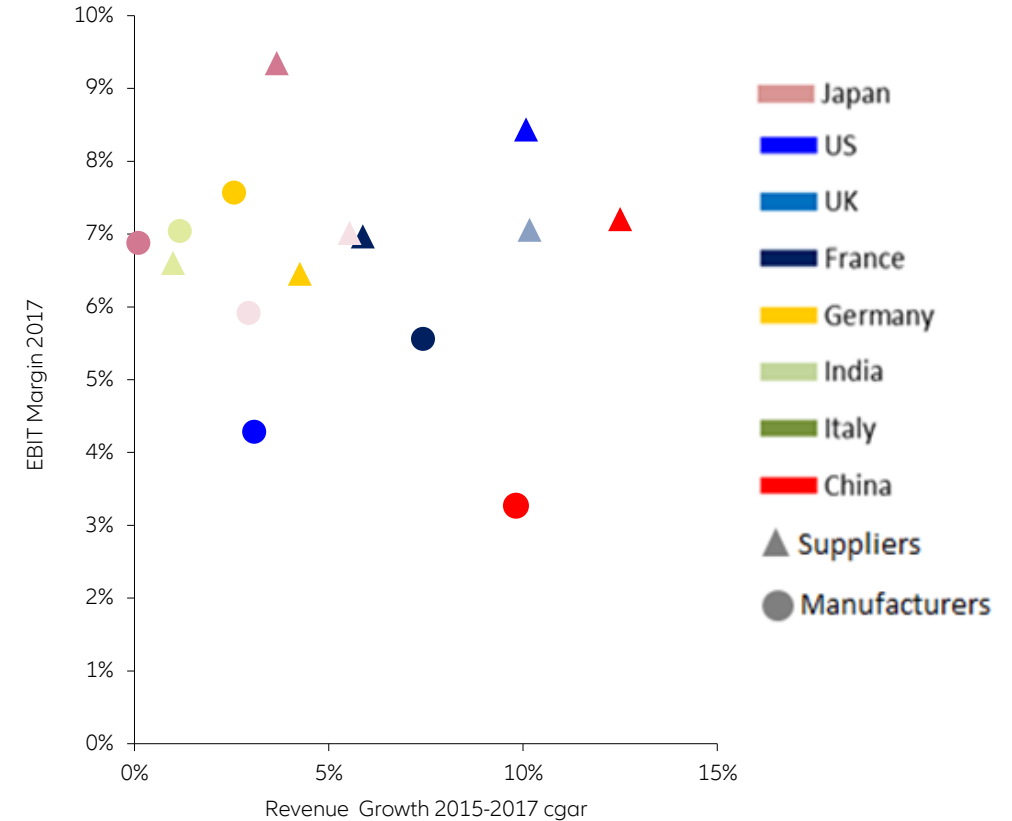
MARGIN RATIO TO WEAKEN IN 2018 AFTER RECORD REVENUE AND EBIT IN 2017

Revenue and EBIT (USDbn)



- ✓ 8 years of recovery (+ 5.7% CAGR since 2009)
- ✓ Record high in 2017 for cumulative revenue and EBIT
- ✓ EBIT margin to weaken from 2017 top levels (5% for manufacturers and 7.2% for suppliers in average)

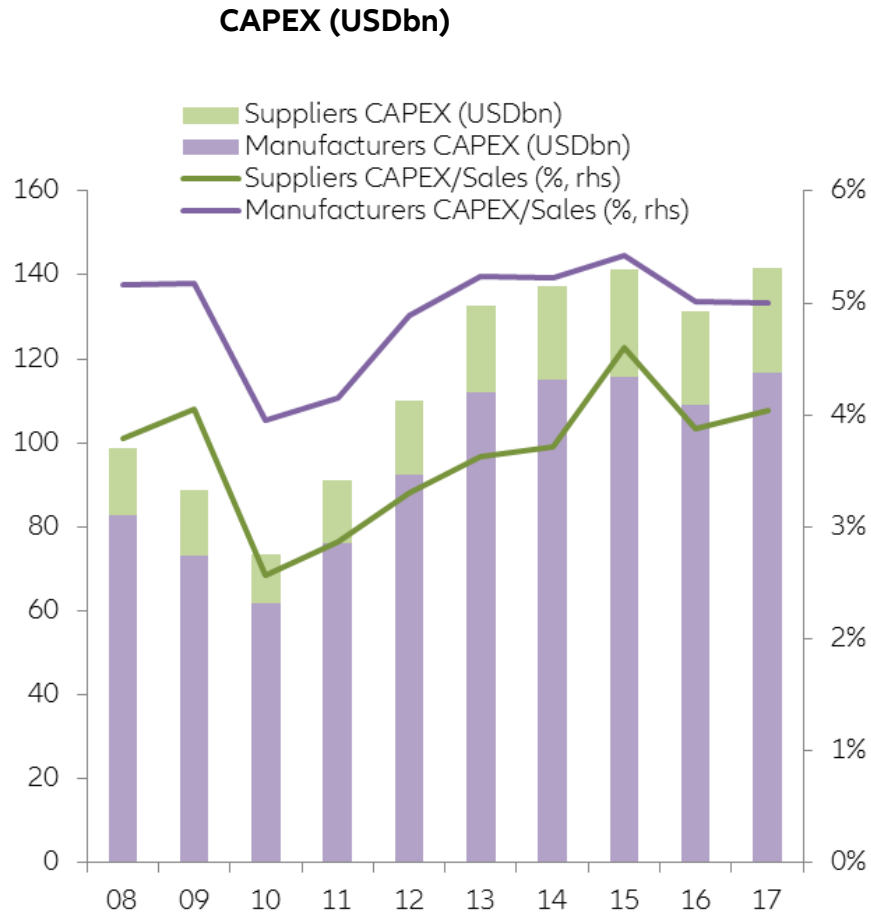
EBIT margin – Suppliers vs Manufacturers



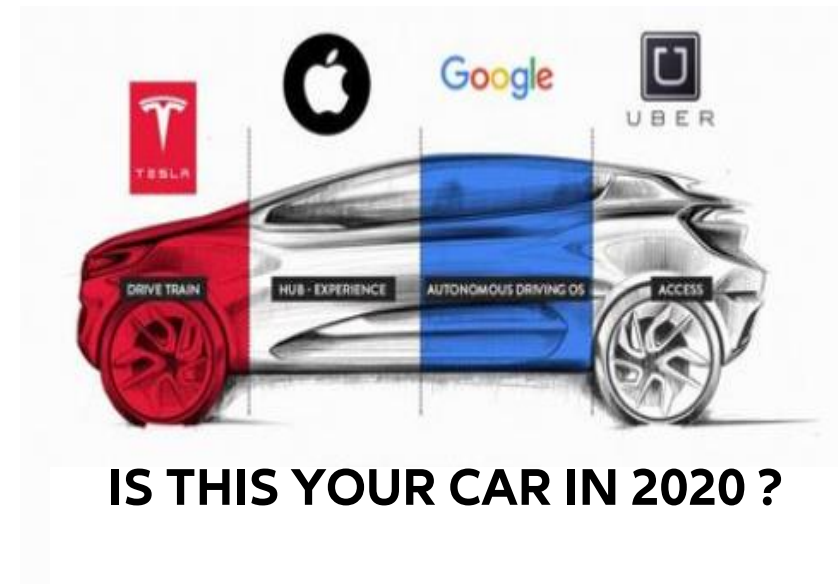
Sources: Bloomberg, Allianz Research
Top 60 listed manufacturers + Top 100 listed suppliers

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Top 60 listed manufacturers + Top 100 listed suppliers

CAPEX: UNDER CLOSER WATCH



- ✓ CAPEX at a new record in absolute terms in 2017 (USD140bn)
- ✓ CAPEX/ sales ratio on the downside (5.3% in 2015 to 4.8% in 2017 in average)
- ✓ Short-term challenges to mobilize part of the CAPEX that were planned for the longer term competition on mobility
- ✓ Less M&As, more JVs and strategic alliances



IS THIS YOUR CAR IN 2020 ?

Sources: Bloomberg, Allianz Research
 Top 60 listed manufacturers + Top 100 listed suppliers

THANK YOU

WEBINAR

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