AUTOMOTIVE

New Technologies Changing Automotive Markets in Western Europe

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Agenda

• Macroeconomic environment

• West European car market outlook
Eurozone sentiment indexes have improved

Positive replies minus negative replies

Source: European Commission
Western Europe stays on a slow growth path

• Eurozone growth has picked up in the fourth quarter, reflecting strength in retail sales, new orders, and business and consumer sentiment.

• Political risks are elevated, however, with elections due in 2017 in Germany, France, the Netherlands, and possibly Italy.

• Aggressive monetary stimulus, a weaker euro, and reduced fiscal headwinds will help sustain growth.

• With inflation picking up only gradually, the European Central Bank (ECB) is not expected to raise interest rates until late 2018.

• The euro is projected to fall to slightly below parity with the US dollar by the end of 2017 before gradually recovering.

• Ireland, Spain, and Sweden will maintain relatively healthy economic growth, but the United Kingdom, Italy, and France will struggle.
Real GDP growth in Western Europe

Source: IHS Markit
Real GDP growth in Western Europe

Real GDP

Annual percent change

Source: IHS Markit

© 2017 IHS Markit
Consumer price inflation will rise in Western Europe

Consumer price index

Source: IHS Markit
Unemployment rates
Most markets see positive employment trends

<table>
<thead>
<tr>
<th>Country</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td></td>
</tr>
<tr>
<td>Eurozone</td>
<td></td>
</tr>
<tr>
<td>EU (28)</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
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<tr>
<td>Italy</td>
<td></td>
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<tr>
<td>UK</td>
<td></td>
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<tr>
<td>Spain</td>
<td></td>
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<tr>
<td>Netherlands</td>
<td></td>
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<tr>
<td>Austria</td>
<td></td>
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<tr>
<td>Belgium</td>
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<tr>
<td>Finland</td>
<td></td>
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<tr>
<td>Greece</td>
<td></td>
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<tr>
<td>Ireland</td>
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<td>Slovakia</td>
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<tr>
<td>Slovenia</td>
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<td>Portugal</td>
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<tr>
<td>Denmark</td>
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<tr>
<td>Norway</td>
<td></td>
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<tr>
<td>Sweden</td>
<td></td>
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<tr>
<td>Switzerland</td>
<td></td>
</tr>
</tbody>
</table>

Source: IHS Markit
Unemployment rates
Most markets see positive employment trends

Unemployment rates

Source: IHS Markit

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Western Europe Passenger Car Sales –SAAR
Much, much better but still a long way to go

Trend wise, WE sales are coming close to the levels we saw in the high phase 2009

© 2017 IHS Markit
Western Europe Passenger car market 2016

Recovery in big parts of Western Europe

<table>
<thead>
<tr>
<th>Year</th>
<th>Italy</th>
<th>Germany</th>
<th>Spain</th>
<th>France</th>
<th>United Kingdom</th>
<th>Rest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>244K</td>
<td>145K</td>
<td>112K</td>
<td>97K</td>
<td>58K</td>
<td></td>
<td>13.2M</td>
</tr>
<tr>
<td>2016</td>
<td>145K</td>
<td>115K</td>
<td>112K</td>
<td>97K</td>
<td>58K</td>
<td></td>
<td>14.0M</td>
</tr>
</tbody>
</table>

Source: IHS Markit

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Western Europe Passenger car market 2016

Recovery in big parts of Western Europe

Source: IHS Markit

© 2017 IHS Markit
Western Europe Passenger car market
Share of alternative propulsion vehicles (BEV, PHEV) from 2012-2016

New products + incentives support share, but still low level

Source: IHS Markit
West European car market outlook
Germany 1 million BEV+PHEV by 2020 target, realistic?

OEM targets ambitious – infrastructure + price + product crucial

Source: IHS Markit
Western Europe Passenger car market 2017

Recovery is slowing down in big parts of Western Europe

Source: IHS Markit
Western Europe Passenger car market outlook 2017

Recovery is slowing down in big parts of Western Europe

Source: IHS Markit
West European car market outlook

Germany

Car sales will level off in a corridor of 3.1 - 3.25 m units
### West European car market outlook

Germany - new car regs by sales channel in % 2014-16

<table>
<thead>
<tr>
<th>Year</th>
<th>Private</th>
<th>Tactical</th>
<th>Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>36.2%</td>
<td>40.2%</td>
<td>23.6%</td>
</tr>
<tr>
<td>2015</td>
<td>34.2%</td>
<td>41.3%</td>
<td>24.5%</td>
</tr>
<tr>
<td>2016</td>
<td>35.0%</td>
<td>40.3%</td>
<td>24.7%</td>
</tr>
</tbody>
</table>

**Private demand still weak – Growth coming from Business + Tactical**

Source: DATAFORCE

© 2017 IHS Markit
West European car market outlook
United Kingdom

Five year of annual growth coming to an end

<table>
<thead>
<tr>
<th>Year</th>
<th>TIV (%)</th>
<th>TIV (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>-5,0%</td>
<td>-11,1%</td>
</tr>
<tr>
<td>2006</td>
<td>-3,9%</td>
<td>-6,5%</td>
</tr>
<tr>
<td>2007</td>
<td>-6,5%</td>
<td>-4,4%</td>
</tr>
<tr>
<td>2008</td>
<td>2,2%</td>
<td>5,4%</td>
</tr>
<tr>
<td>2009</td>
<td>1,8%</td>
<td>10,8%</td>
</tr>
<tr>
<td>2010</td>
<td>5,4%</td>
<td>9,4%</td>
</tr>
<tr>
<td>2011</td>
<td>6,4%</td>
<td>2,2%</td>
</tr>
<tr>
<td>2012</td>
<td>11,1%</td>
<td>-3,1%</td>
</tr>
<tr>
<td>2013</td>
<td>-1,2%</td>
<td>-2,4%</td>
</tr>
<tr>
<td>2014</td>
<td>-5,1%</td>
<td>-1,3%</td>
</tr>
<tr>
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<td>-3,1%</td>
<td>-5,1%</td>
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<tr>
<td>2016</td>
<td>-2,4%</td>
<td>-5,1%</td>
</tr>
<tr>
<td>2017</td>
<td>-1,3%</td>
<td>-5,1%</td>
</tr>
<tr>
<td>2018</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2019</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>2020</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>2021</td>
<td>15%</td>
<td>15%</td>
</tr>
</tbody>
</table>
West European car market outlook

France

Slight recovery - Car sales will level off at around 2.0 m units

TIV (%-change Y/Y, rhs)  TIV (units)
West European car market outlook

Italy

Strong recovery with double-digit growth
West European car market outlook
Spain

3 years of double-digit growth

<table>
<thead>
<tr>
<th>Year</th>
<th>TIV (%)</th>
<th>TIV (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>-28.0%</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>-17.5%</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>-17.9%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>-0.7% - 1.5%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>3.1%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>18.3%</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>20.9%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>10.9%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>3.3% 2.1% 4.9% 4.0%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>1.5%</td>
<td></td>
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<tr>
<td>2017</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>10%</td>
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</tr>
<tr>
<td>2019</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>0%</td>
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</tr>
</tbody>
</table>
West European car market outlook
2016-2023 by Top10 countries

Southern European countries with room to recover, rest is saturated

Volume changes in 1000 units

Source: IHS Markit
West European market outlook
2016-2023 segment development

Small and Compact segment growing due to SUV expansion

CAGR 2016-2023

Source: IHS Markit

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West European car market outlook
2016-2023 bodytype development

SUV still the place to be – tough times for MPV

Source: IHS Markit

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West European car market outlook
2016-2023 by Top12 OEM

FCA strong product activity should recapture some market share
Key takeaway box

- Europe remains in recovery mode, helped by release of pent up demand from post crisis years (not immune to risks).

- Fears that longer term demand could struggle to reach previous levels in Europe due to blend of fast-evolving transportation trends, emerging consumer behavior and changing demographics (esp. certain markets).

- OEMs helping to maintain/grow sales with promotional activity: heavily price discounting, special offers. Financial packages: highly flexible, full service package for peace of mind, low monthly payments. Helps justify N/T upgrades.

- Down sizing trend will broadly continue related to fuel economy concerns and in order to minimize taxes (esp. CO2 related taxation).

- So far, EVs remain hard sell, with consumers unwilling to switch without significant incentives (government/OEM/local).

- SUV remain a clear “winning ticket”. OEMs investing heavily in Crossover/SUV portfolio and future variants

- Premiums will continue to explore further into mass market while enjoying less competition from mainstream in upper segments (it has never been so easy to drive a premium car).