

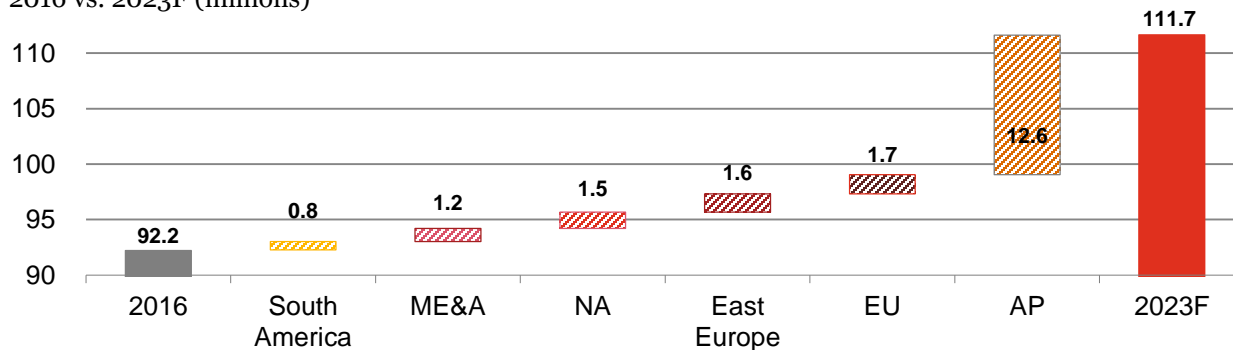
pwc Analyst Note >

Global Forecast Update *Changes taking shape by region*

Individual regional trends are increasingly reshaping the automotive industry, challenging the global OEM's portfolio and brand management capabilities. Powertrain technology shifts are in full swing as suppliers allocate investment budgets to meet future demand.

Global Assembly Growth by Region

2016 vs. 2023F (millions)



Source: Autofacts 2017 Q3 Forecast Release

Shifting gears worldwide

With 2016 full year production figures now accounted for, global production grew at 4.5% year-over-year to reach 92.2 million light vehicles. Consistent with recent history, the bulk of this growth was attributable to the production surge in China, improving by 13.5% in 2016. Halfway through 2017, new market dynamics have emerged. As of June, sales within the European Union markets have shown the largest increases, growing at an estimated 4.1% while both the U.S. and China are facing headwinds with slowing sales. Despite the varying degrees in domestic demand, these major markets have one thing in common – they are all subject to major structural shifts in demand patterns that will likely have long-lasting impacts on OEM strategies and the structure of global automotive production long term.

In the US, the supremacy of light truck sales has been exacerbated by the combined effects of low fuel

prices and increasing availability of new crossover products with car-like ease of handling and truck-like utility and comfort – all with increasingly attractive design cues. The flip side of this development is that producing and selling cars has become less and less profitable in the US, forcing OEMs to reevaluate their assembly mix, including difficult decisions like shifting production to lower cost markets and ceasing sales of long-time nameplates all together.

In China, domestic producers of highly affordable crossovers and SUVs are taking center stage, with premium automakers stretching their capacity to meet surging demand. At the same time, the importance of a strong and well-supported retail dealership network is becoming increasingly evident, as China settles into its position as a very competitive and complex automotive market globally.

In Europe, the structural shift is happening underneath the hood at the powertrain level, with diesel engines sharply declining in sales in most markets apart from Italy, rendering current diesel production and investment plans uncertain at best.

Politics and economics

After a sustained stretch of rapid change and disruption – be it new administrations, secessions from regional unions, or economic volatility – this heightened level of market dynamics and insecurity seems to be accepted as the new normal. Financial and commodity markets have steered a steady course amidst this upheaval, signaling no major risks on the horizon. Central banks in major economies have been slow to retreat from the quantitative easing policies installed after the financial crisis, and continue to support financial markets with liquidity. Increasing inflation in previously zero-inflation markets like the US and Europe are seen as indicators of growing economic performance.

On the other hand, countries that historically struggled with inflation such as Brazil, Turkey, and Russia are seemingly on the path to recovery as structural issues are addressed. The steady process of re-capitalization of banks has quelled ongoing worries about the health of the Chinese banking system. After the impact of the retirement of large bank notes in India – deemed as “demonetization” – the new, common Goods and Services Tax (GST) has been introduced with relatively little noise. This gives rise to expectations of strengthened market conditions in India, and should these positive

developments continue, the country could indeed emerge as the world’s most promising developing economies. In spite of what could be seen as challenging factors, global economic growth appears to be on a sustained, positive path.

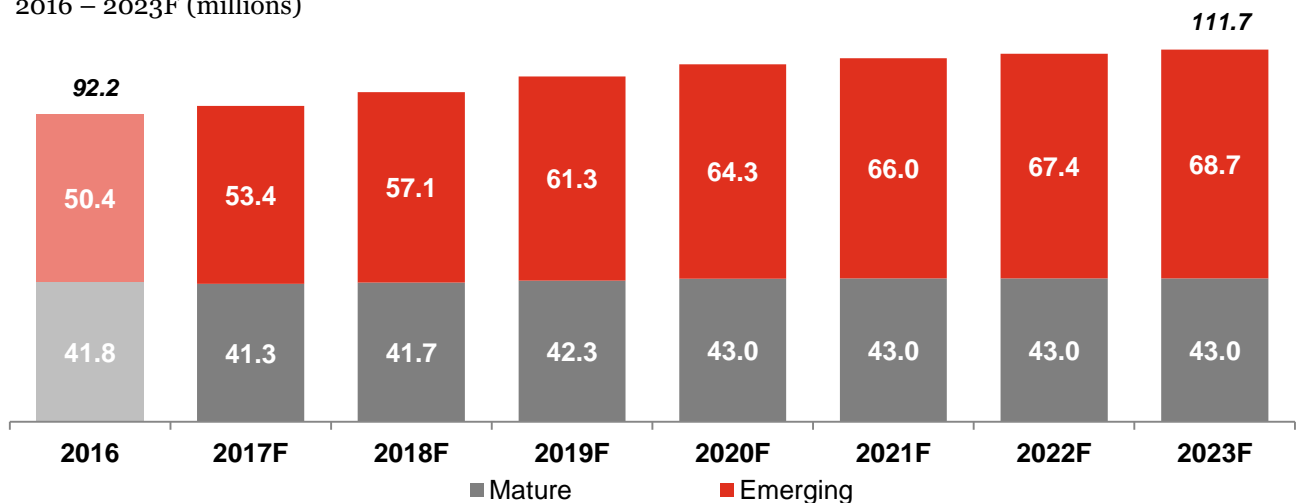
Glass half empty, or half full?

Given this complex landscape, the range of possible scenarios is wide. The increasing uncertainty of regional outlooks is reflected in an increasing spread of possible global paths. The base scenario projects an increase of global LV production to almost 112 million units per year by 2023 for an average growth rate of 2.8%. Through 2020, this growth is mostly supported by organic increases in demand, but after 2020, new electric drivetrains represent an increasing share of incremental volumes. Hybrid powertrains are expected to peak in the next decade as pure battery-powered vehicles are set to take an outside shared of alternative-fueled vehicles.

The potential downside of global demand may see a short-term offset of almost 5 million units in 2018 if growth in China fails to resume and Europe growth is sidelined. The upside scenario picks up steam in the mid-to-long-term, with potential production as high as 120 million units by 2023 on the back of incremental EV sales as governments push towards lower CO₂ emissions and a more fuel efficient parc.

To continue this conversation and find additional information on PwC’s automotive capabilities, please visit pwc.com/auto.

Global Light Vehicle Assembly
2016 – 2023F (millions)



Source: Autofacts 2017 Q3 Forecast Release