

Flash Analysis Credit Analysis

Automotive Manufacturing

>>> Is the end of the golden age in China looming for German car manufacturers?

14 April 2022 Mladen Hucic - Credit Analysis Automotive Industry - KfW IPEX-Bank

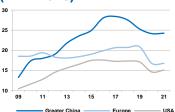
German car manufacturers – especially the OEM premium brands – have been benefiting from China's economic upturn for years. The significant shift in sales and profits in recent years in favour of the People's Republic has led to a clear dependency. The high margins in China are now at risk due to increasing pressure from a slowdown in economic growth and emerging Chinese competitors.

Car sales development in China



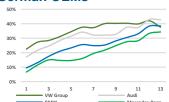
Source: IHS Markit (01–2022; Greater China), KfW IPEX-Bank: own presentation

Car sales development in the three main markets (in millions)



Source: IHS Markit (01–2022), KfW IPEX-Bank: own presentation

Share of sales in China for German OEMs



Source: IHS Markit (01–2022; Greater China), KfW IPEX-Bank: own presentation

China's rapid rise to becoming the world's largest automobile market

China's high economic growth and the associated emergence as the world's second-largest economy have had a very positive effect on the automotive industry. Rising incomes and the emerging middle class, as well as the low car density led to a sharp increase in car sales in China in the period after the financial crisis which peaked in 2017 (Greater China*: ~10% vs. Global: ~5% CAGR 09–17). However, demand has come under pressure since 2018 due to trade conflicts, the COVID-19 pandemic and supply chain disruptions. The People's Republic quickly developed into the world's largest automobile sales market: China's share rose from ~20% in 2009 to more than 30% in 2021 (in a until 2017 globally growing automobile market). In contrast, the share of the saturated European market for instance fell from just under 29% to less than 21% over the same period.

The Chinese sales market – a cluster risk for German car manufacturers

China's rapidly growing middle class in particular helped the German automotive industry to achieve continuous and profitable growth. The annual growth rates of the premium brands were significantly higher than the already high growth of the Chinese car market. As a result, the share of German OEMs' sales in China increased steadily. In the meantime, the shares are well over 30% (actually 43% at VW subsidiary Audi according to IHS). Owing to the robust demand for cars in China during the COVID-19 pandemic, dependency has in fact increased. Together, the German manufacturers in China have a market share of around 20%.

Foreign car makers forced into joint ventures (JV)

In order to be able to sell vehicles in China <u>free of duties</u>, all foreign manufacturers have had to enter into joint ventures (max. 50% participation) with Chinese OEMs and set up production sites in China. Hence Volkswagen's JVs with FAW and SAIC, Mercedes Benz with BAIC and BMW with Brilliance. There was no such requirement for the supplier industry.

Given this industrial policy, China has not only developed into the world's largest car sales market, but also to a similar extent into the largest automobile producer (2021: ~25 million units). This localising effect led to German OEMs producing significantly more cars in China (~5 million) than at their German production sites for the first time in 2019.

Revenue from China JV sales not included in group revenue

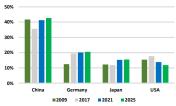
Due to the lack of control over the China JVs, the revenues generated from the sale of locally produced cars are not taken into account in the group revenue of the German manufacturers. Accounting according to the "at-equity method" means only the proportionate JV result and the JV participation are

^{*}Greater China: People's Republic of China (Mainland, Hong Kong, Macau) and Taiwan

^{**}New energy vehicles: BEV = Battery electric vehicles; PHEV = Plug-in hybrid electric vehicles; FCEV = Fuel-cell electric vehicles

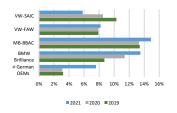


Shares in the Chinese car market by nationality



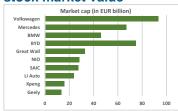
Source: IHS Markit (01–2022; Greater China), KfW IPEX-Bank: own presentation

Highly profitable China - JVs



Source: Company information, KfW IPEX-Bank: own presentation (average industry sectors incl. proportionate JV profits)

Chinese OEMs catch up on stock market value



Source: KfW IPEX-Bank: own presentation (as of: 13 April 2022)

reported in the balance sheet. The situation is different when it comes to reporting sales figures; here the cars produced by the China JVs are included. This leads to a discrepancy between sales and revenue shares. The reported group revenue shares of China are around 20% and break down as follows:

- 1. Vehicle exports to China a duty of 25% is imposed here, which is essentially only enforceable for premium cars;
- 2. Royalties (~3% of the vehicle price) collected for each vehicle produced and sold through China JVs;
- 3. Parts and components produced outside China and sold to the JVs (share depends on the degree of localisation).

| Industry sectors | BMW | | | Mercedes Benz | | | Volkswagen | | |
|---------------------|------|------|------|---------------|------|------|------------|------|------|
| In EUR billion | 2021 | 2020 | 2019 | 2021 | 2020 | 2019 | 2021 | 2020 | 2019 |
| Operating result* | 9.9 | 2.2 | 4.5 | 10.7 | 3.8 | n/a | 13.1 | 7.2 | 12.2 |
| At-equity profit JV | 1.7 | 0.9 | 0.1 | 1.6 | 1.3 | n/a | 3.0 | 3.6 | 4.4 |

*BMW: Automotive; Mercedes-Benz: Cars&Vans; VW: Cars and commercial vehicles

<u>Conclusion:</u> The profitability of the China business is difficult to determine precisely. Industry experts estimate that the three car companies usually generate around half of their total profit in China. The reported proportionate JV profits therefore represent only part of the "China profits".

German car manufacturers aim to hold a majority stake in China JVs

Beijing announced in 2018 that it would lift the ceilings for JV participations in the automotive sector by 2022. As the JVs are highly profitable and make important contributions to the car manufacturers' consolidated earnings, there is strong interest on the part of the OEMs to acquire the majority of the JVs. As a result, sales would increase significantly and operating margins would tend to rise. BMW was the first OEM to acquire a majority stake in its China JV in 2022. Mercedes and VW have not had any success so far.

With electromobility, the high barriers to market entry are disappearing...

Beijing considers the automotive industry as one of the key industries. The country wants to become a leading global player in the industry. This ambitious target could be achieved in the electric car market: with the transformation of drive technologies, there is a possibility of overstepping the Germans' technological lead in internal combustion engines. China's car makers benefit on the one hand from significant government support and on the other, from a large and high-demand market.

With around 3.5 million electric cars sold in 2021 (BEV ~3 million and PHEV 0.5 million), the People's Republic is already the most important market for electric cars alongside Europe (~2.3 million). The share of electric cars rose to ~14% in 2021 (2020: 5.4%).

In 2021, BYD achieved a market share of almost 20% in China among NEVs**. In contrast, German OEMs currently only have a small market share of around 5% due to the modest range of NEVs in the segment.

...and the competitive environment is intensifying

Chinese OEMs (e.g. NIO, BYD, XPeng, Great Wall Motors, Geely, Li Auto, Aiways) are on their way to becoming serious rivals to German manufacturers. Not only because the Chinese are consistently focusing on electromobility, but because they also focus on software and digitalisation. The models manufactured in China require German OEMs for operation (entertainment/networking) and battery technology. However, Chinese tech companies (e.g. Xiaomi) are also driving forward the e-offensive. Others, such as Huawei, Baidu, Alibaba and Tencent, are working with the automotive industry.

Chinese car exports set to increase

In 2021, Chinese car brands accounted for around half of the electric cars sold worldwide (~6.5 million) – with less than 15% of the global car market. The majority of electric cars are therefore still accounted for by domestic demand. According to the 15-year plan announced in 2020 (2021–2035), Beijing wants an export offensive for electric cars and will support Chinese companies.

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Chinese electric car exports are expected to increase rapidly, driven by (1) excess capacity, (2) weaker demand in China, and (3) better quality.

In this context, the rapidly growing European electric car market is creating appeal and Chinese manufacturers are increasingly pushing into this market (a popular start is Norway given the high share of electric cars). Yet their market share in Europe is currently around 1.2%, which is still relatively low.

The favourable prices are likely to shrink market shares at first, primarily for volume manufacturers (Ford, Fiat, Opel). However, competitive pressure will also increase for premium manufacturers (e.g. Aiways U5/U6 or Nio ET7). Market entries via participations in Western brands have already occurred. Geely is represented by Volvo Car, Polestar, Lotus, Smart and Lynk. SAIC acquired the British brand MG and sells electric SUVs in Europe.

Future growth of the Chinese automobile market set to decrease

China is facing various challenges, which will also have an impact on its domestic demand for passenger cars. In the short term, increased lockdown measures resulting from the zero COVID strategy and production disruptions due to supply bottlenecks are worth mentioning. In the long term, a stagnating and ageing population as well as the declining proportion of working people will stunt demand. There is also the risk of a weakening real estate market. In general, Chinese GDP growth is expected to weaken in the coming years. A renewed flare-up of the still smouldering trade conflict between the USA and China and the struggle against the sharp increase in inequality in China (keyword "common prosperity") may put additional strain on the economy and on demand for luxury cars.

Future annual car growth rates are likely to be significantly below their pre-COVID level (CAGR 2022–2029 ~3.7%; Global ~3%). A supporting factor, however, is the still low car density compared to the industrial nations (214 vehicles per 1,000 inhabitants in 2021; cf. USA: 800).

The challenges and risks for car manufacturers are manifold

By its sheer size alone, the Chinese market is immensely significant and is a trend-setter. Securing profits and market shares through the **right customer approach** is very important (a product strategy that focuses on software, entertainment, networking, etc.).

In order not to lose touch with the growing competition and to meet with the goodwill of the government, German OEMs are increasingly shifting **value creation to China** (development, production of e.g. Smart, Mini and SUVs). Such transfer must be viewed critically against the background of the possible loss of technological know-how.

The high sales shares beyond 30% show how dependent the business models of German carmakers are on the economic development of the People's Republic. The **cluster risk** and **growing competition** from China pose significant risks

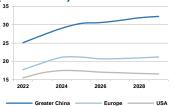
Furthermore, current **sanctions discussions** at EU level, as well as **political or regulatory intervention** on the part of Beijing, may have a negative impact on the profits of German car manufacturers.

Conclusion: China's "engine" is starting to sputter

Owing to weaker growth expectations and falling yields due to increasing competition, it can be assumed that the high, profitable growth of the past will not continue. Overall, we believe that German car manufacturers are well positioned in the high-end segment in the short to medium term and assume that they can continue to tap into the Chinese growth potential.

Since other sales markets simply cannot replace the "China business", OEMs must respond flexibly to the challenges and risks of the Chinese market — as is customary in the automotive industry. This means responding more closely to particular customer needs and seizing opportunities (e.g. through M&A of JV activities).

China remains the most important sales market (in millions)



Source: IHS Markit (01–2022), KfW IPEX-Bank: own presentation

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