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21 January 2025

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Auto Manufacturing – EU

Stellantis, Volkswagen and Volvo Car are most exposed to potential US tariffs

EU auto manufacturers face heightened uncertainty from US President Donald Trump's promise to "tariff and tax foreign countries". Although the scope and implementation of future trade restrictions are uncertain, potential US tariffs on imports from Europe and the prospect of 25% tariffs on Canada and Mexico suggested by the new administration pose substantial risks for the financial performance of EU automakers, because around half of the vehicles they sell in the US are imported.

However, the impact on financial performance varies significantly by company, given different exposures in terms of revenue to the US and import structure.

Among EU-based automakers, Stellantis NV (Baa1 negative), Volkswagen Aktiengesellschaft (VW, A3 negative) and Volvo Car AB (Ba1 stable) are the most exposed to potential new tariffs because of their greater reliance on US sales and higher proportion of imports to the US.

Stellantis faces greater risk from tariffs on imports from Canada and Mexico, since 40% of its vehicles sold in the US originate from those countries, while Volvo cars is highly exposed to tariffs on European imports. VW is vulnerable to tariffs on imports from Europe and Mexico.

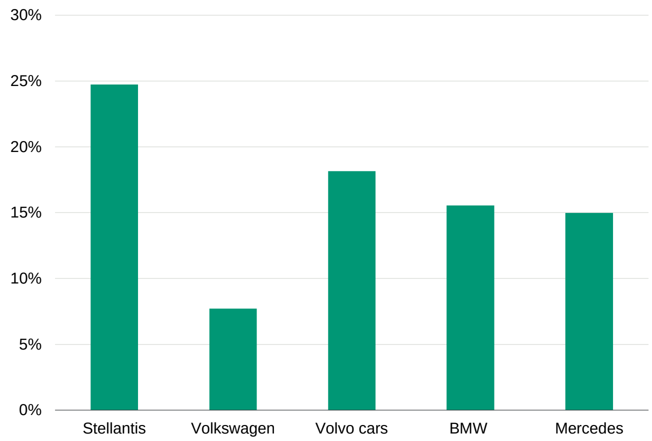
Mercedes-Benz Group AG (A2 stable) and Bayerische Motoren Werke Aktiengesellschaft (BMW, A2 stable) are exposed to potential tariffs on European imports, since a significant portion of their US sales are imported from Europe. On the other hand, Renault SA (Ba1 positive) is not exposed, as it does not operate in the US.

Modest risk to total sales, but higher risk to revenue and significant differences by company

Overall exposure of European auto manufacturers to the US market, from an annual unit sales perspective, is relatively modest. Vehicles sold in the US represent about 15% of annual unit sales for most major EU auto manufacturers on average (see Exhibit 1). Among this group, Stellantis has the highest share with around 25% of its 2023 sales generated in the US.

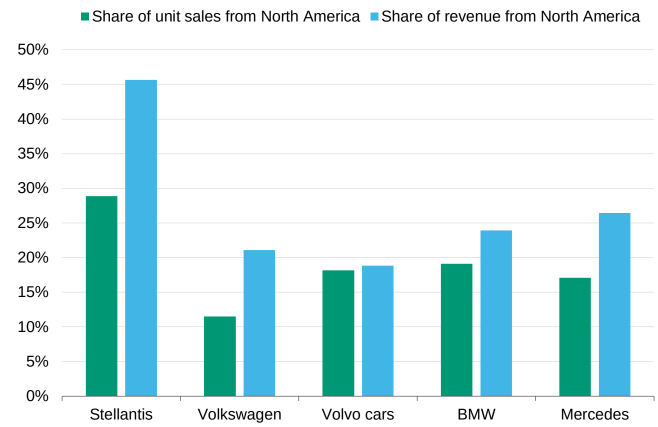
However, the exposure to US tariffs is higher when considering the share of revenue. European companies tend to generate a larger share of their revenue from North America (mainly the US) than the proportion of vehicle sales in the region (see Exhibit 2). For instance, Stellantis saw about 46% of its total revenue in 2023 come from North America, even though the region accounted for around 29% of vehicle sales.

Exhibit 1
Stellantis and Volvo cars have a higher share of annual unit sales in the US than peers
Share of cars sold in the US, 2023 figures



Source: Global Data

Exhibit 2
European auto companies have larger revenue exposure to the US market than unit sales indicate
2023 figures



For Volkswagen and Mercedes in particular, reported revenue exclude revenue from Chinese joint-ventures which are not fully consolidated while reported units sales include Chinese joint-ventures
Sources: Global Data, company annual statements and press releases

Tariffs would substantially cut European automakers' profit

To understand the potential repercussions, we analysed scenarios with tariffs on the main countries, including 10% tariffs on imports from Europe and 25% tariffs on imports from Mexico and Canada. In both, we assume US tariffs are imposed and companies decide to keep vehicle prices unchanged to maintain market share. We also assume no changes are made to shift production to the US. As a result, the volume of sales would remain unaffected, but the tariffs would lead to lower operating profit.

Our analysis suggests if the US were to institute 10% tariffs on imports from Europe, it could reduce European auto manufacturers' EBIT approximately 5%, while the drop could be as much as 15% under a scenario of 25% tariffs on Mexican and Canadian imports. The magnitude of the reduction would vary substantially by company (see Exhibit 3). The impact will also depend on several mitigating factors, including the ability to shift production to the US, the price elasticity of demand[1] for specific models and products, exchange rate fluctuations, as well as potential retaliatory measures.

Exhibit 3

Stellantis, Volkswagen and Volvo Car are most exposed to US tariffs
Impact compared with 2023 EBIT — analysis without mitigating factors

	10% European Tariff	25% Canada and Mexico Tariff
Stellantis	Limited	Significant
Volkswagen	Moderate	Significant
Volvo cars	Significant	Limited
BMW	Moderate	Low
Mercedes	Moderate	Limited
Renault	No impact	No impact
Overall	Moderate	Significant

Our estimation is based on company-level financial information for 2023 and assumptions including the number of car sold in the US, revenue by region, EBIT, etc. The impact ranges are defined as follows: less than 0.5% (limited), 0.5%-5% (low), 5%-10% (moderate), 10%-15% (large) and greater than 15% (significant).
Source: Moody's Ratings

Stellantis, Volkswagen and Volvo cars appear to be more exposed because of their greater reliance on US sales and higher proportion of imports to the US. Stellantis is already experiencing weak US performance, as reflected in our negative outlook for the company. Stellantis is particularly exposed to tariffs on Canada and Mexico, since most its imports come from these countries. A 25% tariff on Canadian and Mexican imports could reduce Stellantis' EBIT by significantly more than 15%.

Volkswagen imports a significant portion of its US sales from Europe and Mexico. In particular, all US sales of its luxury Audi and Porsche brands are sourced from outside the US. A 10% European tariff and 25% Mexican tariff could reduce Volkswagen's EBIT by 5%-10% and more than 15%, respectively.

Volvo cars, on the other hand, is comparatively more exposed to European tariffs, since a significant portion of its US sales are imported from Europe. A 10% European tariff could reduce Volvo's EBIT by more than 15%.

BMW and Mercedes are mainly exposed to tariffs on European goods with BMW having a small exposure to tariffs from Mexico. Renault is unaffected since it does not sell vehicles in the US.

We expect auto manufacturers would absorb some of the tariff costs within their existing price margins, given the competitive pricing environment in the US market. For instance, if automakers decide to pass on the tariffs to consumers by increasing prices by 5% and assuming a demand price elasticity of around 1.9 based on our literature review (see highlight box for more details), the effect would be small in terms of EBIT. Some of the negative impact will be offset by an appreciation of the trade-weighted US dollar.

These potential tariffs on European vehicles comes at a time when the auto industry is facing significant challenges, as reflected by our negative industry outlook. Two key issues are that carmakers are reaping lower margins compared to a few years ago, when vehicle inventory was low, leading to minimal discounting and the shift to electric vehicles (EVs) is proving difficult for established automakers, that are also continuing to manufacture internal combustion engine vehicles, all while facing added competition from new, EV-only companies.

The direct impact of auto tariffs on European economy is likely to be limited, but the indirect effects and increasing global trade tensions could act as a drag on business confidence that would further weigh on the region's economic growth prospects, especially on manufacturing-heavy economies such as Germany.

US auto demand has been sensitive to price changes

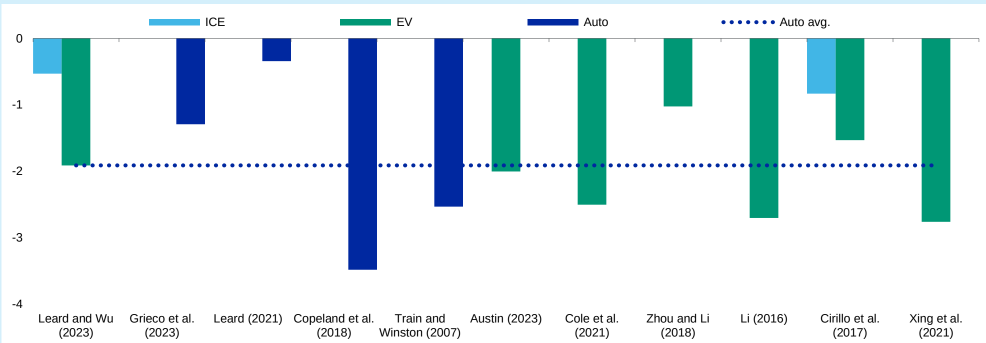
The literature on auto price elasticity explores various aspects of the US automobile market, focusing on how changes in prices affect consumer behaviour and market dynamics. The findings highlight the sensitivity of automobile demand to price changes, with different elasticities observed for various vehicle types (see Exhibit 4). For example Grieco et al. (2023) analysed US auto sector from 1980 to 2018 and found that demand elasticities became more elastic over the analysed years.

The average price elasticity for autos, derived from studies shown in Exhibit 4, is -1.9, meaning that a 1% increase in automobile prices would lead to an approximate 1.9% decrease in quantity demanded.

Exhibit 4

Demand for EV is more price sensitive to that of internal combustion engines (ICE) vehicles

1% increase in the price of vehicles leads to a decrease in the quantity demanded



See reference for more details

Source: Academic papers

Reference:

Leard, B., & Wu, Y. (2023). New Passenger Vehicle Demand Elasticities: Estimates and Policy Implications. Resources for the Future.

Grieco, P. L. E., Murry, C., & Yurukoglu, A. (2023). The Evolution of Market Power in the US Automobile Industry.

Leard, B. (2021). Estimating Consumer Substitution Between New and Used Passenger Vehicles. Resources for the Future.

Copeland, A., Hall, G., & Maccini, L. (2018). Interest Rates and the Market for New Light Vehicles. Journal of Money Credit and Banking.

Train, K. E., & Winston, C. (2007). Vehicle Choice Behavior and the Declining Market Share of U.S. Automakers. International Economic Review, 48(4).

Austin, D. (2023). Modeling the Demand for Electric Vehicles and the Supply of Charging Stations in the US. Congressional Budget Office.

Cole, C., Droste, M., Knittel, C. R., Li, S., & Stock, J. H. (2021). Policies for Electrifying the Light-Duty Vehicle Fleet in the United States. Massachusetts Institute of Technology.

Zhou, Yiyi and Shanjun Li (2018). Technology Adoption and Critical Mass: The Case of the U.S. Electric Vehicle Market. The Journal of Industrial Economics, 66(2), 423–480.

Li, Jing (2016). Compatibility and Investment in the U.S. Electric Vehicle Market. Working paper.

Cirillo, Cinzia, Yan Liu, and Michael Maness (2017). A Time-Dependent Stated Preference Approach to Measuring Vehicle Type Preferences and Market Elasticity. Transportation Research Part A, 100, 294–310.

Xing, Jianwei, Benjamin Leard and Shanjun Li (2021). What Does an Electric Vehicle Replace? Journal of Environmental Economics and Management.

Endnotes

1 Price elasticity, as defined as how changes in price influence demand.

REPORT NUMBER 1435234