zvei electrifying ideas

ZVEI Economics

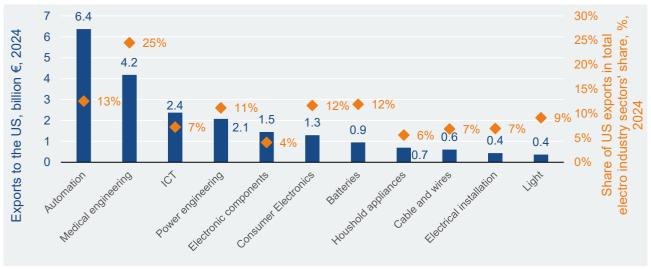
Potential economic impact of US import tariffs on the German electro and digital industry

With the widespread introduction of new (high) tariffs, the new US administration is implementing nothing less than a paradigm shift in decades of American trade policy: away from free trade wherever possible, towards a pronounced isolation of the US market. Following the trade deal recently agreed between the US and the European Union (EU), it is clear – despite some uncertainty about the specific details – that a tariff of 15 percent will be payable on most European goods delivered to the US. This paper analyzes the potential impact of US tariff policy on the German electro and digital industry (EDI). First effects may already be visible in the available data. These are likely to become more pronounced in the coming months.

How important is the US market for the German electro and digital industry?

- With an estimated volume of €864 billion (in 2024), the US market for goods of the electo and digital industry is the second largest in the world. It thus accounts for 15 percent of the global market, comparable in size to the share of the European electro market (16%).
- US electro production itself amounts to only €456 billion. The US therefore has a high trade deficit in the electro goods sector. Since the market is largely served by imports, it is questionable whether US companies can easily compensate for shortfalls in imports.
- The importance of the US market is also reflected in the foreign trade activities of the German electro and digital industry: at the individual country level, in terms of both **German electro exports** (2024: exports worth €24.8 billion, or 10% of total German electro exports) and foreign direct investment stocks in the industry (2023: **FDI stock** in the US worth €6.8 billion, or 14% of the total stock) the US ranks as second largest target country in each case behind China.

The US market is therefore served both by exports from Germany and by direct production capacities on site. The **sectors** of the German electro industry with the **highest** absolute **exports** to the US are **automation** (2024: €6.4 billion) and **medical engineering** (€4.2 billion). Here, US exports also account for a relatively high proportion of total exports (namely 13% and 25% respectively).



Source: Destatis and ZVEI's own calculations

What consequences could US tariffs have for the German electro and digital industry?

Fundamentally, the effects of the new US tariffs are difficult to quantify, both because of its volatility and the lack of historical comparisons. The following key questions therefore represent a more systematic approach:

Who would actually pay the additional tariffs?

It is impossible to say in advance who will ultimately bear the customs duties – producers, consumers, or both. This depends on a variety of factors in the respective markets, such as the intensity of competition or the elasticity of demand. The economic mainstream assumes that tariffs generally burden end consumers the most. This is especially true when manufacturers' margins are low. The harder it is to replace a product with (locally produced) alternatives, the greater the effect of a tariff on the price.

Since demand for goods is generally negatively correlated with the price of goods, a price increase – if the additional tariff is passed on in whole or in part, see above – should reduce demand (ceteris paribus). However, the extent to which demand suffers from the price increase (keyword: elasticity) depends very much on whether and how quickly customers in the US can switch to other (US) producers or whether production is relocated to the US. If a product cannot easily be replaced by a US product in terms of quality, the negative effect will be minor. Another important point is that competitors from other countries (especially China) are subject to even higher import duties. As a result, the competitive position of German exporters compared to other foreign suppliers on the US market could even improve.

Would German EDI exports to the US inevitably decline as a result of US tariffs?

The bottom line, however, is that the sharp increase in tariff rates alone – in the case of electro products, US tariffs on EU goods have increased almost tenfold compared to the pre-Trump era – is likely to mean that the tariffs will not remain without effect on the volume of exports to the US. Thus, a US tariff of 15 percent could reduce German electro exports to the US by up to a fifth, thereby reducing real production in Germany by one percent.

What role does the exchange rate play?

The tariffs tend to lead to less US demand for foreign goods. This also reduces demand for foreign currency. The result would be an appreciation of the dollar. This would in turn improve the price competitiveness of European exporters and thus partially offset the negative effect of tariffs. However, an appreciation of the dollar is by no means certain, especially if other countries respond with counter-tariffs. In fact, the dollar has depreciated in the first few months of the new US administration, probably because the new US administration's actions so far – even beyond trade policy (e.g., on government debt) – have weakened rather than strengthened confidence in the US economy and the US dollar.

What could happen in other markets (outside the US)?

As tariffs make intermediate imports more expensive for manufacturers in the US, US manufacturers are likely to become less competitive in markets outside the United States. If the US market becomes largely isolated, it is also possible that deliveries from foreign exporters will flood other markets. This would increase competition in other markets. However, at least on the German electro market, there has been no sign of a potential import wave so far. Imports from Asia in the first quarter of 2025 – i.e., before Liberation Day – increased by 7.4 percent year-on-year, which was stronger than in the second quarter, when they rose by 5.1 percent.

What other indirect effects can be expected?

Other industrial sectors, some of which are major customers of the German electro industry, are likely to suffer even more from the tariffs. This should apply, for example, to the automotive industry, for which interdependencies between the US, Mexico, and Canada play a particularly important role.

Another aspect to consider here is that **imports of steel and aluminum products and derivatives are subject to the higher tariff of 50 percent**. For example, 30 percent of the products of mechanical engineering are estimated to be such a derivative. In these cases, the steel or aluminum part of the product would then be subject to a 50 percent tariff. In the electro and digital industry, around five to ten percent of products are likely to be affected – with a comparatively lower steel or aluminum part. On the global economy, new tariffs have a negative impact because they distort prices. This makes the allocation of trade flows and production facilities less efficient. Established international production networks are coming under pressure.

How have German electro exports to the US reacted so far?

Data on exports by the German electro and digital industry is now available up to and including June 2025. While the lower customs tariffs (1.0 to 2.0% for the electrical industry) still applied in the first quarter of this year – i.e., before Liberation Day at the beginning of April – the months of April to June were already affected by higher tariffs (the reciprocal tariffs initially announced were suspended, but the new base tariff of 10% was applied in addition to the previous tariff). The data available so far is clear: it shows a clear divide between the two quarters. While German electro exports to the US still grew by 8.4 percent year-on-year in the first three months, the second quarter saw a decline of 3.0 percent. However, the first quarter is also likely to have benefited from pull-forward effects. In addition, the weak dollar may have had an impact, especially in the second quarter. It can generally be assumed that the negative impact of tariffs on export volumes to the US will tend to increase in the coming months. So far, inventory effects, advance purchases, and margin cuts, among other things, may have delayed the adjustment effects. The negative volume effect is therefore likely to increase in the future. At the same time, substitutability is time-dependent. What cannot be replaced in the short term may well be substituted in the medium to long term.

Conclusion

The new US trade policy is a burden for the German electro and digital industry. Although the direct negative effects on the electro industry should be less severe than on other German industrial sectors, the extent of the tariff increase alone is likely to mean that neither the volume nor the margin-related (negative) effects can be completely absorbed. The decisive factor here is the criterion of substitutability, which will lead to varying degrees of individual impact depending on the product and thus among different companies. The individual impact will also be significantly higher for those products that are classified as steel and aluminum derivatives. Overall, the new US tariffs could lead to a decline in German electro exports to the US of up to 20 percent, thereby reducing production in Germany by one percent. The (smaller) declines in exports already being observed are likely to increase accordingly.

Finally, there will also be indirect effects on our industry. These should consist primarily of a greater impact on important customer industries, but also in the general erosion of the free trade system and thus global supply and value chains, which can only hurt an export-oriented industry such as ours. At the same time, despite the agreement, there is still a high degree of uncertainty. On the one hand, there is still uncertainty regarding the concrete implementation of the agreement and, on the other hand, there is no certainty as to how long the deal will actually last. Or whether further tariffs beyond the current level will be used as a means of pressure for completely different political goals.

Last but not least, the US tariff policy increases the likelihood that the US itself will move toward stagflation – with corresponding negative consequences for the global economy. At least, that is what the latest data suggest, with a cooling labor market and increased core inflation.

Contact

Matthias Düllmann • Senior Manager Economics • Economic Policy, Business Cycle & Markets Department • Global Affairs & Business Cycle Division Phone: +49 69 6302-329 • Mobile: +49 162 2664-942 • Email: matthias.duellmann@zvei.org

ZVEI e. V. • German Electrical and Electronic Manufacturers' Association • Amelia-Mary-Earhart-Str. 12 • 60549 Frankfurt am Main Lobby register no.: R002101 • EU Transparency Register ID: 94770746469-09 • www.zvei.org