

► Project *brief*

Thünen Institute of Market Analysis

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Effects of the ‘new’ US trade policy on international agricultural trade

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- A global trade conflict leads to a decline in gross domestic product of over US\$270 billion worldwide.
- Globally, there is a decline in trade in agricultural products.
- Even if the immediate impact on global food supplies is relatively small, the stability and predictability of international trade deteriorates considerably.

Background and objective

In recent months, we have seen a growing return to protectionist trade policies, particularly with the recent announcement of US tariff policies.

This new regulatory environment could significantly alter existing trade patterns, increase price fluctuations, and undermine the stability and predictability of international trade in the long term. The current literature on the effects of US tariff policy on the agricultural and food sector is very limited. Nevertheless, some key statements can be identified. There are clear trade diversion effects, especially when countries take countermeasures and raise their tariffs on the US: countries such as Brazil and Argentina would increasingly take over market shares previously utilized by the US. Globally, trade is declining in both the industrial and agricultural sectors. Numerous renowned research institutes recommend a strategic course of diversification for Germany and the European Union. This is considered the most effective and constructive approach to reducing dependencies and strengthening resilience to political risks—without resorting to confrontational escalation.

In our project, we examined how an escalating trade conflict could affect economic development in different regions of the world—particularly in the US, China, the European Union, and Germany. We were not only interested in which countries would be particularly affected by new tariffs. We also wanted to know whether there are differences between economic sectors – for example, between industry and agriculture – and how much international trade would decline overall as a result of protectionist measures.

Our findings are intended to support political decision-making processes and highlight potential economic consequences at an early stage.

Approach

We used the MAGNET international trade model, which is particularly well suited to depicting trade flows, changes in production, and income effects between countries and industries. The model is designed as a general equilibrium model and considers all covered economic sectors and their interactions simultaneously.

Specifically, we have calculated four scenarios that differ in terms of which countries impose import tariffs:

- Scenario 1 (US only): The US unilaterally increases tariffs for all countries that were on the US president's list on April 3, 2025.
- Scenario 2 (US_EU): Only the European Union imposes retaliatory tariffs on US goods.
- Scenario 3 (US_RoW): All countries affected by the US tariff increase (except the EU) introduce retaliatory tariffs.
- Scenario 4 (US_all): All countries affected by the US tariff increase (including the EU) introduce retaliatory tariffs, resulting in a global trade conflict.

We compared all scenarios with a reference situation (base) without tariff increases.

Results

Decline in global economic output: Our calculations show that trade conflicts cause significant economic costs. If there is a global escalation (US_all), the US will lose the most: its gross domestic product (GDP) will fall by around 1.2 percent – equivalent to a decline of around US\$174 billion. China and the European Union will also be affected, albeit to varying degrees. Globally, losses in the US_all scenario amount to over US\$270 billion. The results presented here are based on the assumption that there are virtually no adjustment costs for the sectoral reallocation of resources. In the short term, taking adjustment costs into account, the declines in GDP could be higher.

Figure 1 shows the percentage decreases in gross domestic product (GDP) per region. The decline is particularly pronounced in the US and China. The European Union also experiences a decline in GDP, albeit somewhat more moderate. Countries outside the major economic powers may even achieve slight GDP growth in some cases if they take advantage of new market opportunities.

Decline in global trade: Tariffs make international trade more expensive, which has an immediate impact on trade volumes. The exchange of industrial goods is particularly affected: In our third scenario, global trade in industrial products shrinks by around seven percent.

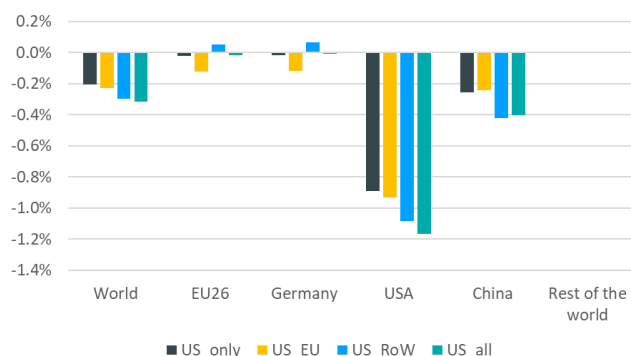


Figure 1: Change in gross domestic product (GDP, real) in percent, relative to the reference scenario (base) – Source: Own calculations (MAGNET model)

Trade in agricultural raw materials and processed foods is less severely affected, as these markets react more flexibly to changing trade conditions. This is primarily attributable to the higher substitutability of agricultural commodities, as trade in these products can typically be redirected to alternative trading partners with greater ease compared to industrial goods. Figure 2 illustrates the global decline in trade by product. While trade in industrial goods is falling by up to US\$940 billion, the declines in the agricultural sector remain comparatively small at US\$6 to US\$11 billion. International trade in services is also declining.

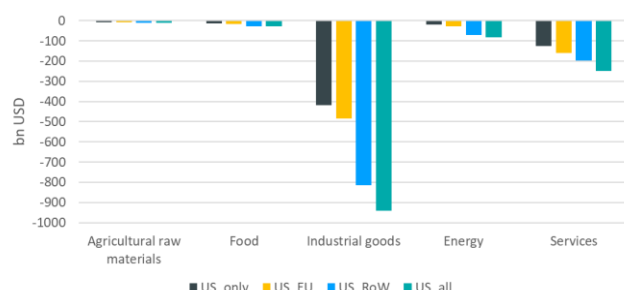


Figure 2: Change in global trade (exports) in billion USD, relative to the reference scenario (base) – Source: Own calculations (MAGNET model)

Impact on Germany: We have identified a mixed picture for Germany. On the one hand, there is a significant decline in industrial production and exports. This is partly due to the fact that important imported intermediate goods are becoming more expensive or are no longer being delivered at all. This is slowing down industrial production. On the other hand, new sales markets are emerging for the German agricultural and food industry, especially outside the US. As a result, exports of agricultural products are even rising slightly.

Figure 3 illustrates these effects: exports of industrial goods decline in all scenarios, while exports of agricultural products increase slightly.

The global food situation is also affected by the tariff conflict, as the degree of self-sufficiency in food in the Global South could change.

In particular, a scenario in which these countries impose tariffs on US agricultural products would cause a deterioration, even if catastrophic effects on the food situation are unlikely.

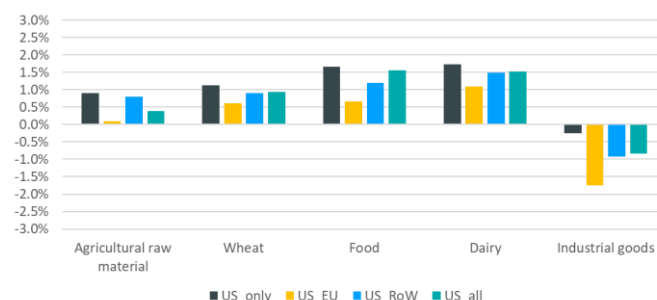


Figure 3: Change in exports in Germany, in percent, relative to the reference scenario (base) – Source: Own calculations (MAGNET model)

Conclusion

Trade conflicts do not solve problems – instead they create new ones. Our analysis shows that higher tariffs not only reduce trade, but also lead to a decline in economic output in almost all affected countries. Increased protectionism leads to higher costs, lower productivity, and reduced export opportunities.

For Germany, it is particularly important to note that industry – the backbone of the economy – suffers noticeably in such a scenario. At the same time, new trade links present opportunities for agriculture. However, even these cannot compensate for the overall losses.

Our findings clearly show that open world trade is beneficial for all trading partners involved and that protectionism causes economic losses – in all countries.

Further Information

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