Problem framing

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How does geopolitics affect global trade?

We live in a world where global trade dynamics are constantly shifting. Countries rise and fall in influence as new products, technologies, and resources reshape markets. Nations that once dominated international trade have been overtaken by others, and the forces behind these changes are complex and interconnected.

Climate change, for example, has weakened some nations' ability to produce essential goods, while others have turned these challenges into opportunities to expand their market position. Political tensions also play a decisive role: countries that were once close allies now impose sanctions on each other, disrupting trade flows. The tensions between the United States and China, or the sanctions imposed on Russia by former partners, illustrate how quickly cooperation can turn into confrontation.

In this project, we address these dynamics because they affect governments, businesses, policymakers, researchers, and citizens alike through their reliance on stable trade systems. The key problem we aim to explore is: What factors are driving changes in global trade? In what ways does geopolitics influence global trade dynamics and the shifting positions of nations within international markets? And can data help us identify patterns that not only explain the present but also hint at the future?

By gathering and analyzing data on trade flows, economic indicators, political decisions, and environmental trends, this project seeks to uncover measurable links between **geopolitics**, which examines how Earth's geography, natural resources, and economics influence international relations, and **global trade**, which serves to supply a nation with the resources it needs in return for those it produces in abundance.

We will use a range of methods such as clustering, correlation, and other analytical approaches to study the geopolitical and geographical position of each country through data. This will allow us to identify nations with similar trade patterns, examine their climate conditions, track the products they focus on and the shifts in their production over time, and better understand the relationships between countries. At a later point, this analysis might provide a foundation for anticipating how these dynamics may shape the future of global trade.

To answer our problem statement, we will rely on data primarily from the following sources:

- **World Trade Organization (WTO)** that provides trade-specific data such as flows, tariffs, and disputes.

- **Observatory of Economic Complexity (OEC)** that provides data on imports and exports per country.

- **United Nations Security Council** that offers official global sanctions regimes (individuals, entities, countries).

- **Food and Agriculture Organization of the United Nations (FAO)** which provides data on land use and climate change indicators