

GEOECONOMIC PRESSURE

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IDENTIFYING THE RESPONSE TO PRESSURE

The Global Capital Allocation Project has released a new paper "<u>Geoeconomic Pressure</u>", which leverages recent advances in large language models (LLMs) to identify the areas of the global economy that are particularly vulnerable to geoeconomic pressure and examine how targeted entities respond. We apply the methodology to focus on the 2025 trade war and track firm responses.

A defining characteristic of the modern global system is that major powers increasingly use economic and financial power for geopolitical ends. Using our LLM-based approach, we can distinguish between future versus present geoeconomic pressure and negative versus positive impact on firms, and we also observe firm responses to pressure.

We use these advantages to track and analyze firm responses to the ongoing trade war. In Fig. 1, we decompose the share of American firms reporting effects from current or anticipated tariffs into firms which report a negative impact and firms which report a positive impact.

In the second quarter of 2025, following the "Liberation Day" tariff announcement, about 60% of American firms report being negatively affected by the prospect of future tariffs—a level substantially above the 10-15% of American firms negatively affected during the peak of the U.S.–China trade conflict in 2018–19. In the same quarter, over 30% of American firms report negative effects from tariffs currently in place.

EXECUTIVE SUMMARY

- We track firm responses to the ongoing trade war. American firms report being negatively affected by current and especially the potential of future tariffs imposed by the United States government, and American firms report that they plan to increase prices and re-arrange supply chains.
- Our LLM-based approach overcomes the main challenge of measuring geoeconomic pressure by allowing us to observe threats that may never materialize once the targeted party complies.
- Firm responses to geoeconomic pressure vary based on the type of pressure exerted. Firms are more likely to exit a market in response to financial sanctions and export controls and more likely to adjust pricing strategy in response to tariffs.
- Our estimates are available in an interactive format in the newly released <u>Geoeconomic</u> <u>Monitor</u>. Using this tool, you can explore in real time how global firms are discussing the impact of geoeconomic pressure. Data is updated regularly.



Fig. 3. Geoeconomic pressure: aggregate trends in earnings calls --- Tariffs Export Controls 50% — Financial Sanctions 40% Earnings Calls 30% Share of 20% 10% 0% 201501 201601 201901 2009,01 201001 201202 201201 201301 201401 202001 202202 202201 202401 $2^{0^{1}}$ $2^{0^{1}}$ $2^{0^{1}}$ $2^{0^{1}}$ $2^{0^{1}}$

LEVERAGING TOOLS FROM AI

Measuring geoeconomic pressure is inherently challenging because many threats never materialize once the targeted party complies, leaving little visible evidence. Moreover, the nuanced phrasing often obscures the measure, making it more difficult for traditional NLP approaches to capture these subtle signals.

LLMs are more suited to this task as they can provide sophisticated analysis of temporal distinctions and discussions of context. However, that comes with a substantial computational requirement. We take a multi-step approach in measuring whether firms are affected by geoeconomic pressure, the nature of the pressure, and, finally, how they respond to this pressure (Fig. 2).

A first-stage prompt is applied to the entire text corpora to identify the subsample of firms that are affected by geoeconomic pressure at all. A second-stage prompt, which requires significantly longer run-time, is only evaluated on the subsample identified by the firststage prompt—so as to avoid running the more computationally heavy inference on hundreds of thousands of firm-level documents.

Running the first-step procedure with Llama 3.3, we identify around 30,000 documents where these issues are discussed. In the second step, we run more detailed second-stage prompt on the documents flagged in the first stage. We use three versions of this longer second-stage prompt, which are all run independently: one for export controls, one for tariffs, and one for financial sanctions.

TRACKING GLOBAL PRESSURE ON FIRMS

Fig. 3 plots the results of the first-stage prompt: the share of earnings calls which discuss an impact of export controls, financial sanctions, or tariffs on firm business or firm decisions. We observe spikes for each of the three tools around well-known episodes when geoeconomic pressure was applied or anticipated. There is a noticeable increase in tariff discussion during the U.S.-China trade war of 2018-19, with an even greater spike during the current trade war. Export controls and financial sanctions are most elevated around the 2022 invasion of Ukraine. We also see smaller spikes in sanctions prevalence following Russia's invasion of Crimea in 2014 and a spike in tariffs discussion around Trump's first election in

FIRM RESPONSES TO PRESSURE

We observe firms' self-reported responses to different types of pressure. Fig. 4 plots firm responses, categorized into ten distinct actions, for every earnings call in which firms report being affected by either current or anticipated geoeconomic pressure. Firms are most likely to exit a market under financial sanctions and export controls, but are far less likely to exit in response to tariffs. By contrast, changing pricing strategy and supply chain adjustment is more common under tariffs than under financial sanctions or export controls. Other responses, like monitoring geoeconomic conditions and expanding business activities, have similar magnitudes of firm response across types of pressure.



Fig. 5. Responses to tariffs of American and non-American firms, 2025



TRACKING THE TRADE WAR

We track the ongoing trade war to analyze how firms based in the United States and those in the rest of the world adjusted their business decisions in response to tariffs in 2025. We consider all firms holding earnings calls during this period, combining responses related to both current and anticipated future tariffs.

Fig. 5 highlights some key takeaways. Nearly 15% of U.S. firms reported plans to adjust their supply chains due to tariffs, a higher proportion than among non-U.S. firms. Similarly, a greater share of American firms indicated intentions to adjust pricing strategies in response to tariffs. By contrast, non-American firms were more likely to report expanding in response to tariffs in 2025.

Fig. 6 gives the direction of these pricing adjustments. Over 5% of U.S. firms reported plans to raise prices in response to current or anticipated tariffs, compared to just above 2% of firms from other countries. Conversely, only a negligible share of firms, regardless of location, indicated intentions to lower prices. Further research is ongoing to identify the underlying factors driving these pricing decisions, and we plan to update these results with high frequency to track ongoing developments in the trade war.

INTERACTIVE, ONGOING DATA

We provide an interactive and frequently updated version of the results and data from this paper on the <u>GCAP Data Hub</u>. Visit the <u>Geoeconomic Monitor</u> to track firms reporting being affected by various types of geoeconomic pressure.





TECHNICAL NOTES

This non-technical brief summarizes research results in the working paper <u>"Geoeconomic Pressure</u>", available on our Lab <u>website</u>. We refer interested readers to the paper for further technical details.

LEARN MORE

- The Global Capital Allocation Project is a research lab based at Stanford University and Columbia University.
- Our goal is to shed light on the most pressing global economic challenges to improve international economic policy.
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