We examine how sanctions affect the performance and strategic diversification choices of Multinational Corporations (MNCs) and Domestic Corporations (DCs) in ‘sender’ (sanctioning) and ‘target’ (sanctioned) countries. To this end, we use granular firm-level data from 1995 to 2022 in 86 countries. Economic sanctions have become a pivotal tool of foreign policy which can have substantial impacts on firms and positions them in a complex discourse. However, to date, there is little research on firms’ responses to sanctions using firm-level data (Meyer et al., 2023).

We find that the type of sanction plays a critical role in how corporations perform and diversify their resources. Export sanctions elicit the largest effects on performance and diversification strategies of firms in sender countries. There is heterogeneous behavior in how MNCs and DCs respond to the imposition of sanctions. DC are often hampered more than MNCs. DCs reduce geographical diversification, while MNCs tend to increase diversification.

### Hypothesis 1
Sanctions have a larger effect on the performance of DCs than MNCs.

### Hypothesis 2
MNCs (DCs) increase (reduce) their geographic diversification following economic sanctions.

### Data and Methods
**Data**: Data is sourced from the GSDB sanctions database (Felbermayr et al., 2020; Kirilakha et al., 2021; Syropoulos et al., 2023), DataStream, Capital IQ, WRDS, Worldscope, Refinitiv, PRS, and others.

**Methods**: We estimate panel regressions from 1995 to 2022, with firm outcomes as the dependent variable (up to 201,385 firm-year observations). Machine Learning is utilized to better understand the interconnectivity of sender/target countries and geographical diversification locations.

\[ \textbf{Outcome}_{it} = \alpha_0 + \alpha_1 \text{Sanction}_{it} + \alpha_2 \text{MNC}_{it} + \alpha_3 \text{Sanction}_{it} \times \text{MNC}_{it} + \epsilon_{it} \]

**Firm outcomes** are performance and value enhancement measures (e.g., returns, firm value) or geographical diversification (e.g., number of geographical locations).

**MNC** takes 1 for a Multinational Corporation and 0 for Domestic Corporation.

**Sanction (Sanction)** refers to the number of import, export, financial or travel sanctions. The models are estimated separately to consider the effects of sanctions on firms in target countries or on firms in sender countries.

Control variables include a lag of the dependent variable, country variables (e.g., country risk), firm-level variables (e.g., total assets), industry fixed effects and time fixed effects.

### Results

**Hypothesis 1**: We find supporting evidence that, on average, the negative impacts of sanctions are as large or larger on DCs than MNCs. There are heterogeneous effects of sanctions on performance by type of sanction, for example:

1. **(1) The effects of export sanctions on firms in sender countries are negative and at least two times larger in absolute value than any other type of sanction.** For example, for each additional export sanction, stock returns of firms in sender countries drop by 0.7 and 1.0 percentage points for MNCs and DCs, respectively.
2. **(2) Import sanctions have a negative effect on firm performance in target countries** (i.e., they cannot export to the sender country).
3. **(3) Import sanctions have little effects on firm performance in sender countries.** Sometimes there are positive effects. This applies to MNCs only.
4. **(4) Export sanctions have little to no effect on DCs and some positive effects on MNCs in target countries** (i.e., they cannot import from the sender country).

**Hypothesis 2**: We find that, on average, MNCs (DCs) tend to increase (decrease) their geographical diversification in response to economic sanctions.

### Discussion and Conclusions

Our results have direct implications for government policy and for strategic decisions and diversification choices of MNCs and DCs in response to economic sanctions. Our results confirm that export sanctions can be costly for firms in sender countries (Eaton and Engers, 1999). “U.S. farmers, for example, bore the brunt of the U.S. grain embargo against the Soviet Union” (Eaton and Engers, 1992). In ongoing work, we also consider other types of strategic choices, including firms’ supply chain adjustments (building on the frameworks in Sharma et al., 2022), reshuffling of tangible and intangible resources, and product market diversification. We also analyze whether good governance alleviates the effects of sanctions.

### References