

Strategic Decisions of Multinational and Domestic Corporations in Response to Economic Sanctions



Farida Akhtar¹, Shumi Akhtar² and Maria Jahromi³

¹Macquarie University, ²University of Sydney, ³Australian National University

Abstract

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.

Theory and Hypotheses

Institutional Theory

Framework of how organizations are formed, operate, and react to pressures from the external environment (Meyer and Rowan, 1977).

Resource Based Theory

Firms achieve competitive advantages through "strategic resources"—resources that are valuable, rare, difficult to imitate, and nonsubstitutable (Penrose, 2009).

Globalization Theory

Free trade & competition leads to efficient markets and knowledge accumulation (Ramondo & Rodriguez-Clare, 2013; Grossman & Helpman, 2015). In the context of recent sanctions and rising geopolitical tensions, Christine Lagarde (2022), President of the European Central Bank, said: "[O]ne can already see the emergence of three distinct shifts in global trade. These are the shifts from dependence to diversification, from efficiency to security, and from globalisation to regionalisation."

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.

Table 1. Number of country-year observations that are affected by at least one sanction

	Import Sanction	Export Sanction	Financial Sanction	Travel Sanction
Target	277	199	252	135
Sender	2436	1896	2527	2339

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.

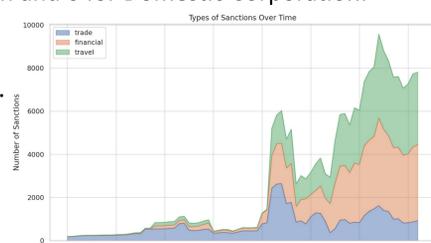
$$Outcome_{i,t} = \alpha_0 + \alpha_1 Sanc_{i,t} + \alpha_2 MNC_{i,t} + \alpha_3 Sanc_{i,t} \times MNC_{i,t} + X'_{i,t} \gamma + \varepsilon_{i,t}$$

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 (Sanc) 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) 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) **Import** sanctions have a negative effect on firm performance in **target** countries (i.e., they cannot export to the sender country).
- (3) **Import** sanctions have little effects on firm performance in **sender** countries. Sometimes there are positive effects. This applies to MNCs only.
- (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.

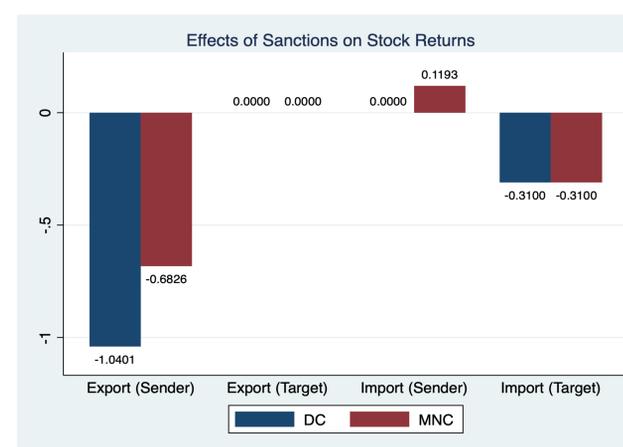


Chart 1. Estimated effects ($\alpha = 0.1$) of sanctions on performance (stock returns)

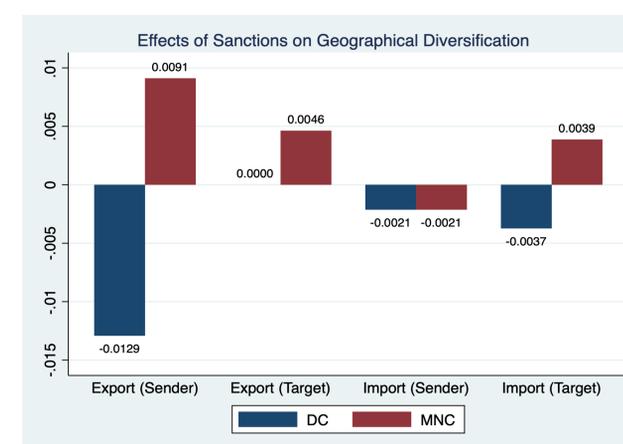


Chart 2. Estimated effects ($\alpha = 0.1$) of sanctions on geographical diversification (number of locations)

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

- Eaton, J., Engers, M. 1992. Sanctions. *Journal of Political Economy* 100: 899-928.
- Eaton, J., Engers, M. 1999. Sanctions: Some simple analytics. *American Economic Review* 89: 409-414.
- Felbermayr, G., Kirilakha, A., Syropoulos, C., Yalcin, E., Yotov, Y. V. 2020. The Global Sanctions Data Base. *European Economic Review* 129: 1-14.
- Grossman, G. M., Helpman, E. 2015. Globalization and growth. *American Economic Review* 105: 100-104.
- Kirilakha, A., Felbermayr, G., Syropoulos, C., Yalcin, E., Yotov, Y. V. 2021. The Global Sanctions Data Base: An update that includes the years of the Trump presidency. The Research Handbook on Economic Sanctions. Edited by Peter A.G. van Bergeijk.
- Lagarde, C. 2022. A new global map – European resilience in a changing world. <https://www.bis.org/review/r220425a.htm>
- Meyer, J.W., Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology* 83: 340-363.
- Meyer, K.E., Fang, T., Panibratov, A.Y., Peng, M. W., Gaur, A. 2023. International business under sanctions. *Journal of World Business* 58: 101426
- Penrose, E.T. 2009. The theory of the growth of the firm. Oxford, University Press. (Original work published 1959)
- Ramondo, N., Rodriguez-Clare, A. 2013. Trade, multinational production, and the gains from openness. *Journal of Political Economy* 121: 273-322.
- Sharma, A., Kumar, B., Borah, S.B., Adhikary, A. 2022. Complexity in a multinational enterprise's global supply chain and its international business performance: A bane or a boon? *Journal of International Business Studies* 53: 850-878.
- Syropoulos, C., Felbermayr, G., Kirilakha, A., Yalcin, E., Yotov, Y.V. 2023. The Global Sanctions Data Base - Release 3: COVID-19, Russia, and multilateral sanctions. *Review of International Economics*.

Contact

Maria Jahromi E: maria.jahromi@anu.edu.au W: <http://maria-jahromi.com/>