



HAL
open science

Axelle Ferrière Discussion of: Sanctions and the Exchange Rate

Axelle Ferriere

► **To cite this version:**

Axelle Ferriere. Axelle Ferrière Discussion of: Sanctions and the Exchange Rate. *Economic Policy*, 2024, 39 (118), pp.355-358. 10.1093/epolic/eiae028 . hal-04849208

HAL Id: hal-04849208

<https://sciencespo.hal.science/hal-04849208v1>

Submitted on 19 Dec 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0 International License

Axelle Ferriere discussion of: Sanctions and the exchange rate

Axelle Ferriere

Paris School of Economics

The invasion of Ukraine by Russia in February 2022 prompted numerous countries to impose economic sanctions against Russia. In the months following the onset of the conflict, coalitions of nations collaboratively devised a set of measures aimed at restricting trade with Russia. Additionally, assets belonging to Russian individuals or companies were frozen. The scale of these sanctions has been unparalleled, marking a historic moment not witnessed for decades. This pertains not only to the extent and variety of economic actions taken against Russia but also to the aspect of implementing such actions against a nation of Russia's size and geopolitical importance.

To evaluate the impact of sanctions on the Russian economy, analysts examined the exchange rate, which has the advantage of being available in real time. Initially, after the sanctions were imposed, the Ruble experienced depreciation, prompting several analysts to assert the effectiveness of the sanctions. However, a few months later, the Ruble began to appreciate, eventually surpassing its pre-war level in late spring 2022 and maintaining this elevated position for several months. This rebound in the Russian currency raised inquiries about the correlation between sanctions and exchange rates: is it inevitable for the currency to depreciate after sanctions, and if so, why?

To shed light on this ongoing debate, two papers have proposed simple theoretical frameworks to analyse sanctions. Both [Itskhoki and Mukhin \(2022\)](#) and [Lorenzoni and Werning \(2023\)](#) have argued that the impact of sanctions on the exchange rate is contingent upon the nature of the sanctions imposed. In particular, following import restrictions, the currency of the sanctioned country may experience appreciation. To reach this conclusion, [Itskhoki and Mukhin \(2022\)](#) developed a model wherein the exchange rate is determined by the supply and demand for foreign currency. In their model, export restrictions reduce the supply of foreign currency, resulting in the depreciation of

the local currency. Conversely, import restrictions increase the supply of foreign currency, potentially leading to currency appreciation. [Lorenzoni and Werning \(2023\)](#) rather highlight the fact that import restrictions could hinder local consumers from purchasing their preferred bundle of foreign consumption goods. Consequently, this may lead to an increased demand for local goods, ultimately contributing to currency appreciation.

In this context, the paper by Eichengreen et al. takes an empirical stance on the question of the effect of sanctions on exchange rates. Specifically, to test the theories mentioned above, this paper aims to retrospectively examine historical data on economic sanctions, with the goal of empirically estimating the effects of sanctions on exchange rates while differentiating based on the nature of the sanctions.

The key challenge, however, lies in identifying sanctions that occurred in a context broadly comparable to the Russian case. The authors contend that two specific properties of the current sanctions are particularly significant. First, the sanctions target a large country. As illustrated in Figure 2 of the discussed paper, Russia in 2022 constitutes approximately 3% of global GDP, while the average size of sanctioned countries has consistently remained below 1% since 1945. Sanctions targeted large countries only before 1945. Second, these sanctions were imposed in response to military events, as was often the case before 1945, rather than in defence of human rights or democracy, which became more common after 1945. Consequently, it is crucial to base the empirical analysis on the pre-1945 period, and the first contribution of Eichengreen et al. is the creation of a new dataset encompassing sanctions from the period 1914–45. To assess the impact of sanctions based on their nature, they classify sanctions into six categories: embargoes, restrictions on imports, restrictions on exports, freezes of financial or real assets, exclusion from foreign capital markets and arms embargoes.

Eichengreen et al. then use local projection methods to evaluate the impact of sanctions on weekly exchange rates. Importantly, their findings reveal that import restrictions typically result in the appreciation of the currency of the sanctioned country, while export restrictions and assets freeze tend to lead to currency depreciation. Embargoes show no significant effect on exchange rates, possibly due to their simultaneous reduction of both imports and exports. The scarcity of observations precludes the authors from testing the effects of the last two types of sanctions, namely exclusion from foreign capital markets and arms embargoes.

The main takeaway is that the effects of sanctions on exchange rates are contingent upon the nature of the sanctions, aligning with the findings of both [Itskhoki and Mukhin \(2022\)](#) and [Lorenzoni and Werning \(2023\)](#). As such, one should not conclude that the sanctions taken against Russia in 2022 were ineffective solely based on the fact that the Ruble appreciated in 2022. Several robustness checks complement the analysis, with a noteworthy observation that restricting the sample to currencies with more flexible regimes yields unchanged results, suggesting that the main findings are driven by the less heavily managed currencies.

Eichengreen et al. take an additional step to investigate which of the two explanations provided in the literature – the foreign currency market versus the consumption goods market – may have more explanatory power for the observed evidence. In a more in-depth exploration of the [Itskhoki and Mukhin \(2022\)](#) hypothesis, the authors examine whether asset freezes have a larger impact on exchange rates when combined with import restrictions. Figure A.27, in the Appendix, shows that the estimated depreciation following asset freezes is twice as large when these freezes are imposed jointly with import restrictions. As the authors argue, this piece of evidence may be interpreted as supporting [Itskhoki and Mukhin \(2022\)](#). Indeed, asset freezes create scarcity in foreign currency, leading to a depreciation of the currency in the sanctioned economy. Conversely, import restrictions make foreign currency more abundant. It is reasonable to expect that when import restrictions have already destabilized the currency, the exchange rate may be more sensitive to further changes in the supply and demand of foreign currency. Exploring the combined effect of asset freezes and export restrictions – if such events did occur in the data – could provide additional insights. Finally, one could consider further tests of the foreign currency market explanation. For example, the effects of trade restrictions on the exchange rate could be analysed conditional on whether the sanctioned country primarily traded in local or foreign currency.

Eichengreen et al. further investigate the [Lorenzoni and Werning \(2023\)](#) hypothesis as well. To do so, the authors narrow down the set of import restrictions to those targeting a limited range of war-related goods, such as oil, steel, iron, etc. According to the theory, this subset of import restrictions, which leave unsanctioned a wide range of consumer goods, should have a smaller effect on the optimal consumption basket of the local consumers of the sanctioned economy. Figure A.28 in the Appendix shows that these war-related import restrictions indeed exhibit no significant effect on the exchange rate. This piece of evidence may be interpreted as supporting [Lorenzoni and Werning \(2023\)](#), as consumers may still have the ability to purchase various other categories of foreign goods. One may also wonder whether war-related import sanctions may be overall less effective in reducing trade. Indeed, governments could have stronger incentives to circumvent restrictions on war-related products and import such goods from non-sanctioning countries during periods of military events.

Finally, a key argument presented by the authors to exclude numerous sanctions that occurred after 1945 is the potential divergence in the impact of sanctioning a large economy compared to a smaller one. Figure A.24 in the Appendix indeed demonstrates that the estimated effects are entirely driven by sanctions imposed on large economies, as measured by their share in the global GDP. Notably, in economies with a GDP share below the average, the impact of all sanctions – be it import restrictions, export restrictions or assets freeze – on the exchange rate is essentially zero. This finding raises

interesting questions about the underlying mechanisms that may explain why adjustments to economic sanctions can vary significantly based on the size of the sanctioned economy.

REFERENCES

- Itskhoki, O. and D. Mukhin (2022). ‘Sanctions and the exchange rate’, *Intereconomics*, 47, 148–51.
- Lorenzoni, G. and I. Werning (2023). ‘A minimalist model for the Ruble during the Russian Invasion of Ukraine’. *American Economic Review: Insights*, 5(3): 347–56.