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## Article

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Jerg Gutmann, Matthias Neuenkirch and Florian Neumeier

## The Impact of Economic Sanctions on Target Countries: A Review of the Empirical Evidence

Economic sanctions are a particularly important tool of statecraft in international politics. Since the end of the Cold War, their use has increased rapidly (Aidt 2020). While they aim at coercing target governments to comply with the interests of the imposing country or with international law, they are often considered to be a less violent, less controversial, and – at least for the imposing country – a less costly alternative to other coercive measures, especially military interventions.

Economic sanctions can take many forms. The most important sanction types are (i) financial sanctions, which include, inter alia, access restrictions to international financial markets and freezing the target country's (or its political elite's) foreign assets; (ii) trade sanctions, which range from bans on the import and/or export of specific goods and commodities to a complete embargo on trade;<sup>1</sup> and (iii) travel sanctions, which typically prohibit members of the target country's elite to visit the imposing countries. The most frequent senders of economic sanctions are Western democracies, above all the United States and the European Union, while African countries are the most frequent sanction targets (Felbermayr 2020a). The main reasons for the imposition of sanctions are (i) to force target states to stop threatening or infringing the sovereignty of another state, such as by engaging in violence against it or by destabilizing its incumbent government; (ii) to foster democratic change in a target, protect democracy, or destabilize an autocratic regime; and (iii) to protect the citizens of a target state from political repression and protect human rights (Hufbauer et al. 2009).

The effectiveness of economic sanctions in terms of meeting their stated objectives is heavily disputed.

<sup>1</sup> This may include sanctions on the import of arms or any other goods that can be used in the target country's military industry.

### KEY MESSAGES

- **The use of economic sanctions has increased rapidly since the end of the Cold War**
- **Economic sanctions can inflict huge economic costs on target countries**
- **Sanctions may also have unintended effects and cause collateral damage**
- **The effectiveness of sanctions in terms of meeting the proximate goals for which they are imposed is disputed**

Hufbauer et al. (2009) and Pape (1997) provide rather dispiriting news, as they conclude that economic sanctions are ineffective in 65 percent to 95 percent of all cases. In contrast, Felbermayr et al. (2020a) are more optimistic. According to them, sanctions imposed with the aim of fostering democratic change or protecting democracy are at least partially successful in around 80 percent of all cases, while sanctions aiming at improving the targeted regime's respect for human rights are (partially) successful in almost half of all cases. The findings by Morgan and Schwebach (1997) suggest that the higher the economic costs that sanctions inflict on target states, the more likely it is that the senders' objectives are met. Steinbach et al. (2023) find that sanctions aimed at improving human rights tend to lead to a deterioration of the human rights situation.

A large body of literature in economics and political science has studied the consequences of economic sanctions for the target country's population. The results of this literature are concerning, as they indicate



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that economic sanctions can cause significant harm to the civilian population of target countries. This is particularly problematic since the regimes against which sanctions are directed typically lack democratic legitimation. Due to that, economic sanctions are often criticized as “blunt” weapons that cause severe collateral damage. However, the results reported in the extant literature should be interpreted with caution since many studies analyze correlations rather than causal relationships. Also, the justifiability of the (potential) humanitarian harm caused by sanctions depends on whether one considers the alternative to be no sanctions or outright military conflict.

The present paper provides an overview of the empirical literature and analyzes the consequences of economic sanctions along three dimensions: economic outcomes, political outcomes, and health outcomes. Imposing costs on the target country is regarded as a prerequisite for the effectiveness of economic sanctions. However, the costs of sanctions may be borne not only by the political regime, but also by the general population. With regard to their political consequences, many researchers have analyzed the effects of economic sanctions on the targeted regime’s respect for human rights and democratic institutions. The health consequences of sanctions are particularly relevant for understanding the extent to which sanctions adversely affect the civilian population.

### ECONOMIC EFFECTS OF SANCTIONS

Sanctions have a significant impact on a target country’s economy, especially in terms of the level and distribution of income. Focusing on the economic consequences of multilateral sanctions imposed by the United Nations and unilateral sanctions imposed by the US, Neuenkirch and Neumeier (2015) find that GDP growth decreases, on average, by 2 percentage points per year when a country is under UN sanctions and 1 percentage point if it is targeted by US sanctions. For a “typical” sanction episode, these effects translate into a decline in GDP per capita of 25 percent in the case of UN sanctions and 13 percent in the case of US sanctions. Using an event study design, Gutmann et al. (2021b) demonstrate that virtually all subcomponents of GDP are adversely affected by economic sanctions and that the adverse effect of sanctions is most pronounced in the first two years of an episode. The authors report a significant decline in private consumption, investment, trade, and FDI during sanction episodes. This evidence is consistent with previous studies, which report reductions in trade (Afesorgbor 2019; Crozet and Hinz 2020; Felbermayr et al. 2020b) and foreign direct investment (Biglaiser and Lektzian 2011; Mirkina 2018).

Figure 1 summarizes the results by Gutmann et al. (2021b) graphically. The figure shows how the growth rates of per capita GDP, private consumption and investment, government expenditure, and trade

develop in countries targeted by economic sanctions. The first vertical black line indicates the year in which sanctions are imposed, the second vertical black line the year in which they are lifted. As can be seen, the growth rates of GDP and its main components tend to decline immediately after sanctions are imposed. What is more, there is no indication of a recovery even after sanctions have been lifted, which implies that sanctioned countries are pushed to a lower growth path and remain there.

However, the costs economic sanctions inflict on target countries are unevenly distributed. Neuenkirch and Neumeier (2016) show that US sanctions affect especially those who live in or close to poverty. Their findings suggest that the poverty gap – a measure that combines information on how many people in a country live on less than 1.25 US dollars per day and how large the average shortfall relative to 1.25 US dollars is – increases by roughly 28 percent when economic sanctions are imposed. Regarding the sanctions imposed on Iran in 2012, Ghomi (2022) reports that it was mainly the young, illiterate, and rural population that suffered the consequences, while the educated and those employed in the public sector were hardly affected. In a similar vein, Afesorgbor and Mahadevan (2016) report that economic sanctions are associated with an increase in economic inequality in target countries and that trade and financial sanctions exert the strongest effects. These increases in poverty and income inequality cannot be mitigated by informal economic activities, as there is no clear effect of sanctions on the size of the informal economy (Early and Peksen 2019; Farzanegan and Hayo 2019).

One way in which sanctions can harm economies is by triggering economic crises (Hatipoglu and Peksen 2018; Peksen and Son 2015). This effect is amplified by a reduced willingness of the International Monetary Fund to lend to countries under sanctions (Peksen and Woo 2018).

Target countries are not the only ones feeling the economic effects of sanctions: senders also pay a price. This has been demonstrated especially for the sanctions against Russia after its illegal annexation of Crimea in 2014 (Bělin and Hanousek 2021; Crozet and Hinz 2020; Gullstrand 2020; Kholodilin and Netsunajev 2019) and against China after the Tiananmen Square Incident in 1989 (Webb 2020). These target countries are of course not representative, since they are some of the largest possible targets of international sanctions.

### POLITICAL EFFECTS OF SANCTIONS

The goal of virtually all sanctions is to alter the target government’s political course. However, many empirical studies yield discouraging results. Instead of improving the political and human rights situation in target countries, economic sanctions often appear to increase infringements of economic and political

rights through, for instance, the confiscation of private property (Peksen 2016b), the use of political repression (Adam and Tsarsitalidou 2019; Peksen and Drury 2009 and 2010), as well as violations of basic human rights (Escribà-Folch 2012; Peksen 2009; Steinbach et al. 2023; Wood 2008). Sanctions are also reported to amplify discrimination against women (Drury and Peksen 2014) and marginalized social groups, especially ethnic minorities (Peksen 2016a). Yet, there is some evidence that democratic sanction may actually induce democratization by destabilizing autocratic governments (von Soest and Wahman 2015).

One reason why sanctions often seem to achieve the opposite of what they are supposed to is that they increase pressure on the political elite. Hence, incumbents feel compelled to resort to violence to stay in power. In this context, Allen (2008) demonstrates that sanctions promote antigovernment activity and, according to Grauvogel et al. (2017), the mere threat of imposing sanctions can trigger domestic protest. Marinov (2005) shows that sanctions increase the turnover of political leaders.

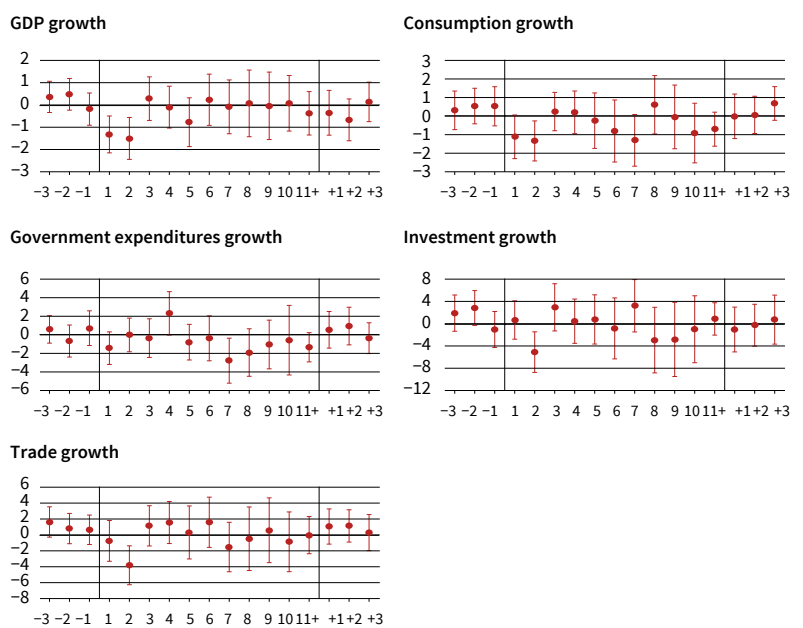
One problem that characterizes many empirical studies is that their findings are based on correlations without a plausible causal interpretation. Economic sanctions are often imposed in a dramatic political or human rights situation, which makes it difficult to empirically differentiate between cause and effect of sanctions. Unlike many previous studies, Gutmann et al. (2020) find no support for adverse effects of sanctions on economic rights or basic human rights when accounting for the endogeneity of economic sanctions. With respect to women's rights, the authors' findings even indicate a positive effect of sanctions, especially on women's economic rights. Only for political rights and civil liberties do Gutmann et al. (2020) find a significant deterioration when economic sanctions are imposed. Their results underline that it is not only important to account for the endogeneity of sanctions, but also to distinguish between dimensions of rights, as the effects of sanctions along these dimensions may differ considerably.

## HEALTH EFFECTS OF SANCTIONS

We have already indicated the bluntness of sanctions as a policy instrument with respect to their effects on political rights and civil liberties, income inequality, and poverty. Health outcomes provide another opportunity to measure the extent to which the general population is harmed by sanctions that may even be intended to protect them. Allen and Lektzian (2013), for instance, report that economic sanctions negatively affect the health situation in the target country in a way that is similar to the public health consequences of major military conflicts. Peksen (2011) studies the effect of sanctions specifically on child mortality rates and finds that the human cost of sanctions depends on how costly they are for the

Figure 1

### Effects of Economic Sanctions on the Growth Rates of GDP and Its Main Components



Note: The figure shows the effect of sanctions during the first (1), second (2), ..., eleventh plus (11+) year in which they are in effect. The labels -3, -2, and -1 on the x-axis indicate the three years before sanctions are imposed, the labels +1, +2, and +3 the first three years after sanctions were lifted. The effects are estimated based on an event study design. 95% confidence bands are indicated by whiskers.

Source: Gutmann et al. (2021b).

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target's economy. Parker et al. (2016) analyze the consequences of sanctions under Section 1502 of the United States' Dodd-Frank Act against firms operating in the Democratic Republic of the Congo. The authors find that the boycott of mineral purchases meant to disrupt the finances of local warlords increased infant deaths in villages near the targeted mines by over 140 percent. The reason for this effect is that the boycott, inter alia, reduced mothers' consumption of infant health care goods and services.

Focusing on economic sanctions against 98 less- and least-developed countries, Gutmann et al. (2021a) show that sanctions imposed by the UN on average cause a decrease in life expectancy of about 1.2 to 1.4 years and sanctions imposed by the US of 0.4 to 0.5 years. Distinguishing between the life expectancy of men and women demonstrates further that women are affected more severely by the imposition of sanctions, which confirms that sanctions tend to affect vulnerable groups in society disproportionately. In that sense, sanctions are not different from violent conflicts and natural disasters, which have also been shown to affect women more than men (Neumayer and Plümper 2007; Plümper and Neumayer 2006). An increase in child mortality and cholera deaths as well as decreasing public spending on health care appear to be important transmission channels through which economic sanctions adversely affect the population's life expectancy.

Aside from income and health, education is commonly considered the third dimension of human development. In contrast to the effects of sanctions on health, there is little evidence on how target popu-

lations' education is affected. Moeeni (2022) shows that sanctions imposed on Iran in 2006 decreased the time children spent in school by 0.1 years and their probability of attending college by 4.8 percentage points. Moreover, Iranian households reduced their education spending by 58 percent. These effects were larger for children that were exposed to sanctions for a longer time.

## POLICY CONCLUSIONS

Economic sanctions are a popular tool for coercing other governments into changing their policies. There is overwhelming empirical evidence that sanctions can cause substantial harm for target countries. They lead to a slump in GDP per capita and its main components, especially private investment, consumption, and trade. These costs are a prerequisite for the effectiveness of economic sanctions.

Whether sanctions can be considered effective in terms of regularly meeting the senders' objectives is disputed. What is more, existing empirical studies indicate that sanctions may cause severe collateral damage, as they harm all dimensions of human development of the target country's population while also undermining their political rights and civil liberties. This is particularly concerning since the governments against which sanctions are directed often lack democratic legitimacy. However, this does not automatically imply that it would be better to refrain from using economic sanctions. Sanctions are often imposed on countries to end wars and human rights violations or to restore democracy. It is unclear whether the side effects of sanctions are worse than the population's fate if the international community fails to act. For example, many blame the measured response of Western countries to Russia's occupation of Crimea in 2014 for encouraging its 2022 invasion of larger parts of Ukrainian territory – the first major land war on European territory in decades with possibly hundreds of thousands of fatalities. Moreover, if governments are set to intervene, sanctions might offer a less harmful alternative to military conflict.

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