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First version

Are sanctions instrumental or expressive?

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Abstract:

In an increasingly globalized world people in country A know more about other countries than they used to. Thus, there are more countries which A feel pursues bad policies. But the options of A to do something about it falls with the distance to the offending country B. However, A can always impose a trade sanction on B. Consequently, international sanctions are getting increasingly common. Sanctions are analyzed in two largely disjunct literatures: One deals with the losses in A and B. The second analyzes the effect of sanctions on the policy of B. Both literatures are known for modest findings. This is well known by the decision makers in A. The paper argues that the purpose of many sanctions is expressive. It allows the politicians in A to say that they do something, and it makes As population feel good.

Keywords: International sanctions, expressive behavior

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1. Introduction

This essay is an attempt to explain a paradox. Over the years I have heard presentation of many papers on sanctions at seminars and conferences on political economy – nearly all of them showed very small effects, and when I started to read up the literature this is the most common result. But at the same time the number of sanctions keep growing.

The paper assumes that people in country **A** find that country **B** pursues a bad policy to which they must react.[2] A can take three types of action against B:

(a1) Diplomatic remonstrations.
(a2) Trade sanctions, see Table 1 for the archetypical case.
(a3) Military threats and actions.

They are roughly in the order of hardness. (a1) will be disregarded, as such actions are invisible for the populations in both A or B. The world is becoming more globalized – especially as regards information. Thus, A is confronted with the behavior of more Bs.[3] Consequently, situations where A feels it must react to B's behavior is becoming more common, while the average distance between A and B is growing. Thus, (a3) is rarely a credible threat.

Table 1. The archetypical sanction discussed

Country A dislikes a policy P of country B. Thus, A targets B by sanctioning the import of X from B
This has the *costs* λ_A in A and λ_B in B. The gains and losses of other countries are disregarded
The *instrumental effect* of X in B. The X-sanction is to induce B to changed P by ΔP to be more acceptable in A. The effectiveness of the sanction is $\Delta P = f(\lambda_A)$, where λ_B is in intermediate variable
The *expressive effect* of X in A. The population in A feels good that B is punished. Here the popularity gain of the government of A is the purpose of the sanction

So, the paper deals with (a2). Hence, A makes a sanction against B. The paper considers the archetypical sanction as set out in Table 1. With this set up the paper contrasts two goals of sanctions. The ***instrumental*** goal is to punish the target, B, so that it changes the policy. The ***expressive*** goal is to make As population feel good that they have reacted to the bad behavior of B. The paper argues that the expressive goal is becoming increasingly important. This has

[2] This paper does not discuss what bad policies A reacts to. Felbermayr et al.(2020) surveys this issue.
[3] Consider two examples of a genocide: (i) In 1830/31 the government of Uruguay successfully organized the extermination of the small indigenous population. (ii) In 1904/06, the German administration in Südwestafrika (Namibia) tried to exterminate the Herero. (i) was not an issue in the international media, while (ii) was a small issue. The reader may contemplate the outcry if such policies would be pursued today.

caused a steady increase in the number of sanctions, as seen in the statistics from the GSDB (global sanctions data base).

The literature on sanctions is large.[4] It deals with the instrumental goal so to reach the expressive goal the literature survey in sections 2 and 3 must be short. Two largely separate strands are found in the literature:

The ***loss literature***, where (mainly) economists calculate the losses, λ_A and λ_B, in A and B caused by the sanction; see section 2.

The ***effectiveness literature***, where (mainly) politologists study the ***effects*** of sanctions, $\Delta P = f(\lambda_A)$, on the policy P in B;[5] see section 3.

It would be nice if a simple relation between the loss λ_A and the effect ΔP could be established, but this does not appear to be the case. From all we know the relation is weak and depends upon additional factors. Two such factors are:

Countries that do not take part in the sanction are termed C. They will normally get a small gain from the sanction – this will be disregarded. If C is large this will reduce the effect of the sanction. Many sanctions are broken by trade through (gray) middlemen typically located in C. Obviously, such middlemen must be paid in proportion to the risk they run of some sort of punishment. Thus, sanctions decrease the price B gets from the export of X.

Sanctions may give rise to rally-around the flag effects notably in B. The literature on Vote and Popularity functions finds that such effects are substantial, but of a short duration; see Nannestad and Paldam (1994). Also, of course, governments of target countries rarely admit that they changed policy because of sanctions, even if they do.

As usual much of the literature is written by authors from the USA, who have their country in mind as country A. The author of this essay is from Denmark. Obviously, the three actions (a1) to (a3) in the first paragraph have a different weight when country A is the USA and when it is Denmark. Large countries, notably the USA, can make credible threats. However, they also have strategic interests with political friends and adversaries, and they may hesitate to impose sanctions on friends. Small countries can make (much) less credible threats, but they have small strategic interests. They are less constrained when it comes to sanctioning countries, even when sanctions have smaller effects.

[4] In January 2025 Google scholar gave 1.7 million hits to *international sanctions*.

[5] A fine recent survey of the effectiveness literature is Peksen (2019) surveying 95 papers, while de Souza (2022) surveys 65 papers of the loss literature. The overlap is two papers only.

2 The sanctions loss literature

The world market for the X-good has a (pre sanction) old equilibrium, E^o, which include X_{BA} exported from B, and imported by A. This is a tiny part of world trade.

2.1 Some data: The leakage in world trade statistics

Table 2 shows some numbers for the world. The world GDP for 2023 was \$ 10.6 x 10^{13}. With a world population of 8.1 x 10^9, this is about \$ 13,170 per capita.

About 30% of world GDP is traded internationally. Many millions of traders operate in this market, trying to find the best deals. No less than 2.4 billion tons of shipping capacity was available in 2023 – all looking for cargo. There are also plenty of trucks, airplanes and railways also wanting cargo. We are dealing with a huge, complex, and very flexible trading system.

Trade costs are a complex issue; see Anderson and Wincoop (2004). However, we look only at the cif (cost, insurance and freight) that the difference between the price of a consignment when it is exported and imported, so that the import is larger than the import by cif. It will be assessed at 1% of the value of the goods in the container. So, if we look at world trade where all goods and services exported are imported by somebody, aggregate imports should be *larger* than aggregate exports by the 1% total cif in world trade.

As seen from Table 2 World imports are 0.75% (of GDP) *smaller* than world exports. This is well known and points to a *leakage* in the trade statistics. The leakage is that amount, i.e., 0.75%, plus cif. Thus, the total leakage is 1.75% of World GDP. This is just above 6% of exports. Some ships are lost at sea, but most of the loss is in the statistics. Goods bought by travelers may be registered as exports but less so as imports. Maybe the trade statistics leakage is 5% of exports.

Table 2. Some statistics for the world, 2014-23, in current US \$

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
GDP / 10^{13}	8.0	7.5	7.7	8.2	8.7	8.8	8.6	9.8	10.2	10.6		
Population / 10^9	7.4	7.4	7.5	7.6	7.7	7.8	7.9	7.9	8.0	8.1		
GDP per capita	10,881	10,142	10,188	10,732	11,289	11,335	10,917	12,353	12,737	13,170		
	Shares in % of GDP										Avr	Std
Export share	29.77	28.15	27.20	28.13	29.02	28.14	26.22	28.76	30.99	29.32	28.57	1.27
Import share	29.03	27.43	26.47	27.40	28.35	27.58	25.52	27.76	30.24	28.49	27.83	1.25
Difference	0.74	0.73	0.72	0.74	0.66	0.56	0.70	1.00	0.75	0.84	0.74	0.11

Downloaded from the World Development Indicators in January 2025.

When Russia is sanctioned the trade shares of Kazakhstan and other neighbors of Russia rise substantially. It is probably not easy to identify the reexport to Russia in the statistics. Just north of Hong Kong is the town of Shenzhen, which had 30,000 inhabitants in 1980. It has 18 million today. When Hong Kong was outside China, Shenzhen produced many gods that were exported through Hong Kong as made there. At that time the trade statistics for the China - Hong Kong trade was known to be murky.

The 5% trade leakage include two shady tricks: (i) goods that are registered as expensive when exported and cheap when imported, to dodge tariffs, and (ii) goods that vanish from the recording system, to dodge sanctions.[6] It is probably not more than 5% percent of world trade that is hit by sanctions, so the trade leakage is large relatively.

2.2 The general case

As described in Table 1 the sanction discussed is that As import from B of X is stopped: This is a (new) imperfection in the market, and thus it produces a new equilibrium E^n that is less optimal than the old one E^o. Thus, the change from E^o to E^n gives losses – λ_A and λ_B – that may be relative to the shares x_A and x_B of the trade X relative to the GDP of A and B. There is also an effect of the rest of the world C, but it will be taken to be marginal and mostly disregarded.

A comparison of E^o and E^n is a typical job for the economist, where many tools are available, and more than 100 papers have been produced studying sanction cases. To trace all effects is difficult, but most effects can normally be found using standard tools.

The extreme case of zero effects occurs if three conditions are fulfilled: (1) X is a standard good, (2) The size of As and Bs trade in X is small relative to world trade in X, and (3) the extra transport costs are negligible. Under these conditions A import X from another country, and other importers buy X from B. Thus, the total amount sold on the world market is the same, and so is the price. The sanction has an effect if one or more of the conditions are false. Though the three conditions are rarely fully met, they are often a good approximation. This and the trade leakage explain why most studies find rather small effects of sanctions.

2.3 The conditions for finding effects

If A is small (2) is a good approximation, and as small countries have large trade shares the trade channels in and out of A are well developed, and thus they can normally handle shifts in

[6] Corruption is widespread in the world, and the customs administration is known to be a part of the administration with a large potential for the corrupt to become rich.

the trade pattern easily, so that (3) is also a good approximation.

Ad (1) X is not a standard product, so B has some degree of monopoly.

As X is special, it means that when A does not import X it will have to import other goods from the rest of the world with a smaller consumers surplus. B must sell X in other markets and hence the price may fall. These marginal changes in consumer and producer's surplus are likely to be small. If the degree of monopoly is high, there will however be some effects.

Ad (2) One of the two shares x_B *or* x_A *is large on the world market*

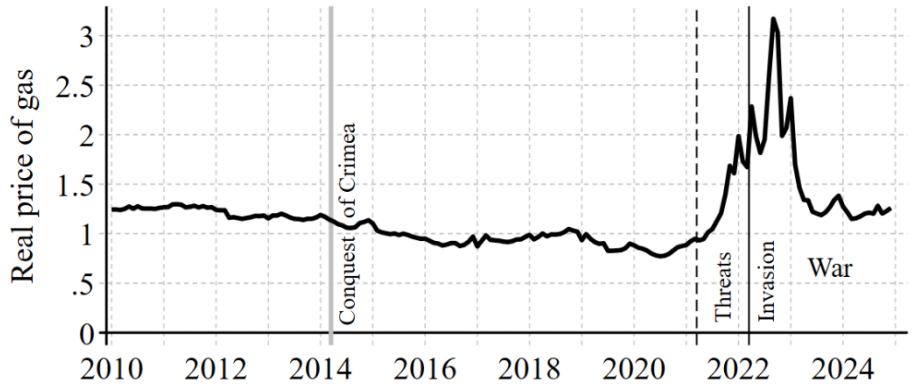
If A is large a restructuring will be needed on the market. This is likely to be possible, but it may take time. Sanctions may be increased gradually to make the restructuring possible for A.

In addition, A may be able to put pressure on many C-countries not to increase their imports of X. If A and C can increase production of X it is possible that B will have a large loss. To obtain such effects A this to form coalitions with other countries that object to Bs behavior, or to make international organizations such as the UN or EU make the sanction; see Gutmann et al.(2023).

Ad (3) the transport costs are substantial

The world market trade X by a transport system with fixed and variable costs. If the old system has lasted for some time the fixed costs are sunk, and thus the variable costs dominate. One effect of the sanction is that the transport system will have to be reorganized. Thus, new fixed costs will occur, and the transport routes will be longer. However, the world transport capacity is large and flexible and for most goods transport is a marginal cost anyhow.

Figure 1. The reaction of the real price of natural gas to Russia's two invasions of Ukraine



The monthly consumer price index for Denmark for the heating gas component divided by the full index. Downloaded in January 2025 from Statistics Denmark.

A case of large, fixed costs of distribution is the trade in natural gas that is done through expensive pipelines that are carefully planned to be as short and secure as possible. A new trading pattern due to sanctions requires new and longer pipelines or many new LNG-carriers that are expensive and take time to build.

One of the most important Russian exports to western Europe was natural gas, and that export has been sanctioned after Russia invaded Ukraine. Sanctions started in 2022 including sanctions against export of gas. In 2021 Russia supplied 40% of the piped gas used in Western Europe, first of January 2025 it is still 10%. So, the sanction has given a large reduction, but not a severance of supply. The reaction of the price has been of a remarkably short duration. Figure 1 shows the path of the real price of natural gas in one small Western country. It was stable for long. It barely reacted to the Russian conquest of the Crimea peninsula. But it did react strongly to the Russian invasion in February 2022, and the threats made by Russia already in 2021. This caused prices to go up three times. However, one year after the invasion gas prices were almost back to normal.

3. The sanctions effectiveness literature

When the government in A announces a sanction, it is often claimed to be a powerful tool that will be effective in making B reduce the offending policy. However, most of the many studies of sanctions contradict such claims. Bapat et al. (2013) and Felbermayr (2020) find some effectiveness, but the comprehensive survey of 95 papers by Peksen (2019) is rather negative.

It is a loss of prestige for the government of B if the offending policy is changed, in a way that establishes a clear link to the sanction. When the policy is changed it is therefore done in a way that seems to have nothing to do with the sanctions. Thus, it is difficult to establish a firm link between policy changes and sanctions. However, many studies have tried.

The effectiveness literature considers the effect (1) $\Delta P = F(\lambda_A)$. It has the intermediate term (2) $\lambda_B = \lambda_B(\lambda_A)$ so that the full system is (1*) $\Delta P = F(\lambda_B(\lambda_A))$. In most cases neither (1) nor (2) are sharp and clear relations. While some papers estimate λ_B other papers estimate λ_A. Still other papers assess the effect as (2) and discuss how to maximize λ_B per unit of λ_A.

3.1 The large literature

The SE consists of more than 120 papers, and many more popular articles deal with the effects of sanctions on the target policy. Few of the papers have found clear examples of policies that changed due to sanctions, but a few have worked, though often after a long time.

The typical result of the sanction seen from B is that the X comes to fetch a lower price. Thus, instead of the price 1 it becomes $1 - s$, where $s > 0$ so that *B* loses sX. Even when sX is small relative to Y_B, the GDP of B, the firms producing X will have a relatively large loss. There is also a balance of payment effect and some adjustment costs.

3.2 The distribution of the sanction costs

The cost λ_B of the sanction primary affects the X-sector in B. Secondary the sanction affects the suppliers of the X-sector including the suppliers of consumption goods to those employed in the X-sector. Already the secondary effects are less hard. There is, of course, also a third round, etc. Those hit by the sanction are unlikely to be the ones who decide the policy P, which are the top of the political system in B.[7]

It is a well-known problem that the government in B does not feel these losses, and the

[7] An example where a sanction tit close to the top in the sanctions against gas export from Russia, as the gas is exported by Gasprom that is a company mostly owned by the Russian state but with a couple of oligarks in the circle of owners.

more authoritarian the regime is the more sheltered is the top. There are many proposals to deal with this problem by smart sanctions directed at the top of the regime, but they will not be discussed at present. The discussion of the difference between the instrumental and the expressive goal of the sanction will require the archetypical sanction only as per Table 1.

Thus, sanctions have a moral dilemma: Decision makers tend to be rich people, while sanctions tend to hit poor people. This dilemma is normally disregarded, or it is argued that if people in B suffer, they will put pressure on the government.

3.3 Hard sanctions

In a few well-known cases a large group of countries – notably the West – have made big efforts to make sanctions hard, so that they covered many goods and were followed by many countries. A fine updated source to sanction is Wikipedia where the query *international sanctions against X* give a fine updated list with further links to the legal documents defining the sanctions. The lists seem to be based on the global sanctions database.

Famous examples were South Africa, and South Rhodesia when they practiced apartheid. The policies seemed to have worked in both cases as both countries did get majority rule, but only after a long time.

The sanctions against South Africa started in 1962, with mild sanctions. They were gradually tightened until the change to majority rule in 1994. If the sanctions were decisive, it required 32 years for them to work.

South Rhodesia declared itself independent in 1965 under a white government and changed to majority rule in 1979. The country was recognized by few countries, and it was under comprehensive international sanctions (imposed by the UN security council) from start to end. If the sanctions were decisive, it required 14 years for them to work. Hasse (1978) argues that the change to majority rule was not due to the sanctions, and hence that they also mattered little in South Africa.

However, there were other pressures both internal and external on the regimes, so it is hard to know the weight of the sanctions in the decision to change the offending policy. Perhaps it was the feeling of being an outcast in world society that was the decisive factor.

Russia and Iran are competing for the title as the most sanctioned country. Russia has been met with harder and harder sanctions when it started to conquer parts of Ukraine. When the American Embassy was occupied by activists permitted by the Iranian regime sanctions against Iran started. They have continued as protests against the nuclear program of the country. However, as of now the sanctions against Iran and Russia seems to have had no effect on the

offending policies of these countries.

3.4 Sanctions on exports from A to B

Iran and North Korea are sanctioned mainly for their nuclear bomb programs. The sanctions started against the export of tools and material used to make nuclear bombs. Since many of these tools have dual uses – both for civilian and military purposes – the sanctions are quite complex and not readily explainable to the population in A. They are typically accompanied by sanctions on the import to A from B of visible goods. But neither country produces well-known goods.

It is likely that the export sanctions have caused some delay it the production of nuclear bombs, especially in the case of Iran. Reports in the international press suggest that this is the case, but it is debated, and there is also the Treaty with Iran limiting its nuclear program. However, there are other reasons for the many sanctions against Iran.

3.3 Conclusion on sanction effectiveness

From this brief survey follows that sanctions rarely work. The sanctions that seem to have worked were hard and they worked after a long time. Decision makers surely know this, and they have staff that are competent in assessing the effects of policies. But still more and more sanctions occur.

Thus, we need something else to explain the strong upward trend in the number of international sanctions. A likely explanation is presented in the next section.

4. The expressive motive: Effect on As population

The expressive motive is that a sanction is made to make the population in A feel good that they are doing something against the offending policy of B. Some goods have a star quality, people know that good and where it is produced. When it is sold in supermarkets it is clearly marked as to origin as this gives it prestige, so that it can sell for a higher price.

If B is exporting a star good this is the goods to hit by the sanction. It means that domestic politics in A enters in the sanction decision. To understand such sanctions, some narrative is needed. The next section tells the story of two NGO sanctions, i.e., sanctions made by an ad hoc non-government organization.

4.1 NGO sanctions against France: Boycotting French wine

France treasures its independence and sometimes pursues policies that allies do not like. Allied governments do not sanction each other, but there has been NGO sanctions against France. They have centered on the French star product wine. Here it does not matter that wine is made by private producers, and not by the French government. Two of these private sanctions have been analyzed:

In 1995/96 France tested nuclear bombs at the (uninhabited) Muroroa atoll. This created a wave of protests in many countries including Denmark, where a movement came about to boycott French wine. Bentzen and Smith (2002) tell the story and analyze the effect, λ_A. They find a moderate, but temporary effect in 1995/96.

In 2003 the USA invaded Iraq and deposed Saddam Hussain. France opposed this invasion, and this was seen as disloyal by many in the USA, and a movement came about to boycott French wine. Ashenfelter et al. (2007) tell the story and analyze the effect, λ_A. They find a negligible effect.[8]

Both studies spend a great deal of effort dealing with seasonal movement and long run trends in French wine sales, in a situation with a strong increase in both the quantity and quality of wines from other countries. Not only in old established wine countries as Italy and Spain, but also in a handful of overseas producers as the USA, Chile, Argentina, and Australia.

There is a loss of consumer surplus for the population in A when they refrain from buying French wine. There are however many other wine producers, and both the quantity and quality of wine from other producers have risen with the growth of the middle class throughout

[8] Other articles cited by Ashenfelter et al.(2007) find a moderate effect.

the West, so it is possible to substitute French wine of most qualities with decent alternatives. Thus, the loss of consumer surplus is small, and then the population has a welfare gain of punishing the "bad" behavior of France. Nobody has suggested that either boycott had any effect on the French policies.

4.2 Official sanctions: Harvesting popularity?

For A to decide to sanction B there must be a majority (or a large vocal group of people) in A who agree that some action is necessary. Thus, the government in A experiences *political pressures*. Both the political parties and the media in A are active in applying the pressures, so the government must do something. What is done has to be visible to the population in A to reach the expressive goal. This also means that the idea of minimizing the costs of sanctions to A is beside the point.

By imposing a sanction, the government of A shows competence and strength. This is popular with the voters. When people see that the sanctioned good disappear from the shelves in the supermarkets they notice and feel good.

No estimate exists as to the size of the popularity gain a government will get when it imposes a sanction. However, there is a set of estimates of the rally-around-the-flag effect of military actions that are seen as justified. The estimates are substantial, but they taper off fast. A short successful war may give a government a popularity boost of as much as 25%.[9] However, after a year little of the boost is left. If war drags on and causes many casualties, it turns into a popularity liability; see Hibbs (2000).

Obviously, a sanction is a much smaller step, and the popularity effect is surely much smaller. However, if we are dealing with the reaction to a crisis that is much in the news there may be an effect – at least in the short run.[10]

[9] A much-researched case is the ten weeks Falklands war in 1982, First the British Falkland Islands the South Atlantic were conquered by Argentina and reconquered by the UK. The government of Margaret Thatcher had a large popularity boost due to the victory, but alternative estimates discuss if anything was left at the general election one year later, see Norpoth (1987) and Sanders et al.(1987). In Argentina, the military dictator responsible for the war had to resign.

[10] One of the most consistent findings in the literature on political decisions is that most decisions have a short time horizon – statesmen that pursue policies with a long-run in mind are rare.

5. Conclusions

The paper deals with a paradox. International sanctions are often claimed to be a potent tool by the politicians imposing them. However, a large literature analyzes their effects and typically finds small effects. Still more and more sanctions are made. The explanation has two steps:

Globalization of information has made policies in more countries known to each other. Thus, increasingly the people in country A know about offending policies in other countries. The further away the offending country is the more limited are the credible actions A can implement. Here sanctions come in as a fine possibility to show action. Even when the sanction is known by the decision makers in A to be ineffective, they are popular with the voters.

Thus, domestic policies in A are the true mover of sanctions and many serve an expressive goal. People in A like to see their government take a step against the offensive policies of country B.

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[11] Large reference lists are found in the papers with a (*).