Tampere University of Applied Sciences



The sanctions regime in current international business and their impacts

Finnish sectors-level review

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ABSTRACT

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The aim of this Master's thesis is to provide some theoretical insights and empirical evidence about the economic impacts of the Russian countersanctions on economies of the countries-imposed sanctions, in particular Finland.

Since the end of the Second World War, the international community has a tendency to resort to economic sanctions in order to punish and attempt to change a foreign country's objectionable policy behavior. However, besides that economic sanctions involve two parties, the sender and the target, they invariably imply tangible costs in terms of bilateral trade of these countries, not merely to the sanctioned side.

The motive for the selection of this topic was numerous discussions in worldwide press and media whether the imposed Western countries' measures against Russia in 2014 were effective over the conflict in Ukraine and annexation of the Crimea. The primary interest is the estimation trade losses suffered by the economy of Finland as a result of Russia's countersanctions.

This work consists of the several parts which include an overview of the literature on this topic, in describing the historical framework related to economic sanctions and essential notions. The theoretical impacts of the sanctions are reviewed in the second part. The final sections introduce empirical analysis on the impact of economic sanctions on trade of the Finland and the general conclusions.

One needs to be mentioned that this work considers mainly the impact of the trade and economic sanctions on Finnish companies in the Russian market. Political costs or effectiveness of the implemented sanctions by the EU are not being addressed.

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1 INTRODUCTION

Current geopolitical and international economic conditions are varying with high frequency and lead to multifaceted changes in the economies of the individual countries. In our modern world, the economic and political interactions between the countries is a vital characteristic of the global environment. Against this back-ground, it appears to be extremely challenging to assume that one of the major economies could be isolated without consequences for the rest of the world.

It is commonly acknowledged that the sanctions regime is a frequent instrument of foreign policy in diplomatic conflicts, particularly in recent times. The specificity of this tool is in the fact that sanctions are more stringent and obligatory than verbal negotiations but more liberal than military conflict, thus facilitating peaceful conflict resolution. In this way, this topic generates vigorous discussions in economic, political, cultural spheres in many countries. And of special interest is the damage assessment caused by sanctions and the possibility of its maximum reduction in the business.

Historically, the U.S. government and its partners in Europe resorted increasingly to economic sanctions as a major tool in their foreign policy. In the past century, their targets included Panama, South Africa, Nicaragua, Libya, the Soviet Union, Poland, and Iran. Scientists and economists from different countries became interested in this topic and are engaged in research concerning the effect of the trade and economic sanctions on the country's economy in the 20th as well as in the 21st centuries. However, there have been surprisingly little studies before, but the problem has gained another peak of popularity a relatively recent date, following the conflict in Ukraine of 2014.

Since the beginning of imposing restrictions on Russia, public opinion in Western countries has been divided into pro- and contra-groups on either side, especially in the European Union. Furthermore, this episode remains a *hot topic* in political circles more than other sanctions episodes like those against Iran or North Korea. And it is rather predictable that political and security interests' discussions dominate in Eastern European countries, while in Western Europe the debates concentrate around economic consequences of Russia's countersanctions.

On the subject, a sufficient number of articles were written by famous economists and politics in the recent time. However, most of them consider the specific impacts of sanctions from the position of the target country, Russian Federation. There are just few works which provide an overall analysis of costs provoked by sanctions from the position of the sender's side, particularly the EU members.

Generally, the bulk of the existent academic literature on sanctions research the phenomenon of sanctions impact in terms of their effectiveness being an instrument of foreign policy. The main focus in such research is the costs of sanctions where the higher are the costs for the target countries the higher will be the probability of the pressure on their government behaviour. It is also assumed that the more the economies of the involved countries are integrated, the more the economic interactions on their trades should be affected (Caruso, 2003). Thus, for instance, Gould-Davies (2018) noted in his observation that the sanctions against Russia are unprecedented in the sense that Russia is the largest economy against which sanctions have ever been deployed. This makes assessment of their effects for all the parties involved more difficult.

While it is true that the main goal of imposing sanctions is to elicit a change in the policies of governments by damaging their economy, they are definitely not costless for the sending economy, where domestic firms involved in business with the target countries might incur collateral damages. As sanctions disrupt commercial relationships, affected firms must either consider the law and find new business partners in the third countries or find other ways of circumventing sanctions re-strictions to continue trading with their old partners.

Cheptea and Gaigné (2018) found that Russian import restrictions generated important trade creation and diversion effects in EU trade. After the Russian food embargo, it has occurred a diversification of EU exports in terms of destination markets. This indicates that EU countries started exporting banned goods to new markets which are smaller and more remote. It led to the situation when EU countries exported to these destinations of smaller amounts of products, but at higher prices. Political economy theory suggests that sanctions may serve or overpower the political interests of individual voting blocks in the target countries. Eaton and Engers (1992) described how the level of compliance with the policy goals of sanctions can depend on, among other factors, the relative costs of the sanctions to the sender and target countries. But their study also failed to describe what costs are relevant to the assigned goals. It is important to stress that in an auto-cratic government, the special interests to impose sanctions may not reflect the economic costs of sanctions. Or for a representative government such as the United States, the ultimate decision should reflect a balancing of prospective losses but, however, it can include the immediate costs for one industry while ignoring the gains for others (Farmer, 2000).

In this thesis, the following definition of sanctions is utilized: *Economic sanctions* are actions that one country, an international organization or a coalition of countries (the sender) takes to restrict the flow of goods, services, or capital between itself and another country, the government or any group within the country (the target) with the aim of promoting particular foreign policies or enhancing national security (Escribà-Folch, 2010). As it is common in the existing economic literature, the expression 'the sender' denotes the country that imposes sanctions, and 'the target' is the country that receives the economic punishment (Caruso, 2003).

1.1 The purpose of the work and delimitations

Despite of significant interest in various aspects of this topic, questions relating to economic sanctions and their impact on business and economic relations are still open, not fully understood, and obligate further research. The impact of the trade and economic sanctions on the activities of Finnish companies in the Russian market is a complex and multilayer process required an in-depth examination and analysis.

In 2014, due to the conflict in East Ukraine and Russia's annexation of the Crimea and Sevastopol, thirty-seven countries including all EU countries, the United States and Japan levied sanctions on the Russian Federation. Afterwards, Russia retaliated by imposing an embargo on certain food and agricultural products from EU countries, including Finland. Time has shown that the Russian embargo has been turned out substantial both for the EU, as Russia being the second most important destination market for agri-food goods, and Russia since the EU is its largest supplier.

The purpose behind writing this thesis is to consider the impact of the main types of the Russia's countersanctions against Finland and bilateral trade, as well as to make a practical analysis of the impact of restrictive measures on Finnish different sectors. The object of the research is the trade relations between Finland and Russia. The subject matter of this study is the adverse impact of sanctions on the country's economy and the possibility of damage reduction on the sector-level.

Research questions what are necessary to achieve the objectives are determined as following:

- 1. to define the concept of sanctions and their types,
- 2. to explore empirical studies on the effect of economic sanctions on trade
- 4. to analysis the effect of restrictive measures on Finnish different sectors,
- 5. to review some prospects of Western sanctions.

The practical purpose of this thesis is that the research results may help theoretical knowledge in the study of sanctions as well as their impacts on the sender country's economy.

This work is structured as follows: section 2 provides a theoretical overview of the sanctions, going from history to the essential notions by highlighting remark-able facts about economic sanctions in the modern world. Section 3 provides a brief review of empirical studies on the effect of economic sanctions. In this chapter, it is also synthesized all the empirical information and the conclusions gathered from other studies in order to summarize the current state of knowledge regarding the economic effects of the sanctions initiated in 2014.

In section 4, it is then analysed the country- and sectors-level trade impact of the sanctions regime. In this chapter, it is assessed the sanctions' regime that af-

fected trade flows between Finland and the Russian Federation. Section 5 provides the conclusion and some practical issue for companies doing business in Russia along with some prospects of Western sanctions.

It is important to emphasise that this study does not assess the political costs or effectiveness of the sanctions, but merely analyses potential economic costs caused by all sanction measures in place. The focus on economic costs omits any consideration of the social costs of disrupting trade or the benefits from achieving policy goals.

1.2 Methodology

In the existing literature there are few works regarding an overall analysis of costs provoked by countersanctions. In the fact, there is no one Master's thesis published in the Theseus in this aspect in last six years.

In order to fulfill the purposes indicated in the part 1.1, I plan to analyze the previous cases of sanctions imposition, to strive to define the concept of sanctions in general and to describe strategies of Finnish firms for adaptation to changes in the business environment.

This work is based on the results and the empirical evidence that have been gathered in various research projects and provides some theoretical insights on the economic sanctions phenomenon. The phenomenon of sanctions in this work is considered from the perspective of the sender country's economy, Finland.

This current study is mainly relied on data collected by Hufbauer, Schott, & Elliott (2007) as well as on others authors' works of various approaches to the study of economic sanctions and publicly available the economics and international relations literatures and documents.

One of the famous studies in the field of economic sanctions, which dataset and econometric estimates serve as references in this field, is the works of Hufbauer, G. C., J. J. Schott, and K. A. Elliott (2007). The scholars produced the large-scale quantitative study of sanctions, in subsequent editions of their book (1985, 1990,

2007). Their latest edition of the widely-used Economic Sanctions Reconsidered by the Peterson Institute for International Economics contains the statistical analysis of some 200 case studies of economic sanctions episodes with varied durations imposed by seven principal senders on 68 target states that the authors have identified in the time period from 1960 to 2006 based on the chosen variables for the empirical model.

To evaluate the effects of the Russian food embargo, several databases are employed which are giving information on bilateral trade flows disaggregated by product. First, common data is given from an official European statistics website on bilateral product-level exports of EU countries to Russia. Second, yearly data is used from Finnish customs for Russia's product-level imports from the country.

The estimations from the previous research show that an average loss of EU28 exports to Russia in 2014 amount to \leq 125 million per month. However, this represents only 45 percent of the overall loss in EU28 exports of banned products to Russia. Nevertheless, economists identified a reorientation of European exports of banned products to alternative markets, translated into a 2 percent increase in the value of these flows. It was calculated in 2014 that the losses of EU exports of banned products to Russia were entirely offset by the additional \leq 188 million average monthly sales on the EU market and \leq 42 million average monthly exports to third countries (Eurostat, 2020).

Including for differences in the scope of change described in various research, this study measures cost as a loss in economic welfare per euro reduction in Finland's exports. A multiple case study method is used.

2 THEORETICAL REVIEW

What are economic sanctions? G.K. Hufbauer and his team used the following definition of economic sanctions: *deliberate, government-inspired withdrawal, or threat of withdrawal, of customary trade or financial relations with political goals* (Hufbauer et al. 2007). There is no single description of economic modifications which can be applied to all types of sanctions. Economic theory suggests that sanctions against a specific country may include any combination of restrictions on exports, imports, and foreign investment (Farmer, 2000). The scope of sanctions also can vary in each situation and can include a policy to completely isolate a country and break off economic and trade relations (Smeets, 2018).

The grounds for imposing sanctions might be mentioned also as follows:

- the most frequent reason for sanctions is demonstration of resolve to achieve the expected political goals,
- prevention of problematic behaviour of the subject of international relations limiting its political and economic independence,
- the interest of the country's authorities imposing the sanctions in demonstrating a strong foreign economic policy,
- unwillingness to engage in open military conflicts (Hufbauer et al. 2007).

What follows from the theory is that the imposition of economic sanctions by a country or a group of countries has always related to the enforcement by the government of the target countries to change their policy. Usually, sanctions are expressed by the prohibition of the import and/or export of goods and services, the restriction of financial transactions with corporations of these countries, the termination of economic partnership and investment. Another feature of the sanctions is the number of states involved. The sanctions can be both unilateral and multilateral. In the first case, sanctions are imposed by only one country against a target country. In the second case, sanctions are imposed by more than one country (Smeets, 2018; Caruso, 2003).

As regards objectives of sanctions, they are grouped by economists into three categories. The 'primary objectives' concern with the actions and behavior of governments against whom the sanctions are imposed. The 'secondary objectives' are related to status, behavior and expectations of governments imposing sanctions. Finally, the 'tertiary objectives' are related either to the structure of international system, or to some parts of it. These three categories do not exclude each other but can overlap in some cases (Caruso, 2003).

2.1 Historical perspective

The meaning of sanctions is not a new one at the current time. They were mentioned even in ancient Greece when such technique was used in The Peloponnesian War (432 BC). However, in our modern history, the sanctions had become to be considered as *an economic and financial pull mechanism* (Hufbauer et al., 2007) in the quality of a stand-alone policy only after World War I (1914-1918). Most of the objectives sought with the use of sanctions had usually signified a broader war effort or used to strengthen positions during hostilities (Hufbauer et al., 2007).

After World War II, the United States was the first country who started to use economic measures as a substitute or as a tool of pressure on a target country to desist from other military actions. For example, *in 1956 the United States pressed the French and the British into withdrawing their troops from the Suez region; and in the early 1960s the United States persuaded Egypt to stop supporting rebels in Yemen and the Congo by withholding development and food aid* (Hufbauer et al., 2007). But, as the historical chronicles showed, such actions from the United States have not been successful (Hufbauer et al., 2007).

An important rationale for further broad-based sanctions imposed against the Soviet Union and China in the late 1940s to impair the economic capability of the countries has become multilateral controls on strategic trade and specific items of military equipment. It is doubtful to evaluate results sanctions against the Soviet Union following the invasion of Afghanistan and the crisis in Poland in the early 1980s not least because it is difficult to hamper the military capabilities of a major power through economic deprivation (Hufbauer et al., 2007). Starting from 1970s, economic pressure was primarily brought to aim at hampering to develop weapons of mass destruction, primarily nuclear capabilities. Especially, such efforts were highly successful with respect to only with a few target countries (South Korea and Taiwan), but took a limited accomplishment with South Africa, Brazil, and Argentina, and failed with India's and Pakistan's cases. The two most questionable and ineffective cases concerning results of the sanctions against Iraq and Libya related to weapons of mass destruction (Hufbauer et al., 2007).

In the world today, sanctions are related with an effort change a target country's regime explicitly or implicitly, usually in the context of a foreign policy and national security. For example, *sanctions have been used to settle expropriation claims, to counter drug lords, and to combat international terrorism (a modest goal until al Qaeda launched its attacks on September 11, 2001 in New York and Wash-ington)* (Hufbauer et al., 2007).

Turning to the question of Russia, the country has traditionally often encountered sanctions imposed against it, usually by Britain and the United States. Generally, Russia has a very advanced experience of life skills in the conditions of the sanctions regime in the past decades.

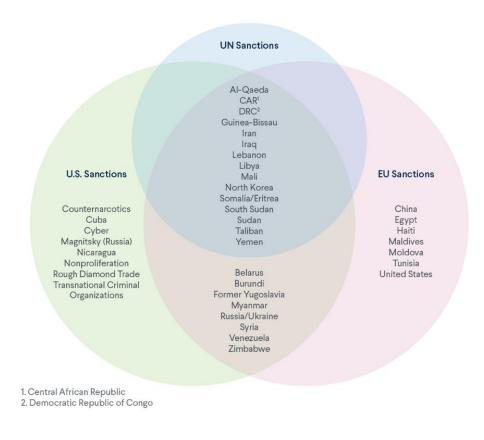
Economic sanctions against Soviet Russia (from 1922, USSR) were applied by the Western countries (the UK, France, USA, etc.) immediately after the events of 1917 (the October Revolution, commonly referred to as the Bolshevik Revolution). The consequence of these sanctions become a decrease in the volume of foreign trade, when the turnover in 1919 amounted to 14,4 million rubles (for comparison, in 1913 this figure was 12,6 billion rubles) (Arkhipova & Komolov, 2016).

At the beginning of the 1930s, USA accused the USSR of knowingly underestimating the prices of its goods for deliveries to the United States and imposed anti-dumping measures and other sanctions against the USSR. As a result of these measures, the total turnover of Soviet foreign trade fell, and exports during this period also decreased from 812,7 million to 636,1 million rubles (Arkhipova & Komolov, 2016). After the World War II and with the beginning of the Cold War, the United States began to apply a new type of economic sanctions against the USSR and the countries of the socialist bloc. They were aimed at blocking access to advanced technologies and high-tech products. The impact of these restrictions on the economy was also not detrimental for the country. The restrictions were lifted actually in the 1970s (Arkhipova & Komolov, 2016).

One of the key landmarks in the dynamics of the Cold War between Moscow and Washington become the Jackson-Vanik amendment to the 1974 Trade Act which affected normal trading relations with non-market economies restricted emigration and other human rights (Moh, 2010). This amendment remains in force still today for several countries, including Russia.

In the first half of the 1980s, the United States also issued an order on economic restrictions against the USSR in response to the introduction of troops into Afghanistan. The restrictions concerned trade and credit, and a ban on cultural exchange. In addition, US President Jimmy Carter announced the termination of the grain contract for the supply of 17 million tons. The consequences of such restrictions on the USSR did not cause significant damage to the country's economy, primarily because of European countries, especially France and the Federal Republic of Germany, retained their agreements with the Soviet Union. Already in the post-Soviet era, the Magnitsky Act and the restrictions imposed on Russia in 2014 became the most resonant actions in the Western countries sanctions policy (Arkhipova & Komolov, 2016).

This brief historical review was showed that economic sanctions took a place in the conduct of governments foreign policy as a tool of respond to major geopolitical challenges since World War I. Overall until 2014, the United States, either alone or in concert with its allies, has deployed sanctions 109 times. Other significant senders were the United Nations (20), the United Kingdom (16 cases, frequently in cooperation with allies), the European Community/ European Union (14), the Soviet Union and since 1990 Russia (13), and the Arab League and its members (4 uses) (Hufbauer et al., 2007). Currently, US, EU or UN sanctions regimes, either separately or in collaboration, focus on the 31 countries worldwide and some of the key sectors, specific entities, and individual people (Picture 1).



Sources: Council of the European Union; U.S. Treasury Department.

PICTURE 1. Global sanctions regime (Masters, 2019).

2.2 Types of sanctions

In the early research, economic sanctions have been differentiated between negative (withholding economic advantages, the use or threatened use of punishments) and positive (offering economic benefits: (humanitarian aid, tariff's reduction or tariff's abolition and so on) forms, as well as trade and financial sanctions. Accordingly, negative sanctions are a definition for the tool used to influence another state's behaviour without resorting to a military conflict. And positive sanctions are *a means by which some states get other states to do things they would not otherwise do* (Knorr, 1983; Baldwin, 1985).

For the purposes of this study, focusing on the case of the impact sanction regime from the perspective of the sender country's economy, the most common types of sanctions will be examined in the forms just the most important ones which are used in recent years: asset freezes; travel, visa and investment bans; withdrawal of financial aid; arms, commodities and trade embargoes; restrictions on banking transactions.

According to Hufbauer et al. (2007) the sanctions can be simplistically categorized within three various types: (1) export sanctions; (2) import sanctions; and (3) financial sanctions. More often, all these three types are applied collectively, but also can be imposed apart. Trade sanctions are targeted to limit exports of sender countries to and/or their imports from the target country. Financial sanctions delay or interrupt publicly funded loans or grants or freeze all assets of the target country. Asset freezes are targeting the leaders of "rogue" regimes, corrupt autocrats, and their associates (Hufbauer et al., 2007).

Trade Sanctions

Trade sanctions are a type of economic sanctions in the forms of total or partial embargoes implemented against a target country. Through them, sender countries seek to restrict the volume of specific imported and exported products by setting a maximum amount of goods authorized for import and export (Bonarriva et al., 2009).

Hufbauer et al. (2007) give a definition of trade sanctions, alone or in conjunction with financial restrictions, as a measure imposed when a sender country more wants to control export on certain type of products of the targeted economy (including chiefly so called "dual-use" technologies) than import. In this context, a sender country assumes to take a dominant market position as suppliers of key exports. Whereas there can be many alternative purchasers of imports (Hufbauer et al., 2007). As a policy tool, export controls address several diverse objectives such as promotion of value-added downstream industries or support for economic agreements made with other government, and noneconomic goals such as national security or social tasks (Bonarriva et al., 2009).

Senders use export embargoes to create economic benefits for certain segments of the economy, domestic producers, or domestic consumers of a particular product. For instance, stopping \$100 million of exports can provoke damage to a specific sector or industry of the target state greater than stopping the same amount of imports. At the same point, import embargoes are intended to lower the target's foreign exchange earnings and thus its capacity to purchase goods, for the purpose of to inflict greater pain to a specific sector or industry of the target state (Hufbauer et al., 2007; Bonarriva et al., 2009). The various types of trade sanctions are defined in Table 1 below.

Types of trade sanctions	Definition					
Quotas	trade restrictions during a particular period that					
	limit the number or monetary value of imported					
	or exported goods					
Tariffs	barriers taking the form of high import (and oc-					
	casionally export) taxes, levied by a sender					
	country					
Non-tariff barriers	non-tariff restrictions on imported goods that are					
	not specifically a tax including licensing and					
	packaging requirements, and other require-					
	ments					
Asset freezes or seizures	prevent assets owned by a target country from					
	being moved or sold					
Embargoes	commonly meaning an official ban on trade and					
	other commercial activity (a more severe form					
	of sanctions)					

TABLE 1. Types of trade sanctions (Bonarriva et al., 2009).

Financial Sanctions

Financial sanctions, considering as delaying or denying credit or grants, were deployed in almost half of instances in combination with trade controls, though not necessarily accompanied in the complex. Thus, USA used financial sanctions without accompanying trade controls in about 80 percent of the cases. Many cases involve the interruption of official assistance aimed at the manipulation of bilateral economic and military assistance to developing countries (Hufbauer et al., 2007). Financial sanctions exist in many forms, and the most common types of them used in recent years are presented in Table 2 below.

Types of financial constions	Definition
Types of financial sanctions	
Targeted asset freezes:	restricting access to funds and economic re-
applied to individuals, enti-	sources
ties, and bodies	
Restrictions on a wide vari-	including:
ety of financial markets and	- investment bans,
services:	- restrictions on access to capital markets,
applied to named individu-	- directions to cease banking relationships and
als, entities and bodies,	activities,
specified groups, or entire	- requirements to notify or seek authorisation
sectors	prior to certain payments being made or re-
	ceived,
	- restrictions on the provision of financial, insur-
	ance, brokering or advisory services or other fi-
	nancial assistance,
Directions to cease all busi-	concerning the specific type of business
ness:	
can be applied to a specific	
person, group, sector, or	
country	

TABLE 2. Types of financial sanctions (Guidance, 2020).

Asset Freezes

The freeze of assets is an unusual type of sanction when the sender country freezes assets holding, for example, by individuals (data subjects) part of or affiliated to the governments of the target country. Such mechanism of the measure not only stops financial flows in broad terms but also prevents trade as freezes are often imposed in conjunction with broad trade controls. Merchandise, accounts receivable, and bank accounts all qualify as assets (as does real property). Hence, anything owned by individual regime leaders and their supporters of the target country, its corporations, or residents is potentially vulnerable (Hufbauer et al., 2007; EDPS, n.d.).

There are approximately 20 such sanctions in place, targeting different countries and groups. Some of these sanctions implement decisions of the United Nations Security Council, while others are imposed by the EU autonomously. But in general, the freezing of assets as a sanction measure made a limited contribution to cases involving a means of putting pressure on "bad guys" in target countries and was usually a small supplement to the use of military force (Hufbauer et al., 2007; EDPS, n.d.).

Comparing Trade, Financial, and Asset Sanctions

A few numbers of studies argue that the economic as well as political effects of trade, financial, and asset sanctions depend on the specific situation of dispute settlement. Often the price effects after the trade sanctions are very modest, and trade controls are usually selective directing on one or a few goods of the target economy. In practical cases, export or import trade would be more likely redirected rather than cut off (Hufbauer et al., 2007).

In contrast to trade sanctions, especially export controls, which have a dramatic effect on the target country's population squarely, the economic effects of financial sanctions may change the political balance even more sharply in the sender country's interest. Additionally, financial sanctions, especially involving trade finance, may be harder to find as well as likely would have a significantly higher interest rate. Thus, they will more likely attack the pet projects or personal pockets of government officials supporting government policy. From the sender's side, an interruption of official development assistance or credit may influence a wide range of trade flows even without the imposition of explicit trade sanctions. This result led to declining popularity of trade sanctions since 1990s (Hufbauer et al., 2007).

2.3 EU sanctions and their criteria

According to the Common Foreign and Security Policy (CFSP), the European Union implements all types of sanctions imposed by a United Nations Security Council (UNSC) Resolution. Until the end of the Cold War, the UNSC only imposed sanctions on two occasions: against Rhodesia in the mid-1960s, and against South Africa in the mid-1970s (Portela, 2010; EEAS, 2016).

Furthermore, the EU's countries can impose its own financial sanctions, sometimes referred to as *EU autonomous* sanctions. These are also implemented through regulations that have direct effect in all member states in the absence of a Security Council Resolution (Portela, 2010; EEAS, 2016).

EU sanctions aim to address different CFSP objectives which include:

- conflict management (Afghanistan in 1996, Libya and Syria in 2011),
- democracy and human rights promotion (Belarus in 2006, Syria in 2011),
- post-conflict institutional consolidation (Guinea in 2009),
- nuclear non-proliferation (Libya in 1994, Iran since 2006),
- countering international terrorism (Libya in 1999 and terrorist organisations on the EU list); and, more recently,
- condemning and containing the violation of a sovereign state's territorial integrity (Russia 2014) (Biersteker & van Bergeijk, 2015).

On 6 March 2014, EU's Heads of State or Government strongly condemned the Russian Federation due to destabilization the situation in Ukraine. It was made decisions concerning travel restrictions and asset freezes for selected individuals (EU Sanctions Map, 2020). Since 31 July 2014, the EU has introduced restrictive measures against Russia in four activity sectors (Figure 1) - finance, energy, defense, and dual-use goods - which have been revised periodically.



FIGURE 1. Economic sanctions against sectors of the Russian economy (European Council, 2019).

Aside from all EU member states and the United States, Norway, Albania, Montenegro, Georgia, Ukraine, Moldavia, Canada, Australia, New Zealand, and Japan enacted similar policies. The exact timing of the enacting of sanctions varies by country, but all did so until the end of August 2014. In terms economic size, countries sanctioning the Russian Federation equalled roughly 55 percent of the 2014 world GDP (Crozet & Hinz, 2019).

The most recent sanctions policy towards Russia conclude the following types:

- Sanctions targeting individuals and entities through travel bans and asset freezes on 175 persons and 44 companies or other entities in Russia/ Ukraine perceived responsible for the violation of Ukraine's territorial integrity (Figure 2).
- Measures dealing with access to the capital markets for specified financial and defence institutions by banning long-term EU loans for the stateowned banks (Figure 3). Financial institutions listed are:

Sberbank (Russia's largest bank, then third largest bank in Europe), VTB Bank (nationwide operating bank in Russia), Gazprom Bank (Russia's third largest bank, subsidiary of Gazprom), Vnesheconombank (VEB) (Russia's "Bank for Development and Foreign Economic Affairs"), and Rosselkhozbank (state-owned bank with agricultural focus) (Crozet & Hinz, 2019).

 Restrictions on business in Crimea and Sevastopol and on the export of dual-use goods and civil and military technology manufacturers, such as products of Kalashnikov rifles (Figure 4).

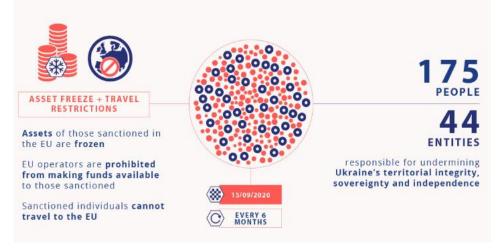


FIGURE 2. Sanctions against individual and entities (European Council, 2019).

- Restrictions on dealing with goods and services related to the oil industry and the energy sector in regard to three Russian energy companies: Rosneft, Transneft and Gazprom Neft activities (Reed Smith, 2014; European Council, 2020a).



FIGURE 3. Diplomatic measures and Restriction on economic cooperation (European Council, 2019).

On June 18, 2020, the heads of states and governments of the European Union made a political decision to extend the economic (sectoral) sanctions against the Russian Federation until 23 June 2021 (European Council, 2020b).

2.4 Russia's sanctions and countermeasures

On 6 August 2014, Russian President V. Putin signed the first Edict No. 560 "On Application of Certain Special Economic Measures to Assure Security of the Russian Federation". Edict No. 560 prohibited the import of several agricultural products, raw materials and foodstuffs from the Member States of the EU, the US, and its allies (Australia, Canada, and Norway) in response to the restrictive measures undertaken by these countries. Starting from 13 August 2015, the food embargo was expanded to the listed food products additionally from Albania, Montenegro, Iceland, and Liechtenstein, and the list of goods was revised. The last time the restrictions were prolonged on June 24, 2019 until the end of 2020 (European Commission, 2020a).



FIGURE 4. Restrictions on business in Crimea and Sevastopol (European Council, 2019).

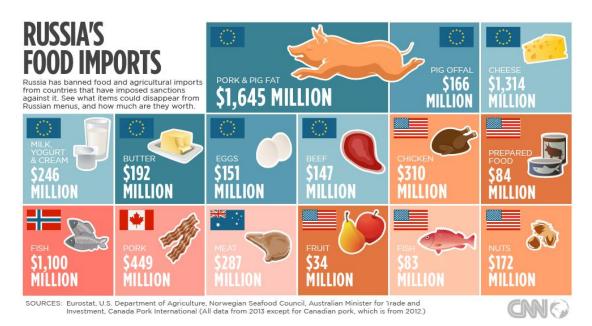
The original list of banned products included meat, dairy, fruit and vegetables and certain process products, such as:

- Meat of bovine animals (fresh, chilled or frozen),
- Pork (fresh, chilled or frozen),
- Meat and edible offal (fresh, chilled or frozen),
- Meat (salted, in brine, dried or smoked),
- Fish and crustaceans, mollusks, and other aquatic invertebrates,
- Milk and dairy products,
- Vegetables, edible roots and tubers,

- Fruit and nuts,
- Sausages and similar products of meat, meat offal or blood; food preparations based thereon,
- Several products of processed food (including malt extract and preparations of flour and starch content) (European Commission, 2014).

Subsequently however, the list was adjusted, and the following products were excluded from it: baby food, selected animal products (fat, meat offal) and live animals, as well as some prepared products in the fruit and vegetables sector (e.g. fruit juices or canned fruit), lactose-free milk and milk products, salmon fry, seed potatoes, onion sets, hybrid sweetcorn and dietary supplements (European Commission, 2014).

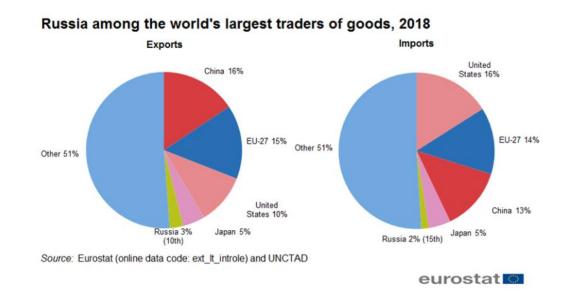
Before of events of 2014, Russia was the second biggest export market for EU agricultural products. The EU's agricultural food and raw materials stood at €114,8 billion, accounting for 10 percent of total EU exports to Russia (but only 1-3 percent of overall EU production in the world). Thus, the Member States of the EU have become the most vulnerable to the countermeasures as 73 percent of banned imports arrived from the EU (Picture 2) (European Commission, 2014).

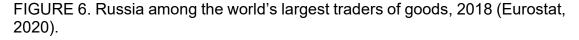


PICTURE 2. Russia's food imports (Matthews, 2014).

Figure 5 of Appendix 1 shows the changes in the exports, imports and trade balance between the EU and Russia from 2009 to 2019. As it can be observed, the EU's imports and exports with Russia reduced from \in 199 billion in 2013 to \in 174,7 billion in 2014 (import), and from \in 114,8 billion in 2013 to \in 99,1 billion in 2014 (export). In 2019, the EU's imports made \in 143,4 billion, and exports was \in 87,8 billion decreased by more than 70 percent as compared to 2013.

The position of Russia among the trade partners of the EU also registered a remarkable decline as compared to 2013. In 2019, the country was the fifth largest partner for EU exports (4 percent) and the fourth largest partner for EU imports of goods (7 percent) among the largest traders of goods in the world. It means that the position of Russia has improved as compared to 2018 (Figure 6) (Eurostat, 2020).





The recent economic component of the relevant measures has taken the form of a systemic nature. It led to a serious price advance on the domestic market of the country, primarily on food products, as well as to the deficit of certain types of imported products. As a result of the sanctions against Russian Federation, the inward investment into the country's economy has been reduced that, in its turn, decelerated a GDP in 2014-2016 from 1,8 percent to 0,5 percent. In 2014, the leading bond rating agencies significantly lowered the credit ratings of Russia, which are an important indicator of the country's attractiveness to foreign capital (Vorotnikov et al., 2019).

However, in modern conditions of *the new sanctions era*, Russia's budget surplus became 2,9 percent of GDP in 2019 that is the largest comparing with 2008. Since 2014, Russia's budget-clearing oil price reduced by more than half, and now stands at \$49 a barrel. And it is the lowest indicator in a decade. From 2016 till 2019, the non-oil primary federal deficit fell from 9 percent to 6 percent. In August 2019, Russia's sovereign-credit rating was upgraded to the level that it was before the Crimea annexation (Gould-Davies, 2020).

2.5 Finland and Russia: the long-standing trade partnership

Before the current sanctions, Russia was considered as Finland's biggest foreign trade partner. In economic terms, Russia was historically as Finland's most important trade partner outside the EU as well as a source of natural resources. This is due to both the countries' geographic locations as well as long-standing historical relationships. Throughout the years, the development of Finnish trade and other economic activities with the Russian Empire, the Soviet Union, and finally Russian Federation has experienced quite major historical transformations (Ollus & Simola, 2006).

During 1860-1916, the foreign trade between the Grand Duchy of Finland and the Russian Empire was at most than 40 percent. Exports at that time consisted mainly of wood (the paper industry accounted for half of all Finnish exports to Russia) and engineering products (mainly served the Russian army's demand). At end of the 1880s, the Finnish paper products were also exported to Western Europe. The larger part of the Finnish imports from Russia during the autonomous time included of consumer goods and raw materials. At the same time, the Russian Empire was also an important source for grain for the Grand Duchy (Ollus & Simola, 2006).

After the Russian Revolution and the civil war (1917-1921), the Bolsheviks closed Russia's foreign trade. Thereby, Finland had to reorientate its trade towards the Western markets and decreased its dependence on Russian grain imports by developing its own agriculture (Ollus & Simola, 2006). In the period between the World Wars, the trade with the Soviet Union collapsed and recommenced only

after 1945 when the Soviet share in Finland's export jumped from zero to 30 percent (Liuhto & Itälinna, 2019).

After the Second World War, Finland was forced to pay war reparations consisted of goods and material for Soviet industry. Reparations consisted of goods and material for Soviet industry (Ollus & Simola, 2006). Later, when Finland paid its entire war indemnity at the beginning of the 1950s, the economic co-operation between Finland and the USSR transformed on a bilateral clearing trade, where financial claims were based on centralized, intergovernmental system and the trade was handled through bilateral clearing accounts by the Bank of Finland on the Finnish side. Finnish exports to the USSR included mainly of forest products, ships and machinery, equipment, and vehicles (Ollus & Simola, 2006).

Since the mid-1950s until the Perestroika era in the end of the 1980s, over a third of exports consisted machinery, equipment, and vehicles. Other important groups in the exports were metals, chemicals, footwear, textiles, clothing, foodstuffs, and beverages (Ollus & Simola, 2006). Bilateral trade ended in 1990, when the Soviet Union collapsed. However, since the demise of the Soviet Union, economic relations between Finland and Russia have solely deepened also including reciprocal investments. Finnish investments to Russia mainly have aimed at local markets rather than outsourcing for cheaper labor and been quite profitable. The investments mainly were in fields that not considered strategic from a Russian perspective, and hence the political risks are smaller (Ollus & Simola, 2006).

At the beginning of the 2000s, the number of small Russia-related companies in Finland has also grown, especially in the field of trading and transportation. These companies were located mainly in Southeastern Finland and increased Finland's tax revenue. The growing in travel and construction services had also increased. In that period, Russia was considered as a large fastest growing market in proximity of Finland. So, the potential effect from Finland's perspective was significant, although more modest compering to the effect of Sweden or Germany on the Finnish economy. Moreover, Finland has always been considered reliable, safe, and effective as a transit hub for value goods to Northwestern Russian regions. Transit transport through Finland to Russia became another large and growing area of Finnish-Russian economic relations. In trade with Russia, about 34,000 people were employed in Finland (Ollus & Simola, 2006).

Since 2000 till 2007, the development of trade between Finland and Russia had again flourished, and Russia has risen back to being among the most important trading partners for Finland. By 2007 Finland's export to Russia accounted more than 10 percent of all Eastern sales. Though the global crisis of 2008 halved the trade activities, the exports between countries increased until the spring of 2013. However, many scholars admitted that the decline in Finnish exports to Russia began before the Western sanctions and Russia's countersanctions of 2014 (Liuhto & Itälinna, 2019). Table 3 displays an annual change in Finland's total export to Russia by main foodstuffs.

TABLE 3. Finland's export to Russia (Liuhto & Itälinna, 2019).

	2002	2007	2012	2013	2014	2015	2016	2017	2018
Annual change in Finland's total exports to Russia (percent)	11	8	7	-6	-13	-32	-6	15	-3
Finland's total food exports (€ million)	808.3	1,133.6	1,366.2	1,376.7	1,344.3	1,235.7	1,208.7	1,350.5	1,294.3
Food exports from Finland to Russia (€ million)	182.0	267.0	389.5	401.3	301.4	103.1	103.6	112.3	83.5
Share of Russia in Finland's total food exports (percent)	22.5	23.5	28.5	29.1	22.4	8.3	8.6	8.3	6.5
Share of foodstuffs in Finland's exports to Russia (percent)	5.8	4.0	6.9	7.5	6.5	3.3	3.5	3.3	2.5
Meat [1] (€ million)	12.5	35.4	16.0	20.1	6.2	0.2	0.1	0.0	0.0
Dairy and eggs [2] (€ million)	84.2	123.0	240.7	253.1	164.4	0.9	0.2	0.6	1.6
Fish [3] (€ million)	3.4	15.1	11.5	9.0	5.3	1.7	3.0	2.3	1.8
Total [1–3] (€ million)	100.2	173.5	268.2	282.2	175.9	2.8	3.2	2.9	3.4
Share [1–3] of Finland's total exports to Russia (percent)	3.2	2.6	4.7	5.3	3.8	0.1	0.1	0.1	0.1

Source: Customs Finland (2019).

A major decline in Finnish meat exports to Russia started already in 2010 due to accusations by Russian authorities that some Finnish meat exporters had used antibiotics in their raw materials (Liuhto & Itälinna, 2019). Finland's national public broadcasting company, YLE, posted the following news: "*Russia has said that the operations of several Finnish food producers do not meet Russian food safety standards…* Beef and pork products from the meat packer Atria have been banned from Russia since February, after Russian inspectors found traces of antibiotics in the company's meat. Atria insists that the antibiotics in question have never been used in Finland, and there has been speculation that the ban has more to do with political maneuvering in Russia than any real concern about the safety of Finnish food imports" (YLE, 2010). As a result, Finnish meat exports to Russia amounted to just €14 million in 2010 in as compared with 2009 when it valued at €31 million (Liuhto & Itälinna, 2019).

Russia's food-related ban introduced in the autumn of 2014 have deepened the decline of meat exports, and Finnish food trade to Russia were completely stopped. However, the full impact of Russians countersanctions became noticeable only in 2015. According to Customs of Finland (2019) in 2013, Russia's share of Finland's total food exports was 29,1 percent and foodstuffs included 7,5 percent of Finland's exports to Russia. In 2018, these shares were 6,5 percent and 2,5 percent, respectively (Liuhto & Itälinna, 2019).

Aside from that, The Central Bank of Russia (2018) confirmed that the average annual foreign indirect investment flow from Finland to Russia was over \$500 million in the period 2007-2013, whereas in the period 2014-2017, the corresponding index was below \$40 million (Liuhto & Itälinna, 2019).

3 ECONOMIC IMPACT OF SANCTIONS

It was mentioned in the previous parts, different types of sanctions are used through restrictions or bans on the trade of certain goods and services, breaking of financial ties, or an all-out embargo. They are the current tools of foreign policy meant to hurt a sensitive sector in the target country's economy.

Undoubtedly, sanctions are not costless for the sanctioning economy, when domestic firms involved in business with the target countries might perceive the impact economic damages (Crozet & Hinz, 2019). It is therefore important to conceive the dimensions of the magnitude of economic costs which a sanctions regime may inflict on the sender country. The costs for the sender can be considerable, and these costs will be vested in the consumer and taxpayer, which must be ready to accept both the economic rationale and the political willingness to engage in the achievement of the objectives of the sanctions (Smeets, 2018).

The purpose of this work is not to calculate the monetary costs of sanctions to sender country nor to quantify the political costs visited on the sender *as a result of flexing its economic muscle* (Hufbauer et al., 2007). Instead, the key objective of this research is to draw a rough sense of the trade and financial costs incurred by the sender country – Finland – from the imposition of sanctions against Russia by Western countries.

3.1 Costs of sanctions to senders

According to Hufbauer et al. (2007), sanctions, apart from the fact that are designed to carry a credible threat of penalties in order to coerce the target country to change its behaviour, also carry costs for the sender. Economists have created elaborate theoretical models to suggest how the conditions of supply and demand for the sanctioned types of products might affect the level of costs incurred by the sender and imposed on the target. In addition, one of the important questions emphasised here is how the balance of costs might affect the outcome of sanctions (Hufbauer et al., 2007). Economic sanctions impose potential and indirect costs on target states which may entail an economic burden, in the form of lost sales and jobs, for domestic firms on the sender country. When trade, aid, or financial flows are disrupted, sanctions increase the long-term uncertainty, and therefore the cost, of doing business abroad. Sanctions may even have broad macroeconomic effects, when business of the sender country, not just the target country, are forced to seek alternative resources for technologies and products not developed in the sender country. This becomes most obvious in cases involving a large number of economically significant countries or a strategic commodity, as with the episode of the US-UN embargo of Iraq and the 1973 Arab oil embargo of the United States and the Netherlands mentioned by Hufbauer et al. (2007).

The scholars studying the effectiveness of sanctions stress that the sender country in imposing of punishment should seek to maximize its political gains and to minimize its economic costs. In other words, the sender country should seek to maximize the ratio of costs inflicted to costs incurred.

The results of the large-scale quantitative study of sanctions made by Hufbauer et al. (2017) reveals that, in practice, the domestic costs of the categories of sanctions are rarely calculated, and almost never in advance, for two reasons. First, commonly due to lack of access to existing accurate data, to quantify the costs to the sender country can be plain hard. There are quite many unclear conditions for calculating the costs of imposed sanctions, which appear only years later in the form of lost sales opportunities for domestic business. Second, based on the research of Hufbauer et al. (2017) for large countries, the overall impact on the sender's economy is regarded as trivial. According to the calculations of the scientists, in more than 60 percent of the examined cases, the cost to the target is less than 2 percent of its GNP. When in more than half of the episodes, it is less than 1 percent. In fact, as the sender has by far the larger economy, it is relatively that the costs of the sender country as percentage of its GNP will be much less. But from the perspective of political elite in the White House, 10 Downing Street, or Brussel, all kind of costs imposed as the punishment for problematic regimes may seem entirely tolerable.

In their book, the authors indicate some rather pessimistic results for the sender. Here are presented some of them:

- Sanctions are paid for by the industries whose trade is most deeply affected,

 Sanctions can amount to a discriminatory, sector-specific, and unfair tax aimed at to finance foreign policy,

- In contrast, most other foreign and defense political programs are financed out of general treasury revenues,

- The impact of sanctions on firms not only may restrict the sale of goods or require the cancellation of existing contracts, but also arouse political opposition to the goals of the sender government with such lopsided burden-sharing (Hufbauer et al., 2007).

Further in their research, the team of the sanctions experts (Hufbauer et al., 2007) paid special focus on estimates of the costs of economic sanctions to the sender countries in the context when the goods are available from others sources. Obviously that it is pragmatic to impose sanctions on goods which are not easy to obtain in third foreign markets, as the availability of goods from other sources lessens the impact of the sanctions, and, consequently, increases the domestic political costs of maintaining the goals. Based on the analysis of some 200 sanctions cases, the researchers estimated that the costs of economic sanctions to the sender and target.

Working on the sanctions dataset and cases, the team of Hufbauer et al. (2007) concluded that there is existing a limited exception to the general rule that sanctions entail costs for the sender country. Thus, it can be highlighted the following characteristics for utility of economic sanctions for the sender's side:

 In more than a quarter of the researched cases involving modest policy goals, the sender country received a net gain (usually quite small) due to withholding aid and official credits. The only one exception to this category of the modest policy goals, when significant trade diversion occurred with consequent losses to the affected firms in the sender country, is the case involving US efforts to release hostages held by Iran.

- The average cost in some sanctions episodes concerning the regime change and military disruption was trivial and not differed between success or failure. The exception to this category is military impairment, where average costs are higher, and successes cost more. Although, these costs tend to be justified since such cases also concern national security.
- Only in other major policy changes in the target countries, failure was associated with noticeably higher costs to senders (Hufbauer et al., 2007).

To sum up the part about the cost to senders, one needs to be noted that the costs of economic sanctions are not confined to the economic sphere of influence. Political costs on the sender country could be induced both successful sanctions as well as a failed episode, particularly if it precipitates a public outcry.

Definitely, all diplomacy has its political costs: some episodes are dear, and others are cheap (Hufbauer et al., 2007). This is another interesting question which can be also one of research objects for further study.

3.2 The analysis of countersanctions

This subchapter summarizes the major findings of the previous studies relating to the effects of sanctions on trade between Russia and sanctioning countries.

In their last work, Crozet and Hinz (2019) evaluated the costs of sanctions in terms of export losses on foreign trade between the Russian Federation and 37 countries. For the analysis, the authors apply a gravity model approach to examine Russia's exports to its major trading partners. Thus, it was calculated that the Russian Federation lost some US\$53 billion in total exports from the beginning of sanctions to the end of 2015. Western countries imposing sanctions also lost approximately US\$42 billion in exports to Russia. Approximately 92 percent of

this loss amount by the EU countries, where most of this reduction includes products not directly banned by Russian countersanctions.

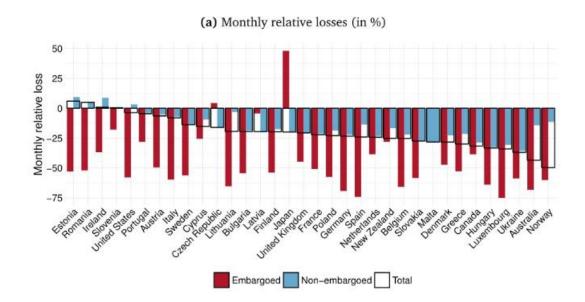
Table 4 of Appendix 2 provides quantitative analysis of the effect of the Russia's sanctions episode on trade in a general equilibrium counterfactual framework. The analysis is based on the monthly UN COMTRADE (n.d.) data from January 2012 until December 2015 between all 37 sanctioning countries, Russia, and the 40 other largest exporters in the world. These findings show losses of total trade by period (per month) and country:

- *Total* is the average monthly loss since December 2013.
- *Conflict* is the average monthly losses incurred during the time of conflict before the imposition of financial sanctions in mid-March 2014.
- Smart sanctions are the monthly losses during the time of conflict and financial sanctions before the imposition of economic sanctions in late July
 early August 2014.
- *Economic sanctions* are average monthly losses incurred since the imposition of trade and banking restrictions (Crozet and Hinz, 2019).

The results of this research, presented in Table 4 (Appendix 2), indicated that the decline of Western exports has not been perhaps driven by Russian retaliation, but mainly by country risk affecting financial transactions with Russia at international framework. This Table in particular displays well the estimated drastic drop of imports from non-sanctioning countries.

For instance, Germany is losing the most exports in absolute terms (27 percent of the global lost trade), most of them incurred by non-embargoed products. Poland and the Netherlands follow it but in much smaller values (Figure 7).

Applying a triple-difference estimation strategy, Cheptea and Gaigné (2018) analysed the general impact of the Russian food embargo on European and Russian trade. They pointed out that the EU28 exports to Russia due to the ban lost an average €125 million monthly with more of this loss was borne by Lithuania, Poland, and Germany. In this connection, it can be stated that EU members were borne by Russian retaliation. These researchers found, as Crozet and Hinz pointed in 2019, that 45 percent of most of this reduction included goods that neither side had banned. Moreover, the interesting finding came out that banned EU products, which were intended for the Russian market, were reoriented and sold to other markets to be able to circumvent sanctions.



Solution of the solution of

(b) Monthly absolute losses (in million USD per month)

FIGURE 7. Composition lost trade of embargoed and non-embargoed products by country (Crozet and Hinz, 2019).

The variation in the number of EU export and Russian import flows in an average month before and during the embargo and in their cumulative value is presented in the Tables 5A and 5B of Appendix 3. The key data of the table are designed as follows:

- *Number of flows* are average numbers of flows in a month before and after the introduction of the Russian embargo.
- *Value (USD m)* is the cumulative value of monthly imports before and after the introduction of the Russian embargo.
- *All banned products* are the products exported before the ban period (Jan 2013 to Jul 2015), and during ban period (Aug 2014 to Dec 2015).
- Products under the pork ban are the figures before the ban concerning averages across months with no pork ban (Jan 2013 to Jan 2014) and during the ban concerning averages across months with the pork ban (Feb 2014 to Dec 2015).
- Products under the food embargo excluding pork and swine products are the figures before the ban concerning averages across months with no food embargo (Jan 2013 to Jul 2014), and figures during the ban concerning averages across months with the food embargo (Aug 2014 to Dec 2015) (Cheptea and Gaigné, 2018).

It may be deduced from the table under review that about two-thirds of the export of banned products from EU countries to Russia was suspend after the introduction of the counter sanctions. At the same time, the number of export flows to other destinations increased by 7 percent.

In other earlier study, a group of the researchers (Fritz, Christe, Sinabell and Hinz 2017) revealed that EU exports to Russia in the period 2013 and 2016 declined by 20,7 percent annually, while the EU until 2013 was Russia's most important trading partner with 42,4 percent of total exports which had grown per year by 20,0 percent between 2009 and 2012. In their work, Fritz et al. (2017) used a counterfactual analysis based on an econometric model and defined that EU exports to Russia between 2014 and 2016 were \$35 billion lower than they would have been without the sanctions. Their analysis showed that, whereas exports declined in many other categories as well, the most decline touched agricultural goods targeted by Russia's countersanctions.

The work of Fritz et al. (2017) exposed the heterogeneity of impacts caused by Russian retaliatory measures. Thus, exports to and imports from Russia halved in most of the EU countries over the period 2013 to 2016, as it shown in the Figure

8 of Appendix 4. This figure illustrates descriptive statistics on monthly UN COMTRADE (n.d.) concerning both export and import losses observed in the EU trade relations with Russia between 2013 and 2016. The data of this figure reports that the seven largest EU economies including Germany, France, and Finland had to deal with the highest export losses in absolute terms.

Figure 9 shows shares of product groups in EU exports to Russia. From this figure, it can be seen that, according to the research carried out by group of Fritz et al. (2017), EU agri-food exports to Russia declined by 2,2 percent over the period 2013 to 2016. Additionally, the export share of manufactured goods decreased significantly by 3,8 percent, while the export share of mining and chemical products grew considerably by more than 5 percent over the same period. It could be deduced that not all economic sectors of EU exports to Russia were affected the same way with some enhancing their exports to Russia even after the imposition of the sanctions (Fritz et al., 2017).

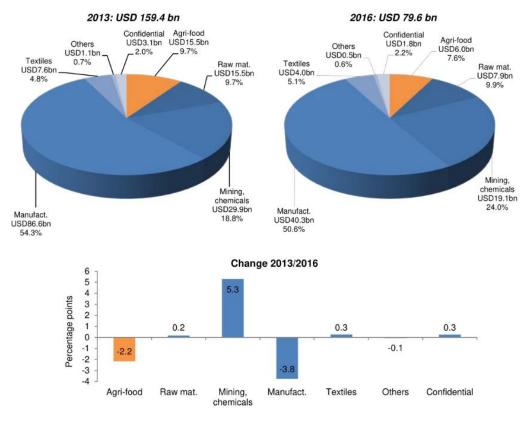
3.3 The effects of Russia's import ban

Thus, six years after Russia's embargo began it is difficult to figure out how Western countries, which have being replaced from Russian market, will be able to recapture a significant presence in the country's food market (Wegren, 2019). There are other results of the import substitution policy. The dependence of the Russian food market on imports has significantly decreased.

Effects on Food Producers

According to Wegren (2019), the effects of the countermeasures from Western competition combined with an increase in state financial support to agriculture contributed to a rise in Russia's food production:

- The nominal ruble value of agricultural output grew by nearly 42 percent from R3,68 trillion in 2013 to R5,11 trillion in 2018.



Source: UN Monthly COMTRADE, WIFO calculations.

FIGURE 9. Sectoral shares of EU exports to Russia, 2013 and 2016 (Fritz et al., 2017)

- The ruble value of meat pro- duction (mostly poultry and pork) rose by 45 percent. The total volume of meat production from all producers increased from 12,1 million tons in 2013 to a record 14,8 million tons in 2018.
- During 2014-2018 annual grain harvests averaged just under 115 million tons, a post-Soviet high. Wheat harvests averaged nearly 71 million tons annually from 2014 through 2018.
- In 2014, Russia imported 60 percent of its tomatoes and cucumbers, today, only 38 percent. The increase in domestic vegetable output has an additional benefit in that it dampens the seasonal increase in vegetable prices that occurs each winter.
- Since the introduction of countersanctions, Russia's federal government has also emphasized the development of the domestic food processing sector, which grew by an average of 5 percent annually during 2015–2017.

In 2018 output increased 7 percent with the value of output exceeding \$100 billion.

One branch that has not benefited much from the embargo's measurements is milk and dairy. The number of dairy cows continues to decline, milk production is essentially flat, and Russia has increased importation of milk and dairy products from non-embargoed countries such as Belarus. In 2013, milk and dairy imports totalled 5,5 million tons. During the first half of 2019, Russia was on pace to import 6,6 million tons of milk and dairy.

Effects on Exporters

Starting in 2014, Russia became the world's leading wheat exporter for the first time in agricultural year 2015-2016 and then repeated in 2017-2018 and 2018-2019. In 2019-2020 agricultural year, Russia's wheat exports were estimated at 34 million tons. In addition to an increase in food trade with China and in Asia, grain exports are also growing to the Middle East, specifically Egypt, Saudi Arabia, Iran, Morocco, and Syria (Wegren, 2019).

Effects on Consumers

Countersanctions have brought two main consequences to consumers:

- During 2014-2015, countersanctions contributed to high food inflation. As a result, prices for meat and products have risen 30 percent since 2014 and experts point to a lack of competition that would restrain price increases. Since 2016, however, food inflation has been moderate, falling to just 1 percent in 2017 and 4,7 percent in 2018 (Wegren, 2019).
- 2. A consequence of countersanctions has been a growth in black market food trade, and the main reason is not availability of products from embargoed countries but their prices as consumers pay more for imported food. Belarus and Kazakhstan are most frequently identified by the Russian government as responsible for allowing the transit of *contraband* food through their countries into Russia and being complicit in mislabelling the country

of origin for food products. The governments in Belarus and Kazakhstan deny responsibility and accuse Russian middlemen who seek high profits from black market sales (Wegren, 2019).

Meanwhile, Russian consumers are affected because the government is attempting to stop food smuggling. In early 2019, rumours spread that small quantities of foreign food carried home by Russian travellers would be seized in airports and at border crossings. Also, the debate over what to do with seized contraband food continues. In June 2019, the federal agency Rospotrebnadzor, which has oversight for food safety, suggested a moratorium on the destruction of seized contraband food which had been the standard practice. Since 2015 more than 32 000 tons of contraband food have been destroyed according to government sources. In August 2019, Rossel'khoznadzor announced that the destruction of contraband food would continue through 2020 (Wegren, 2019).

3.4 Conclusion: the macro effects of Russia's embargo

In August 2020, it was the sixth anniversary of Russia's food embargo against the Western countries supporting economic sanctions. Originally, Russia's food embargo was a political message to the West that means *we don't need you or your food*. As Russia was the largest food market in Europe, so denial to its market became significant consequences when member states in the European Union have lost tens of billions of euros in food trade (Wegren, 2019).

Thereby, summarizing assessments of components of the economic effects of Russia's food embargo, it can be emphasized the following important aspects of the macro effects of the embargo:

1. The value of Russia's food imports declined from a high of \$43 billion in 2013 to a low of \$24,9 billion in 2016 before rising in 2017 and 2018 as the economy recovered from recession. Compared to 2013, the importation of frozen beef in 2019 is less than one-half its previous value; pork, poultry, and cheese are almost two-thirds lower; and seafood is down by one-third. For fruits and vegetables, the value of apple imports is about

one-half the 2013 level and tomatoes are less than one-half, while citrus fruits, bananas, and soybean imports have increased (Wegren, 2019).

Figure 10 displays the total value of Russia's food imports and food exports from 2008 through 2018 in US dollars. As can be observed, Russia's food imports declined steadily from 2013 till 2016 and then started to increase again. The total downfall in the period 2013-2016 made 57 percent, while an increase was no less than 16 percent. At the same time, Russia's food exports, after slight decline in 2015, increased steady from 2016 till 2018.

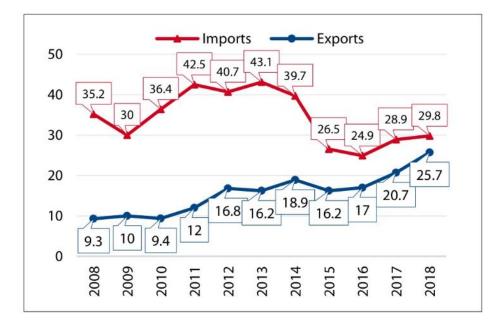


FIGURE 10. Russia's Food Imports and Exports in USD bn, 2008–2018 (Wegren, 2019).

2. Russia's trade partners for agricultural and seafood pro- ducts have changed. Russia has increased its food trade with Belarus, Turkey, Brazil, Ecuador, South Africa, Chile and Argentina, countries that are not subject to the food embargo. Since the food embargo, China has become Russia's largest food trading partner. In 2018, food trade with China (both imports and exports) reached a record \$5 billion. Russia is also expanding agricultural trade with other Asian nations, targeting in particular Japan and Vietnam (Wegren, 2019).

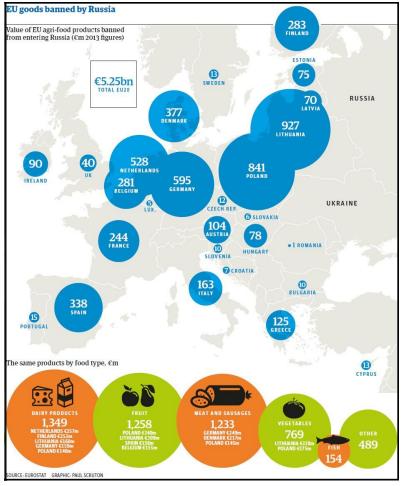
4 COUNTRY- AND SECTORS-LEVEL IMPACTS OF SANCTIONS

In this section, it is analysed the impact of the Russian food embargo on Finnish and Russian trade patterns. However, in the beginning it is necessary briefly to highlight the general condition of the EU countries economy after the imposed countersanctions.

It was endorsed that the embargo-induced loss in EU28 exports was totalling more €125 million per month. Nonetheless, it is emphasized also that only 45 percent of the reduction of banned products in EU exports to Russia was due to the ban. As the different studies showed, EU member states were unevenly affected by the ban (Cheptea & Gaigné, 2018). It is quite expectable that the economic effects on individual EU countries vary according to their exposure to the Russian market. Furthermore, with the Baltics and several East European EU member states were affected more than others (Havlik, 2019).

The countries which were most affected by the decrease in exports to the Russian Federation in 2014-2017 (Picture 3) were named Lithuania (5 percent drop; vegetables, fruit, dairy products), Estonia (4,3 percent; dairy products), Finland (4 percent; dairy products), and Latvia (2,5 percent; fruit and vegetables, dairy products) (Kraatz, 2014). At the time the sanctions were introduced, it was the five European sectors which were most exposed to the Russian market. The textiles, pharmaceuticals, electrical machinery, machinery and transport equipment were sectors where goods exports to Russia accounted for more than 3 percent of the total in 2013. Machinery, transport equipment and pharmaceuticals are still important in Austrian and German exports to Russia. Meanwhile, foodstuffs such as meat, milk, fish, fruits and vegetables from the West banned by the Russian embargo since August 2014 did not play a major role in EU exports (except for the Baltic states, Finland, Germany, and Poland) (Havlik, 2019).

However, three sectors potentially worst affected with regards to the proportion of exports in 2013 became: fruit and vegetables (29 percent of European exports used to go to Russia); cheeses (33 percent); and butter (28 percent) (Kraatz, 2014). For this reason, part of these exports promptly was diverted to other markets or redirected to Russia via Belarus or Serbia (Havlik, 2019, Eurostat, n.d.).



PICTURE 3. EU goods banned by Russia (Kraatz, 2014).

Despite Russia was the destination for 10 percent of exports of agricultural and food products from the European Union in 2013, the items impacted by the embargo accounted for only 4 percent of the overall exports of EU to Russia's market. According to Eurostat data, because of the introduction of the embargo, the value of these exports fell from €10,4 billion in 2013 to €4,5 billion in 2015. By 2018, the decline in the value of agricultural and food exports to Russia compared with 2013 (€5,1 billion) was more than offset by the increase in the value of exports to other markets (€17,3 billion) and reached the €5,3 billion (Rutkowski, 2020; Eurostat, n.d.). As a result of the bans, EU diary exports (30 000 tons of butter, 257 000 tons of cheese, 21 000 tons of SMP and 26 000 tons of whey powder on an annual basis) with a total annual value of €1,4 billion were suspended (Cornall, 2019).

And one sector adversely affected by the sanctions, perhaps indirectly, was services, especially tourism, as the number of Russian tourists dropped substantially after 2014. This drop can be largely attributed to the devaluation of the Russian ruble in 2014-2015 (and it made foreign trips for Russians more expensive).

Russian economy returned to growth and the rouble appreciated, and Russian imports revitalized in 2017 (+22 percent against 2016) which included higher imports from the EU, without any substantial change in sanctions policies during that year. So, Russia's import recovery although weaker continued in 2018. At the same time, economic growth reached a significantly high level (+2,3 percent) unmatched in the previous five years (Havlik, 2019).

4.1 The impact of Russia's import embargo on exports from Finland

During the most prosperous period, Finnish food exports to Russia amounted around 26-28 percent with the value of \in 440 million in total. In 2016, the number has fallen to 8 percent which crashed down to \in 117 million. At the same time, exports to other countries have been increased, particularly in Sweden, the Netherlands and France (Niemi, 2017).

According to the Research Institute of the Finnish Economy (Berg-Andersson & Kotilainen, 2016) estimates, Finland's exports to Russia fell by 6 percent in 2013, by 13 percent in 2014 and by a further 32 percent in 2015 (Table 6, Appendix 5). In comparison with 2013, Russia's share in Finnish exports was around 10 percent, while its rate in 2015 were less than 6 percent. The significant point, which Berg-Andersson and Kotilainen (2016) argue in their research, is that the consequence of sanctions has been clearly smaller for this decline. The main reason in their view for weakening of the purchasing power of Russian companies and households has been the collapse in oil prices since 2014 and as a result weakening of ruble (Berg-Andersson & Kotilainen, 2016). However, in my point of view, the Western sanctions were also be able to serve as a catalyst which have led to the collapse in oil prices, and to the further decline in Russian exports since imposition of sanctions.

The mentioned research revealed that sanctions greatly influenced the distribution of food industry exports in Finland. Before the conflict in Ukraine, Russia accounted for about a third of the Finnish food industry's exports. In 2015, this share was only 8,6 percent. The direct effects of Russia's countersanctions on the Finnish economy was roughly estimated by relating the decline in exports to total output. Food exports to sanctions accounted for 5,3 percent of exports of goods to Russia in 2013. The share of total exports of goods was about 0,5 percent. However, food exports would also have fallen because of the fall in oil prices alone and the devaluation of the ruble. The direct net effect of the sanctions was therefore likely less than 0,1 percent. This effect might be reduced over time by foods exporting at subsidized and reduced prices to Asia, for instance. However, the degree of export processing in this scenario is declining (Berg-Andersson & Kotilainen, 2016).

Finland's exports of goods to Russia decreased by 44 percent between 2012 and 2015. The various sanctions of EU sanctions on Russian exports effected changes in the export of goods from Finland to Russia as well as the sanctions imposed by Russia in Finland. Exports of Russian sanctioned commodity groups fell from around €270 million in 2011-2013 to just under €3 million in 2015. Exports of EU sanctioned commodity groups fell from around €30 million in 2011-2013 to €14 million in 2015, roughly halving. This decline was only slightly more than the contraction of all Finnish exports to Russia (Berg-Andersson & Kotilainen, 2016; Finnish Customs, 2013-2019).

Helwig, Jokela & Portela (2020) analysed data for the whole world and revealed that there were several categories import-restricted foodstuffs which were mainly exported to Russia during 2001-2018. The top five groups included the following product names:

- Frozen meat of bovine animals' product group accounted for 11,3 percent of all countersanction exports,
- Meat of swine had a 9,6 percent share,
- Citrus fruit had a 7,4 percent share,
- Cheese and curd with a share of 7,2 percent,
- Meat and edible offal of fowls with a share of 5,9 percent (Helwig, Jokela & Portela, 2020).

From this list of numerous import-restricted foodstuffs titles, food imports from Finland dominated two main product groups, Cheese and curd (41,3 percent) and Butter (26,6 percent). Other important groups were Meat of swine (8,5 percent), Buttermilk, curdled milk and cream, yoghurt and kefir (4,8 percent) and Milk and cream, not concentrated (4,4 percent) (Helwig, Jokela & Portela, 2020).

Here one needs to note that the dairy industry has continued to be the only industry in the Finnish food sector with a positive trade balance throughout Finland's EU membership. However, in 2016 the trade balance was barely positive, following a dive from €162 million in 2014 to €13 million in 2016. As far as the issue of food imports is concerned, despite Russia's ban, dairy products were still the most significant single product group in Finnish food exports. However, their drop in just three years have gone down from €533 million to €357 million, and the sector's share of total exports has declined from 33 percent to 25 percent (Niemi, 2017).

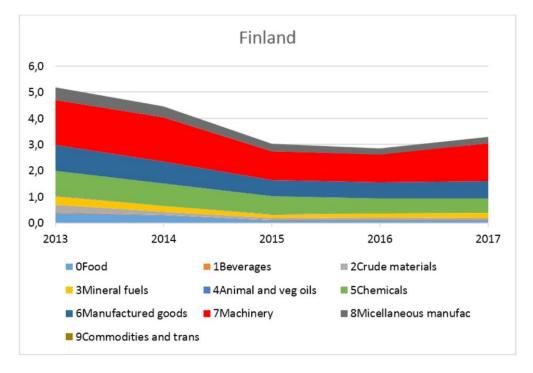


FIGURE 11. Finland's export to Russia, billion € (Oxenstierna, 2018).

According to the research of Dr Susanne Oxenstierna (2018), a Deputy Research Director at the Swedish Defence Research Agency, Finland lost 36 percent of its export to Russia and its share in total EU export to Russia fell to 4 percent between 2013 and 2017. Figure 11 shows more detailed how much Finland has lost across the main sectors of exports in value terms. The Finland's export to Russia of the food and live animals sector more than halved from 7,6 percent in 2013 to 3,2 percent in 2017. In this period, the value of food export fell by 73 percent, or $\in 0,3$ billion. One of Finland's biggest export product, machinery, dropped by 16 percent. The export of other demanded sectors also fell significantly, for example, chemicals and manufactured goods declined by 40 and 32 percent, respectively.

In conclusion to this section, it needs to be remarked that, as of today, Finland's food exports start to recover from the decline caused by Russia's sanctions. According to the report of the Finnish Customs, although the drop of imports in 2019 was considerably smaller than the previous years, meanwhile increase in exports to Russia still is less compering with pre-embargo period. Between 2013 and 2016, Finland's food exports to Russia have decreased by 72 percent, dairy products being the most affected category (Niemi, 2017; Finnish Customs, 2013; Finnish Customs, 2019). In the report of the Finnish Customs of 2019, the mentioned category is even not presented what could mean the very small share of this sector in Finland's import and export to Russia in 2019. The information from the report of the Finnish Customs for 2013 for comparing with 2019 is presented more detailed in Table 6 (Appendix 5) and Table 7 (Appendix 6).

4.2 Review of sectors-level impacts

On the basis of the above analysis of outlined results regarding the impacts of the sanctions regime on economy and subsequent world trade diversion to and from the European Union, here it needs to indicate one significant feature. Sanctions were not the only variable which been changed over time. Other factors, most importantly the slump in international oil price, ruble devaluation, and the decrease in the incomes of the Russian population, damaged trade relations between Russia and Finland as well. This is a major obstacle for the measuring and interpretation of the received outcomes, especially at the industries or firms' level.

Adding to the difficulties of measuring the welfare effects of the sanctions, it should be taken into account that EU exports to Russia declined not only for commodity groups directly affected by the sanctions. The export of the most other

non-sanctioned goods fell as well. Thus, the general worsening of economic relationships should be considered as a corollary of all sanction measures additionally to political tensions.

Unfortunately, the effects of sanctions on the industries or firms' level has been looked at only by a small academic literature in the field of international trade. It was commented in these studies that some companies who was doing business with Russia had encountered serious challenges or even disappear in the face of sanctions that hinder bilateral trade. In addressing this issue, three different and equally important points were discussed:

- if firms started to sell less on affected markets or suspended altogether,
- the mechanisms that drive these effects,
- the opportunities for affected firms to shift their sales to other markets (Fritz et al., 2017).

Finnish business in Russia

In Finland, it tends to view the current situation on the Russian market as bleak. However, many Finnish companies continue to do business in Russia in success.

According to Head of International Affairs Finnish Entrepreneurs (Suomen Yrittäjät), Thomas Palmgren, there are about 400 Finnish companies operating in Russia, most of them in St. Petersburg and the Northwest region. In his blog, Palmgren (2019) claims that, in spite of the downturn, the Russian economy is still in a good state, with economic growth at around 1,5 percent as of 2019. As the sanctions apply to only 5 percent of Finland's exports to Russia, the companies who were operating and are operating in Russia for a long time know that the business environment in Russia is unstable throughout long time. Despite of tightening internal requirements and restricting imports, Finnish companies are trying to adapt to the changing situation and are likely to stay on the Russian market (Palmgren, 2019).

Although for today many European and American companies have left Russia, Finnish business continue to make investment there. Ilari Hyyrynen, a former Russian Country Director of Tikkurila Oyj, pointed out that the investment has been aimed mostly at increasing capacity, specifically in the professional and industrial segments (Pakkanen, 2017).

The companies among the most famous on the Russian market nowadays can be indicated as following:

- Nokian Tyres (tyres),
- YIT (construction sector),
- Neste (fuels),
- Fazer, Atria, Valio (food industry),
- Prisma (retail),
- Fortum (energy sector), and
- Stora Enso, UPM and Metsä Group (forest industry and biomass).

In fact, after the difficult period linked with the austerity phase of adaptability to business activity under the sanctions regime, Finnish companies are still willing to work in Russia and continue to invest in the Russian business. For instance, it was told in October 2017 that Nokian Tyres built a new production line in Vsevolozhsk in Leningrad Region increasing so the annual production capacity of its factory from 15 million tyres to 17 million (Pakkanen, 2017).

According to the company's press release, Tikkurila has a plan from 2017 to build a new plant for producing solvent near St. Petersburg. The value of the company's factory investment is about €2,0 million. Most of the paints sold in Russia are of the local production industry. In total, Tikkurila has four paint factories in Russia, three of which operate in St. Petersburg and the fourth plant in Stary Oskol produces paints for the markets of southern Russia and Central Asia (Terhemaa, 2019).

According to a press release sent by Prisma to the Finnish-Russian Chamber of Commerce, S Group plans to double the number of Prisms in Russia in five years. There are seventeen new Prisma stores in St. Petersburg. One new store in the center of St. Petersburg was opened by Prisma very recently, in September 2020 (Saarto, 2020).

The Russian government's ban on food exports from abroad, which came in force in 2014, had a significant impact on one of Finland's largest companies, Valio. In fact, Valio lost the big share of exports to Russia in the amount of €380 million rapidly when Russian countersanctions almost stopped the export of dairy products produced in Finland at the border. Currently, Valio exports from Finland only lactose-free dairy products, ice cream and infant formula, and most of production sold in Russia are produced locally. Over time, Valio compensated for the loss from sanctions by increasing local production in Russia. They invested in new production lines at the plant in Moscow and found new partners (Valio, 2020).

Atria is on the Russian market from 2005 when the Group purchased two factories: a salami factory in St. Petersburg and a Sinjanivo factory in the western part of St. Petersburg. While Atria Finland's operating profit for the full year 2018 remained more or less compering with the previous year at €36,7 million, operating result for Atria Sweden and Atria Russia turned into losses (was €7,1 million and €4 million respectively). The result was reduced due to the increase in the cost of raw meat in the countries and the weakening of exchange rates against the euro. If Atria decides to leave Russia, it will join other Finnish companies quitted from the Russian market such as Kesko, Stockmann (Atria, 2020; Saarto, 2019).

However, already in the second quarter 2019, the operating situation in Russia gave positive motions. In general, Atria Russia's January-December 2019 net sales were €73,8 million, operating loss declined, and the production results have improved over the previous year (Atria, 2020).

4.3 Conclusion: Adjustment to the new external trade conditions

Six years ago, in connection with the destabilization of the situation in Ukraine, the United States and the EU began to apply large-scale anti-Russian sanctions. The most painful bans were the lending to Russian enterprises and restrictions on imports and exports. All this, along with the fall in oil prices, hurt hard the economy and led to the collapse of the ruble against world currencies almost two times. Since then, the pressure of sanctions only intensifies, and the reasons for new punishments have become more diverse. On October 15 in Brussels, the European Union imposed a new sanction set on Russia in connection with the poisoning of A. Navalny were announced. Restrictive measures include an asset freeze and travel bans for several possibly implicated Russian high-ranking government official.

Today it can be implied that Russia has gradually adapted to the sanctions regime and even benefited from some: the process of import substitution has accelerated. In the current situation, it is impossible to imagine that the Kremlin will return Crimea. Because of this, it would seem that sanctions against Russia will remain forever. Intentions that sanctions would serve for the downfall of the political regime or reduce administrative pressure on business become unfeasible.

More recently, several trends have emerged in the Russian economy which are directly or indirectly related to living under sanctions. At least, the government believes that Russia is capable of successfully developing in such conditions and is inciting the people to be prepared for a long life under sanctions.

As the global experience of sanctions shows, in conditions of a long embargo, the ruling party shift all the burdens on the population as in the case of the sender country, so with the target country. Hence, the world experience's main conclusion can be defined as that never before in history had a state which would benefit from sanctions.

5 SUMMARY OF FINDINGS AND CONCLUSION

The summer of 2020 was the sixth anniversary of Russian countersanctions on the imports of agricultural and food products from the European Union, United States, and some other countries. After the introduction of the EU sanctions and the countervailing Russian sanctions in early August 2014, a discussion about the rationality of the economic costs for European countries and for Russia generated immediately. Mainly, the discussion was focused on the negative consequences of disrupting trade. In Russia and in some Western countries, many analyses and statements were published on this subject which stated that EU countries are bearing a high burden of the sanctions disproportionately comparing with Russia.

Economists and researchers state that restrictions on exports of certain commodities as well as financial restrictions undeniably led to additional barriers to trade and investment and consequently reduced production, value added and employment of all trading partners. However, due to existence other factors, most importantly the slump in international oil price after 2013, it is more difficult to determine the specific contribution of the sanctions to the observed decline in EU trade with Russia. Disentangling all different factors influencing trade flows between Russia and other Western countries thus posed the main challenge for researchers attempting to quantify the impact of sanction-induced economic costs (Fritz et al., 2017).

Despite the empirical evidence that European and Russian companies alike managed to partly divert trade flows to other international markets due to the sanctions, such manoeuvres have been not able to compensate for losses of EU exports to Russia and thus to mitigate the negative impacts. Furthermore, it was admitted that EU exports to Russia declined not only for commodity groups directly affected by the sanctions, but for most other non-sanctioned goods as well. As most other cost assessment attempts, this indirect economic impact is the main concern of the topic under review (Fritz et al., 2017).

One of the major consequences of the effects of the sanctions, firms in all impacted economies had to adapt to changed business conditions in their quest to save profits. Thus, deterioration of business opportunities in one market and disruptions of bilateral trade relationships led to trade diversion effects which pushed companies to seek for alternative destination markets in other countries to compensate for their losses. However, this recovered at least some of the exports lost after the sanctions entered into force. But by attempting to reduce negative consequences of the sanctions, some firms looked for opportunities to circumvent the introduced legal trade restrictions that might reduce economic costs but disregard the intentions of policy makers (Fritz et al., 2017).

As all things considered, it can be summarized several principal findings of this research:

I. In the last six years, Finnish exports to Russia have dropped significantly.

As a consequence of the sanctions, but also due to other external factors weakened the Russian economy, worldwide exports of sanctioned products to Russia declined sharply in 2015 from \in 1,6 billion in the previous year to \in 0,7 billion which was in line with the level of 2005 (Berg-Andersson, 2019). EU exports to Russia declined by 20,7 percent annually between 2013 and 2016, while they had increased by 20,0 percent per year between 2009 and 2012 (Fritz et al., 2017).

During the years 2001–2017, Finland exported banned products to Russia at a value of $\in 0,57$ billion, which accounts for 2 percent of world exports of goods to Russia. In 2010, Finland delivered larger than usually, so the share of Finnish exports subject to EU sanctions was higher (6,6 percent) at that time. In 2016, Finland's share fell sharply because of trade sanctions and was 0,19 percent. Finland's percentage share before the sanctions has been substantially smaller than the average share of the whole world. After sanctions have been imposed, its share has fallen less than in other countries which could imply that Finland has thus been suffered less from specific trade restrictions than the rest of the world on average (Berg-Andersson, 2019). The decline in exports stopped in 2016 and recovered in 2017 (Table 6; Appendix 5).

II. Trade diversion has reduced the economic costs of the sanctions only to a very limited extent.

Geographical location close to Russia or historical long economic relationships to Russia are critical from the point of country-specific impacts suffered by countersanctions. The shares of Russia in total exports of the Baltic countries, but also of Poland, the Czech Republic, Austria and Finland declined considerably and much more than for the EU as a whole. The analysis (Fritz et al., 2017) based on aggregate numbers showed that losses in EU exports to Russia may have been compensated by rechannelling trade flows to other destinations, but only marginally, and firms were unlikely to recover their sales in the short run. In addition, the analysis (Fritz et al., 2017) on agri-food trade flows confirmed that the EU has managed to partly redirect agri-food exports to alternative third markets, two of them being the African continent and China. They grew by 2 percent in 2016 as compared to the previous year.

With a share around 26-28 percent of all Finnish food exports, Russia has been by far the most important market for Finnish food exports until 2013. According to Finnish Customs, Russia's share of Finland's exports of goods was 10 percent in 2012, but it was only 5,7 percent in 2017 and only 5,2 percent in 2018. The last time exports were so low was in 2001. Exports to other countries have been increased, particularly for example, China +54 percent, Germany +48 percent, Japan +23 percent, Denmark +17 percent (Finnish Customs, 2019).

III. Banned products might have been rerouted to Russia through certain transit countries

According to Fritz et al. (2017), there are some empirical suggestions showed that banned products may have been rerouted to Russia through certain transit countries, in particular Belarus, Serbia and Macedonia, in the beginning after the sanctions been implemented. The exports from EU countries to these three countries increased at the same time when export flows between Belarus, Serbia, Macedonia and Russia intensified as well. Thus, agri-food exports from Serbia and Belarus to Russia increased by 13 percent between August 2014 and December 2014 as compared to the same period a year before. However, this legal diversion of trade flows was immediately prevented by the Russian authorities

who blocked suspected goods through third countries at the Russian border (Fritz et al., 2017).

In addition, in the context of the collateral damage that sanctions have on the domestic economy, it has been particularly evident with time after the sanctions been implemented, that Russia is getting ready for a prolonged conflict with the West. In that connection, such conditions contributed turn Russia towards the authoritarian regime in China. Despite the setbacks in the energy cooperation, Sino-Russian relations continue to improve. As Figure 12 shows, Russia's exports to China decreased by 24,3 percent between 2014 and 2015 due to falling oil prices and the struggling Russian economy and increased again, eventually reaching \$56 billion in 2019 (Nabil, 2020).

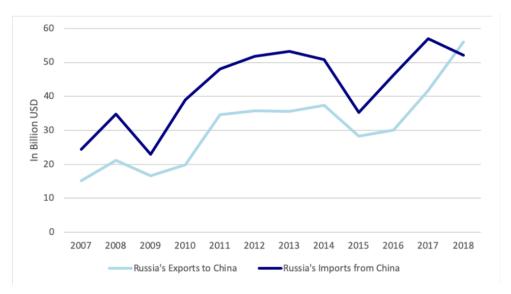


FIGURE 12. Russia-China Bilateral Trade (in Goods), 2007-2018 (Nabil, 2020; UN COMTRADE, n.d.).

IV. The likelihood that sanctions might bite is decreasing.

From the western economists' point of view, the main purpose of the sanctions against Russia was to take a political stance regarding annexation of Crimea and the Russian-Ukrainian conflict. But, as the results of the sexennial period of imposed sanctions, it can be concluded that they damaged Russia's long-term economic prospects, but they did not achieve the intended aims, namely the change in Russian policies. Additionally, given the inverse relationship established between the duration of sanctions and their effectiveness, the likelihood that they

will bite Russia's economy more strongly in the future is decreasing (Smeets, 2018).

Although some experts argue that sanctions have been effective since they might have prevented Russia from further incursions in Ukraine, sanctions inevitably had an economic disadvantage for other countries worldwide. Although the primarily purpose of EU was to restrict the export of certain products to Russia for political reasons, companies in other countries that manufacture these products apparently suffered. However, the companies that had trade activities the most to Russia were the biggest suffered. This quite impasse which showed that replacing lost sales in Russian market with new markets may take time (Berg-Andersson, 2019). In fact, EU exports to Russia declined not only for commodity groups directly affected by the sanctions, but for most other non-sanctioned goods as well (Fritz et al., 2017).

Regarding the decision of Russian authority on the introduction of the embargo in 2014, statistical data confirm that, despite the Russian embargo was supposed to serve as a tool to support domestic production, the country has not really been ready for a rapid substitution of the banned products from another sources. Six year after countersanctions resulted that only few sectors of economy demonstrated a positive effect of import substitution policies, when it was not enough for most of industries to revert the price dynamics. As a result, the basic costs of countersanctions and the implementation of the anti-import program was very costly for consumers, what was manifested by simultaneous changes in two areas: a decline in consumption and an increase in prices. However, the consequences linked to the functioning of the embargo unlikely do not change the stance of Russian government. Currently, one can be stated that both sides, Russia and Western countries, are ready for a prolonged conflict disregarding the collateral damage that sanctions have on the national economies.

5.1 Practical Issues

Sanctions implementation in foreign policy and their complexity has increased significantly in recent years, posing a set of practical challenges for companies operating internationally. In this challenging time, companies and risk managers

are encouraged to examine all sanction trends and determine how to best solve the risks they create. Some general practical recommendations of compliance with sanctions measures for different companies are presented in this part.

They may include (based on Kozlov, 2020):

For achieving full compliance to sanction regime, one needs systematically to conduct comprehensive close business partners, new customers and vendors against international sanction lists. It might be worth checking the end-user of your products, third parties and end destination especially for all individual orders in high risk areas (e.g. defense industry, oil and gas).

Since sanctions change over time, new companies are being added in the restricted lists and delisted on a monthly and sometimes weekly basis, ongoing trends of sanctions monitoring are recommended.

Definitely, it would be appropriate to include sanctions clauses into international trade contracts enabling contract termination in case of changes to sanctions regimes. Or another option can be to include clauses allowing you to audit third parties to understand where they move your products.

More detailed, Finnish companies are advised to familiarize themselves with the recommendations for exporters given on the site of the Ministry for Foreign Affairs of Finland (Ministry for Foreign Affairs, 2020).

5.2 Some prospects of Western sanctions on Russia

As the Russia sanctions risk probably becoming a permanent component in Western-Russia relations, the EU, US and other countries have several potential option values for future development of this situation. Maarten Smeets (PhD) (2018), a head of section at the Institute for Training and technical Cooperation of the WTO and a senior visiting fellow at Institute Clingendael in the Netherlands, listed they as the five options:

- 1. Western countries will leave sanctions in place, in the expectation that their effect will grow over time. In such way, they give a permanent political signal that annexing territory is unactable.
- 2. They will cancel sanctions and return to trade activity as usual.
- 3. They can maintain the objectives but adjust the sanctions.
- 4. They can maintain the sanctions but adjust the objectives.
- 5. They will adjust both sanctions and objectives (Smeets, 2018).

It will be known over time, which option will be chosen by the EU, US and other countries. But the economic analysis of many economists showed that keeping sanctions in place with the expectation that they will work in the long term is not realistic and not supported by the evidence.

In concluding, there is a general agreement that economic sanctions are always preferable then armed hostilities. However, these measures are not one-sided: *those taking the sanctions may end up shooting themselves in the foot* (Smeets, 2018).

5.3 Proposition for further research

While completing my thesis on the topic of the sanctions regime, I should like to emphasize here that this research subject is extensive enough. Recognizing that this topic was difficult and challenging, however, many related issues were left out of scope of this work due to their volume. For this reason, the limitations of this research may become an option and direction for other authors.

It can be interesting for the future researchers of the similar topic to evaluate embargo impact more precisely that have affected Finnish export volume. Moreover, in future research, different export sectors might be evaluated separately, or analysis of the effect on each industry could be conducted. Another option for further research would be to identify the specific contribution of the sanctions to the observed decline in EU trade with Russia after 2014 and potentially in the collapse in international oil price.

The detailed review of economic growth dynamics revealed that the Russian economy began to decline almost immediately after the sanctions were imposed in 2014. But the main challenge for researchers poses to disentangle all different factors influenced trade flows between Russia and other countries and determination what role exactly the sanctions or countersanctions played in this decline. To quantify the impact of sanction-induced economic costs could be even more difficult to do.

All in all, looking back at the last six years, one can see that EU sanctions and subsequent Russian counter sanctions have caused a significant declining in trade between Russia and EU, although economists estimated that Finland had been less severely affected by the anti-Russian sanctions.

Currently, the EU-Russia political dialogue and intergovernmental interactions are facing challenging times. The economic sanctions against Russia introduced in 2014 are extended periodically, and a reversal of the sanctions regime is not expected in the foreseeable future. Additionally, in the face of the continuing COVID-19, the impact of such pressure on both sides is difficult to predict.

Atria Suomi Oy. (2020). Atria Oyj tilinpäätöstiedote 1.1. – 31.12.2019. Retrieved from https://www.atria.fi

Berg-Andersson, B. (2019). EU:n Venäjän vastaisten kauppapakotteiden vaikutus länsimaiden vientiin / The Impact of EU's Trade Sanctions Against Russia on Western Countries Exports. ETLA Raportti No 95, 11.11.2019. Retrieved from https://pub.etla.fi/ETLA-Raportit-Reports-95.pdf

Berg-Andersson, B. and Kotilainen, M. (2016) Pakotteiden vaikutus Suomen vientiin Venäjälle / The Effect of Sanctions on Finnish Exports to Russia. ETLA Muistio No 45. Retrieved from http://pub.etla.fi/ETLA-Muistio-Brief-45.pdf"

Biersteker, T. and van Bergeijk, P.A.G. (2015). On target? EU sanctions as security policy tools. Report 25, September 2015. Retrieved from http://www.iss.europa.eu

Bonarriva, J., Koscielski, M. and Wilson, E. (2009). Export Controls: an Overview of Their Use, Economic Effects, and Treatment in the Global Trading System. Office of Industries Working Paper, 23. Retrieved from www.usitc.gov

Caruso, R. (2003). The Impact of International Economic Sanctions on Trade: An empirical Analysis. The European Peace Science Conference, Amsterdam. Retrieved from www.researchgate.net

Cheptea, A. and Gaigné, C. (2018). Russian food embargo and the lost trade. European Review of Agricultural Economics, Volume 47, Issue 2, April 2020, Pages 684–718. Retrieved from https://academic.oup.com/

Cornall, J. (2019). Could EU dairy exports to Russia resume? Retrieved from https://www.dairyreporter.com/Article/2019/11/26/Could-EU-dairy-exports-to-Russia-resume

Crozet, M. and Hinz, J. (2019). Friendly Fire: The Trade Impact of the Russia Sanctions and Counter-Sanctions. Retrieved from https://matthieucrozet.weebly.com/uploads/6/0/2/7/60271695/sanctionsep.pdf

Crozet, M. and Hinz, J. (2016). Collateral Damage: The impact of the Russia sanctions on sanctioning countries' exports. Retrieved from www.cepii.fr

Davis, L. and Engerman, S. (2003). History Lessons. Sanctions: Neither War nor Peace. Journal of Economic Perspectives, 17(2), pp.187-197. Retrieved from www.aeaweb.org

Eaton, J. and Engers, M. (1992). Sanctions. Journal of Political Economy, October 1992, 100(5), pp. 899–928. Retrieved from https://www.jstor.org/stable/2138628

EDPS / European Data Protection Supervisor. (n. d.). Asset freezing. Retrieved from https://edps.europa.eu

EEAS / European External Action Service. (2016) European Union sanctions. Retrieved from https://eeas.europa.eu/headquarters/headquartershomepage/423/sanctions-policy_en

Escribà-Folch, A. (2010). Economic Sanctions and the Duration of Civil Conflicts. Journal of Peace Research 47(2) 129–141. Retrieved from https://journals.sagepub.com/doi/10.1177/0022343309356489

European Commission. (2020a). MEMO: Brussels, 3 September 2014. Questions & Answers on the potential impact of the Russian measures. Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/MEMO_14_517

European Commission. (2020b). Russian import ban on EU products. Retrieved from https://ec.europa.eu

European Council / Council of the European Union. (2019). Infographic - EU sanctions against Russia over Ukraine. Retrieved from https://www.consilium.europa.eu/en/infographics/eu-sanctions-against-russia-over-ukraine/

European Council / Council of the European Union. (2020a). EU restrictive measures in response to the crisis in Ukraine. Retrieved from https://www.consilium.europa.eu/en/policies/sanctions/ukraine-crisis/

European Council / Council of the European Union. (2020b). Timeline - EU restrictive measures in response to the crisis in Ukraine. Retrieved from https://www.consilium.europa.eu/en/policies/sanctions/ukraine-crisis/history-ukraine-crisis/

Eurostat: Statistics Explained. (2020. Russia-EU – international trade in goods statistics. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/

Farmer, R. D. (2000). Costs of Economic Sanctions to the Sender. Blackwell Publishers Ltd. Retrieved from www.researchgate.net

Finnish Customs. (2013). Foreign Trade 2013: Finnish Trade in Figures. Retrieved from www.tulli.fi

Finnish Customs. (2019). International trade 2019: Finnish Trade in Figures. Retrieved from www.tulli.fi

Fritz, O., Christe, E., Sinabell, F. and Hinz, J. (2017). Russia's and the EU's sanctions: economic and trade effects, compliance and the way forward. Directorate-general for external policies, The European Parliament's online. Retrieved from http://www.europarl.europa.eu

Gould-Davies, N. (2018). Economic effects and political impacts: Assessing Western sanctions on Russia. BOFIT Policy Brief 8/2018. Retrieved from https://www.researchgate.net"

Gould-Davies, N. (2020). Russia, the West and Sanctions. Survival: Global Politics and Strategy February - March 2020 /February 2020. Volume 62, 7-28. Retrieved from https://www.iiss.org/publications/survival/2020/survival-global-politics-and-strategy-februarymarch-2020/621-02-goulddavies

Guidance: financial sanctions. (2020). Office of Financial Sanction Implementation. Retrieved from www.gov.uk

Havlik, P. (2019). EU-Russia sanctions exchange has had important economic and political consequences. The Vienna Institute for International Economic Studies, 20 February 2019. Retrieved from https://wiiw.ac.at/eu-russia-sanctionsexchange-has-had-important-economic-and-political-consequences-n-365.html

Helwig, N., Jokela, J. and Portela, C. (eds.). (2020). Sharpening EU sanctions policy for a geopolitical era. Publications of the Government's analysis, assessment and research activities 2020:31. Prime Minister's Office Helsinki 2020. Retrieved from https://julkaisut.valtioneuvosto.fi

Hufbauer, G. C., J. J. Schott, and K. A. Elliott (2007). Economic Sanctions Reconsidered, 3rd ed. Peterson Institute for International Economics. Retrieved from https://ebookcentral.proquest.com/

Kangasniemi, J. (2020). Ulkomaankauppa. Elinkeinoelämän keskusliitto. Retrieved from https://ek.fi/mita-teemme/talous/perustietoja-suomentaloudesta/ulkomaankauppa/

Knorr, K.E. (1983). Power, Strategy and Security: A World Politics Reader. Princeton University press. Retrieved from https://www.book.google.fi

Kozlov, O. (2020). Sanctions against Russia: Practical Issues for International Business. Society of Corporate Compliance and Ethics. Retrieved from https://complianceandethics.org/

Korhonen, I. (2019). Sanctions and counter-sanctions – What are their economic effects in Russia and elsewhere? Bank of Finland, BOFIT; Institute for Economies in Transition. 2019, No. 2. Retrieved from www.bofit.fi/en

Kraatz, S. (2014) The Russian Embargo: Impact on the Economic and Employment Situation in the EU. Policy Department A: Economy and Scientific Policy/ European Parliament.

Liuhto, K. and Itälinna, T. (2019). Adaptation of Finland food exporter to Russia's food import restriction. Book: Russian trade policy: achievements, Challenges and prospects. Retrieved from http://book.google.fi

Masters, J. (2019) What Are Economic Sanctions? Retrieved from https://www.cfr.org/backgrounder/what-are-economic-sanctions

Matthews, A. (2014). Russian food sanctions against the EU. Retrieved from http://capreform.eu/russian-food-sanctions-against-the-eu/

Ministry for Foreign Affairs. (2020). Sanctions checklist for exporters. Retrieved from https://um.fi/sanctions-checklist-for-exporters

Moh, C. (2010). The Jackson-Vanik Amendment and U.S.-Russian Relations. Retrieved from https://www.wilsoncenter.org/event/the-jackson-vanikamendment-and-us-russian-relations

Nabil, R. (2020). Evaluating Russia's Pivot to Asia. Yale Journal of International Affairs. Jun 10, 2020. Retrieved from http://yalejournal.org/article_post/

Niemi, J. (2017). Finnish food exports to Russia down more than 70 percent. Natural Resources Institute Finland (Luke). Retrieved from https://www.luke.fi/en/news/finnish-food-exports-russia-70-percent/

Ollus, S.-E. and Simola, H. (2006). Russia in the Finnish Economy. Sitra Reports 66, Helsinki. Retrieved from http://www.sitra.fi

Oxenstierna, S. (2018). The sanctions against Russia. Are there winners and losers around the Baltic Sea? Some recommendations for the policy-makers. Centrum Balticum Foundation, BSR Policy Briefing series 10/2018. Retrieved from www.centrumbalticum.org

Pakkanen, S. (2017). Suomalaiset yritykset investoivat Venäjälle pakotteista huolimatta – tai niiden vuoksi. https://www.rakennuslehti.fi/2017/09/suomalaiset-yritykset-investoivat-venajalle-pakotteista-huolimatta-tai-niiden-vuoksi/

Palmgren, T. (2019, June 19). Venäjällä hyviä mahdollisuuksia suomalaisyrityksille [Blog post]. Retrieved from https://www.yrittajat.fi/blogit

Portela, C. (2010). European Union Sanctions and Foreign Policy : When and Why Do They Work? Taylor & Francis Group. Retrieved from http://ebookcentral.proquest.com/lib/tampere/detail.action?docID=995643.

Reed Smith: Sanctions. (2014). Overview of the U.S. and EU Sanctions on Russia: Client Alert 14-255. October 2014. Retrieved from http://www.reedsmith.com

Rutkowski, J. (2020). Five years of Russian sanctions — who are the winners and the losers?. Retrieved from https://www.obserwatorfinansowy.pl/in-english/five-years-of-russian-sanctions-who-are-the-winners-and-the-losers/

Saarto, P. (2019). Atria: raaka-ainekustannukset kasvoivat loppuvuonna Venäjällä kolmanneksen edellisvuodesta. https://www.svkk.fi/uutishuone

Saarto, P. (2020). Prisma avasi uuden myymälän Pietarin keskustassa. https://www.svkk.fi/uutishuone/prisma-avasi-uuden-myymalan-pietarinkeskustassa/ Smeets, M. (2018). Can economic sanctions be effective? WTO: Economic Research and Statistics Division. Staff Working Paper ERSD-2018-03. 15 March 2018. Retrieved from

Terhemaa, A. (2019). Tikkurila yhdisti mission ja vision. https://www.kauppalehti.fi/uutiset/tikkurila-selvittaa-vaihtoehtoja-venajantehdasinvestoinnille-kannattavuus-ei-riita/a6218d24-26b1-4ed3-be32-998c658919c4

The Central Bank of Russia. (2018). Direct Investment. Retrieved from www.cbr.ru/eng/statistics/?prtid=svs

UN COMTRADE. (n.d.). United Nations International Trade Statistics Database. Retrieved from http://comtrade.un.org/

Valio Oy. (2020). Valio Venäjä. Retrieved from https://www.valio.fi/

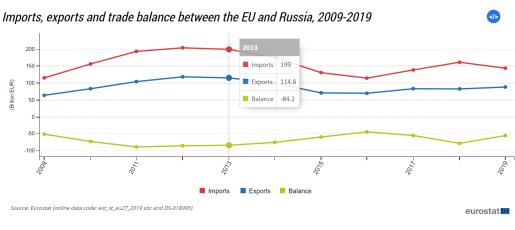
Vorotnikov, I. L., Sukhanova, I. F., Lyavina, M. Y., Glukhova, M. I., and Petrov, K.A. (2019). Economic sanctions and import substitution. Entrepreneurship and sustainability issues: 2019 Volume 6 Number 4 (June). Retrieved from http://doi.org/10.9770/jesi.2019.6.4(23)

Wegren, S. (2019) Effects of Russia's Food Embargo After 5 Years. Russian analytical digest: No. 241, 11 November 2019. Retrieved from www.laender-analysen.de

YLE: Uutiset. (2010). Russian import Restrictions on Finnish Food Take Effect. 23.7.2010. Retrieved from https://yle.fi/uutiset/osasto/news

APPENDICES

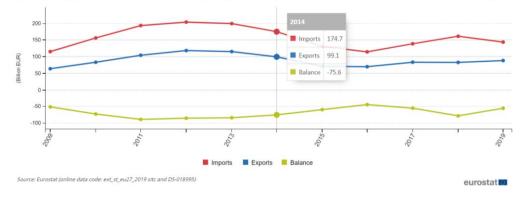
Appendix 1. Import, export and trade balance between the EU and Russia, 2009-2019.



2013



Imports, exports and trade balance between the EU and Russia, 2009-2019





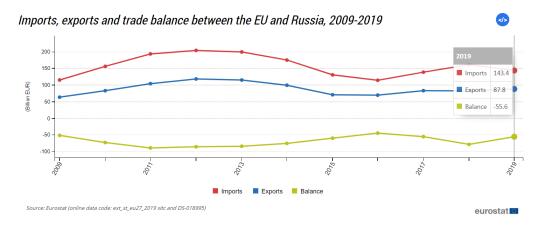


FIGURE 5. Imports, exports and trade balance between the EU and Russia, 2009-2019 (Eurostat, 2020).

Appendix 2. Losses of total trade by period and country

-	Total		Conflict		Smart sai	nctions	Economic	sanctions
Country	ABSOLUTE	RELATIVE	ABSOLUTE	RELATIVE	ABSOLUTE	RELATIVE	ABSOLUTE	RELATIVE
Australia	-10.48	-40.97	7.46	31.95	-8.06	-25.40	-13.31	-55.35
Austria	-13.36	-3.83	190.36	87.58	-10.03	-2.19	-38.31	-11.55 🗀
Belgium	-80.39	-17.95	-64.20	-11.96	-88.97	-15.51	-79.77	-19.93
Bulgaria	-3.11	-6.16	4.28	8.83	-1.03	-1.69	-4.60	-9.63
Canada	-25.99	-28.08	-2.52	-2.33	9.47	8.19	-39.18	-46.67
Cyprus	-1.06	-37.00	-3.00	-57.07	-0.23	-8.99	-1.07	-40.15
Czech Republic	-70.47	-16.27	-0.53	-0.11	-20.97	-4.13	-93.25	-23.01
Germany	-667.69	-20.03	-425.03	-11.72	-421.33	-10.32	-768.70	-24.97
Denmark	-26.42	-22.47	-16.48	-11.94	-13.50	-8.99	-31.39	-29.72
Spain	-46.28	-17.45	-30.14	-9.58	2.34	0.73	-62.47	-25.65
Estonia	28.69	21.78	89.54	78.25	58.23	36.95	12.84	10.18
Finland	-77.57	-16.37	-14.99	-3.08	-25.94	-4.53	-100.12	-22.61
France	-117.16	-16.74	12.27	1.45	-145.83	-15.68	-123.96	-20.14
United Kingdom	-153.72	-25.90	-117.68	-17.54	-93.42	-13.38	-175.69	-31.74
Georgia	9.79	120.79	18.36	534.88	15.95	244.36	6.97	76.43
Greece	-7.55	-20.34	-7.01	-20.74	-5.56	-10.58	-8.20	-24.86
Croatia	-5.54	-18.61	0.21	0.78	-3.51	-12.09	-6.81	-22.46
Hungary	-42.91	-18.60	-20.33	-7.46	-44.78	-16.01	-45.01	-21.30
Ireland	0.09	0.16	11.22	18.88	44.12	68.43	-14.17	-26.10
Italy	-52.22	-5.78	66.83	7.15	20.47	1.80	-87.60	-10.53
Japan	-86.88	-12.60	-16.56	-1.80	6.69	0.78	-122.68	-20.05
Lithuania	23.27	5.77	91.27	24.91	113.33	22.80	-11.22	-2.95
Luxembourg	-1.47	-11.75	-7.08	-32.67	0.14	1.02	-1.28	-11.61
Latvia	-3.51	-3.42	12.12	13.50	-1.32	-1.15	-5.99	-5.95
Malta	-2.14	-86.65	-0.43	-86.78	-2.29	-91.44	-2.30	-85.34
Montenegro	-0.14	-28.09	0.31	107.71	-0.01	-2.38	-0.22	-44.27
Netherlands	-107.63	-15.81	-168.86	-20.40	-67.93	-8.22	-112.10	-18.06
Norway	-30.55	-38.93	-12.33	-11.05	3.87	4.00	-42.82	-61.87
Poland	-151.18	-19.36	-76.97	-9.19	-68.66	-7.61	-184.18	-24.93
Portugal	-1.17	-5.93	1.74	7.19	1.44	5.98	-2.29	-12.69
Romania	11.78	10.20	32.61	26.42	40.02	28.89	1.03	0.96
Russian Federation	-2227.71	-10.10	557.11	2.53	479.57	1.79	-3351.60	-16.20
Slovakia	-38.15	-17.26	-17.28	-6.89	23.19	9.43	-58.65	-27.91
Slovenia	4.32	4.89	9.11	10.03	8.05	7.29	2.65	3.26
Sweden	-13.60	-6.31	44.56	21.91	7.21	2.69	-26.56	-13.19
United States of America	-5.14	-0.69	114.90	14.46	165.09	19.96	-69.33	-9.62
CUMULATIVE	-3993.25	-11.57	262.85	0.74	-24.21	-0.06	-5661.33	-17.58

TABLE 4. Losses of total trade by period and country (UN COMTRADE, n.d.; Crozet and Hinz, 2019).

Note: Losses are per month. Absolute losses are in millions of USD. Relative losses are in percent.

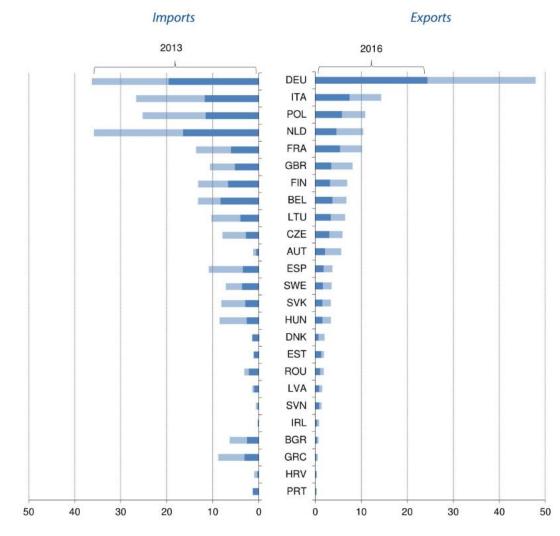
TABLES 5A and 5B. EU exports and Russian imports, monthly averages (Cheptea and Gaigné, 2018).

TABLE 5A: EU exports before and during the Russian import ban, monthly averages

	Nur	nber of flo	ows	V	alue (€ m))
Type of products	before	during	change	before	during	change
	the ban	the ban		the ban	the ban	
			Exports t	to Russia		
All banned products	449	166	-63%	434	67	-84%
Products under the pork ban	20	1.6	-92%	79	0.2	-100%
Products under the food embargo	435	165	-62%	379	67	-82%
Non-banned products	1,073	1,033	-4%	482	410	-15%
		E.	xports to ot	her countri	es	
All banned products	24,971	26,728	+7%	13,312	13,964	+5%
Products under the pork ban	838	904	+8%	1,483	1,438	-3%
Products under the food embargo	24,125	25,810	+7%	11,828	12,542	+6%
Non-banned products	60,653	64,281	+6%	20,776	22,166	+7%

TABLE 5B: Russian imports before and during the import ban, monthly averages

	Nur	nber of flo	ows	Va	lue (USD	m)
Type of products	before the ban	during the ban	change	before the ban	during the ban	change
		Imports fr	om countrie	es targeted	by the ban	ı
All banned products	502	157	-69%	628	121	-81%
Products under the pork ban	19	10	-48%	82	5	-94%
Products under the food embargo	476	148	-69%	559	96	-83%
Non-banned products	1,163	1,064	-9%	592	471	-20%
	In	nports from	n countries	not targete	ed by the b	an
All banned products	599	583	-3%	843	959	+14%
Products under the pork ban	5	7	+37%	35	72	+108%
Products under the food embargo	594	576	-3%	805	883	+10%
Non-banned products	923	914	-1%	485	531	+9%

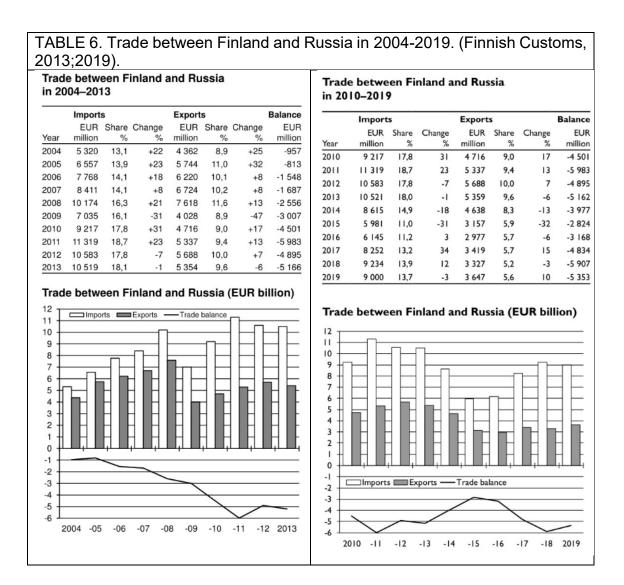


Appendix 4. Changes in exports to and imports from Russia, 2013-2016

Source: UN Monthly COMTRADE, WIFO calculations. Figures for Luxembourg, Cyprus and Malta too small to show.

FIGURE 8. Changes in exports to and imports from Russia in billion USD over the period 2013 to 2016 (Fritz et al., 2017).

Appendix 5. Trade between Finland and Russia in 2004-2019



Appendix 6. Main products in trade between Finland and Russia in 2013 and 2019.

TABLE 7. Main products in trade between Finland and Russia in 2013 and 2019 (Finnish Customs, 2013;2019).

Main products in trade between Finland and Russia in 2013

Imp	orts from Russia	EUR	Share	Change
SITC	C (REV 4)	million	%	%
333	Crude petroleum	5 981	56,9	+1
334	Petroleum products, refined	1 176	11,2	-4
343	Natural gas	977	9,3	-12
511	Hydrocarbons nes, derivatives	356	3,4	+14
321	Coal, not agglomerated	249	2,4	+13
247	Wood in the rough or roughly squared	248	2,4	+32
351	Electric current	164	1,6	+1
342	Liquefied propane and butane	146	1,4	+22
522	Inorg chemical elements, oxides, etc	123	1,2	-26
512		111	1,1	+25
	Total imports	10 519	100,0	-1
•	orts to Russia	EUR	Share	Change
SITC	C (REV 4)	million	%	%
641	Paper and paperboard	517	9,7	+3

331

285

224

173

128

119

118

115

110

5 354 100,0

6,2

5,3

4,2

3,2

2,4

2,2

2.2

2,1

2,1

-1

-36

-9

+20

+8

-41

-17

+10

-6

-6

334 Petroleum products, refined

542 Medicaments, incl. veterinary medicaments

728 Other machinery for special

571 Polymers of ethylene, in primary

764 Telecommunications equipment,

723 Civil engineering plant etc778 Electrical machinery n.e.s.597 Additives for mineral oils etc

723 Civil engineering plant etc

industries

024 Cheese and curd

Total exports

forms

parts

Main products in trade between Finland and Russia in 2019

ոսե	orts from Russia	EUR	Share	Change
SITC	(REV 4)	million	%	%
333	Crude petroleum	4 511	50,1	3
284	Nickel ores and concentrates	830	9,2	14
334	Petroleum products, refined	682	7,6	17
343	Natural gas	540	6,0	-7
511	Hydrocarbons nes, derivatives	360	4,0	-5
351	Electric current	307	3,4	2
247	Wood in the rough or roughly squared	212	2,4	-14
321	Coal, not agglomerated	139	1,5	-44
246	Wood in chips, wood waste	132	1,5	27
562	Fertilizers, manufactured	126	1,4	15
522	Inorg chemical elements, oxides, etc	110	1,2	-8
722				
	Total imports	9 000	100,0	-3
Ехр	Total imports orts to Russia (REV 4)	9 000 EUR million	100,0 Share %	Change
Exp SITC	orts to Russia (REV 4)	EUR	Share	Change %
Ехр	orts to Russia	EUR million	Share %	-3 Change % 4 >999
Exp SITC 641	orts to Russia (REV 4) Paper and paperboard	EUR million 412	Share %	Change %
Exp SITC 641 679	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel	EUR million 412 305	Share % 11,3 8,4	Change % 2 >999
Exp SITC 641 679 334	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined	EUR million 412 305 181	Share % 11,3 8,4 5,0	Change % 2 >999 -6
Exp SITC 641 679 334 781	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons	EUR million 412 305 181 175	Share % 11,3 8,4 5,0 4,8	Change % >999 -6 16 47
Exp SITC 641 679 334 781 723	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons Civil engineering plant etc	EUR million 412 305 181 175 131	Share % 11,3 8,4 5,0 4,8 3,6	Change % >999 -6 16 47 -22
Exp SITC 641 679 334 781 723 728	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons Civil engineering plant etc Other machinery for special industries	EUR million 412 305 181 175 131 110	Share % 11,3 8,4 5,0 4,8 3,6 3,0	Change % >999 -6 16 47 -22 -16
Exp SITC 641 679 334 781 723 728 721	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons Civil engineering plant etc Other machinery for special industries Agricultural machinery, excl tractors	EUR million 412 305 181 175 131 110 100	Share % 11,3 8,4 5,0 4,8 3,6 3,0 2,7	Change % >999 -6
Exp SITC 641 679 334 781 723 728 721 782	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons Civil engineering plant etc Other machinery for special industries Agricultural machinery, excl tractors Lorries, special motor vehicles n.e.s.	EUR million 412 305 181 175 131 110 100 95	Share % 11,3 8,4 5,0 4,8 3,6 3,0 2,7 2,6	Change % >999 -6 16 47 -22 -16 -22 -16 -22
Exp SITC 641 679 334 781 723 728 721 725	orts to Russia (REV 4) Paper and paperboard Tubes, pipes etc, of iron or steel Petroleum products, refined Motor cars for the transport of persons Civil engineering plant etc Other machinery for special industries Agricultural machinery, excl tractors Lorries, special motor vehicles n.e.s. Paper etc. mill machinery	EUR million 412 305 181 175 131 110 100 95 86	Share % 11,3 8,4 5,0 4,8 3,6 3,0 2,7 2,6 2,4	Change % >999 -6 16 47 -22 -16