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Economic effects of the mutual sanctions between Russia and the EU on Finland and Germany

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The goal of this thesis is to determine the economic effects of the mutual sanctions between Russia and the EU on Finland and Germany.

The Ukraine crisis that began in 2014 changed the economic relationships between the EU and Russia drastically, as the EU implemented sanctions against Russia because of its role in the crisis and consequently Russia implemented counter sanctions against the EU. The research of this thesis will focus on the economies of Finland and Germany and the economic effects the sanctions have on them.
In order to assess the long-term effects of the sanctions policy I have laid down several hypotheses, firstly, there is a way back to normal economic and political relationships between the European Union and Russia, secondly it is a possibility that, the EU will put up with the status quo of the Crimea in the near future and thirdly, the European industries affected by the sanctions will not have the same turnover in Russia after the sanctions as before the crisis.
To evaluate my research question I have analyzed data from several data bases including Statistics Finland and the Statistisches Bundesamt.
The economic impacts of the mutual sanctions on Finland and Germany are hard to specify. The export volumes of both, Finland and Germany to Russia suffered from a huge decline between 2013 and 2016. In percentual terms, the Finnish exports between 2013 and 2019 the declined by31,77%. The German exports to Russia declined by 40% from € 35.8 bn in 2013 to € 21.5 bn in 2016. The numbers slightly recovered to € 26.54 bn in 2019 meaning that between 2013 and 2019 the German export volume to Russia decreased by 25,86%. However, these declines are not solely due to the sanctions as other factors play a role. Russia suffered from the huge decrease in oil prices and consequently the ruble suffered from a loss of worth. This also affects the Russian imports, as they get very expensive. For Finland, the economic impacts of the sanctions in 2019 amounted around 65% of the trade loss between 2013 and 2019. For Germany this looks a little different. There are estimations that the loss due to the sanctions that vary between 20% and 43% of the overall trade losses of Germany with Russia. Other estimations calculate up to € 770M a month in trade losses for Germany due to sanctions.
All in all, we can say, that the economic sanctions are harmful for Germany and Finland either way.

Keywords	Sanctions, economic relationships, Ukraine crisis

Contents

List of tables and figures

Tables

Figures

1 Introduction

1.1 Research Question

The beginning of the Ukraine crisis in March 2014 marked the start of a more complicated relationship between the European Union and Russia. As a result of the annexation of Crimea and the war in the eastern Ukraine, the European Union has implemented several sanctions against Russia and consequently Russia implemented counter sanctions against the European Union. During the past six years, this situation has not changed and there is no forecast on when this state of things will go back to normal. In the following thesis, I want to analyze the economic impacts on Finland and Germany that originate from these sanctions.

1.2 Background

Russia and Finland as well as Russia and Germany share a very changeful common history. Finland was a part of the Russian empire for over 100 years and the two countries share a border of 1,300km length. Furthermore, there is a big Russian community, living and working in Finland. Germany and Russia historically have strong economic bonds. However, the two countries had several disputes in the past, leading to two wars against each other. Today, Russia is the European Union's fifth biggest trading partner with a trading volume of € 232 bn in 2019 (European Comission, 2020). Germany and Finland combined contribute € 70.45 bn to this trade volume which equals to 30,36%. A huge part of this trade volume is Energy supply. Russia is the most important energy supplier for both Germany and Finland, giving these economic and political relationships further weight. Germany is highly dependent on Russian energy deliveries. 31,5% of Germany's crude oil demand comes from Russia and 50,7% of the natual gas demand (MWV, 2020a)(BP, 2020). Finland is even more dependent on Russian energy supplies as 100% of the Finish natural gas demand and 88% of the country's oil demand comes from Russia (Lyyra S., Semkin N., Sipilä O., 2018). The gas pipeline projects Nord Stream and Nord Stream 2 are cementing the German dependency on Russian energy supplies. Nord Stream is a pipeline project initiated by the Russian state-owned Gazprom and several German energy supply companies in the early 2000's. The pipelines are connecting Russian gas fields in Siberia directly with

Germany, the most important European market for Russia, through the Baltic sea. The main objective of the project is to avoid the transit through countries such as Poland, Belarus and the Ukraine. Before Nord Stream was built, 80% of the natural gas coming from Russia to Western Europe was transported via the Ukraine who earned billions of dollars with transit fees every year (Schneider- Deters W., Schulze P. W., Timmermann H, 2008). Furthermore, the pipeline should enhance the energy security of Germany and other countries of the European Union as the gas that is coming through the pipeline is distributed to other European countries such as the Netherlands. The project gained even higher importance and support when the Russian-Ukrainian gas dispute began. Russia and the Ukraine argued over gas prices, transfer fees and theft of gas and as the conflict escalated Russia cut gas deliveries to the Ukraine which caused shortages of gas in western Europe. Nord Stream had large support from Russian President Vladimir Putin, and more importantly, former German chancellor Gerhard Schroeder, who massively supported the project especially after the gas dispute began as it was illustrated how dependent the gas deliveries are on the goodwill of transit countries(Hecking H., Vatansever A., Schulte S., Raszewski S., 2016). In retrospect, the question arises in how far the energy security and other interests of Germany and Europe actually played a role in the actions of chancellor Schroeder and in how far the personal interests were the driver as he became the chairman of the Nord Stream AG. It must be noted that personal interests may not have played a significant role in the decision to support this project as Gerhard Schröder planned to stay chancellor of Germany. He seeked for re-election in 2005 but lost to Angela Merkel. Thereupon, he became the chairman of the Nord Stream AG two months later at request of the Russian president (Pieper O., 2020). As a result of this policy, several politicians, for instance the American president Donald Trump, claim that Germany is very restrained in terms of Russia and its politics because of the energy dependency and the pipeline increased this restraint. Furthermore, transit countries such as Poland and the Ukraine claim that their interests are violated as these countries lose a high amount of transit fees which are important for their country's financial households. Moreover, these countries lose negotiating power against Russia, especially in terms of energy supplies for these countries as their bargaining chip now flows through the Baltic sea (Zeit Online, 2019). Now, Russia can use the energy supplies more selectively as a bargaining chip as other countries can still be delivered with gas, while for example the Ukraine receives less or in the worst case no energy from Russia. Today there is no sign that the status quo in terms of energy supplies will change in the near future as the second pipeline is under construction. However, United States of America implied sanctions against the Nord Stream 2

because of the aforementioned concerns whereat the question arises if not economic interests are the real reason for those restrictive measures (Zeit Online, 2019). Moreover, it is unlikely that these sanctions will prohibit the completion of the pipeline as Russia already announced that it will complete the pipeline solely despite the sanctions of the US. (Astrasheuskaya, 2020)

Even though the gas consumption decreased and fluctuated in the past few years, the hunger for gas still rises in the European Union and Germany as a result of a changing environmental policy and less gas production in Europe (Eurostat, 2019). These strategic decisions from almost 20 years ago are now influencing the relationships between Germany and Russia, the handling of the Ukraine crisis and consequently the sanctions that are implemented. The protests in the Ukraine that led to the crisis began at the end of 2013 when the Ukrainian president Viktor Janukovic refused to sign the Association agreement with the European Union and instead sought for tighter relationships with Russia. As the protests began to escalate the EU started several mediation attempts between the protesting opposition and the Ukrainian government. However, these attempts did not lead to a tranquillization of the situation. With the annexation of the Crimea and the war in the Eastern Ukraine the situation completely escalated and turned into the situation that we have ever since (Böttinger K., Jopp M., 2014). The United States of America positioned itself as a supporter of the new Ukrainian regime as antipole to Russia as well as the European Union. Furthermore, the EU alone does not have the military resources to plunge Russia from further actions and is dependent on the US military power. As the United States of America is the protecting power of the EU with many EU members being in the NATO at the same time, the space for political independence of the EU is limited. Therefore, the EU orients itself on the course of the US in this conflict even though the economic consequences for the EU are much more painful than for the US due to the tight economic relationships of the EU with Russia. Viktor Orban summed up the situation as following: „It's a simple geographical fact: No country can change its address" (Gorondi P., 2019). As we cannot change the geographical conditions of Europe, it should be in our best interest to have the best and most prosperous relationships to our direct or indirect neighbors. On the other hand, Europe needs to give a clear and unambiguous answer to the actions of violation of sovereignty of countries and the break of international law in the European community of states. The EU needs to find a way how to combine these two things, good economic relationships and clear answers to violations of sovereignty.

2 Economic Overview

2.1 Sanctions

The Gabler economic lexicon gives the following definition of sanctions: “Sanctions are political actions of punishment for a certain behavior or practice. Commonly in resolutions of the United Nations security council or by the European Union within the scope of the common foreign and security policy. A sanction is the basis for an embargo” (Weerth C., 2018)

In our case the sanctions shall punish Russia’s actions that threaten the territorial integrity of the Eastern Ukraine and Crimea. Since March 17, 2014 the EU has progressively imposed restrictive measures against the Russian Federation leading to the current status of economic relationships. The sanctions implemented by the European Union apply to several individuals and economic sectors of the Russian Federation including the Crimea. 177 individuals and 48 entities are subject to an asset freeze and a travel ban because the EU sees their actions as the undermining of Ukraine’s territorial integrity, sovereignty and independence (European Council, 2020.). Besides that, there were several other economic restrictions implemented targeting the armament’s, tourism, oil exploration and financial industry of Russia and the Crimea. European companies are not allowed to sell, deliver or export military hardware including weapons, ammunition, military vehicles, military equipment, paramilitary equipment or spare parts for these goods to the Russian federation (GTAI, 2020a). So called dual use goods are subject to the penalties, too. Dual use goods are products that can be used for military purposes as well as civil purposes. The export ban of dual use goods is earmarked and individual-related. The sanction decree prohibits the export, disposal or deliver dual use goods if they are or could be fully or partly dedicated to a military purpose. If the goods are fully dedicated for a civil purpose, there is a general duty to obtain a permit from the local government for the export to Russia (GTAI, 2020b). Another part of the restrictive measures is the prohibition to provide tourism services for the area of Crimea and Sevastopol. This includes the call at Crimean ports with cruise ships from the European Union, except it is a case of emergency (Bafa, 2019.). In the energy sector the EU has implemented sanctions that target the oil exploration industry. There is a general duty to obtain a permit for drilling equipment such as line pipes, casing

tubes, offshore drilling rigs, or drilling rigs and well sinking and boring machine. The permit is denied if the equipment is destined for exploration and production projects in water that is deeper than 150 meters, offshore areas north of the arctic circle and for fracking projects. Besides the hardware, there are also services affected by the restrictive measures. Drillings well bore testing, well logging and the delivery of special offshore platforms apply to the same rules and regulations as the oil equipment (GTAI, 2020c) (European Union, 2014). The financial sector is also affected by the European sanctions. Five Russian state-owned banks, namely, Sberbank, VTB Bank, Gazprombank, Vnesheconombank and Rosselkhozbank and six other organizations from the armaments and oil sector, namely, OPK Oboronprom, Uralwagonzawod, United Aircraft Corporation, Rosneft, Gazprom neft and Transneft have only limited access to the European capital market. It is prohibited to provide these institutes financial assistance, loans and credits of a maturity exceeding thirty days. Moreover, it is prohibited to buy, sell, trade or to assist with trading transferable securities of a maturity exceeding thirty days. Furthermore, it is not allowed to provide the financing for products or services that are sanctioned by the European Union such as military hardware. Loans and credits that are destined for the financing of legal commercial transactions are excepted from the restrictive measures.

With regard to the Crimea it is prohibited to provide entities located on the Crimea loans or credits, including equity capital. It is also prohibited to acquire any ownership interest or to build up a joint venture with a company located on the Crimea. Besides that, it is also prohibited to acquire land or real estate on the peninsula (Office of Financial Sanctions Implementation HM Treasury, 2020). The ban of products from Crimean origin is also a part of the European restrictive measures.

The sanctions must be obeyed by all citizens of the European Union regardless of the location or company they operate in and by companies that underlie the European law.

The following table shall illustrate when the sanctions take effect:

	European companies Incl. foreign representation & foreign subsidiary	**EU-Citizens**	**Non-EU companies**	**Non-EU citizens**
Operating in the EU	Sanctions take effect	Sanctions take effect	Sanctions take effect	Sanctions take effect
Non-EU jurisdiction (e.g. Russia)	Sanctions take effect	Sanctions take effect	Sanctions do NOT take effect	Sanctions do NOT take effect

Based on: (Russia sanctions in the context of the Ukraine crisis. Moscow: Aussenwirtschaft Austria Österreichisches Aussenwirtschaftscenter Moskau. PP 4-5).

Table 2.1: Illustration of the conditions under which the European sanctions take effect and under which they do not take effect.

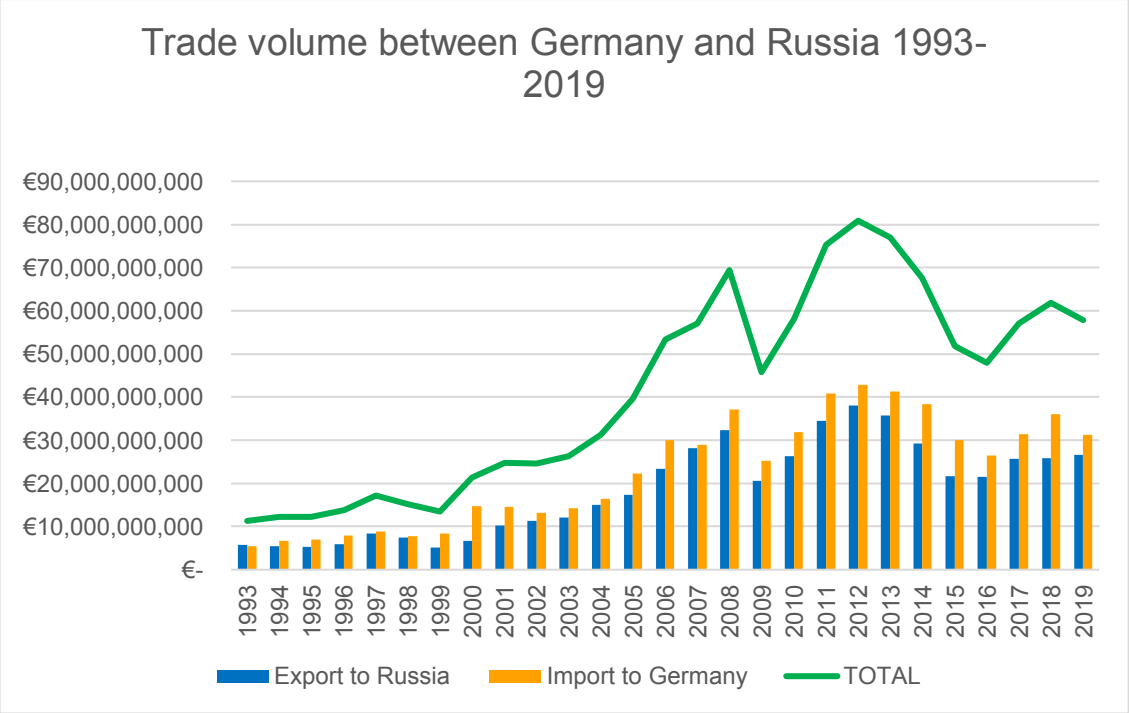
As a reaction to the sanctions of the European Union the Russian Federation implemented countersanctions that target the European economy. Since August 2014 there is an import ban in force that targets several agricultural products. It is prohibited to import living pigs, except purebred animals for breeding. In addition, beef, pork either fresh, cooled or frozen as well as animal products from the pig, cow, sheep, goat, donkey, horse, mule are banned, except for the production of pharmaceutical products. Also, chicken and chicken products in any state are affected by the restrictive measures. Pork bacon, pork fat and chicken fat, either fresh, cooled, frozen, salted, pickled, dried or smoked are part of the sanctioned products. With the exception of the autumn fry of the salmo salar, salmo trutta, Oncorhynchus mykiss, psetta maxima, dicentrarchus labrax and ornamental fish it is also prohibited to import living fish from the EU as well as other seafood. Milk, cheese and dairy products cannot be imported. Vegetables, rootes and lumps, fruits and nuts are also affected by the ban, except the salad potato, onion seedings, pea seedings and hybrid sweetcorn seeding.

Other products that are banned are, fruits and nuts, fat of cows, sheeps and goats, margarine and tallow oil. Furthermore, sausages and related products, foodstuffs, food additives and salt. While the EU focused its sanctions on a brought range of individuals, companies, goods, technology and services from several sectors, Russia targeted mainly the European agricultural industry and banned a brought range of products from this industry (Russia sanctions in the context of the Ukraine crisis, 2019. PP 96-98).

2.2 Trade

Germany

After the collapse of the Soviet Union and the German reunification the economic relationships between Russia and Germany began to prosper. In the economic relationships with Russia, Germany always remained a balance of trade deficit in the past twenty-eight years. Since the end of the 1990's the trading volume continuously increased between these countries. After a strong decline in 2009, due to the world financial crisis, the commercial relationship between Russia and Germany recovered fast. In 2012 they reached their peak with a total trading volume of around € 81 billion followed by a small downturn in 2013 (Statistisches Bundesamt, 2020a).

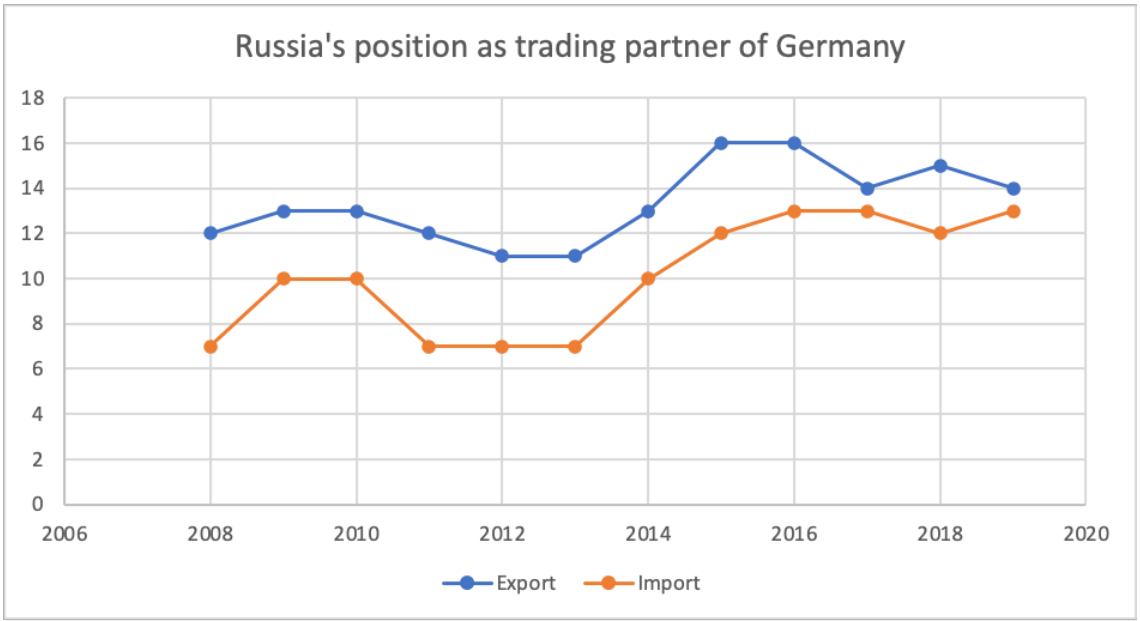


Data Source: DESTATIS, 2020. Export and Import of Germany by Countries, Wiesbaden: Statistisches Bundesamt, [online], https://www-genesis.destatis.de/genesis/online?operation=previous&levelindex=3&levelid=1601812445498&levelid=1601812386280&step=2#abreadcrumb [accessed 15.09.2020].

Figure 2.1: Illustration of the trading volume between Germany and Russia from 1993 to 2019.

With the beginning of the Ukraine crisis in 2014, the downturn increased heavily, reaching the lowest point in 2016 with a total trading volume of just around € 48 billion. In only four years the trading volume decreased by € 33 billion or 41%. Especially the exports to Russia were affected by the crisis and the following sanctions as they decreased by € 16.6 billion, or 43.5%, from € 38.1 billion in 2012 to € 21.5 billion in 2016. In the same time the imports from Russia decreased by € 16.3 billion, or 38%, from € 42.8 billion to € 26.5 billion. Since then, the numbers have been rising again. In 2017 the exports increased by € 4.2 billion to € 25.7 billion and in 2019 they accounted for € 26.5 billion. On the import side the numbers rose to € 31.3 billion in 2017 and reached € 36 billion in 2018 but decreased again in 2019 to the 2017 level. So, after a huge decline between 2014 and 2016 the trade numbers recovered a little, but they have not reached the pre-crisis level due to the mutual economic sanctions (Statistisches Bundesamt, 2020a). With regards to the German federal states, Bavaria, North Rhine-Westphalia and Baden-Württemberg are the three states that have the highest export volume to Russia in total. 41% of the exports come from these states. A closer view to the trade numbers of the federal states reveal that the exports to Russia only play a minor role for their foreign trade. In the past twelve years Russia´s share on the German exports was

on average 2.52%. However, the numbers highly vary between the states and the years. Between 2008 and 2013, the years before the crisis, Germany's exports to Russia equaled 3,11% of the whole export earnings. It decreased to 1,94% between 2014 and 2019. As measured by percentage, Russia has a higher share at exports for the eastern federal states such as Berlin, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt or Brandenburg but also Lower Saxony has a higher export volume to Russia. Since 2008 these states make on average 3,23% of their export earnings in the Russian Federation. Nevertheless, these numbers largely vary between the years as the Ukraine conflict hit these states very hard. Between 2008 and 2013 the number was at 4,13% whereas between 2014 and 2019 it decreased to 2,33%. So, there is a big imbalance when it comes to the effects of the sanctions on the single federal states in Germany (Statistisches Bundesamt, 2020b). Overall, the trade volume of Russia and the eastern federal states of Germany decreased by 28,7% whereas the Western federal states recorded a decrease of 17,0% (Dpa,2020). In the ranking of German trading partners Russia is not located among the top ten target countries for exports. Between 2008 and 2019 Russia ranked between rank 11 and 16, which shows the fluctuations in the trade relationships between Germany and Russia due to the Ukraine crisis, but also other factors play a role (Statistisches Bundesamt, 2008-2019).

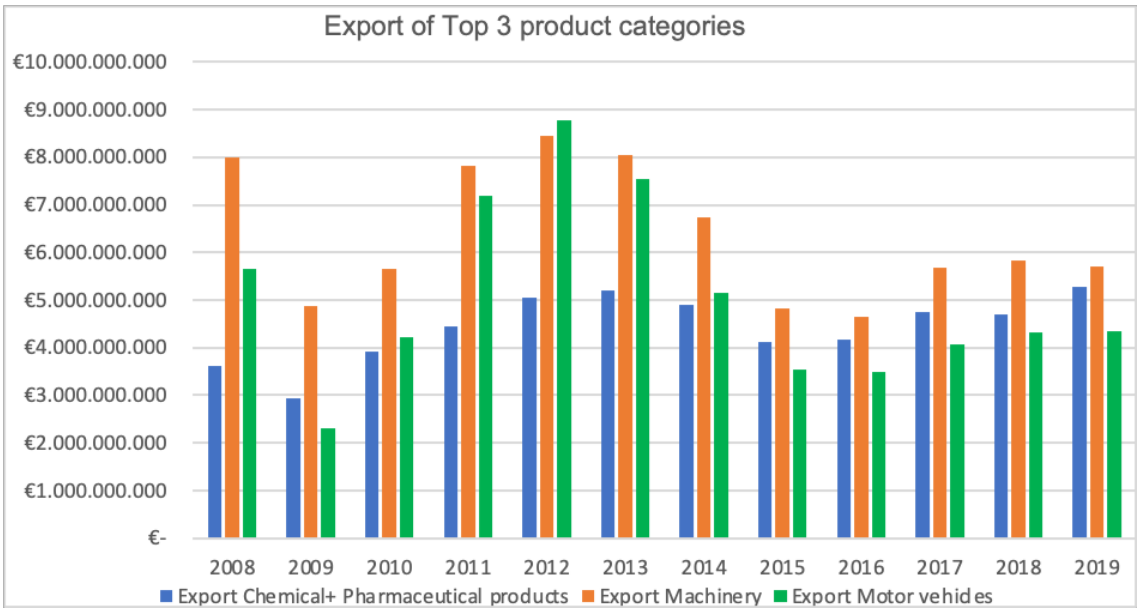


Data Source: Statistische Bibliothek, 2008-2019. Foreign trade, Wiesbaden: Statistisches Bundesamt, [online], https://www.statistischebibliothek.de/mir/receive/DESerie_mods_00000235 [accessed 19.09.2020].

Figure 2.2: Illustration of Russia's position as trading partner of Germany.

As Russia's economy is highly dependent on energy exports it is very vulnerable to fluctuations in energy prices which massively affects the Russian foreign trade. As the

oil price constantly rose since the beginning of the century, with one decline in the financial crisis 2009, Russia gained high profits from its export of natural resources such as oil and gas. In 2012 the oil price reached its peak with a price of $ 111,63 for one barrel of UK Brent oil. Therefore, Russia was able to invest in other industries and to finance the modernization of its out of date industries. However, oil prices began to decrease again, with a huge decline between 2013 and 2015 from $ 108,56 per barrel to just $ 52,32, reaching its lowest point in 2016 with a price of $ 43,67 per barrel oil. So, in just four years the oil prices declined by around 61% (MWV, 2020). This consequently led to a deep cut into the state earnings of the Russian federation, resulting in a slowdown of economic growth and of imports of foreign products. As another consequence, the Russian ruble suffered from loss in value which made imports of foreign goods further expensive. Since the through in 2016, oil prices only slightly recovered to $ 71,34 per barrel in 2018 and $ 64,36 in 2019, but never again even nearly reached prices compared to the ones in 2011,2012 and 2013. Also, the Russian ruble did not recover from the loss in value and fluctuates much in value (Kolev G, 2016, PP 5-9.).



Data Source: Statistisches Bundesamt. Balance of Trade sorted by product groups, Table 51000-0007, [online], https://www-genesis.destatis.de/genesis/online?operation=abruftabelleBearbeiten&levelindex=2&levelid=1607899076179&auswahloperation=abruftabelleAuspraegungAuswaehlen&auswahlverzeichnis=ordnungsstruktur&auswahlziel=werteabruf&code=51000-0007&auswahltext=&wertauswahl=253&wertauswahl=254&nummer=11&variable=11&name=GP19B2#astructure [accessed 15.09.2020].

Figure 2.3: Illustration of the export volume of the Top 3 product categories between 2008 and 2019 in €bn.

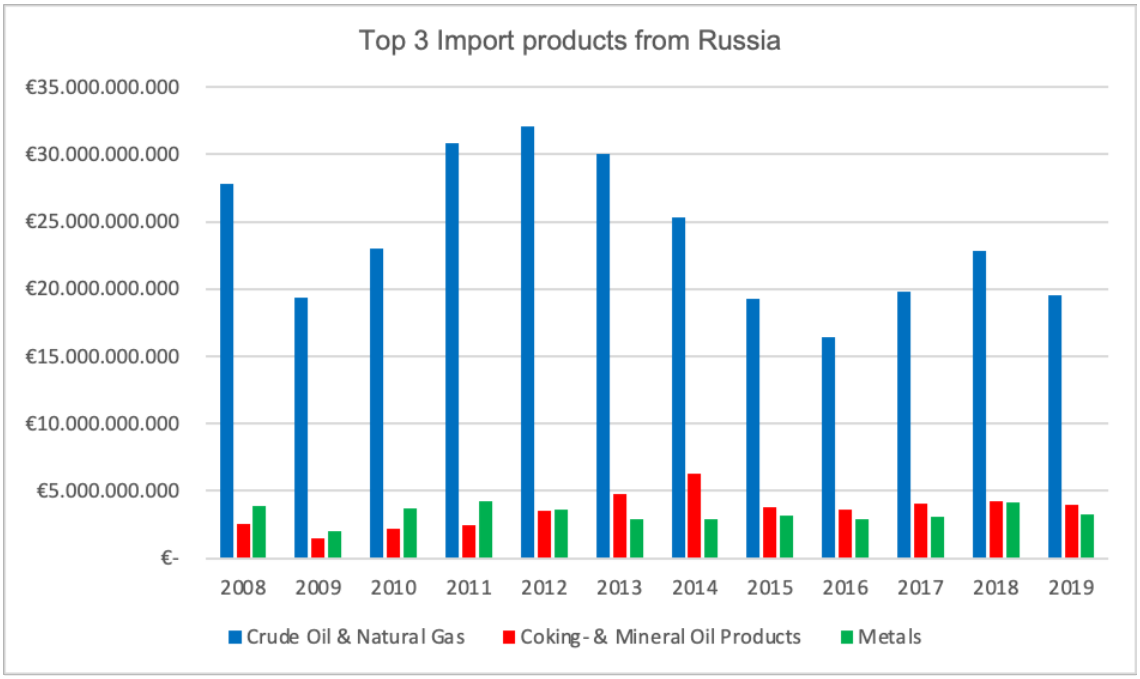
Regarding the products that are traded, the main export goods to Russia came from three product categories, namely, machinery, motor vehicles and chemical and

pharmaceutical products. Their status as the main export categories remained unchanged during the Ukraine crisis but were also highly affected by the worsened relationships between the EU and Russia. These products have been responsible for 55% of the export earnings on average. This makes visible that Russia mainly imports manufactured goods and technology from Germany with a high economic value (Statistisches Bundesamt, 2020c).

Data Source: Statistisches Bundesamt. Balance of Trade sorted by product groups, Table 51000-0007, [online], https://www-genesis.destatis.de/genesis/online?operation=abruftabelleBearbeiten&levelindex=2&levelid=1607899076179&auswahloperation=abruftabelleAuspraegungAuswaehlen&auswahlverzeichnis=ordnungsstruktur&auswahlziel=werteabruf&code=51000-0007&auswahltext=&wertauswahl=253&wertauswahl=254&nummer=11&variable=11&name=GP19B2#astructure [accessed 15.09.2020].

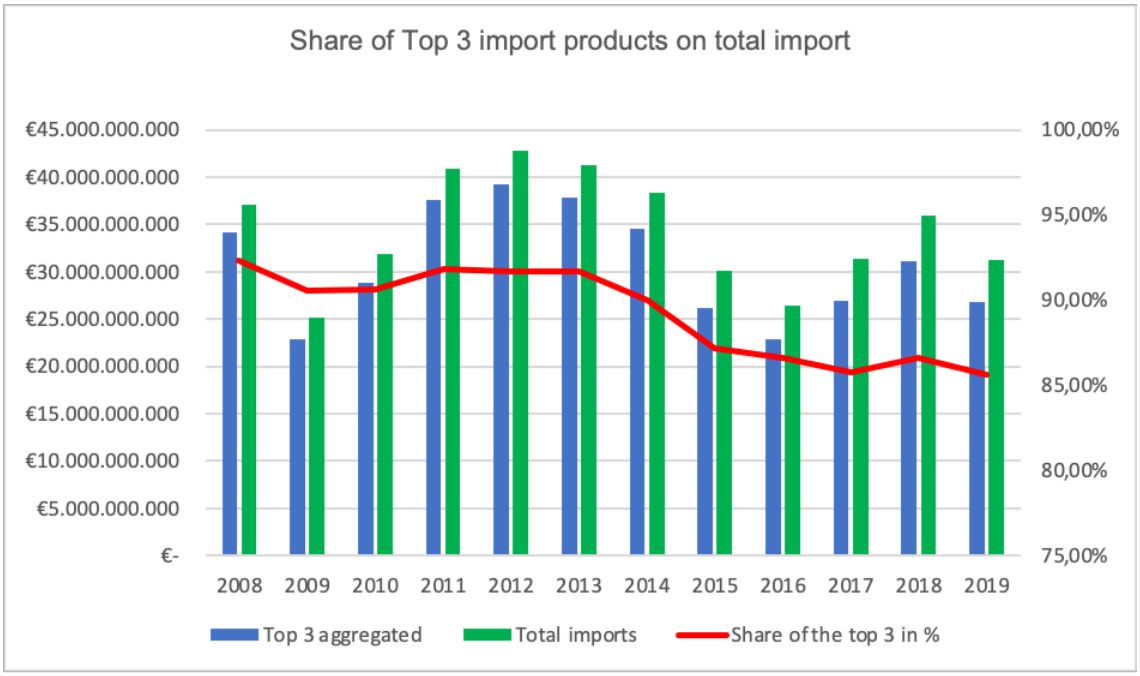
Figure 2.4: Illustration of the Top 3 export products share on the total export to Russia between 2008 and 2019 in €bn and percent.

On the import side, things look very different in terms of the top import categories. The three main product categories that are imported from Russia to Germany are Crude oil & natural gas, Coking- & mineral oil products and metals. These products represent around 90% of the total import volume from Russia. This also has not changed since 2008. The crude oil & natural gas imports have by far the biggest volume ranging between 61% and 76% of the total imports from Russia (Statistisches Bundesamt, 2020c).



Data Source: Statistisches Bundesamt. Balance of Trade sorted by product groups, Table 51000-0007, [online], https://www-genesis.destatis.de/genesis/online?operation=abruftabelleBearbeiten&levelindex=2&levelid=1607899076179&auswahloperation=abruftabelleAuspraegungAuswaehlen&auswahlverzeichnis=ordnungsstruktur&auswahlziel=werteabruf&code=51000-0007&auswahltext=&wertauswahl=253&wertauswahl=254&nummer=11&variable=11&name=GP19B2#astructure [accessed 15.09.2020].

Figure 2.5: Illustration of the import volume of the Top 3 product categories between 2008 and 2019 in €bn.



Data Source: Statistisches Bundesamt. Balance of Trade sorted by product groups, Table 51000-0007, [online], https://www-genesis.destatis.de/genesis/online?operation=abruftabelleBearbeiten&levelindex=2&levelid=1607899076179&auswahloperation=abruftabelleAuspraegungAuswaehlen&auswahlverzeichnis=ordnungsstruktur&auswahlziel=werteabruf&code=51000-0007&auswahltext=&wertauswahl=253&wertauswahl=254&nummer=11&variable=11&name=GP19B2#astructure [accessed 15.09.2020].

Figure 2.6: Illustration of the Top 3 import products share on the total import from Russia between 2008 and 2019 in €bn and percent.

The numbers and the structure of the trade between Germany and Russia paint a precise picture of the economic structures and conditions of these countries. Germany has a very strong industry technology sector. It is a world leader in several technology areas, especially in the manufacturing and machine constructions sector. These technologies and the know-how of German engineering is demanded worldwide. This counts for Russia as well, as the country has a huge demand for modernization of its industries that often have technology and production facilities in use that date back to the times of Soviet Union. Germany plays a key role in the modernization of the Russian economy and in the beginning of the 21st Century, the term of modernization partnership was created to describe and deepen the economic relationships between Germany and Russia. However, the Ukraine crisis and the subsequent sanctions burdened this partnership, and some view it as failed. Nevertheless, German products are still very popular in Russia.

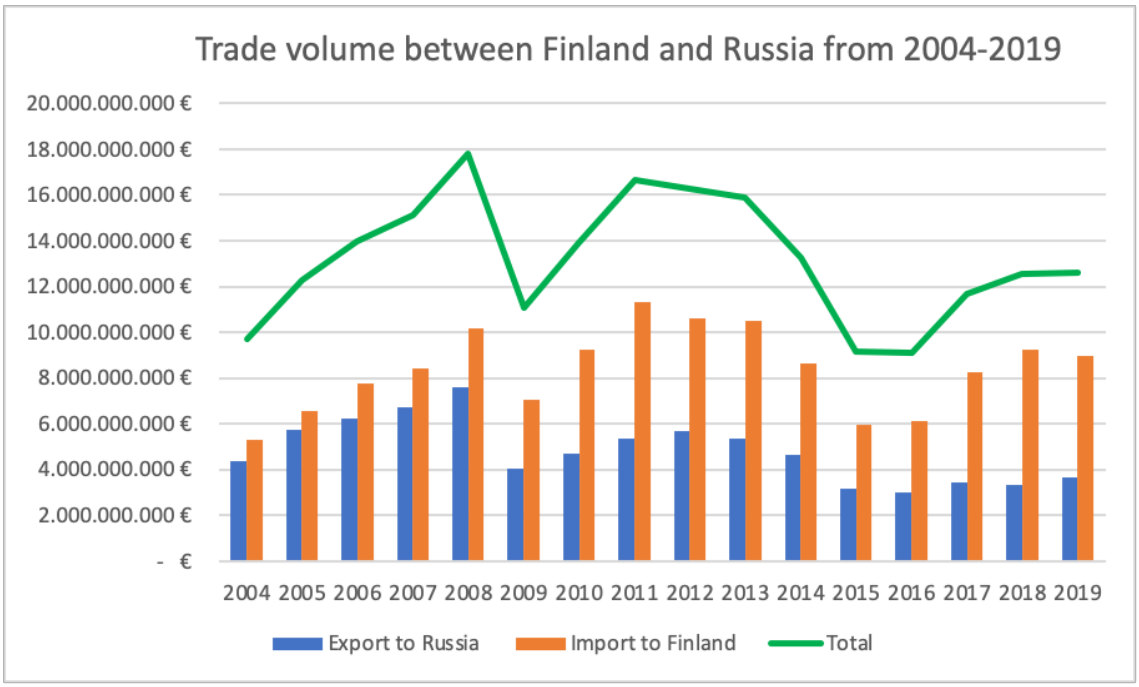
In contrast to this, Russia acts as an important raw-material supplier in this partnership. As Germany does not possess noteworthy amounts of natural resources, apart from brown coal, it is dependent on the import of such. Russia is one of the biggest suppliers of natural resources worldwide as it possesses huge amounts of almost all demanded resources. The Russian foreign trade mainly consists of the export of these and the Russian economy as a whole is very dependent on the energy sector. This makes the Russian foreign trade very vulnerable to fluctuations in the energy prices, which affects the whole Russian economy.

For Germany, its eastern neighbor is the most important energy and raw material supplier that are very much needed for the German economy, especially the industry that is relies on affordable raw materials and energy. It becomes apparent that on the one hand Russia functions as an important resource supplier for Germany that imports materials with a rather low added value. On the other hand, Germany acts as a technology supplier for Russia that exports products with a high added value and know-how.

Finland

The economic relationships between Russia and Finland have been historically strong. Finland was a part of the Russian empire for over one-hundredth years and even during the cold war the economic relationships remained stable. Besides that, simple

Geography plays a role as the countries share a border of 1340 kilometers length and there is a big Russian community living in Finland. In the recent past, there were more fluctuations in the trade between those countries.

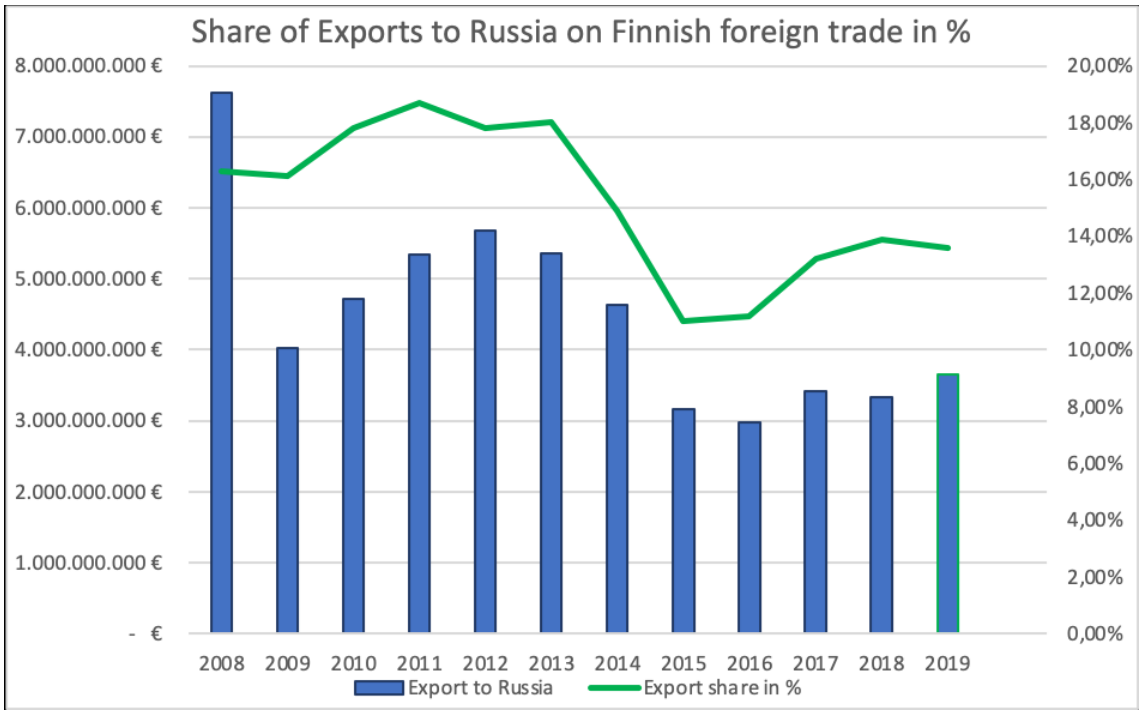


Data Source: Finish Customs, 2004-2020. Country Statistics, [online], https://tulli.fi/en/statistics/country-statistics [accessed 28.09.2020]

Figure 2.7: Illustration of the trading volume between Finland and Russia from 2004 to 2019.

From 2004 on, the trade volume rose by 56% from € 9.68bn to € 15.13bn in 2007 and reached its peak in 2008 with a total trade volume of € 17.79bn. Due to the world financial crisis the trade volume decreased by € 6.73 bn or 37.8% to € 11.06bn in 2009. After this huge decline, the numbers recovered quickly as 2010 the volume reached € 13.93bn and in in 2011 it was at € 16.65bn. Especially the imports to Finland recovered fast and reached a record high of € 11.31bn in 2011, which is more than the combined trade volume of 2009. On the other hand, the exports could never again reach the pre-crisis level. After 2011, the trade volume began to slightly decrease again to € 16.27bn in 2012 and € 15.87bn in 2013. This trend increased in 2014 as it was fueled by the Ukraine crisis and the trade volume decreased to € 13.25bn. In 2015, the first whole year that the European sanctions and the Russian counter sanctions were in force, the volume further decreased by 31% or € 4.12bn to € 9.13bn, which is less than in the year of the financial crisis 2009. The 2016 trade numbers only differ slightly from 2015 as the volume decreased by only € 100m and so reached its lowest point in the recent trade history between Finland and Russia. After that, trade began to recover a little, and in 2017 reached a volume of € 11.67bn followed by € 12.56 bn in 2018. In 2019 the trade volume

almost remained the same with € 12.62bn worth of traded goods (Finnish Customs, 2004-2020). Again, trade numbers recovered a little, but they did not reach the pre-crisis level again.



Data Source: Finish Customs, 2008-2020. Country statistics, [online], https://tulli.fi/en/statistics/country-statistics [accessed 28.09.2020]

Figure 2.8: Share of exports to Russia on Finnish foreign trade in %.

Considering the importance of Russia as a trading partner for Finland it is obvious that Russia plays a major role for the foreign trade of Finland. Since 2008 the average exports to Russia equaled 15,21% of the total Finnish exports. This means that Russia is among the top five destinations for Finnish exports making it a very important trading partner for Finland and its companies. On the import side, Russia plays an important role, too. The average share of Russian imports to Finland on the overall imports to Finland was 7.91%. This means that Russia acts as an important customer for Finnish products and at the same time an important supplier to Finland. During all these years, Finland remained a trade deficit in the economic relationships with Russia (Finnish Customs, 2008-2020).

Data Source: Finish Customs, 2008-2020. Country statistics, [online], https://tulli.fi/en/statistics/country-statistics [accessed 28.09.2020]

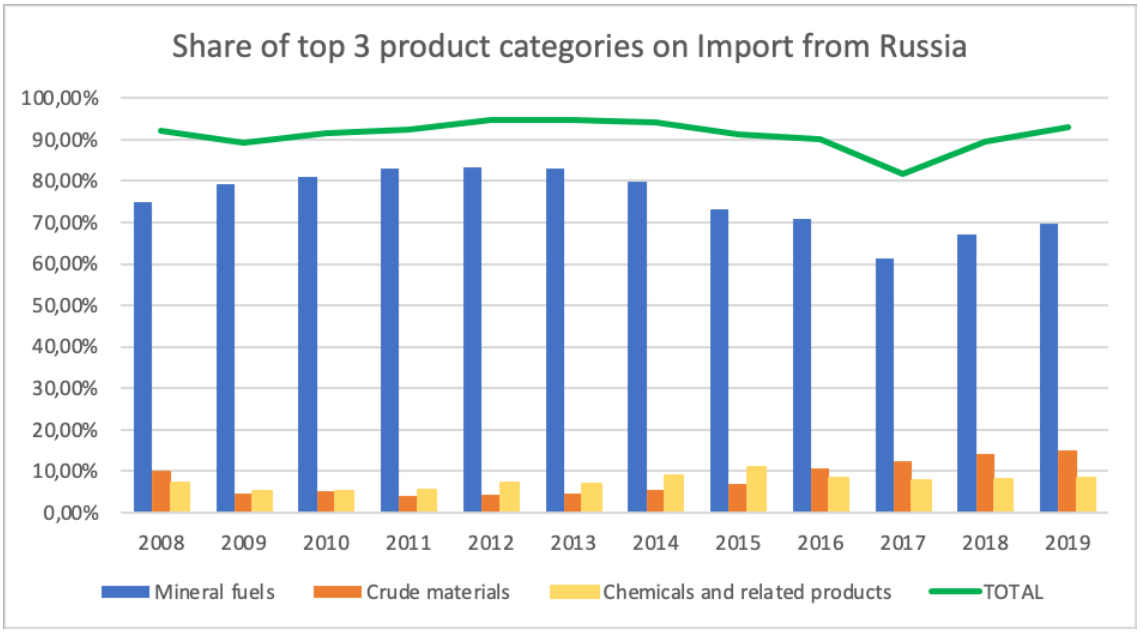
Figure 2.9: Share of the Russian imports on Finnish foreign trade in %.

Regarding the traded goods, Finland mainly exports chemicals and related products such as medicinal and pharma products, dyeing, tanning and coloring material, plastics or chemicals. Other main export products are basic manufactures such as paper, paperboard and articles thereof, iron and steel and manufactures of metals as well as machinery transport equipment such as machinery for special industries, general industrial machinery, telecommunication and sound recording equipment, road vehicles and electric machinery. These product categories are responsible for 79% of all Finnish exports to Russia on average. Especially machinery and transport equipment are in great demand as it counts on average for around 39% of the exports to Russia (Finnish Customs, 2008-2020b).

Data source: Finnish Customs, 2008-2020. Trade with selected regions and countries by SITC, [online], https://tulli.fi/en/statistics/country-statistics# [accessed 30.09.2020]

Figure 2.10: Share of top 3 product categories on export to Russia.

On the other side, the main import categories that come from Russia are mineral fuels such as petroleum, gas and products thereof, coal and electric current. Other main import products are crude materials such as cork and wood, metalliferous ores and metal scrap as well as chemicals and related products such as organic chemicals, fertilizers and inorganic chemicals. On average, these three product categories are responsible for around 91% of the total import volume from Russia. Mineral fuels are the product category that has by far the biggest share on the import volume. They had a share of around 75,5% on average in the past twelve years (Finnish Customs, 2008-2020b).



Data source: Finnish Customs, 2008-2020. Trade with selected regions and countries by SITC, [online], https://tulli.fi/en/statistics/country-statistics# [accessed 30.09.2020]

Figure 2.11: Share of top 3 product categories on import from Russia.

The structure of trade between Finland and Russia shares strong similarities with the trade between Germany Russia. Finland is a country with a strong, modern and distinctive industry, that produces goods that are demanded worldwide. Russia as a direct neighbor and country whose industry is not as strong and distinctive as the Finnish one is in demand of imported technology and products. Therefore, it acts as an important buyer of Finnish goods that are produced in Finland. Furthermore, Russia needs Finnish technology in order to modernize its own industry.

Russia, again, takes the role of the raw material supplier for Finland. As Finland does not possess noteworthy natural resources, besides wood, it is dependent on imports. In addition, Finland has a high demand for energy because of its climate and energy intensive industry. So similar to the economic relationships with Germany, Russia is the most important supplier for energy and natural resources as well as metals and products with a low added value. Contrary to Russia's role, Finland acts as a technology exporter and modernization partner for Russia and its industry sector.

So, Germany and Finland mainly import natural resources from Russia in order to meet the demands and ensuring the access to cheap energy and other resources or raw goods for their industries and societies. Through these imports they compensate their disadvantages at the spreading of such sources. Russia, on the other hand, needs to import technology and finished or semi-finished products that are of high value in order

to compensate the weakness and underdevelopment of the domestic industries and to modernize the such.
Regarding the trading volume, the impacts of the sanctions are very visible. For both countries, Finland and Germany, there is a strong decline in the trade volumes between 2013 and 2016 and the recovery that began in 2017 is less strong than the decline and did not lead to the same trade volumes as before the crisis yet. This has different impacts on the particular sectors and industries and will be further investigated in this thesis.

2.3 Core Industries

In order to assess the economic impacts of the mutual sanctions between the European Union and Russia, it is necessary to take a closer look at the economic structure of Germany and Finland and to determine their core industries.

2.3.1 Germany

The economic structure of Germany is very unique. The industrial sector is very strong, stronger than in the most European countries and has a high importance for the German domestic economy. The industry sector itself is highly developed and technologized. The manufacturing sector is the most important subsector of the industry in Germany. German manufactured products are demanded world-wide and stand for quality and know-how. There exist a lot of midsize companies in Germany that are specialized on particular goods and that are often market leader, so-called hidden champions, in these niches. These companies build the fundament of the German industry and economy. While in the early 2000's there was a wave of deindustrialization throughout Europe, Germany kept its share of the industry on the economic added value stable. In 2018 the German industry was responsible for around 22% of the gross value added (BMWI, 2020a). This is in comparison to other developed countries in the European Union and world-wide very high. In the United States the industry was responsible for around 11,6%, in the whole European Union for 17,1, in France for 10,9 and in Great Britain for 10% of the gross value added (VCI, 2019, pp. 2-5). Besides that, the industry is a major employer in Germany. 7,75 Million people work in the manufacturing sector in Germany which equals around 17% of the total employees (Statista, 2020a). Around 41% of them work in the four biggest manufacturing sectors which are the automotive industry, the chemical and pharmaceutical industry, the electronic industry and machine construction

industry. In the year 2017, the manufacturing sector generated revenues amounting € 2.1 trillion (VCI, 2019). This equals around 62,6% of the German gross domestic product.

Germany	Automotive Industry	Chemical and Pharmaceutical Industry	Electronic Industry	Machine Construction Industry	Combined
Direct Employees	832.000	464.000	885.400	1.063.000	3.244.400
Companies	962	2.200	3.568	6.653	13.383
Revenue (2019)	436.200.000.000 €	198.270.000.000 €	190.100.000.000 €	228.700.000.000 €	1.053.270.000.000 €
Export Turnover (2019)	282.500.000.000 €	124.430.000.000 €	99.992.600.000 €	179.800.000.000 €	686.722.600.000 €
Export Quota (2019)	64,76%	62,76%	52,60%	78,62%	65,2%*
Most Important Export Markets	USA ; China	USA ; Netherlands	China ; USA	USA ; China	USA ; China**
*Average; **Most important trading partners					

Data Source: Bundesministerium für Wirtschaft und Energie, 2020. Automobilindustrie (Automotive Industry), [online], https://www.bmwi.de/Redaktion/DE/Textsammlungen/Branchenfokus/Industrie/branchenfokus-automobilindustrie.html [accessed 03.10.2020]
Verband der Chemischen Industrie e.V., 2020. Chemical industry in numbers 2020, Frankfurt am Main. pp.32-93.
Zentralverband Elektrotechnik- und Elektronikindustrie, 2020. The Electric Industry in Germany, [online], https://www.zvei.org/fileadmin/user_upload/Presse_und_Medien/Publikationen/2020/Mai/Elektroindustrie_in_Zahlen_2020/Elektroindustrie-in-Zahlen-Mai-2020.pdf [accessed 03.10.2020].
Bundesministerium für Wirtschaft und Energie, 2020. Mschinen-und Anlagebau (Machine and equipment construction , [online], https://www.bmwi.de/Redaktion/DE/Artikel/Branchenfokus/Industrie/branchenfokus-maschinen-und-anlagenbau.html [accessed 04.10.2020]

Table 2.2: German core industries overview.

The importance of the four major sectors of the manufacturing industry for the German economy is clearly visible here as 55,6% of the revenues came from these sectors.
So, the aforementioned numbers and facts already give an overview by which sectors the industry in Germany is dominated and therefore build the core of the German economy.

2.3.1.1 Automotive industry

The automotive industry is by far the biggest of these four main sectors. In 2019 the revenue of this sector accounted for € 436 bn and was responsible for around 4.7% of

the gross-added value. Two-third of the revenues of the German automotive industry are made in foreign markets, equaling € 282,5 bn in 2019. Furthermore, the vehicle and engine manufacturers were responsible for 75% or € 343,4 bn of the revenues made in this sector. These numbers already show what a huge significance the automotive sector has for the German economy. Besides that, it plays a major role for the job market in Germany. Around 832.000 people were directly employed in the automotive industry and 2.2 Million jobs are directly and indirectly related to this sector. This is equal to around 4,9% of all workforce in Germany giving this sector further economic and social weight. As mentioned before, the foreign markets play a key role for the automotive industry as not just two-third of the revenues are made there but 75% of the vehicles produced in Germany are exported to foreign countries, so companies of this sector have a special interest in free trade (BMWI, 2020b). Russia only plays a minor role as an outlet market for automotive parts and vehicles with a share of 1,54% in 2019. Compared to other foreign markets such as China or the United States that have a share of 8,5% and 8,9% on the German Automotive export the share of Russia is very marginal for the German Automotive industry (Statistisches Bundesamt, 2020d). Major companies in this sector are Volkswagen, BMW and Daimler, which are vehicle manufacturers, but also Bosch, Continental and ZF Friedrichshafen are very important German automotive suppliers. Beside these major companies, there are many other big and medium sized companies connected to the automotive sector.

2.3.1.2 Chemical and pharmaceutical industry

The chemical industry is another key industry of the German economy. It is dominated by big companies such as BASF, Bayer, Fresenius or Henkel but more than 2.000 companies are operating in the German chemical industry with around 90% of them being small or medium sized enterprises. In 2019 the chemical industry gained a combined revenue of € 198,27 bn and € 124,43 bn or 62,8% of this revenue came from foreign markets. Similar to the automotive industry, the chemical industry is highly dependent on foreign markets and therefore this industry has a high interest in free trade, too. In Germany there are around 464.000 people employed in the chemical industry, that equals around 1% of all people in paid work in Germany and 6 % of the employees in the manufacturing sector. The exports of the chemical and pharmaceutical industry to Russia amounted € 5,27 bn in 2019 which averages a share of 2,64% on the exports to foreign markets. This means that the Russian market is less significant for German chemical companies. Other markets such as the US market where around 11% of the

exports to foreign markets are going to or the Netherlands where 8,6% go to have a dissimilar higher significance for the German chemical industry (VCI, 2020, pp. 32-93).

2.3.1.3 Electronic industry

The electronic industry also has a very high significance for the German economy. The biggest most known German company from this sector is Siemens. However, also in this sector we can find the typical structure of the German economy, as around 94% of the companies in the electronic industry are small or medium sized enterprises. In 2019 the electronic industry gained € 190,1bn of revenues of which 52,6% or € 99,99 bn came from foreign trade. In the same year 885.500 people were directly employed in the electronic industry, meaning that around 2% of all people in paid work in Germany and 11,4% in the manufacturing sector worked in this industry. The exports of the electronic industry to Russia in 2019 amounted € 3,99 bn, this were around 4% of the revenues that came from foreign trade in the electronic industry. Again, the Russian market has a moderate significance for the German manufacturers and compared to other export markets the export volume is rather low. The Chinese market was the most important export market for this industry sector with a revenue of € 21,9 bn, followed by the US market with € 19,2 bn. (ZVEI, 2020)

2.3.1.4 Machine construction

The fourth industry sector of the German core industries is the machine construction industry. Over 1 Million people are directly employed in this sector, making it the biggest industry sector in Germany in terms of employment if only direct employment is considered. The biggest players in this sector are Siemens, KION, Bosch and ThyssenKrupp. These four companies have made a combined revenue of € 72,32 bn in 2019. Beside these big companies there are many small and medium sized companies that build the fundament of this industry sector. Altogether around 6.600 companies in Germany are companies related to machine construction. The whole sector gained a revenue of € 228,7 bn in 2019 and € 179,8 bn of the whole revenues were gained from exports to foreign countries which equates to an export quota of around 80%. Similar to the other core sectors, the export and the free trade plays a significant role for the German machine construction industry. The exports to Russia in 2019 valued € 5,7 bn, which is around 3,2% of the whole revenues gained from foreign trade. However, again, there are other foreign markets that have a higher significance for the German machine

construction industry than the Russian. With an export volume of € 20,1 bn or 11,17% the United States are the biggest export market for German machinery, followed by China with € 18,8 bn or 10,45% export share (BMWI, 2020c)

All in all, we can say that the German economy is built up of the manufacturing sector that is the fundament of the economic activities in the Germany. This fundament consists of four major industries, namely, the automotive industry, the chemical pharmaceutical industry, the electronic industry and the machine construction industry. These industries together employ around 7,1% of the people in paid work in Germany and around 41% of all employees in the manufacturing industry work in one of these branches. They made a combined revenue of over € 1 trillion in 2019 which is around 30% of the German GDP. Especially the automotive industry in Germany is to highlight here as it gained revenues of € 436,2 bn in 2019 and around two million jobs are directly and indirectly dependent on this sector, so one could say Germany is an automotive stronghold. Furthermore, the structure of these industries illustrates the structure of the German industry in general very well. Most companies that operate in these sectors are small or medium sized enterprises with a staff between 20 and 5000 employees and make revenues between € 10 Million and € 500 Million per year. As mentioned before, a lot of these companies are hidden champions, meaning that they are market leaders in their special field, but they are relatively unknown to a broader society. Moreover, the German core industries approve the countries reputation as an export nation. With 62,5% of all revenues coming from the export, foreign markets play a major role for these industries and are significantly involved in the success of the German core industries. Especially China and the United States of America are important foreign markets for the products of these industries. Therefore, Germany has a high interest in low market barriers and trade tariffs as well as free trade.

2.3.2 Finland

The Finnish economy was based on the forest industry and the processing of wood for a long time until the middle of the last century, due to its lack of other resources such as coal or ores. However, a small metal industry started to develop in the 17th century when Finland was still part of the Swedish empire, as Finland processed Swedish ore as labor force and charcoal was sufficiently available. After the second world war, Finland was

forced to pay high reparations to the Soviet Union. Instead of money, the country primarily had to deliver industrial products that were desperately needed in the Soviet Union in order to rebuild the country. Therefore, Finland mainly had to deliver metal products to wipe of the debt. Consequently, Finland's industry had to modernize itself to meet the high demands of its neighbor, so the Finnish industry grew and became very competitive.

The Finnish economy shares many similarities with the German economy. Today, the industry sector is still the heart and driver of the Finnish economy. In 2019 21,8% of all people in paid work were employed in this sector. Furthermore, it had a share of 23,97% on the Finnish GDP in 2019 (Worldbank, 2020). Manufacturing is the largest part of the industrial activities in Finland as it accounts for € 142,0 bn turnover and it consists of four major departments, namely, the forest industry, chemical industry, electronic industry and metal industry. These sectors had a turnover of € 120,5 bn in 2018 which equals to 84,85 % of the overall manufacturing turnover (Statistics Finland, 2020).

Finland	**Forest Industry**	**Chemical Industry**	**Electronic Industry**	**Metal Industry**	**Combined**
Direct Employees	37.924	48.000	35.283	111.715	232.922
Companies	1849	854	960	6.369	10.032
Revenue (2018)	32.900.000.000 €	27.250.000.000 €	20.200.000.000 €	43.400.000.000 €	123.750.000.000 €
Export Turnover (2018)	13.290.000.000 €	12.300.000.000 €	7.460.000.000 €	23.400.000.000 €	56.450.000.000 €
Export Quota (2018)	40,40%	45,14%	36,93%	53,92%	44,10%*
Most Important Export Markets	Germany ; China	Sweden ; Netherlands	USA ; China	Germany ; Sweden	Germany ; Sweden**
*Average ; ** Most important trading partners					

Data Source: Finnish Customs, 2019. Finnish International Trade 2018, [online], https://tulli.fi/documents/2912305/3439475/Statistical%20graphics%202018/90c7d327-e4e4-4168-bcd2-122276d55c19/Statistical%20graphics%202018.pdf?version=1.23 [accessed 05.10.2020]

Statistics Finland, 2020. Enterprises by industry and size class in personnel, 2013-2019, [online], http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__yri__yrti__oik/statfin_yrti_pxt_11qe.px/ [accessed 06.10.2020]

Table 2.3: Finnish core industries overview.

These major subsectors are responsible for around 88% of the total exports of the Finnish economy. Moreover, the manufacturing sector plays an important role as employer in Finland. In 2018, 299,857 people in paid work were employed in the manufacturing sector which is equals to 11,8 % of all employees in Finland (Satistics Finland,2020) (Finnish Customs 2019).

2.3.2.1 Forest industry

The forest industry has a long tradition in Finland as the country is the most well-wooded country in Europe, so the natural resource wood was always sufficiently available. Furthermore, it is an important and diverse resource than can be used for several purposes such as energy delivery, as construction material or pulp and paper production. Today the pulp and paper production accounts for two third of the production value of the forest industry making it the biggest part of this industry. In 2018, around 37,924 people were employed in this industry sector equaling 12,6% of the overall employees in the manufacturing sector. The biggest companies in the Finnish forest industry are Stora Enso, UPM-Kymmene and Metsä Group. These companies made a combined revenue of € 25.1 bn in 2017, outlining the weight of these companies for the Finnish economy. In the same year the turnover of the forest industry amounted € 32.9 bn which equals around 23,1% of the whole manufacturing turnover. Exports play an important role for the Finnish forest industry as € 13.29 bn or 40,4% of the total turnover is exported to foreign markets. The exports to Russia amounted € 412,81 Mn in 2018 so around 3,1 % of all Finnish forest industry exports went to Russia. Compared to other foreign markets, Russia plays only a minor role for the Finnish forest industry. In the same year exports of wood and paper manufactures to Germany amounted € 1.89 bn. This equals to 14,25 % of the whole export volume in this industry. Another important market for the Finnish forest industry is China. Forest products with a value of € 1.25bn were exported to the Chinese market in 2018 which is 9,5% of the whole export volume in the same year. So, these two countries were the target of almost one-fourth of all forest industry exports in the aforementioned year (Statistics Finland, 2020) (Finnish Customs, 2019) (Business Finland, 2018).

2.3.2.2 Chemical industry

Another core industry of the Finnish industry is the chemical industry. Around 48.000 people in Finland worked in this sector in 2018. That means that 16,0 % of all employees

in the manufacturing sector work in the Chemical industry. Large companies in this sector in Finland are Kemira, Nokian Renkaat or Tikkurila. The revenue of the chemical sector amounted € 27.25 bn in 2018. In other words, this sector is responsible for 19,1% of the manufacturing turnover. Similar to the forest industry, the chemical sector is gaining a significant amount of revenues from foreign trade. In 2018 the exports of chemicals and related products valued € 12.3 bn, meaning that 45,13% of the revenues in this sector came from foreign markets. Furthermore, these are 19,3% of the total Finnish exports in 2018. Russia as a destination market for Finnish chemical products is only of moderate importance as € 772,2 Mil or around 6,3% of the total export revenues come from Finland's eastern neighbor. Other countries such as Sweden or Netherlands have a much higher significance for this sector. Sweden imported chemical products worth € 2.0 bn in 2018 and in the same year the Netherlands imported chemical products worth € 1.0 bn from Finland. So, these two countries were responsible for 25% of the foreign trade revenues of the Finnish chemical industry (Statistics Finland, 2020) (Finnish Customs, 2019) (Business Finland, 2018).

2.3.2.3 Electronic industry

The electronic industry of Finland is also considered as a core industry of the country. This sector employed 35,283 workers in 2018 which equals to 11,76 % of all employees in manufacturing. The most famous company that operates in this sector is the company Nokia which is famous for its cellphones a sector in which the company was the market leader for a long time. Nowadays, Nokia focused its business on telecommunications infrastructure equipment. Other big companies of the Finnish electronic industry are Scanfil and Vaisala. The electronic industry generated revenues of € 20,2 bn in 2018 making it the smallest of the four core industries in terms of revenues. However, this sector is responsible for 14,2% of the turnover of the whole manufacturing industry. Foreign trade plays a significant role for the Finnish electronic industry, too. € 7,46 bn came from exports to foreign countries, so 37% of the revenues came from foreign trade. The most important foreign markets for the electronic industry of Finland in 2018 were the United States of America with a share of 7,7% or € 576,2 Mil and China with a share of 6,7% equaling € 505,3 Mil. Russia played a moderate role for the Finnish electronic industry with a share of 4,2% on the Finnish electronic industry exports which equals € 313,5 Mil in the same year (Statistics Finland, 2020) (Finnish Customs, 2019)(Business Finland, 2018).

2.3.2.4 Metal industry

The metal industry that consists of manufacture of metal products, machinery and equipment as well as vehicles and other transport equipment is another important core industry of the Finnish economy. This sector gained turnover of € 43,4 bn in 2018 which is around 30,6% of the total turnover of the manufacturing sector. Besides that, this sector is a significant employer in Finland with 111,715 people working in the metal industry in 2018, meaning that 37,25% of all employees in the manufacturing sector work in the metal industry. Important companies of this industry are Kone, Wärtsilä and Valmet. These companies are global players in their specialized subsectors that export their products all over the globe. Generally, export is very important for the metal industry as 54% of the revenues in the metal industry came from export gains in 2018, which is in monetary terms € 23,4 bn. Russia is also for this sector of moderate importance as in the same year 6% of the exports of the metal industry went to the Russian federation which is equal to € 1,4 bn. The most important foreign market for the Finnish metal industry is the German market as this sector exported goods valued € 5,74 bn to Germany in the abovementioned year. This equals to 24,5% of the whole exports of the metal industry. Another important export market for the Finnish metal industry in 2018, was Sweden. € 2,42bn in products of the metal industry were exported to the western neighbor which equals to 8,9% of the whole exports (Statistics Finland, 2020) (Finnish Customs, 2019))(Business Finland, 2018).

In conclusion we can say that the Finnish manufacturing sector is the backbone of the country's economy. Around 300,000 people were employed in this sector, and € 142 bn of turnover was gained, more than any other subsector in Finland. The four core industries forest, chemical, electronic and metal contributed around 87,1% of these revenues in manufacturing which is in total numbers € 123,75 bn. Not only do they gain the lion's share of revenues in the manufacturing sector they are also the most important employers in this branch as 232,922 people in paid work are employed in these four core industries of Finland which equals to 97,68% of the workers in manufacturing. Especially the metal industry is of great importance for the Finnish economy as around 112,000 people work in this sector and € 43,4 bn of revenues were gained in this sector in 2018. Finnish products are not only demanded in domestic markets but also very popular in foreign markets. Finland has a very high reputation in the manufacturing of pulp and paper as well as in manufacturing the machines for this industry. Furthermore, Finland is a leading country in ship building and is nowadays specialized in the building of cruise ships and engines for big vessels. Other famous products from the Finnish core

industries are the escalator and elevator of the company Kone that are demanded all over the world. Not only big enterprises are active in those industries but also many small and medium sized enterprises, all in all more than 10,000 companies operate in these industries with the most of them in the metal industry. As the Finnish domestic market is of limited size due to the small number of citizens and the traditional orientation of the industry to foreign markets due to the historic circumstances in the past, foreign markets play a crucial role for the Finnish core industries as on average 44,1 % of the turnovers are gained abroad. The overall export quota of goods compared to the GDP of Finland equals to 27,3 % in 2018. So, Finland has a high interest in free trade as well as low market barriers for Finnish companies and products. The most important foreign markets for Finland are Germany, Sweden and the Netherlands. As we can see Finland and Germany share a lot of similarities when it comes to their economies and core industries. For both the manufacturing sector is crucial for their economies and they are both highly dependent on the export of their goods. Furthermore, many small and medium sized companies are active in the industry sector of both countries.

3 Hypotheses

3.1 There is a way back to normal economic and political relationships between the European Union and Russia

The history of the relationships between Russia and Germany as well as Russia and Finland is very changeful. In the last century Germany and Russia faced each other twice in brutal wars with millions of victims on both sides and extensive consequences for these countries and the whole Europe. The same counts for Finland and Russia in the winter war and shortly after the continuation war where Finland fought on Germany's side against Russia in the second world war. After the second world war and the defeat of Nazi-Germany and the division of Germany there were formally no diplomatic nor economic relationships between Russia and the Federal Republic of Germany. This was different in east Germany as that area was the Soviet occupation zone. However, only ten years after the war, in 1955, official diplomatic relationships between the Federal Republic of Germany and the Soviet Union were started. Already at the end of the 1950's there were negotiations over energy deliveries from the Soviet Union to Germany, but

they came to an end without a deal because of a NATO veto. In the middle of the 1960's these negotiations were revived, especially on the behalf of Bavaria and further intensified after Willy Brandt became chancellor of Germany. Willy Brandt implemented the policy of détente, which marked the beginning of an improvement of the relationships between the Soviet Union and Germany, especially in the economic sector. In 1970 the first so-called pipeline-gas deal was fixed between the two countries. Germany should deliver pipelines and in return the Soviet Union should deliver 3 bn cubic meters of gas annually to Germany. In 1973, the first Soviet gas delivery reached West Germany (Metz A., 2020, pp. 2-17). Over the years these contracts were amended, and new deals were made that continuously increased the Soviet energy deliveries to West Germany and other European countries. Trade on general benefited, apart from these energy deals, the Soviet Union started buying more and more products from West Germany. It was a win-win situation for both sides. Germany had access to cheap energy and reduced its dependency on imports from the Arab world and the Soviets received the desperately needed foreign currencies which were used to buy more high-tech products from the West.

With the invasion of Afghanistan by the Soviet Union in 1979 as well as the NATO Double-Track Decision, the political relationships with the Western world worsened again and the diplomatic cooperation was reduced dramatically (Bösch F., 2013). The United States of America implemented sanctions against the Soviet Union, banned technology deliveries and reduced its grain exports to the Soviet Union. Furthermore, the Western world, managed by the USA, boycotted the Olympic games in Moscow 1980. Apart, from the United States, another 80 countries stayed away from the games, including West Germany, Great Britain, Japan, Spain, Australia, Portugal and Norway (Sportschau, 2016). However, the political tensions and differences did not influence the economic relationships between the Federal Republic of Germany and the Soviet Union. Earlier in 1980 the German chancellor Helmut Schmitt and a German economic delegation visited Moscow and made a deal that doubled the energy deliveries from the Soviet Union to Germany. Countries like the United States tried to influence Germany and argued that Germany and other parts of Europe would become too dependent on the Soviet energy deliveries and that the eastern country could easily put pressure on Germany by reducing the energy deliveries. Germany tried to calm its allies and argued that only 30% of the gas demand came from Soviet Russia (Bösch F., 2013). Furthermore, the Soviets were dependent on these deliveries, too. Foreign currencies were highly demanded to buy products from the world market and therefore the energy exports were a good source to gain these currencies. The Communist country was very intent on fulfilling the contracts

with Germany and other western countries to proof itself as a reliable partner. The country always fulfilled its obligations to the West on time and communist brother states had to suffer from shortages in gas deliveries regularly because the deliveries to the solvent clients in the West were of priority. These economic bounds also served as a basis of diplomatic exchange between these countries (Bösch F., 2013).

Finland's defeat in the continuation war did not only have consequences for the territory of Finland, as it had to cede some of its territories to the Soviet Union, but it also had to pay a vast amount of reparations to its former enemy. As the Soviet Union was massively destroyed during the war, it was in desperate need of industrial products in order to build the country up again. Finland had to deliver these products as reparations and therefore it had to modernize and concentrate its industry sector to be able to fulfill the obligations. After Finland fully cleared all debts, the Soviet Union remained an important trade partner for the Finnish economy. On a political level, Finland tried to find the balance between the Communist East and the West. It remained political neutral during the Cold war and remained good relationships to the West as well as to its powerful eastern neighbor. During this time the term of Finlandization occurred which means that a smaller country remains neutral but accepts some influence on its politics by a powerful neighbor and therefore can keep its territory and political system (Kivinen M., 2017). Today, Russia still plays an important role for the Finnish economy and as the two countries share a border of 1,300 kilometers as a political partner too although Russia does not have the same significance as a trading partner for Finland as the Soviet Union had, especially after Finland's entry to the European Union in 1995. So, even though these countries have a very changeful history with each other they managed to come back to a constructive relationship relatively quickly after a phase of political tenses and remained good economic relationships with each other. Furthermore, after the collapse of the Eastern bloc, new prosperous relationships developed, especially between Russia and the now reunified Germany. For many years the relationships tightened, especially in the economic sector. Besides that, other countries of the European Union as well as the European economy have an interest in normal economic and political relationships to Russia, too. The country is still the fifth biggest trading partner of the EU and a very important energy supplier for many of the member states. Six years after the implementation of the sanctions against Russia, the question occurs to some members, how effective the sanctions are as the conflict in the Ukraine is not solved yet. Moreover, a new Ukrainian president is in office since May 2019, whose main election promise was to solve the conflict with Russia. This could give new momentum to the negotiations and

the conflict parties could start a new and constructive peace process. However, this process seems to take very long as since 2019 no real progress was made.

For the European Union the crucial question must be if the sanctions that were implemented in 2014 are helpful or only harmful. Since the implementation, Russia did not change its behavior in the conflict and there are no signs that the country is willing to do that in the near future. The economic exchange can be used as a platform to stay in contact with Russia and to also discuss political topics such as the Ukraine crisis. With sanctions this is only in limited form possible as the economic exchange is political influenced. This scenario is not new. Already in the 1970's when the United States implemented sanctions against the Soviet Union because of the war in Afghanistan and wanted to convince its allies to do the same, German chancellor Helmut Schmitt said: "Who trades with each other, does not shoot at each other". The circumstances today might be different but good economic relationships can help to solve conflicts, because the influence on the other country is much bigger when there are tight economic ties. The term "change through trade" describes the principle of reaching political changes and concessions through strong economic bonds.

History teaches us that constructive relationships, especially in the economic sector, are possible with Russia. The Soviet Union had to mourn the most victims of the second world war and the country was widely destroyed. However, it took only ten years to establish diplomatic relationships with the federation of Germany. This also counts for the relationship between Finland and the Soviet Union. So, these countries overcame much more dramatic events in history.

Furthermore, they managed to remain stable economic relationships even when the political situation was tense and even confrontational as it was in the late 1970's and beginning 1980's. Therefore, it is a matter of time that the European Union and Russia will get back to normal economic relationships and consequently to more constructive political relationships of which the whole Europe and Russia can benefit.

3.2 The European Union will put up with the status quo of the Crimea in the near future

The annexation of the Crimea by Russia as a consequence of the Ukraine crisis in 2014 provoked several States, including the European Union, to implement sanctions against Russia and the peninsula in particular. The European sanctions against the Crimea include economic sanctions as well as penalties against Individuals. Since 2014, it is prohibited to import products from the peninsula into the EU nor to insure or financially

support such imports. Furthermore, there are other restrictions for European businesses and individuals in force with regards to the Crimea. The purchase of real estate or to extend any existing participation in ownership of real estate located in Crimea or Sevastopol are prohibited as well as to acquire any new or extend any existing participation in ownership or control of an entity in Crimea or Sevastopol. Besides that, there are export restrictions for a list of goods and several services in finance, engineering, tourism. Cruise ships under the flag of an EU country or in possession of a European entity or individual, are not allowed to enter into any port of the peninsula, unless there is an emergency situation. Technical assistance for relating to infrastructure, technology or manufacture is also affected by the restricting measures (European Council, 2020). To put it in a nutshell, it is basically prohibited for European entities and individuals to do business with the Crimea apart from a few exceptions.

For six years now, the Crimea belongs de facto to the Russian federation and there are no signs that this status quo will change in the near future. During this time, the economic and administrative integration of the peninsula into the Russian state was actively pushed and this process is still going on. The construction of the Kerch Strait bridge, that connects the Russian mainland with the Crimea was a huge step for the country to bind the peninsula to the domestic economic and touristic infrastructure. The significance of the project from a Russian standpoint was illustrated by the opening ceremony of the bridge. Vladimir Putin personally crossed the bridge first in May 2018, staged by the Russian media as the connection of the reclaimed peninsula to the motherland. Putin also opened the railroad part of the bridge in December 2019. The direct connection between Russia and the Crimea offers the possibility to move goods and persons much easier and faster than before as the traffic is not dependent on ships or aircrafts. Moreover, Russia is investing heavily in the infrastructure of the Crimea in order to make the peninsula independent from Ukrainian deliveries. Before the annexation, the Crimea received around 85% of its water supplies from the Ukraine but since the annexation the country stopped the deliveries. Therefore, Russia implemented an infrastructure program worth around € 11,7 bn to build new electricity cables, gas pipelines, airports, water network as well as railways and roads (Kusznir J., 2018, pp.2-5). Besides that, it was integrated into the existing Russian federal system. In 2018, the citizens of the peninsula were participating in Russian presidential elections for the first time giving the integration further precedence. The vast majority, around 75%, of the Russian people support the so-called homecoming of the Crimea, giving the Russian government the legitimation for their integration process (Jobst K., 2019). In 2020 the Russian people voted in favor of extensive constitutional amendments. One point that was included in

the package of alterations is a strong hint to the situation of the Crimea in the future and manifests the retrieval of the peninsula. Article 67 of the new constitution contains the prohibition to alienate parts of the national territory of the Russian Federation (Kunze T., 2020). As Russia views the Crimea as a legitime part of its National territory this also counts for the peninsula. So, it is now officially prohibited by law to give back the Crimea to the Ukraine. Six years after the implementation of the European sanctions against Russia and the Crimea as a reaction to the annexation, it is obvious that the goal of these was missed, as the Crimea is still in Russian hands and the full integration into the Russian Federation is almost completed. The European Union and Russia argue over the international law if the annexation was legal or not. While the European Union argues that the annexation was unlawful because Russia violated the territorial integrity of the Ukraine with a military intervention, Russia has another point of view. The country argues that the referendum about the reintegration into Russia was lawful and uses the example of Kosovo as a precedence. The Kosovo declared itself independent from Serbia in 2008. This independence is acknowledged by most of the members of the European Union, exceptions are Spain, Romania, Cyprus, Slovakia and Greece. The European parliament claims that all member states should acknowledge the Kosovo as an independent State (bpb, 2010). So, in this case most of the European Union members accept the decision of an area that declares its independence after an Act of Parliament. It must be noted that the military intervention of the NATO in Kosovo was against international law, too. However, the preconditions were different as the goal of the NATO was to prohibit a genocide in Kosovo, this was never the case on Crimea. Regardless of the outcome of this discussion, if any, the reality is that the Crimea now de facto belongs to Russia, a fact that the EU has to accept, too. When a promising peace process between the Ukraine and Russia begins under the Minsk Agreement from 2015, that was agreed between the two aforementioned countries as well as Germany and France, it becomes visibly harder for the European Union to keep the sanctions in force as the fulfillment of the agreement is the premise for the abolishment of the restrictive measures. The European Union needs a strategy how to deal with the facts and the status of the Crimea in case the tensions will ease between the conflict parties. However, it seems unlikely that the EU will officially approve or accept the new status as a part of Russia. Therefore, the EU could deal with that situation differently. It will not officially approve the status but will put up with the status quo and abolish the sanctions. There are several models on how the European Union could deal with this status.

One model could be the European Union's handling of the Israeli occupied territories. These territories are the West bank, Golan heights and East Jerusalem. These territories

were occupied by Israel during the Six-Day war in 1967 and are controlled ever since by the State. Since then, Israel began with the settlements in these areas and until today there are around 300 settlements in the occupied areas. These settlements also produce goods, especially in the agricultural sector as the Westbank has very fruitful areas and many of these goods are exported to Europe. As the EU does not consider these areas as Israeli territory, products that come from the occupied areas must be labeled as such. The European Court of Justice decided that this special labeling is necessary in order to identify the real origin of these products and that it is unlawful to label them as products of Israel. Furthermore, these products do not benefit from the customs duties exemption that is in force for Israeli products. So, the European Union clearly differentiates between products from the Israeli State and products from the occupied territories (Auswärtiges Amt, 2019). However, it deals with the political circumstances and the reality in this region and makes trade with these possible. This could also be an appropriate approach for the EU's handling of the relationship with the Crimea. On the one hand, it could avoid accepting it as a part of Russia but on the other hand deal with the reality and have trading relationships with the peninsula. It will become harder for the EU in the future to investigate if Russian products origin from the peninsula or if European products find their way there as the economic integration into Russia is progressing. Therefore, it is time to find a solution for that.

Another example of how the European Union copes with occupied territories is the Western Sahara. After its independence from Spain the Western Sahara was occupied by Morocco and Mauretania in 1976. After Mauretania's exit, Morocco occupied the full Western Sahara and declared it to a part of the country. Today, 85% of the area is controlled by the country and 15% by the self-proclaimed Sahrawi Arab Democratic Republic. The United Nations see the Western Sahara as non-self-governing territories as they claim a referendum in the area over the status and neither acknowledge it as a part of Morocco nor as a sovereign state. This is also the standpoint of the European Union, although there are different views on this topic among the member states. However, Morocco is acknowledged as the de facto occupying power that governs the Western Sahara. Although, the territories are not considered Moroccan by the EU, there are neither sanctions against Morocco and the annexed territories nor any trade restrictions for products that originate in these or the export of European products to the Western Sahara. The preferential treatment of products that come from Morocco which was agreed under the treaty of association by the EU and Morocco does not only count for products of Morocco but for products that originate from the West Sahara, too. In other words, the EU does not accept the West Sahara as Moroccan territory but treats

products that come from these annexed areas as preferential as products that originate from the national territory of Morocco (Bundestag, 2020) (Bundestag, 2019).

The very different treatment of the aforementioned situation leads to the question why the EU does not follow a uniform strategy in relation to annexed or occupied territories in the world.

As the Crimea will most likely remain a part of Russia in the near future the European Union must find a solution to have trading relationships with the peninsula and at the same time remain its position of not accepting it as Russian territory but as annexed. The two examples of the Israeli occupied territories and the Western Sahara show how the EU already deals with similar situations. In my opinion the most realistic approach would be the treatment of the Crimea similar to the Israeli occupied territories. The sanctions could be abolished but the peninsula would not benefit from any trade agreements and would still be considered as Ukrainian.

3.3 The European industries affected by the sanctions will not have the same turnover in Russia after the sanctions as before the crisis

The current sanction regime of the EU and Russia against each other, lead to a development of substitutions in Russia. After the beginning of the Ukraine crisis and the implementation of the restrictive measures Russia began changed its economic policy. Instead of importing products Russia is aiming to substitute these products with domestic goods. A very good example of this process is the agricultural sector. Before the crisis, the country imported a lot of foodstuffs from foreign countries, especially the EU and North America. With the ban of agricultural products from these countries, Russia needed to find other solutions. Therefore, the country heavily invests in the domestic agriculture. Ekosem Agricultural for example is a Russian agricultural producer focused on dairy products and cattle farming that turned into the biggest dairy producer in Russia in a very short time. Since 2012, he company octuplicated its cattle population to around 182,000 and cultivates 599,000 hectares of land (Ekosem, 2020). It shows that Russia is pushing its goal of self-sufficiency in the agricultural sector. Also, foreign companies that have production facilities in Russia benefit from this development and invest into their facilities in Russia. The German company Hochland modernizes its cheese production facilities in Russia and Nestle invests € 85M until 2021 in its facilities in the country (Wittmann H-J., 2020a).

Besides the agricultural sector, Russia pushes the import substitution in other sectors, too. Until 2035 the domestic production in ten key industries shall increase significantly, including the aircraft production, machine construction and the pharmaceutical industry. For the agricultural sector, the chemical industry, automotive industry and ship construction the Russian government provides financial aid amounting 3,2 trillion rubles for the import substitution until 2024, which equals around € 36,2 bn (Wittmann H-J., 2020b). Moreover, Russia plans to continue with these projects even if the sanctions would be abolished. A visible example of import substitution is the state carriage of president Putin. Until 2018, the Russian state carriage was a model of Mercedes-Benz. With the inauguration of Putin to his fourth presidential term, the new carriage was introduced, too. It is a domestic production which is produced by the company UAZ in Uljanowsk and called Aurus Senat. The car shall be an alternative to western luxury vehicles and be advertisement for the Russian Automotive sector (Grüneweg, T.).

Since the Ukraine crisis, Russia is also diversifying its export structure. The country is looking for new buyers of Russian natural resources such as gas on oil as Europe is currently the biggest buyer of Russian natural resources. However, it seems like the country found a new reliable customer, namely, China. As the Asian country is the biggest energy consumer in the world and always looking for new inexpensive energy supply it is the perfect target for Russia. In 2014, the construction of the new pipeline with the sonorous name “Power of Siberia” to China began (Zeit, 2019). One advantage of China as a customer is that Russia and China share a border, which means that transit costs for the transport through third countries can be saved and that China is such a big sole energy consumer that is always in the need of new resources. The delivery volume, that was agreed in the delivery contract between the two countries, amounts 38 bn cubic meters of gas annually for thirty years. Another gas project that shall decrease Russia’s dependence on the European gas market is the Turkish stream pipeline (ZDF, 2020). As the name already implies, it is a pipeline running through the black sea to Turkey. With these projects Russia wants to secure its position as a leading energy supplier in the world and diversify its client base to be more flexible and less dependent on one single buyer. The new relationships in the energy sector could also lead to stronger economic ties in other sectors. China is the second biggest national economy in the world and has a high interest in finding new buyers of Chinese products. Russia could buy more Chinese products instead of European, especially machinery, automotive parts or electronic products and Europe could lose market share in these areas. Today, China is already the most important trading partner for Russia, followed by Germany, illustrating the shift towards Asia and away from Europe. However, Europe is still the most important

buyer of Russian gas and a very important exporter of technology to Russia. Nonetheless, these developments complicate the re-entry of European companies into the Russian market if the sanctions against Russia will be abolished, and it is very unlikely that they will have the same market shares than before the crisis. Furthermore, Russia will keep its strategy of import substitution that was implemented in 2014, making it even harder for European companies to compete in the Russian market, especially if there are restrictions by the state for foreign companies. Not only sanctioned products are affected by this development but also products that are not directly affected by the restrictive measures. Besides that, China became an important technology supplier after the European sanctions were implemented as Russia oriented itself more to Asia. China is today the most important supplier of oil drilling technology for Russia and companies in this sector have several cooperations with each other, for example for a liquified natural gas terminal on the Jamal peninsula, in order to deliver Russian gas to the Asian markets. Another example of Russian-Chinese cooperation is that the telecommunications company Huawei will construct the 5G infrastructure in Russia. Russia is also involved in the Belt and Road Initiative of China with several infrastructure projects such as the extension and modernization of the Murmansk port. It shall become Russia's most important hub for the arctic ocean road. The arctic ocean road could shorten the distance for ships between Asia and Europe by around 10,000 kilometers and it is expected that the route will be constantly ice free by 2040 (Vishnevskaya-Mann, 2019). Therefore, a Chinese company invests $ 275 Mil in a new coal terminal in Murmansk. So, China took the chance and invested in Russian infrastructure and became an important technology supplier during the Ukraine crisis. It is unlikely that China will give up its position in Russia when the sanctions are abolished.

All in all, we can say that these developments do not lead to a friendly market environment for European companies and that it will be harder for them to gain market share in Russia. Interventions by the state and Asian competitors as well as the chilled political relationships between the EU and Russia account for the difficult business conditions that European companies will have in the future in Russia.

4 Economic Impacts on Finland and Germany

The mutual sanctions between the European Union and Russia not only affected Russia but the European countries as well. Finland and Germany both have strong economic

ties with the country, therefore it is more likely that these countries are more affected by the sanctions than others that do not have a high trading volume with Russia. Besides that, other factors such as the strong decline in oil prices between 2014 and 2016 must be considered, too.

The export volumes of both, Finland and Germany to Russia suffered from a huge decline between 2013 and 2016. The Finnish exports declined from € 5.35 bn in 2013 to just € 2.97 bn in 2016. Since then, the numbers recovered slightly and reached an export volume of € 3.65 bn in 2019. In percentual terms, the Finnish exports declined by 44,48% between 2013 and 2016 and between 2013 and 2019 the decline amounts 31,77%. However, Giucci and Walter, 2017 estimated the sanction related decline in exports only to amount € 0.54-1.03 bn in 2016. This would mean that only around 22,68%-43,37% of the decline originated from the mutual sanctions. Moreover, the overall export volume of Finland declined from € 56.04 bn in 2013 to € 51.87 bn in 2016 but recovered and reached € 65.05 bn in 2019 (Finnish Customs 2013-2020). Russia's counter measures aim at the agricultural sector. Before the Ukraine crisis, the exports of this sector to Russia amounted 5% of the overall exports from Finland to Russia which is in monetary terms around € 270M. Dairy products and cheese made up 60% of the food stuffs exports in 2013. This number declined to just 0,9% in 2015, showing that the sanctions have a significant effect on the foodstuff exports to Russia. Finland's biggest dairy producer Valio suffered the most from these sanctions as 20% of its production was for the Russian market (Liuhto K., Sutyrin S., Blanchard J-M, 2017, p.69). Overall, one-third of Finland's foodstuff industry exports were going to its eastern neighbor, declining to just 8,6% in 2015 (Berg-Andersson, Kotilainen, 2016). So, the foodstuff industry found new markets for their products and adapted to the Russian sanction regime. Regarding products that are on the European Union's sanction list, the effects on Finland were rather small. Overall these products had an export volume of around € 30M to Russia. This number decreased by half to around € 14M in 2015 (Berg-Andersson, Kotilainen, 2016).

The German exports to Russia declined by 40% from € 35.8 bn in 2013 to € 21.5 bn in 2016. The numbers slightly recovered to € 26.54 bn in 2019 meaning that between 2013 and 2019 the German export volume to Russia decreased by 25,86%. Again, Giucci and Walter, 2017 estimate the sanction related export decrease in 2016 to be between € 3.22-6.12 bn meaning that only around 22,5% to 42,79% of the decline come from the mutual sanctions. Furthermore, the overall German exports increase between 2013 and 2019 from € 1,088.3 bn to € 1,328.15 bn meaning that the economy grew despite the restrictive measures (Statistisches Bundesamt. 2020e). Regarding Russia's sanctions

against the European agricultural sector, Germany sufferes from losses of about € 1bn annually (Deutscher Bauernverband, 2015). However, the European agricultural sector is adapting to the embargo and finds other export markets. Another sector that suffered from the sanctions is the machine construction industry. The export volume to Russia declined by 27% in 2015 (Ost-Ausschuss – Osteuropaverein der Deutschen Wirtschaft e.V., 2019). The costly assessment of exports by the German federal office for export control affects the economy additionally.

The assessment of the economic effects on the Finnish and German economies requires the consideration of other factors that stress the economic relationships of these countries with Russia. Parallel to the Ukraine crisis and the resulting restrictive measures, Russia suffered from a strong decrease of oil prices. The cost for one barrel of Brent oil amounted $ 108.56 in 2013 while in 2016 it was only $ 43.67, reaching its lowest point (MWV, 2020). Therefore, the Russian economy suffered from a recession and the inflation rose. Furthermore, the Russian ruble suffered from a strong loss in value making imports from foreign countries very expensive. This worsened the business climate even stronger. In order to divide the economic effects by the sanctions and the economic effects due to the slump in oil prices, Giucci and Walter, 2017 compared the development of trade with Russia to Kazakhstan, a country that is similarly to Russia, highly dependent on the export of natural resources. In 2013 the energy exports of Kazakhstan amounted 76% of the overall exports, for Russia they amounted 71%. Between 2013 and 2016 the European exports to Kazakhstan decreased by 30,4% from € 7.5 bn to € 5.2 bn. During the same time, the exports to Russia decreased by 39,4% from € 119.4 bn to € 72.4 bn. Considering that the exports to Russia would also have decreased by 30,4% instead of 39,4% the sanctions- related decrease amounted € 11 bn or 23%. Finland exported goods worth € 157.06M to Kazakhstan in 2013. In 2016 the exports to the central Asian country only amounted € 114.64M meaning the export volume decreased by € 42.41M which equals to 27%. This is significantly less than the decrease of 44,48% in exports to Russia. Considering that the Finish exports to Russia would also have decreased only by 27% instead of 44,48%, the sanction-related decrease amounted €935.5M in 2016 which equals to 39,3% of the total decrease. Since then, oil prices recovered a little but could not reach the 2013 numbers. In 2019 the export decrease to Kazakhstan compared to 2013 amounted 11,08%. The exports to Russia decreased by 31,77% from € 5.35bn to € 3.65bn in the same time. This means that for 2019 the sanction-related share of export decrease amounts € 1.1bn or 65% (Finnish Customs, 2008-2020a).

The German economy exported goods to Kazakhstan worth € 2.15 bn in 2013. This amount decreased to € 1.08 bn in 2016 and slightly increased until 2019 to € 1.44bn. In percentual terms, trade with Kazakhstan decreased by 49,77% until 2016 and from 2013 until 2019 by 33,77%. The trade with Russia in contrast only decreased by 39,9% until 2016 and between 2013 and 2019 25,82% (Statistisches Bundesamt, 2020a). That means that the German exports to Russia are neither as much affected by the slump in oil prices, nor by the sanctions against Russia. This is the case because Germany is the second most important trading partner for Russia with strong economic bonds between the two countries. Other calculations estimate the German trade losses due to the sanctions between 20% to 43% of the overall decrease in exports to Russia (Bundestag, 2017).

When assessing the economic impacts of the sanctions it must be considered that companies and industries that are affected by the sanctions look for alternative export markets. This can be observed in the export numbers of Finland and Germany as both countries increased their export volume between 2013 and 2019. Overall, we can say that it is very difficult to estimate concrete numbers when it comes to the economic effects on Finland and Germany. Nevertheless, there are different estimations that reach up to € 770M of losses monthly (Bundestag, 2017). There are other factors that also play a role in this scenario such as the business climate and competitors from other countries that do not have implemented restrictive measures against Russia, such as China or South Korea. These countries try to gain market share in Russia on the cost of European companies, which creates long-term losses in exports to Russia for these companies. Another development is the import substitution that Russia is pushing since 2014. A prominent example is the agricultural sector as Russia wants to become a net exporter of agricultural products and therefore heavily invests into Russian agricultural companies through subsidies. All the aforementioned points create economic effects on the Finnish and German economies.

5 Conclusion

The relationships between Russia and Finland as well as Russia and Germany have been very changeful in the past. There have been wars and other tensions and there have been easier times. Most of the time, these countries were able to remain stable economic relationships with each other. Russia is the most important energy supplier for Finland and Germany whereas these countries mostly deliver technology products to Russia. In the recent years these economic relationships, beside the political relationships, cooled down and the trade volumes between these countries declined heavily. This is on the one hand due to the Ukraine crisis that started in 2014 and the mutual economic sanctions that resulted from the crisis. On the other hand, factors such as the strong decrease of oil prices play a role, as Russia is highly dependent on the export of natural resources. As history taught us, Russia and Finland as well as Russia and Germany managed to improve their relationships again after heavy political differences. This will also be the case in the current situation, especially if there is a promising peace process in the Ukraine. Moreover, the European Union will cope with the status of the Crimea. As it is highly unlikely that Russia will give the peninsula back to the Ukraine and the integration process will go on, the EU will find a way to maintain the political agenda of not accepting the Crimea as a part of Russia but to remove the sanctions and to get back to normal trading relationships with Russia and the peninsula. Possible models for this would be the EU's dealing with the Israeli occupied territories or the Western Sahara. Nevertheless, it is unlikely that European businesses will have the same turnovers in Russia after the Ukraine crisis as before as other companies fill the current gap, for example Chinese companies. Furthermore, Russia implemented an import substitution strategy in 2014 to make the country less dependent on imports and will keep on with this strategy even after the crisis ends. The economic impacts of the mutual sanctions on Finland and Germany are hard to specify. The export volumes of both, Finland and Germany to Russia suffered from a huge decline between 2013 and 2016. The Finnish exports declined from € 5.35 bn in 2013 to just € 2.97 bn in 2016. Since then, the numbers recovered slightly and reached an export volume of € 3.65 bn in 2019. In percentual terms, the Finnish exports declined by 44,48% between 2013 and 2016 and between 2013 and 2019 the decline amounts 31,77%. The German exports to Russia declined by 40% from € 35.8 bn in 2013 to € 21.5 bn in 2016. The numbers slightly recovered to € 26.54 bn in 2019 meaning that between 2013 and 2019 the German export volume to Russia decreased by 25,86%. However, these declines are not solely due to the sanctions as other factors play a role. Russia suffered from the huge

decrease in oil prices and consequently the ruble suffered from a loss of worth. This also affects the Russian imports, as they get very expensive. For Finland, the economic impacts of the sanctions in 2019 amounted around 65% of the trade loss between 2013 and 2019. For Germany this looks a little different. There are estimations that the loss due to the sanctions that vary between 20% and 43% of the overall trade losses of Germany with Russia. Other estimations calculate up to € 770M a month in trade losses for Germany due to sanctions.

All in all, we can say, that the economic sanctions are harmful for Germany and Finland either way. They put a strain on the economies of the countries and prohibit them to have prosper trade relationships with Russia. Moreover, the sanctions failed to reach their aim. Russia did not change its policy in the Ukraine crisis and the Crimea is still in Russian hands. Therefore, it is time to change the EU's policy and to release the European economy from the sanctions.

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