A Reflection on the Ukrainian Crisis and How Western Sanctions Will Impact the Russian Economy

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Dedication

The thesis is dedicated to all Ukrainians who are fighting for their freedom and independency. Additionally, this work is for those who suffered from the Russian Aggression.

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Abstract

The focus of this thesis will be an analysis of the potential economic union between China and Russia. To start, it must be noted that it is hard to evaluate the role of the Chinese State in the Russia-Ukraine war and how it can resolve the conflict. Moreover, it is difficult to figure out whether China is willing to sacrifice its trade partnership with the US and EU to help Russia to take over Ukraine. In the author's opinion, Russia is in need of China because their market is available to Russian business, and thus it is reasonable to suggest that the RF may try to replace the Western technology and products with Chinese ones.

To perform this task, it is mandatory that the author discuss in deep detail the newly imposed sanctions on Russia and its effects on the economy, particularly to address the risks of the Russian economic depression or prolonged recession. Additionally, it is interesting to evaluate the current costs from the US and Europe sanctions on the RF. In the end, the author will try to estimate how long the Russian economy can survive for under these economic restrictions and what the West can do economically to stop Russian aggression.

Introduction

The Russian Federation is the largest land-mass in the world with a 2021 GDP of $1.65 trillion, making it the eleventh largest economy in the world. However, the country's economic growth has been slowing since 2014 due to the ongoing armed conflict in the east of Ukraine and the annexation of Crimea. Therefore, after the small incursion of the sovereign state of Ukraine in the year of 2014, the EU and US came up with financial sanctions on the Russian economy, which included the ban of technological machinery for the oil extraction, technological military equipment, restrictions on certain bonds, and some foodstuffs. According to NATO.com, "Recent data confirm Russia's entry into recession, with GDP growth of -2.2% for the first quarter of 2015, as compared to the first quarter of 2014. Recent forecasts suggest a fall in real GDP in the order of 3%-3.5% for 2015, and growth of around zero for 2016". In addition, during this same time the ruble plunged by about 100% in its value, meaning that in 2014, the average Russian had to pay 35 rubles for USD, but by 2021 Russians needed to pay around 75 rubles for one USD.

In fact, experts still struggle with gauging the real effect of the Western sanctions on the Russian Federation due to the significant decrease in oil price in the year of 2015. In particular, the price crash made Russia's economic position weaker because oil and gas account for about 40% of the federal budget revenue. Moreover, the Russian leader said that his economy would benefit from the so-called restrictions because domestic companies would produce and replace the sanctioned products. The reform of substituting the foreign production with the domestic one started to be called "import substitution", and this model was applied when the U.S.S.R. invaded Afghanistan. Thus, in this thesis Putin's import substitution model will be discussed in the following chapters, and it will be argued that they were not successful since domestic producers heavily rely on Western technologies.

The Western sanctions did not cripple the Russia economy from 2014-2021

The 2014-2015 Western sanctions did not ruin the Russian economic welfare. Some analysts speculate that new economic measures on the RF were not that severe because there was no ban of the major banks like Sberbank or VTB, no cut off from the SWIFT systems, and foreign investors still had an access to the Russian financial systems where they could borrow, lend, and buy. The reason for such a weak response of the US and EU on the Russian aggression is because of their inability to replace the Russian gas and oil imports. Moreover, the RF was one of the largest trading partners of the European Union: "in 2020, the EU was Russia's first trade partner, accounting for 37.3% of the country's total trade in goods with the world,36.5% of Russia's imports came from the EU, and 37.9% of its exports went to the EU. In 2021, the total trade in goods between the EU and Russia amounted to €257.5 billion"(ec.europa.eu).

The real risk of the Russian economic crisis arose when it started the full-scale invasion of Ukraine at the end of February 2022. In the author's opinion, Putin thought that he could invade the second largest European country without severe consequences from the West because the latter had not done so in 2014, meaning the West is partially liable for the current war in Ukraine due to its previous soft response. Indeed, as mentioned, Russia occupied a portion of the country and still kept access to almost all financial instruments with limited economic losses. Nowadays, the West decisively condemns Putin's aggression in Ukraine and responded by banning the major Russian banks, freezing the EU and US foreign accounts of Russian financial institutions, sanctioned domestic oligarchs, and banned access to Western technologies.

The immediate response to these toughened actions was that the Russian stock market collapsed by over 80%, and the national currency by50%. However, it is still hard to evaluate the real damage to domestic companies because all Russian financial markets are closed and investors cannot buy or sell securities, yet the author suspects that the RF has managed to avoid an economic nightmare, at least for now. The West did not ban the Russian energy products like oil, gas, and coal, which accounts for 15-20% of the Russian GDP. Additionally, the US and Europe still did not completely cut off Russia from the SWIFT system, which means that the RF still has access to international payment networks. Hence, Russia is still not completely isolated from the world and has some leverage over Europe through its energy resources.

The focus of this thesis will be an analysis of the potential economic union between China and Russia. To start, it must be noted that it is hard to evaluate the role of the Chinese State in the Russia-Ukraine war and how it can resolve the conflict. Moreover, it is difficult to figure out whether China is willing to sacrifice its trade partnership with the US and EU to help Russia to take over Ukraine. In the author's opinion, Russia is in need of China because their market is available to Russian business, and thus it is reasonable to suggest that the RF may try to replace the Western technology and products with Chinese ones.

To perform this task, it is mandatory that the author discuss in deep detail the newly imposed sanctions on Russia and its effects on the economy, particularly to address the risks of the Russian economic depression or prolonged recession. Additionally, it is interesting to evaluate the current costs from the US and Europe sanctions on the RF. In the end, the author will try to estimate how long the Russian economy can survive for under these economic restrictions and what the West can do economically to stop Russian aggression.

Chapter 1: Sanctions on the Russian Federation

The Prelude to the Russia-Ukraine war

The tensions between Russia and Ukraine exacerbated at the end of 2021. The government of the RF saw a possible threat in Ukraine joining NATO. Therefore, Russia and the United States started security consultations. One of the most discussed topics between them was the neutral status of Ukraine, meaning that Ukrainians would never be able to join any military alliance. At the beginning of 2022, the Russian President disclosed his concerns over a possible NATO and Ukraine cooperation, “If Ukraine joins NATO and tries to get Crimea back by military means, European countries will automatically be drawn into military conflict with Russia, " Putin said, speaking with heavy emphasis. "There will be no winners."(reuters.com). Despite Russia’s anxiety over Ukraine and NATO, the United States refused to give any guarantees to the RF. During the talks with the foreign Prime Minister Lavrov, the Secretary of State Blinken emphasized on the open-door policy within NATO. “...That we will uphold the principle of Nato’s open door,” Blinken said, adding: “There is no change. There will be no change.” (civil.ge). Thus, Ukrainian people will have to decide whether to join the NATO alliance or not. However, the US tried to calm down Russia by claiming that Ukraine will not be joining the Western military alliance anytime soon. Then, the President of Russia has claimed that the US has ignored all security principles of Russia and promised to prepare a military technical response to NATO. The US intelligence was confident that the Russian military response involved the invasion of Ukraine. In fact, Russia has amassed approximately 190,000 troops near the Ukrainian border by the 20th of February, 2022. Then, after continuous talks with the Russian government, President Biden admitted that President Putin made a decision to attack Ukraine by March 2022.

After the continuous warnings from the US and British leaders regarding the possible Russian invasion over Ukraine, Putin made a decision of a full-scale attack on Ukrainian territories on the 24th of February, 2022. In his state speech, Putin described Ukraine as a threat to Russian security if it joins NATO. “In a speech Thursday morning, Putin said the invasion of Ukraine was an act of self-defense against NATO expansion” (businessinsider.com). Additionally, Putin laid the blame on the Ukrainian government for the “genocide” of the ethnic Russian people that are living in the east of Ukraine. At the end of his speech the Russian President claimed that Ukraine is not a sovereign state because Vladimir Lenin was freely giving away most of the Russian territory to Ukraine.

> Ukraine has never had its own authentic statehood. There has never been a sustainable statehood in Ukraine … He (Putin) argued Ukraine was created by the Soviet Union under its first leader, Vladimir Lenin, despite overwhelming evidence of Ukrainian culture and history that predates the Soviet Union. Putin also insisted that Ukraine is part of Russia(businessinsider.com,2022).

Also, the Russian President ordered his troops to complete the so-called “denazification”. In his speech he said:

> To this end, we will seek to demilitarize and denazify Ukraine, as well as bring to trial those who perpetrated numerous bloody crimes against civilians, including against citizens of the Russian Federation … a special military operation against nationalists to protect the people of Donbass, ensure denazification and demilitarization"(npr.org).

After Russia attacked Ukraine, the Western allies had to come up with a strong sanctions package. Therefore, on the day of the invasion of Ukraine, the US President Joe Biden condemned Putin's aggression announcing the first sanction package on the RF in response to the breach of international law. In his speech, President Biden promised to freeze all Russian assets and sanction the major banks of the RF.

The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) today imposed expansive economic measures, in partnership with allies and partners, that target the core infrastructure of the Russian financial system — including all of Russia's largest financial institutions and the ability of state-owned and private entities to raise capital — and further bars Russia from the global financial system. The actions also target nearly 80 percent of all banking assets in Russia and will have a deep and long-lasting effect on the Russian economy and financial system. (home.treasury.gov).

The Treasury Department took unprecedented steps against the largest Russian bank Sberbank. To be concise, the number one bank of Russia and 25 of its subsidiaries will lose access to the American dollar transactions.

Severing the connection to the U.S. financial system for Russia's largest financial institution, Sberbank, including 25 subsidiaries, by imposing correspondent and payable-through account sanctions. This action will restrict Sberbank's access to transactions made in the dollar. Sberbank is the largest bank in Russia, holds nearly one-third of the overall Russian banking sector's assets, is heavily connected to the global financial system, and is systemically critical to the Russian financial system. (whitehouse.com).

The second largest bank of Russia, VTB was sanctioned by the US Treasury Department as well. The VTB bank and 20 of its subsidiaries will no longer be able to make any transactions in American dollars. Moreover, financial assets of the VTB that are touching the US financial system are going to be frozen. Citizens of the United States will be prohibited from investing and dealing with the particular financial institution. Finally, the full-blocking sanctions on the key Russian bank will be in force from the day of the invasion of Ukraine. Another portion of the full-blocking sanctions will hit:

Bank Otkritie, Sovcombank OJSC, and Novikombank- and 34 subsidiaries. These sanctions freeze any of these institutions' assets touching the U.S financial system and prohibit U.S. persons from dealing with them. (whitehouse.com).

The US Treasury Department sanctions the Russian financial entities which are critical to Putin's regime. Those enterprises are: Sberbank, AlfaBank, Credit Bank of Moscow, Gazprombank, Russian Agricultural Bank, Gazprom, Gazprom Neft, Transneft, Rostelecom, RusHydro, Alrosa, Sovcomflot, and Russian Railways. From now on, the listed companies will not be able to raise money on the US market. “This includes restrictions on all transactions in, provision of financing for, and other dealings in new debt of greater than 14 days maturity and new equity…” (whitehouse.com).

The other portion of the US’S sanctions was against the so-called Russian elites, who are termed oligarchs due to the fact of their enrichment at the cost of the Russian people and the state. According to the White House:

> Additional full blocking sanctions on Russian elites and their family members: Sergei Ivanov (and his son, Sergei), Nikolai Patrushev (and his son Andrey), Igor Sechin (and his son Ivan), Andrey Puchkov, Yuriy Solviev (and two real estate companies he owns), Galina Ulyutina, and Alexander Vedyakhin.

Most of these oligarchs are already holding key positions in the government and are being held accountable for the war in the neighboring country. Thus, their assets in the US will be frozen and they will lose access to the US financial system. Also, the families of the Russian “elites” are going to be in the lists of sanctions and will experience the same consequences.

The US will be sanctioning the Russian military. To be concise, the US will prohibit the sale of its software, technology, and equipment to the RF’s army. Additionally, the Treasury Department will forbid the United States’ companies to export their technology to Russia. According to the White House:

> This includes Russia-wide denial of exports of sensitive technology, primarily targeting the Russian defense, aviation, and maritime sectors to cut off Russia’s access to cutting-edge technology. In addition to sweeping restrictions on the Russian-defense sector, the United States government will impose Russia-wide restrictions on sensitive U.S. technologies produced in foreign countries using U.S.-origin software, technology, or equipment. This includes Russia-wide restrictions on semiconductors, telecommunication, encryption security, lasers, sensors, navigation, avionics and maritime technologies. These severe and sustained controls will cut off Russia’s access to cutting edge technology.

The key US ally, the UK took aggressive action on Russia as well. On the 24th of February, the United Kingdom decided to ban Russian companies from its capital markets. Moreover, the RF’s sovereign debt sales in London would also be restricted. It is still uncertain whether it will impact the Russian economy but reuters.com claims, “Russia has issued $4.1 billion of sovereign debt in London since the beginning of 2020” (reuters.com, 2022). The other portion of the UK's sanctions will involve the asset freeze of the second-largest bank of Russian VTB. From now on, the majority of the Russian banks will not be able to make transactions in the British currency as well as clearing their payments through the financial systems of the United Kingdom.

> These powers will enable us totally to exclude Russian banks from the UK financial system, which is of course by far the largest in Europe, stopping them from accessing sterling and clearing payments through the UK, Johnson told parliament. (Reuters.com, 2022).

Additionally, the UK's government imposes sanctions on the so-called Russian elites who bear the responsibility for the violence in Ukraine. The new measures involve the asset freeze and travel. The list of sanctioned individuals includes 100 businessmans and government officials.

> This includes an asset freeze and travel ban on Yelena Georgieva, chair of the board of Novikombank; Pyotr Fradkov, Promsvyazbank chairman; Denis Bortnikov, VTB deputy president; Kirill Shamalov, Putin's former son-in-law; and United Aircraft's Yury Slyusar. (reuters.com,2022).

Other measures which are set to be implemented will hit Russian middle and upper classes who have British bank accounts. Thus, if the legislation takes place, Russian individuals will be restricted from holding more than 50,000 pound or $66,860 in their UK banks.

The British government is set to ban tech exports to Russia. From now on, the UK will prohibit the sale of semiconductors, oil refinery equipment, and air parts to the RF. The UK Kingdom is set to ban the Russian aircraft from landing in the British airports.

The European Union has imposed identical sanctions on Russia as the UK and US did. From now on, the Russian financial institutions will lose access to the European capital markets. Also, Russian people will be able to deposit only a certain amount of money in their European banks. According to consilium.europa.eu:

> In addition, it introduces new measures which significantly limit the financial inflows from Russia to the EU, by prohibiting the acceptance of deposits exceeding certain values from Russian nationals or residents, the holding of accounts of Russian clients by the EU Central Securities Depositories, as well as the selling of euro-denominated securities to Russian clients. (consilium.europa.eu, 2022)

The new European legislation will restrict their companies from exporting the vital technologies to Russia.

The EU imposed further restrictions on exports of dual-use goods and technology, as well as restrictions on exports of certain goods and technology which might contribute to Russia's technological enhancement of its defense and security sector. This will include products such as semiconductors or cutting-edge technologies (consilium.europa.eu, 2022).

The EU will prohibit the insurance and reinsurance to Russian airline companies. Also, the RF's airline corporations will not be allowed to import the technology and key goods from Europe to their airplanes. Moreover, the European Union aircraft will be closed for all Russian airlines. It is assumed that the EU will sanction the Russian elites and other individuals who are responsible for the invasion in Ukraine.

IIndividual restrictive measures will apply to a total of 654 individuals and 52 entities, and include an asset freeze and a prohibition from making funds available to the listed individuals and entities. In addition, a travel ban applicable to the listed persons prevents these from entering or transiting through EU territory. (According to the (consilium.europa.eu, 2022):

The Russian aggression in Ukraine has been intensifying since the start of the war. The examples of Russian violence are the massacre in Bucha, Irpin, and Borodyanka. Also, the RF's army does the bombardment of major Ukrainian cities such as Kharkiv, Kyiv, Mykolaiv, and so on. Thus, the US and its allies continued to impose new sanctions on Russia. Moreover, the White House has announced additional measures against the Russian oligarchs who have close ties with President Putin. "This coming week, we will launch a multilateral Transatlantic task force to identify, hunt down, and freeze the assets of sanctioned Russian companies and oligarchs – their yachts, their mansions, and any other ill-gotten gains that we can find and freeze under the law". (cnbc.com, 2022).

At the beginning of March, the US designed a new task force named "KleptoCapture". The particular name comes from the word "kleptocracy" and aimed to arrest those who misuse their power to enrich themselves at the cost of the state and people. After the announcement of the “KleptoCapture”, this statement has followed: “To those bolstering the Russian regime through corruption and sanctions evasion: we will deprive you of safe haven and hold you accountable," said Deputy Attorney General Lisa Monaco. "Oligarchs be warned: we will use every tool to freeze and seize your criminal proceeds."(reuters.com).

The “KleptoCapture” immediately hits wealthy Russians. Washington imposes fresh sanctions on oil magnate and close Putin’s ally Alisher Usmanov. Thus, all of his assets such as yachts and apartments in the United States will be arrested. The US Treasury Department will announce the same measures on Dmitry Peskov, Nikolay Tokarev, Boris and Arkady Rotenberg, and Yevgeniy Prigozhin. Some of these names are very well-known in the American establishment because of the interference in the US elections.

Evgeniy Prigozhin, previously targeted for alleged attempts to interfere in U.S. elections, was designated again. The Treasury described him as the Russian financier of the Internet Research Agency (IRA) and said his "influence apparatus is reportedly supporting Russian Government designed influence operations within Ukraine. (reuters.com, 2022)

Additionally, the new sanctions will ban nineteen more wealthy Russians and their families from entering the US.

The EU has also imposed sanctions on oligarchs under its new legislation “freeze and cease”. According to reuters.com, “... the EU has introduced new sanctions on Russia, adding nearly 700 top politicians, businessmen and military staff to its blacklist - including 42 super rich "oligarchs" such as Chelsea soccer club owner Roman Abramovich and banking tycoon Mikhail Fridman”. Great Britain is expected to hit oligarchs as the US and EU does. These wealthy Russians are: Roman Abramovich, Oleg Deripaska, Igor Sechin, Andrey Kostinm, etc. According to the gov.uk:

As part of the UK’s leading efforts to isolate Putin and those around him, these oligarchs – who have a collective net worth of around £15 billion – will have their assets in the UK frozen, they are banned from traveling here and no UK citizen or company may do business with them”.

The latest massacre in Kyivska oblast pushes the West to take more aggressive steps against Russia. The top EU official Josep Borrel claims that they are already designing new sanctions on Russia. Hence, on the 5th of April, the EU proposed a new portion of sanctions on the RF. According to the European officials, the following restrictions are more severe and would cost Russia to lose around $10B alone due to the import ban.

The proposals include banning imports of coal, wood, cement, liquors and seafood worth about 9.5 billion euros ($10.4 billion) a year, according to the European Commission. A source said the restrictions would also hit caviar, vodka, rubber and chemicals" (reuters.com).

Also, the EU wants to stop exporting, "... advanced semiconductors, quantum computers, and other electrical and transport equipment. The export of technology for liquefied natural gas (LNG) would also be banned, according to a source" (reuters.com, 2022). The export ban would cost Europe around $10B. It is expected that the EU officials are seriously considering the prohibition of Russian ships and vessels from entering the Eurozone harbors. The particular move could make Russian-Europe trade relations even worse due to potential exemption of energy products, food, medicine, etc. Additionally, the EU will ban all the transactions with VTB bank of Russia and will sanction thirty-six more Russian individuals who are related to Putin.

The US is never behind its Western allies on imposing sanctions on Russia. Even before the violence in small towns like Bucha and Borodyanka, the Treasury Department kept announcing new measures against the RF. On the 25th of March, the White House targeted the Russian corporations which, "... provide goods and services for the military and intelligence services, including dual-use components used in weapons proliferation, U.S. officials said" (wsj.com, 2022). It is expected that the new measures will cripple the RF's technology sector which largely relies on the West, per wsj.com. The Russian companies that will be targeted by the US are:

…Serniya Engineering, which the U.S. thinks is at the center of a procurement network engaged in weapons proliferation for Russia's intelligence services; and Moscow-based Sertal, which the administration says produces equipment and technology for Russia's military. The U.S. also will impose sanctions on what it describes as four front companies used by Serniya and Sertal to facilitate their procurement for the military" (wsj.com).

The mass killings in Kyivska oblast made the Biden Administration take an even tougher stance on Putin by imposing more sanctions on Russia. Therefore, the US Treasury Department proposed to toughen the existing measures against the major Russian banks such as Sberbank and Alfa Bank. It is worth mentioning that the following financial institutions are Russia's top private lenders, per wsj.com). As Wall Street Journal reports, the US Treasury Department will sanction two daughters of President Putin. (wsj.com, 2022)

After the Russian invasion of Ukraine, the Ukrainian government started to press on Western leaders to ban all energy from Russia. Thus, on the 7th of April, the US Congress and Senate passed a bill to ban all imports of oil, natural gas, and coal from the RF. According to cnbc.com,

"The bill prohibits the importation of oil, gas, coal and other energy products from Russia. It comes nearly a month after Biden signed an executive order that mandated essentially the same steps". The bipartisan support of the package signifies US solidarity with all Ukrainians. Also, the energy embargo sends a strong message to the Russian tyrant, "Putin's Russia does not deserve to be a part of the economic order that has existed since the end of World War II, …"(cnbc.com, 2022).

Moreover, the French President Macron signaled that France is more than ready to do everything they can to make Russia responsible for the violence in Ukraine.

Speaking to a French broadcaster, Macron said that there were "very clear signs" war crimes had been committed in Bucha and that, 'it's pretty established that it's the Russian army' who is responsible for them … 'We can't let it slide. We must have sanctions that dissuade what's happened there [in Bucha], what's happening at Mariupol," Macron said.' (cnn.com, 2022)

The particular statement of one of the EU's leaders sounds pretty optimistic for the Ukrainian government which seeks to do everything they can to cut off all economic activities between Russia and Europe. Indeed, if the EU imposes the full embargo on the RF's energy resources, it can really hit Putin's economy. According to oilprice.com:

In 2020, oil and gas generated US$219 billion (16.3 trillion Russian rubles) of Russia's gross domestic product, according to estimates by Russian outlet RBC based on Russian GDP data for last year … The Russian oil and gas industry's share of the overall GDP is generally in line with the average 15-20 percent estimate for other major oil producers. (oilprice.com, 2022)

However, as of 10th of April 2022, Russia is still selling oil and gas to the European Union without facing major consequences.

One of the countries that tries to avoid imposing embargo on Russian energy is Germany. The German government fully supports Ukraine but at the same time admits that it is largely dependent on the RF' oil and gas. According to dw.com, "Before the war began and the subsequent heavy sanctions targeting Russia, Germany received 50% of its coal, 55% of its gas, and 35% of its oil from Moscow". Indeed, the following statistics do not look promising and mean that German people can face severe consequences if they stop purchasing Russian energy, as the German energy minister (Robert Habeck) says. Robert Habeck claims that Germany would face poverty and massive economic destruction if it cuts off the Russian gas. He is confident that ordinary Germans will not be able to heat their homes as well as to buy petrol for their cars.

> If we flip a switch immediately, there will be supply shortages, even supply stops in Germany … The Green party politician predicted 'mass unemployment, poverty, people who can't heat their homes, people who run out of petrol' if his country stopped using Russian oil and gas. (guardian.com, 2022).

The top official agrees with the fact that it's not morally right to buy energy from Russia but this is the only choice Germany has now. However, Germany plans to significantly reduce the imports of all energy products from Russia due to the ongoing war in Ukraine. Moreover, Robert Habeck says that it's possible for Germany to become fully independent from Russian coal, gas, and oil by 2024, and he also claimed that there will be no renewals of contracts by stating:

> By the middle of the year, Russian oil imports to Germany are expected to be halved. By the end of the year, we aim to be almost independent … Habeck confirmed that current contracts with Russian companies to import energy will not be renewed. He also acknowledged that Germany would only be able to wean itself off Russian gas deliveries by mid-2024(dw.com).

The support for full oil embargo is growing among the EU countries. However, it is still unknown when this decision will take force.

The Russian aggression against Ukraine caused hundreds of Western corporations to leave the Russian market. Despite some confrontations between the West and the RF, many companies like McDonalds or Shell have built good relationships with the Russian consumers. However, the war spurred almost all foreign within Russia to either completely close the business and leave the country or temporarily shut-down the facilities and resume all the operations when the conflict is going to be resolved. Thus, as on 10th of April, 2022, this number of companies have left the RF:

1) Withdrawing all business: 150 companies completely halting Russian engagement. 2) Suspending Operations: 178 companies temporarily curtailing Russian operations while keeping return options open. 3) Reducing Activities: 74 companies scaling back some but not all operations and/or delaying investments. 4) Economic Collaboration: 34 companies digging in, defying demands for exit or reduction of activities(fortune.com,2022).

In Chapter One, the author discussed the measures that were taken by the Western countries to make Russia accountable for the war in Ukraine. The reader was made familiar with the details of sanctions which were imposed by the US, UK, and EU. Moreover, the reader is offered to look at the relationships between the US and RF before the invasion of Ukraine. In the following chapter, the author will be evaluating the economic and financial consequences of sanctions on the RF in order to discuss the future of the Russian economy.

Chapter 2: The Russian economic damage from the Western sanctions

As of writing, most estimates of the impact of sanctions on the Russian economy are that they will be severe, in the range of many billions of dollars of losses, if not larger. For example, some the Russian officials, such as the Chairman of the Central Bank Elvira Nabiullina have warned of the severe consequences of the sanctions, while former finance minister Alexei Kudrin estimated that,"Russia's economy is on track to contract by more than 10% in 2022, the biggest fall in gross domestic product since the years following the 1991 fall of the Soviet Union" (reuters.com, 2022). If these officials are right, Putin's risky gamble may lead to the largest economic crash in Russian history, and this economic and financial meltdown could lead to widespread strikes and potentially even revolution. However, the Russian government will try to solve these most significant scenarios by simply not releasing the economic reports which would show the effects of the Western Sanctions. Indeed, according to the Wall Street Journal:

> In recent days, authorities stopped publishing data on government debt, trade statistics and oil production. The central bank limited the volume of financial information that local banks have to publish regularly while lawmakers are working on a bill banning lenders from sharing data with foreign states. (wsj.com, 2022)

Yet, despite this information blackout, the author will try to discuss the effectiveness of the Western sanctions on the Russian financial markets, gross domestic product, inflation, the investment environment, and the overall economy as a whole. Additionally, Chapter Two will focus on foreign companies' exit from Russia as well as prove that the RF's economy is highly dependent on foreign imports. The author is set to discuss that Putin's Russia will face severe product shortages from medicine to key industrial materials, from semiconductor components to key elements to the Russian military.

<u>Gross Domestic Product</u>

After the invasion of Ukraine, the course of the Russian economy was set on a path that will dramatically change it for a long time. At the moment, the European Bank for

Reconstruction and Development estimates that there will at least be a prolonged recession, with around a 10% decrease in GDP, according to (CNBC.com, 2022). Goldman Sachs has given the same projections of the RF's GDP, (cnbc.com, 2022). Meanwhile, one of the leading economic indicators that measures the direction of economic trends in manufacturing has fallen significantly due to the Western sanctions. According to cnbc.com:

> The S&P Global purchasing managers' index (PMI) for Russia, published on Friday, dropped from 48.6 in February to 44.1 in March, with anything below 50 representing contraction. Goldman Sachs economists noted on Friday that the fall was broad-based, with sharp drops in the output, new orders, and (especially) the new export orders components. (cnbc.com, 2022)

Indeed, the economic future of Russia darkens with financial institutions giving more pessimistic predictions. For example, the economic analysts at Capital Economics predict that Western sanctions will cause the RF's gross domestic product into a 12% contraction in 2022, while inflation is expected to exceed 23% year-on-year, per cncb.com (cnbc.com, 2022).

Russian Financial Markets

The combination of these estimates can likely mean that the Russian government has a lot of challenges ahead, from fighting inflation to rescuing financial markets from a freefall. Moreover, the head of the Central Bank of the RF admitted, "Today, Russia's financial system and economy are facing a totally abnormal situation" (cbr.ru, 2022). In the first week of the war between Russia and Ukraine, the Russian ETF VanEck plunged about 77% from February 16 to March 8, (risingcandle.com, 2022). Russia's largest financial institution Sberbank collapsed 96% within the same timeframe, according to yahoo.com (cnbc.com, 2022). In response, the Central Bank of Russia shut the stock market.

Eventually, the Russian exchange resumed its limited operations only on the 23rd of March, and the Central Bank was forced to provide liquidity on demand to ensure it maintained opening. For example, "the central bank started to buy OFZ ruble treasury bonds to support the domestic debt market when it reopened on Monday, and the finance ministry said it plans to spend 1 trillion rubles to buy Russian companies' shares" (reuters.com,2022). Meanwhile, non-residents are prohibited from selling their securities until April 1, as it was stated that, "until April 1, foreign investors are allowed to conduct operations to lower their obligations including repo deals and deals with derivative instruments, but not to sell shares or OFZ ruble treasury bonds, the Moscow Exchange said"(reuters.com).

This has not ruled out the fact that the Russian stock exchange is still facing renewed challenges. For example, the UK Treasury plans to strip Moscow stock bourse of recognized exchange status, according to a new report from the Financial Times (ft.com, 2022). Thus, the British investors will not be able to buy and sell on the Russian stock exchange. Another move by the British authorities involves, "the UK plans to strip Russia's stock exchange of a status that allows investors to claim tax relief on trades, in a move aimed at further isolating Moscow from global financial markets" (ft.com).

The Russian Currency, the Ruble

The Russian ruble has experienced a major hit from the new measures. According to Chart one, the reader can see that the ruble was trading in the range of 80 to the American dollar before the invasion of Ukraine. In the two weeks after the Russian occupation of Ukrainian territories, the ruble had crashed by approximately 100%. Chart one reveals that from the 24th of February to the 8th of March, the Russian currency has risen from 80 to 155 to the American dollar, which can be explained by the significant capital outflows from the Russian economy as well as international reserve freeze. According to the nbcnews.com author:

> The hundreds of billions in foreign assets, which include government securities and foreign deposits, could have been used to prop up the ruble and stave off inflation, experts say. But sanctions froze a portion of those assets, and when the ruble felt following Russia's invasion of Ukraine, experts say there was nothing to stop it. Russia could not get access to its money. The ruble fell to its lowest value in more than two decades (nbc.com, 20220

Figure 1, The USD/RUB, yahoo.com

It is unclear if Russia's gold reserves could help to save its financial markets and the ruble. Russia has built the fifth largest gold reserves in the world, which are worth over $130B. However, it might not be a safe haven for Putin's state because banks and other financial institutions are afraid of doing any business with the RF because of potential penalties. So, Russia may need to find some other countries or foreign companies which would be willing to buy the gold and at a significantly lower price. For example:

> Russia may instead be forced to sell its formerly lucrative supply - worth more than £100 billion - to central banks in India and China … Those deals will come at a lower price, commodities analysts CPM Group predict … And the blow to Russia could be even greater if Western politicians expand so-called 'secondary sanctions' to punish those buying or selling Russian gold anywhere - including key market China. (dailymail.co.uk, 2022)

It is expected that the ruble's plunge will cause Russian living conditions to significantly worsen in the coming months. Moreover, the prices on the foreign production have already increased in Russia. According to bbc.com:

> Official figures show the price of some household staples - such as sugar - have jumped by as much as 14% over the past week… Inflation is set to keep rising in Russia where the ruble has fallen sharply since the Ukraine war began. The value of the currency has dropped about 22% this year, and this has pushed up the cost of importing goods (bbc.com, 2022).

Yet, despite all of these measures, with only a month later the Russian ruble had erased all of its losses, as of 10th of April, 2022. Nonetheless, the tremendous rebound does not seem trustworthy by some financial analysts. Economist Daniela Gabor commented, "Guys, with capital controls, I can fix the currency at about any rate I want to, ..."(businessinsider.com). Indeed, the Russian Central Bank implemented measures that brought some hope back in the ruble. Another countermeasure the RF has undertaken was that:

> Russia has also ordered exporters who earn foreign currency to convert 80% of any money earned abroad into rubles. This has been a key support for the currency, given the fact that Russia is still earning plenty of money from oil and gas exports (businessinsider.com, 2022)

Third, the Russian Federation requires all “unfriendly” countries (countries which imposed sanctions on Russia) to pay in rubles for oil and gas. For example, Germany would have to ask the Russian Central Bank to sell them X number of rubles in exchange for euros to pay for Russian fossil fuels. Therefore, the demand for Russia’s currency would have risen if “unfriendly” countries wanted to purchase more rubles in exchange for euros. However, this idea did not find many supporters among European countries, with, “German Chancellor Olaf Scholz on Thursday dismissed Russia's demand that the EU and U.S. pay for Russian gas in rubles, arguing that most existing gas purchase agreements require payment in euros or U.S. dollars” (politico.eu, 2022). The other reason for the supposed ruble recovery is strong limitations on how much people can take out of the RF, restricting the selling of the currency.

The final notable policy that propelled the rubble rebound was from the Head of the Russian Central Bank, Elvira Nabiullina, who announced an interest rate increase from 9.5% to 20%, as Chart Two reveals. The Contractionary monetary policies are implemented to , "… to offset increased risk of ruble depreciation and inflation” (cnbc.com, 2022). Meanwhile, Russia's bank does not leave efforts to contain the plunge of the domestic currency and plans to free approximately 733 billion rubles or $8.78 billion in local bank reserves to boost liquidity.

Indeed, Nabiullina plans to give more confidence in the Russian banking and financial systems after severe measures from the "collective West" and significant outflows of deposits in a very short time within the RF. Thus, there is a tough call for Russian bankers and economists due to frozen international reserves, and the arrested $284 billion could be a safe haven for the Russian economy and their banks. Some analysts speculate that the RF could withstand sanctions and losses in export revenue for several years, if it had the reserves, which at this point is unknown. Thus, for the foreseeable future, Nabiullina has to look for other options to provide liquidity.

Figure 2, The Rise of Interest Rate in Russia, tradingeconomics.com

The Demand Side of the Domestic Investment Climate and Payments System

As Russian financial markets are trying to find stability, the Russian investment climate has been eroding since its invasion. Foreign capital outflows have been increasing as foreign companies rush to sell their assets in Russia. For example, the British energy BP is going to sell 20% stake in the Russian oil company Rosneft, at a $25 billion loss. Thus, international investors pulled out of Russia $50 billion in February-March 2022. However, the capital outflows may increase and total $75 billion by the end of 2022, according to the Russian Central Bank.

The exit of payment processors such as Visa and Mastercard could cause some disruptions in the RF. Indeed, Visa and Mastercard accounted for about 70% of the debit card market and have millions of Russian users, as Chart Three reveals. However, the exit of payment processors does not ruin the Russian commerce nor makes Russians switch to cash rather than debit cards, as some studies show. The truth is that the Russian government was developing its own payment system called “MIR " or “PEACE” in English. Therefore, more banks were implementing it from 2016 to 2020, as Chart 4 illustrates. The Russian Central bank designed “MIR” to protect the financial system from possible sanctions. So, the Russian citizens still can use their debit cards under the “MIR” payment system and can only pay for goods and services within the RF. However, “MIR” is not authorized in the EU or the US which means that Russian businesses are not allowed to trade with foreign companies. For example, as The Guardian reports:

> Both Mastercard and Visa’s decision to suspend their Russian operations will primarily impact foreign payments, meaning local consumers will no longer be able to use their Russian cards abroad or for international payments online. Foreign customers will also be blocked from making payments to Russian companies or withdrawing cash within the country(guardian.com).

Now, it is hard to estimate the damage of service suspension of Visa and Mastercard but analysts are confident that the exit of two giants can cripple the economy in the long run as well as result in a loss of faith to the Russian government.

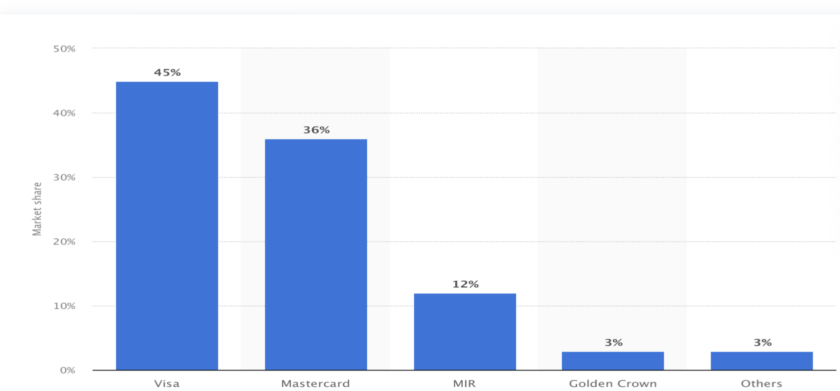

Figure 3, the Market Share of Payment Processors in the RF, 2016-2020, Source: Statista

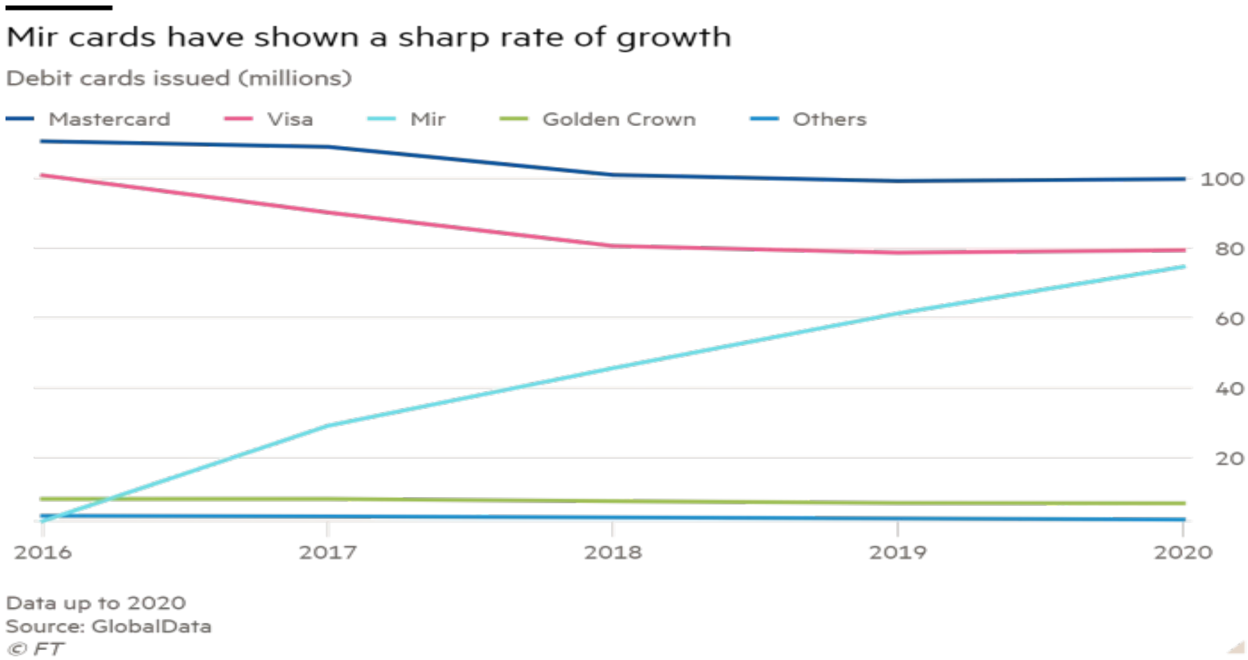

Figure 4, the Growth of Payment Processors in the RF, Source: Financial Times

As Western sanctions started to roll in every other week, more international companies decided to leave Russia, and this business closure is going to negatively affect the Russian Federation and its people. Already, the mayor of Moscow has predicted 200,000 layoffs in Russia. However, he also mentioned some aid, with:

"...authorities [approving] a program worth 3.36 billion rubles — or roughly $41 million — to support employees at risk of layoffs with training and temporary employment" and that Western Companies are still paying some 200,000 Russian workers, hoping that the conflict will be resolved at some near-term point, as ft.com reports. Nonetheless, the Russian job market may get hit even harder than anticipated. In a report by the Center for Strategic Developments (CSR) it was noted that, "Russia could lose about 2mn jobs, causing unemployment to rise from 4.4% to 7.1-7.8% by the end of this year" (inpr.org, 2022).

The Russian Fiscal Position

These actions towards the RF significantly boost the risk of default. The Fitch rating agency downgraded the Long-Term Foreign Currency Issuer Default Rating (IDR) of Russian to 'C' from 'B', a rating that Fitch itself notes that the default of the country is imminent. In fact, the Russian government was making the payments on its debt using international reserves. However, the US prohibited the use of arrested assets to pay on its debt. Eventually, the RF managed to avoid the default as, according to cnbc.com, "Russia's Finance Ministry said Friday that the London branch of paying agent Citibank had received the $117 million in total payments. The U.S. bank is responsible for processing payments on behalf of bondholders"(cnbc.com, 2022).

Nevertheless, the risks of default still persist since Russia missed the deadline on its $650 million debt payment on April 4, 2022, and so now the RF has only a 30-day grace period (until May 4) to convert the payments to dollars to avoid default. Additionally, the Russian Federation has large cash inflows which it makes from the sale of oil and gas, yet Russia has limited access to American dollars due to sanctions, so there is a very tough call for Putin's elites on how to save the Russian financial system and economy.

Russian Inflation

The inflation rate in Russia is rapidly accelerating. Before sending troops to Ukraine, Russia already had high prices due to the post-pandemic recovery and high price for raw materials. However, the invasion of Ukraine caused the inflation rate to double from 7.5% in February to 16.7% in March 2022, moscowtimes.com reports. It is essential to make an emphasis on the food prices which reached 19.5% year-on-year, rosstat reports. For example:

> Pasta has gone up by 25%, butter by 22%, sugar by 70% and fruit and vegetables by 35%. Other items that have soared in price are building materials (up 32%) and home electronics (up 40%)" (moscowtimes.com).

Indeed, the price surge is accelerating and may get even worse according to some economists. For instance, the Renaissance Capital analysts predict that inflation in Russia will peak at 24% in the summer. Meanwhile, the Russian government is struggling to decide what to do about real wages as rising prices are increasing faster than citizens' wages. Nevertheless, the Chairman of Russia's Central Bank Nabiullina predicts a 4% inflation rate by 2024 and does not give an outlook for the year of 2023. In fact, the Russian Central Bank needs to choose whether to combat the inflation with rates pushing up lending costs and increasing the appeal of bank deposits or be inactive on inflation, worsening the purchasing power as well as denting living standards.

The West sanctions can cause shortages in Russian stores. Nowadays, the crippling sanctions are hitting Russian pharmacies, according to Euronews.com. Most of the RF's cities are already experiencing drug shortages, though experts are still unsure whether this is panic buying of medicine or logistical problems. However, it is very likely that high-quality medicine products will start disappearing. "Most likely there will be shortages. How catastrophic it will be, I don't know," said Dr Alexey Erlikh…" (euronews.com). Additionally, the euronews research shows that the drug deficit already persists in the RF:

> Vrachi.Rf, one of Russia's biggest online communities for medical workers, surveyed more than 3,000 doctors in mid-March, and they said they had run into shortages of more than 80 medications: anti-inflammatory, gastrointestinal, antiepileptic and anticonvulsant drugs, as well as antidepressants and antipsychotics. … Patients I treat have lost some blood pressure medications," Erlikh said. "And some doctors I know are reporting problems with certain very expensive, very important medications (used in) certain surgical procedures (euronews.com,2022).

Indeed, the medicine shortage may significantly hit the Russian population. However, the RF's Health Minister is not as skeptical as some doctors are. He assures that the drug deficit is caused by the panic-buying and in the coming months everything will get back to normal. Euronews's experts partially agree with the RF's health minister on the panic-buying but also blame sanctions, which will cripple supply chain lines.

Technological Aspects of Sanctions

The foreign sanctions can hit the Russian technological sector of the economy, so the US issued a ban on selling essential technological products to Russia. According to the Wall Street Journal article:

> In late February, the U.S. imposed a ban on selling high-tech products including semiconductors and telecommunications systems used by the defense, aerospace and maritime industries to Russia and its ally Belarus, days after Russia invaded Ukraine. The ban also extended to certain foreign items produced with U.S. equipment, software or blueprints (livemint.com, 2022).

These sorts of measures on Russia have expanded with Taiwan and South Korea supporting the ban on key technologies. Chart 5 shows that both South Korea and Taiwan export about $300 million of integrated circuits and other semiconductor devices together to the RF, and it is worth mentioning that the Taiwanese semiconductor manufacturer TSMC is heavily integrated into the Russian market. Moreover, Russian chip-makers have already been lagging behind the TSMC by more than fifteen years, according to wsj.com. For example, the Russian companies Baikal Electronics JCS and Elbrus were purchasing microprocessors from TSMC for their computers and other electronics, while the South Korean giant Samsung confirmed the suspension of all shipment products to Russia. Tom Rafferty, who is Asia Regional Director at the Economist Intelligence Unit suggested that, “The big export bans are going to be on semiconductors and high-end semiconductors in particular, for which Korea and Taiwan almost monopolize production. So, there won’t be a supply of that anywhere that Russia can lean on” (livemint.com,2022).

The foreign sanctions on technology can affect Russian weapon and military equipment sales which is crucial to Putin. According to the Wall Street Journal, the Russian Federation is the second-largest arms exporter, “Russia-made weaponry including advanced air-defense systems, radar and missiles accounting for roughly 20% of global arms sales, according to the U.S. Congressional Research Service” (wsj.com). The US Defense Department confirms the importance of technology to the Russian military because semiconductors are developed with specialized materials and circuit designs enabling them to withstand radiation while maintaining performance. So, the potential decrease of arms sales can significantly weaken Putin’s geopolitical stance in the future and even strengthen the US and China influence over the foreign agenda.

The other crucial areas to Russia are artificial intelligence and 5G. The Russian Federation pursues to diversify its economy by investing in AI and 5G. However, those plans may be stalled due to lack of high-technologies. According to wsj.com, “Russia’s tech ambitions would hit a snag without the high-end chips,” (wsj.com). Thus, China may become a safe haven for the Russian technological sector. Also, China already exported $400 million of semiconductor devices to Russia in the year of 2020, according to Chart five. However, it will not be that easy for Russia to exchange the Taiwanese and South Korean technologies with Chinese ones because as the Wall Street Journal claims:

> And even for the older-technology chips, Chinese companies may not be in a position to step up, reluctant to risk escalating tensions with the U.S., said Mr. Rafferty, of the Economist Intelligence Unit … Should companies take steps to evade these controls, they run the real risk of being cut off from access to U.S. technologies (wsj.com, 2022)

In reality, it is very hard to estimate how the Russian economy will be impacted by the lack of semiconductors because the government does not disclose the data needed to forecast it. However, virtually all analysts can agree that Russia has limited chip-production capabilities and heavily relies on foreign technologies.

Figure 5, Top Semiconductors exporters to Russia, Source: Wall Street Journal

The Russian oil industry may be under a major hit in the months ahead. The British Reuters reports that oil production is set to fall about 17% in 2022. “The United States has banned Russian oil imports, while Western sanctions against Russian banks and vessels had crippled the oil trade, one of Moscow's key sources of revenue. The European Union is also considering fully banning Russian oil” (reuters.com). The same source confirms that Russian oil output has been declining since the start of the invasion of Ukraine, and is already down by 7.5% from March to April 2022. The fall in output can be explained by sanctions as well as foreign energy corporations voluntarily closing business in Russia; for example, BP and ExxonMobil already stopped doing business in the RF.

However, some experts suggest that the damage for the oil and gas industry might be way more serious than it seems. As politico.eu claims, sanctions restrict Russia's access to crucial Western technology and finance needed to help it drill oil from drawn-down, remote and inhospitable Siberian and Arctic fields. The departure of Western companies also cripples its ability to produce ultra-lucrative liquefied natural gas for the coming decade and hence Russia is heavily reliant on the West when it comes to oil drilling:

> These technologies are a product of market-driven innovation and technology progress, primarily originating in the U.S.," said Vladimir Milov, a former Russian deputy energy minister and now a political opposition figure. "The Soviet oil industry lacked them, and the Russian private oil industry simply bought them, because why develop something on your own when you can simply hire Halliburton and Schlumberger… Techniques developed and perfected by the Texas pros — like using remote-piloted robots to drill rock horizontally for miles, guided by state-of-the-art imaging software to locate and push out those last drops of oil — rely on technology that has now been sanctioned. (politico.eu, 2022)

The Politico website’s analysts predict that most of the Siberian oil fields will be drilling less oil in 2022 because of insufficient technologies. Therefore, Russia has many challenges along the way because now it needs to look for new technologies as well as for companies and countries which could be interested in purchasing the “black gold”. Additionally, the Russian energy companies are not allowed to raise money on the foreign markets which makes it even harder for them to keep the business afloat. As noted by Politico:

> You're fighting a rearguard battle, trying to maintain the old production fields as long as you can, retreating step by step, drilling all the while … pleading with the Russian government for more funds in the form of cheap loans, and will you build us a port please, and by the way we'll need a new pipeline," said Thane Gustafson, professor of Russian politics at Georgetown University in Washington. "It's many billions of rubles that are needed for the state's helping out with this next chapter of Russian oil. (politico.eu, 2022).

The Russian natural gas business may also be impacted by sanctions. Nowadays, Russia's Zvezda shipyard, meant to build the country's next-generation LNG fleet, relies on French liquefaction technology also out of reach under EU sanctions. Russian big projects like Rosneft's Far East LNG, Gazprom's Baltic LNG are pretty much frozen and it's unclear when the operations will take place. The politico.eu experts suggest that Gazprom and Rosneft are highly modernized companies with very well-educated people in charge, and both companies are capable of operations without the West. However, the Western pullout "could leave some of the Russian installations in trouble, not because they're incapable of running them themselves, because they've learned a great deal in the last twenty years, but it's more the spare parts issues, the questions of maintaining equipment on a timely basis,", meaning the Russian energy sector is reliant on Western IT specialists and engineers (politico.eu). Thus, if Putin does not stop the war, sanctions can take a longer effect and eventually erode Russia's energy power because companies will lose all access to key technologies. In this scenario, the Russian President would likely try to subsidize oil and gas companies as long as he can while shifting business from the EU to Asian market. Sofya Donets, a Moscow-based economist and Russia director with Renaissance Capital, said:

> despite the economic blow that will hit Russia, the oil and gas sector would likely receive strong financial support from the Kremlin while the industry works to reorient itself toward Asian markets …But there could also be long-term consequences darkening the outlook, including the ostracizing of Russia by global financial markets …That's the kind of stigma…Even if sanctions will be removed at some point, I don't expect any investors to be back to this market any time soon. (politico.eu, 2022)

Chapter Two has discussed the economic and financial consequences of foreign sanctions on Russia. In doing so, the author argued that the Russian Federation is unprepared for the economic war with the US and its allies because it lacks technologies and products in key sectors. Additionally, Russian oil and gas revenues can decrease due to the fall in output in 2022. The exit of foreign companies can increase jobless claims by over 200,000 people. Chapter 2 has proven that financial markets are highly vulnerable to sanctions because equities collapsed by more than 80%. The author was able to prove that the response of RF's Central Bank was weak because they lost access to its foreign reserves. Finally, Chapter 2 confirms that Russian economic power will weaken significantly in the long term as well as the short term.

Chapter 3: The Russian Federation's attempts to Resist Sanctions

The exit and closures of foreign companies in Russia is going to force its government to think about alternative policy actions. As illustrated in Chapters One and Two, most of the Western measures ban Russia from financial cooperation with many developed countries. The RF will be prohibited from purchasing or using advanced technological machinery or equipment. Moreover, the Russian economy and businesses will have limited interaction with Western economies such as the EU, UK, and the US. Chapter Two argued that the state's isolation from the world can lead to shortages in almost all spheres. Thus, the Russian government will be looking for new ways to adjust the existing economy to a new reality with war, sanctions, and political isolation. One of the easiest ways to extend the life of the economy and prevent the domestic markets from crashing is to evade sanction. So, Chapter Three will discuss how Russia will likely attempt to evade the sanctions. Additionally, Putin's government will be forced to seek out a substitute for its Western markets, which can be found somewhere nearby in order to resist sanctions. Lastly, Chapter Three will discuss the effectiveness of import-substitution within Russia.

After the invasion of Ukraine in 2022, the world leaders warn about risks of sanctions' evasion. The West fears that Russia can implement a similar scheme as Iran and Venezuela do in bypassing the sanctions. Indeed, the RF already had a meeting with Iran in late March 2022. The details of the meeting have not been disclosed by both sides. However, some analysts already suggest that Russia wants to enhance mutual cooperation with Iran to avoid sanctions. Moreover, Iran has already created successful financial and banking systems which can help to hide billions of dollars, according to wsj.com.

Iran's sanctions-evasion techniques are sophisticated and sweeping. The Journal reported last month that Tehran has developed a:

> clandestine banking and finance system to handle tens of billions of dollars in annual trade banned under U.S.-led sanctions.'... Tehran could teach Moscow how to replicate this illicit financial architecture, or the clerical regime could serve as the Kremlin's broker, taking a cut of the covert trade it facilitates on Russia's behalf. The combination of Russian and Iranian expertise in illicit financial activities could produce the world's most sophisticated and expansive sanctions-evasion network. If Western sanctions lose their bite, the pressure on Moscow to end its invasion of Ukraine and other threats would diminish. (wsj.com, 2022).

However, the result of negotiations is unknown and it is unclear when both countries will start mutual cooperation in bypassing sanctions.

Russia is already using a similar to Iran approach to evade sanctions in the fuel sector. Putin's country has increased oil supplies by tankers in the European direction to 1.6 million barrels per day compared to 1.3 million barrels per day in March. According to wsj.com:

> Oil exports from Russian ports bound for European Union member states, which historically have been the biggest buyers of Russian crude, have risen to an average of 1.6 million barrels a day so far in April, according to TankerTrackers.com. Exports had dropped to 1.3 million a day in March following the Ukraine invasion. Similar data from Kpler, another commodities data provider, showed flows rose to 1.3 million a day in April from 1 million in mid-March. (wsj.com, 2022)

Chart six indicates that the exports for "unknown" oil have skyrocketed from March to April. This may be a repeat of the evasion used by Iran and Venezuela, in which oil was delivered to larger tankers where it was mixed with other oil. Some Western companies also use such mechanisms. Additionally, the price for Urals oil is one of cheapest in the market and trades at a significant discount, $20-$30 a barrel for April 2022.

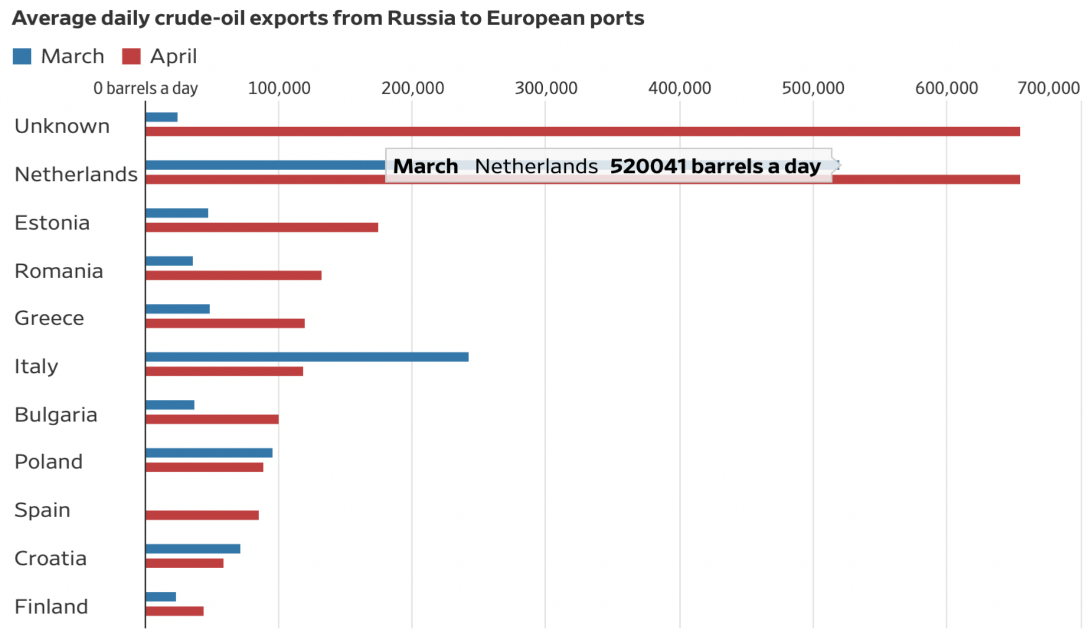

Figure 6, Average crude-oil exports from Russia to European ports, Source: Wall Street Journal

Moreover, European traders began trading in early April the so-called Latvian oil mixture, where oil of different grades are mixed in the Latvian port of Ventspils. If the volume of Russian Urals in the mixture is less than 50%, then the British-Dutch company Shell does not consider it to be Russian oil. However, on April 28, the company announced that they were refusing to buy any Russian oil, including as part of blended products.

The other option for the Russian Federation to avoid sanctions is to use China as a proxy. In other words, China can help Russia in the money laundering process, according to Yale's Professor Paul Brecken:

> Get China to deposit the Russian money in, say, a Lithuanian bank. That's in the EU, which makes it easier to move to a legitimate bank... There are probably limits to how much laundering China would want to do, but perhaps in combination with helping Russia obtain technology from Chinese companies, the temptation will be there (observer.com, 2022).

However, it is still unclear whether China will be interested in helping out Russia since the US government warned China not to provide any aid to the RF or it will face consequences for helping to bypass sanctions. The United States National Security Advisor Jake Sullivan states, "We are communicating directly, privately to Beijing, that there will absolutely be consequences for large-scale sanctions evasion efforts or support to Russia to backfill them …"We will not allow that to go forward and allow there to be a lifeline to Russia from these economic sanctions from any country, anywhere in the world" (reuters.com, 2022).

Moreover, the media spread out the information that the Russian government has already asked China for military aid. The Chinese officials denied the particular allegations, according to reuters.com. However, Russia may try to boost economic and financial cooperation with China and gradually make a transition from the West, particularly since the RF has been actively switching to national currencies when trading with partners. The share of such settlements in relations with the BRICS members (in particular, with China and India) is growing.

The other country which can help Russia to evade sanctions is Kazakhstan, a post-USSR country in Asia which has been having close economic and military cooperation with Russia for a long time. Hence, a rumored possibility is that Russian companies will move to Kazakhstan and establish their headquarters outside of the RF to evade sanctions:

> Working through intermediary companies in Kazakhstan could in theory allow Russian retailers to resolve some issues caused by sanctions, such as making payments in foreign currency. Yerkebulan Orazalin, head of the entrepreneurship and investment department at the mayor's office of Almaty, Kazakhstan's largest city, said Magnit and Lenta were looking in particular at goods whose supply directly to Russia has been restricted, Kazakh news website Tengrinews.kz reported.

Though, it is still unclear when or if Russian companies would start moving into Kazakhstan or import goods from that country. The top officials of Kazakhstan have made it clear that their country is not going to help Russia to escape sanctions, stating, "we will do our best to control any investment from a sanctioned person or entity in Kazakhstan, and this is something we wanted to convey to Europeans openly" (rferl.org).

At the moment, the Biden administration will be hunting for entities and individuals which help the Russian Federation to bypass sanctions. Moreover, the US Treasury can implement measures against those who materially help a sanctioned entity or person, with a leading official stating:

> I want to make that very clear to these institutions that are domiciled and other countries that may not have taken sanctions actions: that the United States and our allies and partners are prepared to act if they do things that violate our sanctions. (nyt.com, 2022)

Finally, there is no evidence of countries helping out Russia to evade sanctions. Moreover, the next steps of the Russian Federation and how it intends to escape sanctions are hard to predict. Countries like China or India is not going to disclose information about possible help to Russia to not escalate relationships with the US. However, Putin will be looking for alternatives among isolated countries or communist regimes to enhance cooperation with them.

Import Substitution

Import substitution is another option for Putin's government to save the Russian economy, which the RF introduced back in 2014 when Russia invaded Crimea. The Russian government implemented this model to transition the economy from imports of foreign products to domestic ones. Nowadays, the current stance of Russia's economy is way weaker compared to 2014-2016 years, because of sanctions on advanced technological sectors and international reserves. However, the RF's top officials continue to promote import substitution. So, the author is going to analyze the effectiveness of import substitution and its future implementation in the Russian economy.

After Russia invaded sovereign Ukraine in 2022, the US and its allies imposed severe sanctions. The bombardment of Ukrainian cities made foreign companies decide to shut down their business in the RF. Therefore, their Russian subsidiary firms and companies had to suspend their operations. In other words, the Russian companies which are owned by Western corporations are lacking the machinery, technology, key components, etc. For example, AvtoVAZ, Russia's largest carmaker, which is owned by Renault, has had to suspend operations because it cannot source parts: cars and vehicle components are the country's biggest imports. SvetoCopy, one of Russia's most popular office paper brands, has halted work at its mills with Sylvamo, its Memphis-based owner, citing supply shortages and then — five days later — company values.

As Al Jazeera reports, Russian officials were well aware about the country's dependence on foreign imports: "the central bank of Russia reported that 65 percent of enterprises in the country were dependent on imports for their manufacturing, underscoring the country's reliance on global supply chains" (aljazeera.com). Hence, these highlights Russian structural economic weakness since the country was unprepared to face Western sanctions and did nothing in the past to ease the dependence on foreign imports. Indeed, the RF had some successful development of the particular model in the food and agriculture sectors. Those areas of the economy have received large subsidies from the government:

> By 2019, Russia's import bill for meat was down by 70 percent compared with 2013, according to UN Comtrade data — though the dip for fruits was much more modest, at only 20 percent (aljazeera.com).

Nowadays, the RF is facing a different type of restriction, since the Western Sanctions target the crucial industries of the economy. Al Jazeera provides an example of an aerospace industry which is vulnerable to sanctions:

> But in the civil aviation space — as with meat — the costs to consumers depend on competition, which a closed market does not allow. The result: Russian-made headlights for planes are three times as expensive as ones made outside the country (aljazeera.com).

Moreover, import substitution can bring low quality and weak competition in the market, which will not work in the Russian hi-tech industries, analysts suggest: "Take the semiconductor industry: it's impossible to reproduce the whole supply value chain in Russia due to technical issues and the complexity of the process," (aljazeera.com). Putin's officials already looked for ways to boost the usage of Russian technologies by forcing government-owned companies to replace foreign software with Russian ones. However, the plan was not effective because only ten percent of software used by state agencies was made in the country, in 2019.

The analysts do not have any optimism about the Russian import substitution model. The loss of foreign companies in the RF can deteriorate the domestic producers and the whole market. Al Jazeera economists already say that the import substitution model is ineffective due to the corruption in the government and Russian bureaucrats which make things overly complicated. Kamil Galeev who is a fellow at the Wilson Center reports that import substitution needs to be run by economical experts. Meanwhile, the whole situation with the Russian economy looks similar to the USSR's one when it tried to centralize a top-down policy which did not take into account the complexity of the problem.

The outcome of the so-called import substitution model is yet to be found out in the future. However, it may result in higher prices, lower product quality, and heavier state dependency in many sectors of the economy meaning the Western sanction will force Russia to decide how to adjust the economy to the new reality.

Conclusion

The thesis examined the current financial situation within the Russian Federation. Chapter one provided the full analysis of all imposed sanctions by the US, UK, EU, and other allies. The author showed the sequence of all implemented measures in real time as the Russia-Ukraine war escalated. Chapter One reveals that the most powerful tools against Russia were the freeze of all international assets worth over $270B as well as the cutoff of Russia's Central Bank from the American dollar transactions. Additionally, the author discussed the sanctions against Puitin's elites such as Abramovich, Sechin, and Deripaska. However, the sanctions are far from over and are being imposed every other week by top Western officials.

Chapter Two highlighted the consequences of sanctions on the Russian economy. The author revealed that the GDP of Russia will contract by 10-20% in 2022 and inflation can rise up to 20%. Additionally, the exit of international corporations may lead to an increase in jobless claims by approximately two million people. The sanctions on prominent Russian banks and their reserves caused chaos in the financial markets. The Ruble has crashed by 100% and Russian ETFs plunged by about 50% on average. Sanction will cause shortages in areas such as healthcare or medicine. Additionally, the Russian technological sector is going to have a gloomy outlook due to Asian chip manufacturers imposing sanctions against Russia. Thus, Russian companies are barred from imports of South Korean or Taiwanese chips. The author suggests that sanctions are going to be felt by Russia in the longer-term period but will not ruin the economy from a short-term perspective.

Chapter Three described the Russian attempts to fight foreign sanctions. One of the options to resist sanctions is to avoid them. However, Russia is not quite successful in that task due to the inability of others to help Putin. The author has proven that powers such as China and

India do not want to risk relationships with the West and specifically with the US to save the Russian Federation. The other option that is left in Putin's pocket is import substitution which substitutes the importation of foreign products by domestic ones. However, this model is effective due to the corruption and Russia's inability to prepare ahead of time.

Finally, it is very difficult to predict the path of Putin's country. The irrational actions of the Russian government are making them lose billions of dollars; however, in the short term it may not make Putin and his elites concerned. The real effect of foreign sanctions can hit the wealth of ordinary Russians. However, they did not entirely feel it because most of the stores were stockpiled with reserves and foreign companies are still paying salaries to most of its workers, so, only time will reveal how long the Russian economy can resist this isolation.

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