

Europe's Response: Impact of Sanctions on Russia

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Abstracts

This research delves deeply into the intricate dynamics of economic sanctions levied by Western nations against Russia, investigating their wide-ranging implications. Employing a blend of quantitative analysis and hypothesis testing, the study unravels a notable insight: these sanctions carry a more substantial impact on the economies of the sanctioning nations themselves than on Russia. The study introduces the "Mary-Jeanne" theory, developed by Professors Jeanne Kaspard Kamel and Richard Hanna Beainy from Holy Spirit University. This theory asserts that the inefficacy of the sanctions on Russia, and their subsequent repercussions on Europe, emanate from the targeting of essential raw materials, particularly oil and gas. The research recommends an alternative approach to sanctions, advocating for the utilization of Russian gas at a moderated price cap, rather than a complete embargo on the commodity as currently enforced. This strategic shift would seek to address the present situation, wherein Russia encounters relatively minor losses due to the low raw material value, while Western industrialized nations grapple with substantial declines in their economies due to the high finished goods' value.

Keywords: Sanctions, European economy, Russian economy, Russian gas.

Introduction

1.1 Background, purpose, and nature of the study

Throughout history, sanctions have been employed as a strategic tool to inflict detrimental impacts on the economy of an adversarial nation (Cardwell and Moret 2023), while concurrently fostering favorable conditions for the economies of unaffected nations (Tunga 2021). This mechanism operates on the premise that the reduced supply from the sanctioned country would be compensated by the augmented supply from other nations, leading to a straightforward price adjustment in accordance with the fundamental principles of supply and demand.

Yet, an intriguing conundrum emerges when we contemplate the scenario of imposing sanctions on the world's largest country. Compounding this complexity is the notion that the targeted

product under sanctions could wield an influence that reverberates across numerous other commodities, generating intricate interdependencies (Abiad and Qureshi 2023).

In such a context, the very act of imposing sanctions raises an essential query: Are we, in effect, sanctioning the intended adversary, or does this action inadvertently impact our own interests? This research delves into the multifaceted dynamics of such scenarios, exploring the intricate balance between intended consequences and unintended repercussions, this holds particular significance given the substantial reliance of Western European nations on their industrial sectors (Beainy 2023).

In presenting a novel theory concerning the most effective categories of products to target for optimal outcomes, our study retains its empirical essence. The proposed theory, underpinned by a systematic evidence-driven methodology, undergoes scrutiny through regression analysis and meticulous evaluation of mathematical secondary data derived from reputable global sources. The credibility of these data, garnered from authoritative entities like the World Bank, assumes a pivotal role in reinforcing the underpinning theoretical constructs. Furthermore, the validation process incorporates hypothesis testing, a method tailored to address a singular yet profoundly significant research inquiry: What are the ramifications of European sanctions on Russia for the parties involved, and how can these consequences be strategically optimized?

Literature Review

Economic sanctions specified as limitation on economic transactions established by one international entity on another for a particular objective (Aydın and Biltekin 2020). Sanctions can aim to "signal" a message to target states or other countries, to impose a change in behavior ("coercion"), or to "restrict" a person's behavior (Giumelli 2011), to achieve other goals or to achieve a combination of different goals (Blazic et al., 2023). The actors involved can be not only punishing states and target states, but also third parties such as international bodies, non-state entities (specific intrastate groups, terrorist associations or even particular individuals among the targets) (Giumelli, Hoffmann et al. 2021). Economic restrictions can have a variety of consequences, varying in intensity according to factors such as the characteristics of the countries imposing sanctions, the target of punishment, types and ranges of sanctions, and the relationship between the country imposing sanctions and sanctions targets and third parties (Özdamar and Shahin 2021).

2.1 Consequences of Economic sanctions

Economic sanctions can have serious and far-reaching repercussions, both purposeful and unintentional.

a- Economic Consequences

Sanctions frequently impose limits on imports and exports, resulting in a fall in trade. This can have a significant impact on the target country's economy, particularly if it is largely dependent on foreign commerce. Sanctions can also limit access to international markets and banking systems, making it harder for the target country to transact, acquire credit, and manage its

currency (Gustavo et al., 2024). They can dissuade international investment, resulting in lower capital inflows and economic growth (Podvalny et al., 2021). In addition, the most important impact of Economic sanctions is the inflation. In fact, when commodities are scarce, prices rise especially for necessary products such as food and medication (Morgan, Syropoulos et al. 2023).

b- Societal and Humanitarian Repercussions:

Sanctions may cause a Health crisis, especially if there are an Import restriction on medical supplies and medicines. This can cause shortages and threaten public health. In the other hand, Economic disturbances, such as firm closures or reduced operations, can raise unemployment and poverty rates. Economic sanctions can lead also to Human Rights issues by hurting the most disadvantaged groups (Rodríguez 2024).

c- Political Implications

The principal goal of sanctions is to compel the target nation to alter its policies or actions. But results vary, and regimes may become more stubborn under certain situations. The dissatisfaction of the people caused by the hard financial times might topple the leadership of the target nation. Economic sanctions can cause diplomatic issues. In fact, they have the potential to sour relations with third-party nations impacted by secondary sanctions, as well as with the sanctioning and target countries (Özdamar and Shahin 2021).

d- Global Repercussions:

Sanctions have the potential to cause Economic Disruption by threatening the international supply chains, particularly if the target nation produces a sizable amount of a particular item or commodity. Therefore, sanctions have also the potential to intensify geopolitical tensions, which may result in responses and alliances that might have an impact on global stability (Caruso 2003, Lopez and Cortright 2018).

e- Implications for the Sanctioning Nations

Sanctions may have an adverse effect on the Economy of nations imposing them, especially if those countries have close commercial relations with the targeted nation. Indeed, because of financial losses, local companies and consumers in the penalizing nation may be against sanctions and that might lead to a political backlash (Morgan, Syropoulos et al. 2023)

2.2 Overview of Economic Sanctions and their Consequences

Assessing the global economic impact of sanctions on targets countries concentrates on tracking changes (after the introduction of sanctions) in gross domestic product (GDP), gross national product (GNP), the consumer price index (CPI) (Drezner 2000), or GDP growth rate (Neuenkirch and Neumeier 2015). However, the accumulative results of business contraction and other disruptions to the economy caused by sanctions vary from case to case (Biersteker and Van Bergeijk 2015).

In this Scoop two contradictory effects of sanctions on the countries imposing the sanctions need to be reviewed. The first related to the United States (US) sanctions on the Iranian economy, the second concerned the United States (US) sanctions on China Economy.

a- United States Sanctions on the Iranian Economy

In April 2019, the International Monetary Fund (IMF) projected that without U.S. sanctions, the Iran Economy would grow by 4 % in both years 2019 and 2020. But after American sanctions it forecasts a 1.5 % contraction in 2019 and an additional 3.6 % in 2020. In 2019, the exports of Iranian oil fell from 2.7 million barrels per day in June barrels by day at the end of September. Sanctions on Iran's oil exports have increased volatility in the world's oil markets, which has an impact on both the stability of the market and oil prices.

The inflation rate raised to 31.4% end of 2019, and the unemployment rate reached 40% (Biersteker and Van Bergeijk 2015). Despite intervention by Iran's central bank to protect the rial, the currency has lost more than two-thirds of its value since January 1, 2019, on the black market (Pratt iD and Alizadeh 2020). Due to sanctions, foreign businesses have refrained from making investments in Iran. Both foreign direct investment and technical progress have decreased because of the withdrawal of current foreign investors. Therefore, Iran suffered from a financial isolation. The country is cut off from the world financial system because of restrictions on banking and financial transactions. Due to Iran's banks exclusion from the SWIFT global payment network, transnational transactions are now challenging and expensive. The economic slump has been exacerbated by the combined effects of decreased oil revenue, currency depreciation, and inflation. Iran's GDP growth has suffered, and the country's general economic situation has gotten worse (Katzman 2015, Omarov 2018)

The Iranian government has worked to increase self-sufficiency in several areas, including manufacturing and agriculture, in reaction to the sanctions. But the outcomes of these initiatives have been unstable due to limited resources and technology. Iran has depended more and more on smuggling and the black market to get around sanctions; these two sectors of the economy have grown significantly. To lessen the effects of Western sanctions, Iran has worked to strengthen its economic relations with nations such as China, Russia, and Turke (Dupont 2012).

U.S sanctions on Iran raise the question of the dollar as a unit of international currency. In fact, the President of the European Commission Jean-Claude Juncker urged for the Euro to play a bigger international role. He emphasized that just around 2% of the European energy imports are from the United States, and Europe pays for 80% of its Energy imports around the World in U.S. dollars (Pratt iD and Alizadeh 2020). In addition to European Initiatives, India and China have decided to pay for Iranian gas oil in their local currencies. These efforts had been useless in the short term. The US dollar remains the master currency in the international trading system, with more than 40% of global payments (Aslan, Aslan et al. 2020). In other words, U.S. sanctions on Iranian Economy did not affect the American economy.

b- United States Sanctions on China Economy

United States economic and trade sanctions against China have been in place for decades, and the structural imbalance in U.S.-China trade relations ultimately led to the recent trade war (Fajgelbaum and Khandelwal 2022). The consequences of U.S. penalization imposed on China, both for the U.S. economy and for the target countries, have changed considerably over time (Gutmann, Neuenkirch et al. 2022). Firstly, US economic penalties have progressively extended from labor-intensive Chinese products to high-value-added goods and have significantly reduced

China's commercial growth. Secondly, US customers and companies are facing both higher prices and higher production costs for Chinese imported merchandises (or substitute products) as a result of US trade sanctions (Guo, Wang et al. 2023). The United States increased prices, resulting in significant heavy losses for the sponsoring country.

In addition, US economic and trade restrictions on China have also a significant impact on other economies involved in US-China trade (Kapustina, Lipková et al. 2020). In fact, trade and economic sanctions imposed by the United States on China have far-reaching effects that go beyond their direct bilateral relationship. Global supply networks may be disrupted, trade patterns may change, financial and commodities markets may see volatility, and geopolitical alliances may alter (Wang 2023). Third-party nations, particularly those with close economic relations to China or the United States, will need to carefully manage these possibilities and difficulties to minimize negative consequences and take advantage of fresh potential for trade and investment (Andresen 2023).

Economic penalties imposed by the United States on China would have a significant and lasting impact on both economies. Trade problems, financial isolation, and technology difficulties would all be effects for China (Andresen 2023). The repercussions for the United States would include increased consumer prices, supply chain disruptions, and financial market instability. There may be a restructuring of global supply lines and heightened trade disputes, which would impact the world economy as well. Both nations would probably adjust by looking for new markets and enhancing their own capacities, although the shift may be difficult and expensive. To offset American sanctions, China may try to deepen its political and economic connections with other nations. Developing closer ties with nations in Asia, Europe, and Africa may fall under this category. To lessen its reliance on Chinese goods, U.S. businesses may diversify their supply chains and search for imports from other nations (Guo, Wang et al. 2023).

Overall, US economic and trade sanctions have generated losses for both the United States and China, but their influence on China (the target country) has been largely mitigated (Li, He et al. 2018), especially due to new emerging markets and globalization (Subrahmanyam and Ribeiro 2022)

2.3 Effectiveness of the Economic Sanctions

Therefore, widely used internationally, economic sanctions are largely inefficient in achieving their goals. Studies have demonstrated that the longer sanctions remain in place, the more inefficient they are, as the sanctioned country may adapt to new economic situations rather than change its behavior (Hovi, Huseby et al. 2005, Peksen 2019, Walentek, Broere et al. 2021). But this does not mean that sanctions are completely inefficient: Over the past half century, such measures have helped peacefully resolve several highly competitive political issues (Wallenstein 2000, Kittrie 2008). For instance, economic sanctions played a major role in persuading Iran to sit down at the negotiating table to discuss its nuclear intentions.

Economic penalties vary in effectiveness depending on the situation and are impacted by several variables. Sanctions are a useful weapon in some circumstances, but they frequently need well-defined goals, exact targeting, widespread international support, and constant use (Hufbauer and Jung 2020). Moreover, the effectiveness of the sanctions can be greatly impacted by the target

nation's political dynamics, economic resiliency, and availability of other trading partners. Consequently, sanctions are not a one-size-fits-all answer and must be properly planned and carried out to achieve desired results, even though they can be a useful component of a larger foreign policy strategy (Morgan, Syropoulos et al. 2023).

Successful sanctions cases are related to South Africa and Iran. In South Africa apartheid was mostly ended thanks to international sanctions. Significant political change resulted from a combination of internal resistance and widespread economic and cultural penalties (Evenett 2002). While Iran was forced to the negotiation table because of sanctions, which helped to bring forth the Joint Comprehensive Plan of Action, which aims to restrict Iran's nuclear program. The objective was to combine targeted punishment with the assurance of release upon compliance (Farzanegan and Batmanghelidj 2024).

Less promising Examples concern North Korea and Cuba. North Korea Despite decades of sanctions, North Korea's nuclear program has not been stopped. The effectiveness of the sanctions has been weakened by the regime's preference for military advancement above economic well-being and its capacity to locate alternate sources of funding (Whitty, Kim et al. 2006). The United States' more than 60-year-old sanctions against Cuba have not brought about the intended political transformation. Cuba's leadership has remained in power despite severe economic difficulties (von Burgsdorff 2009, Gordon 2016)

In our globalized world, countries no longer need to be self-sufficient and can take advantage of countless different business opportunities (Duzcu 2019). While markets are closed to the application of sanctions, globalization implies that the target country can quite simply reorient its economy towards new targets and business partners, avoiding sanctions and ensuring healthy levels of trade (Timofeev 2022). This question of denial has significantly weakened the Western sanctions currently applied to Russia, as the country still trades freely with some of Asia's biggest economies. Therefore, it is interesting to highlight the impact of the most recent sanctions on the economies of both sanctioned and imposing countries.

Studies related to the American sanctions against China, Russia, Syria and Iraq are abundant. Very few are the studies concerning the European Union sanctions and their impact on their economy and the economy of the target country. From this, it is interesting to carry out a study on the impact of European sanctions on the Russian economy and on the economies of European Countries emphasizing on neighboring Western European countries.

2.4 Hypothesis Development

From a financial standpoint, this research aims to address the research question by employing hypothesis testing. Additionally, it introduces a novel theory named the "MaryJeanne" theory. According to this theory, when primary production raw materials like oil are subjected to sanctions, the affected country bears the impact in terms of the raw material's value. However, the industrial nations imposing sanctions or the entities demanding the raw material might experience a substantially greater impact on the shorter run due to the elevated value of the finished goods.

Table 1: Hypothesis Formulation

<p>Hypothesis one</p> <p>The repercussions of the sanctions exert a substantial and detrimental effect on the Russian economy</p>	<p>Hypothesis two</p> <p>The consequences of the sanctions have a minimal and negligible impact on the European economy.</p>
<p>Research Question</p> <p>What are the ramifications of European sanctions on Russia for the parties involved, and how can these consequences be strategically optimized?</p>	
<p>Hypothesis 3</p> <p>The Mary-Jeanne Economic Theory demonstrates a negligible influence on the European economy.</p>	

The initial facet of the research query undergoes examination via two hypotheses. The first hypothesis pertains to the repercussions of sanctions on the country under sanctions, namely Russia, while the second hypothesis pertains to the magnitude of impact sanctions have on the nations imposing them, with particular emphasis on neighboring Western European countries.

The subsequent segment of the research, which pertains to the strategic refinement of sanctions, is deliberated by the assessment of an innovative and interconnected theory. This theory advocates for the implementation of sanctions on finished products while discouraging the imposition of sanctions on primary raw materials.

Throughout the study, all alternative hypotheses are treated as incorrect until they are mathematically proven otherwise, upholding a rigorous analytical approach.

Figure 1: The Mary Jeanne Theory Simplified, instead of Stopping Russia’s supply to Europe, impose a Price Cap or else the below scenario is inevitable on the short run.



On the Short Run before finding substitutes, embargoing 150\$ worth of Gas from Russia to Europe would Reduce Russian GDP by 150\$



But would Reduce the GDP of UK
Supplier of raw materials – Seats by 500\$



And would Reduce the GDP of Italy Supplier of raw
materials – Seats by 1000\$



To Finally reduce the GDP of Germany
Supplier of Finished Good by 10000\$

Before Proving the theory quantitatively through mathematics and hypothesis testing, which will be done thoroughly in the next part of the study, the research analyzes if the new theory fits two criteria, the first is that the theory is useful at least theoretically but preferably also practically, and the second criteria is the Greek “LOGOS” which analyzes if the theory is logical.

In Terms of usefulness, the theory may enhance the durability of the current financial system, as even though the United States is still the leader in the global economy through technology, R&D and AI (Beainy and Kamel 2023) yet sanctions on China and Russia have been argued by researchers that are hastening international financial instability and De Dollarization (Chen 2023).

Therefore, a theory that posits that sanctions cause more harm to the sanctioning countries rather than to the sanctioned countries, would not only foster the economies of European country, but

have a direct positive impact on the entire financial market. Even the most biased individuals do admit that inflation would directly be reduced as Russia is the largest Gas and Raw material exporter in the world and China one of the biggest exporters of cheap materials in international trade, both the latter and the former are under heavy sanctions.

Furthermore, and much more important than inflation, is global financial stability. Many countries in the BRICS and BRICS Plus are hastening their war against the current financial system, not knowing, or maybe knowing very well but not admitting that currently there is no substitute for the US dollars, and even in the most optimum scenario, the best alternative seems Cryptocurrency, decentralization, and Chaos.

Therefore, a de dollarization would have decremented effect on the entire global economy, including both developed and developing countries.

Reference the above, we deduce that in terms of usefulness, both theoretical and practical, the new proposed theory has as a purpose not to protect Russia and China, nor even Europe and the United States, but the entire Financial System.

On the other hand, in terms of Logos, both economists and politicians should trust research scholars who confirm that unlike the stone age, bronze age, iron age, medieval age, renaissance and even the industrial age, we now live in a totally different time where raw materials are far less valuable when compared to technology and research development and communication.

The above are not theories but are facts as beside Aramco the Saudi anomaly, no raw material company is in the top ten largest corporations in the world.

Another argument that enhances the deduction that technology and finished goods are worth much more than raw material is Venezuela, a perfect example since the latter is by far the holder of the largest Petrol reserve in the world, surpassing even Saudi Arabia, yet Venezuela is among the poorest economies in the world in term of currency value and GDP.

Many other arguments support the importance, usefulness and logic of the new theory, however the Goal of the study is not a mere proof of usefulness but a mathematical quantitative objective hypothesis testing, for to have any real value and to worth both the reader and the researcher's time, the most important quality of a theory is being True and this is exactly what will be analyzed in the next part of the study.

Research Methodology

3.1 Data Collection and Sampling Method

Given the paramount importance of this study, all data have been meticulously gathered from authoritative secondary international sources. These sources include esteemed institutions like the World Bank, the International Monetary Fund (IMF), Trading Economics, and the official database provided by the European Parliament known as Euro Stat.

A necessary clarification is appended subsequent to the thorough analysis of the results:

Please note that all data utilized for the purpose of hypothesis testing have been extracted from the official dataset of the International Monetary Fund (IMF) as of August 19, 2023. These data can be conveniently accessed through the official website of the International Monetary Fund: <https://www.imf.org/external/datamapper/datasets>.

3.2 Approach in Practice, Handling of Data and Strategy

The temporal scope of this study encompasses a range spanning three years from 2021, meticulously avoiding potential bias stemming from the disruptive Covid-19 pandemic to a more expansive timeframe of 23 years from the onset of the twenty-first century. A robust confidence level of 95% has been adopted to underpin the reliability of the outcomes.

Employing advanced technological methods, a binary code framework has been embraced. This binary framework employs the value 0 for years before 2022, representing the pre-sanctions era, while the value 1 is designated for the years starting from 2022, marking the post-sanctions phase.

Results and Discussions

4.1 Results

Hypothesis one: The repercussions of the sanctions exert a substantial and detrimental effect on the Russian economy

Table 2: Hypothesis one testing

Regression Statistics	
Multiple R	0.63835349
R Square	0.407495179
Adjusted R Square	0.318619455
Standard Error	0.233051372
Observations	24

Significance F
0.013383789

ANOVA

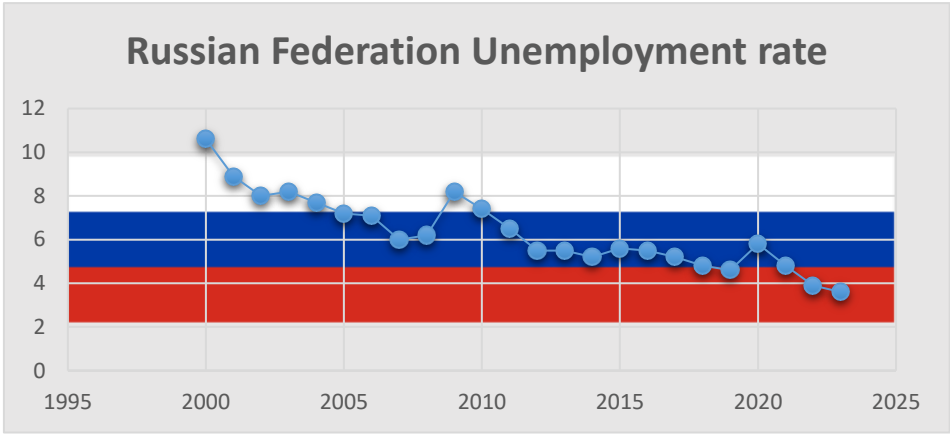
	df	SS	MS	F
Regression	3	0.747074494	0.249024831	4.584999863
Residual	20	1.086258839	0.054312942	
Total	23	1.833333333		
	Coefficients	Standard Error	t Stat	P-value
Intercept	0.6102	0.1944	3.1394	0.0052
Russian Unemployment rate	-0.1305	0.0401	-3.2588	0.0039
Russian GDP Growth	-0.0121	0.0130	-0.9374	0.3597
Russian Inflation rate	0.0352	0.0145	2.4328	0.0245

Time Line: 2000 till 2023, 24 years of Data by IMF

Based on the noteworthy and unanticipated negative coefficient of the unemployment rate outlined in red above, it becomes evident that, with a high level of confidence set at 99%, we can confidently dismiss the Null hypothesis. The outcomes underscore that the unemployment

rate in Russia has not only remained unaffected by sanctions but has actually experienced a decline to an unprecedented nadir, serving as a positive and unforeseen economic marker.

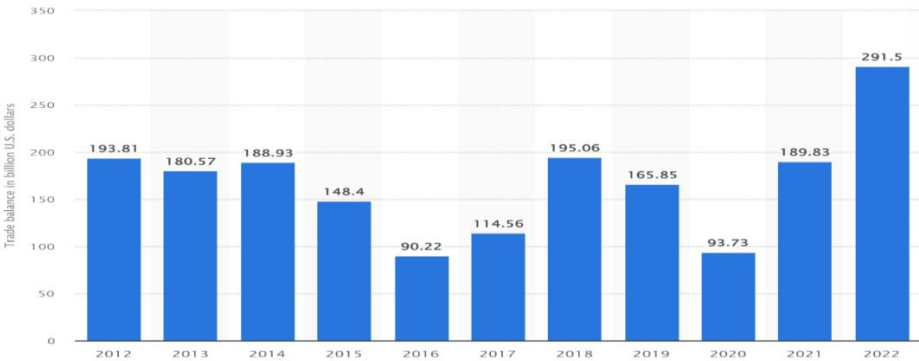
Figure 2: Unemployment rate in Russia reaches a record low



Source: International Monetary Fund 2023

Side Note: To make sure data presented in the study are accurate and significant, a revision of the article was made and IMF further supported the results as the Potential economic development of Russia is expected to be the highest among all developed economies in the world, facts by IMF further supporting this study as well as the new theory.

Figure 3: Trade surplus in Russia reaches in all time high



Source: Statista 2013

Official figures and numbers speak louder than words, scholars around the world are wondering are the sanctions on Russia or on Europe, where two out of three of Germany’s largest companies have moved out of the country as of 2024.

Hypothesis two: The consequences of the sanctions have a minimal and negligible impact on the European economy.

Table 3: Hypothesis two testing

Regression Statistics						
Multiple R	0.85					
R Square	0.72					
Adjusted R Square	0.68					
Standard Error	0.12					
Observations	23.00					

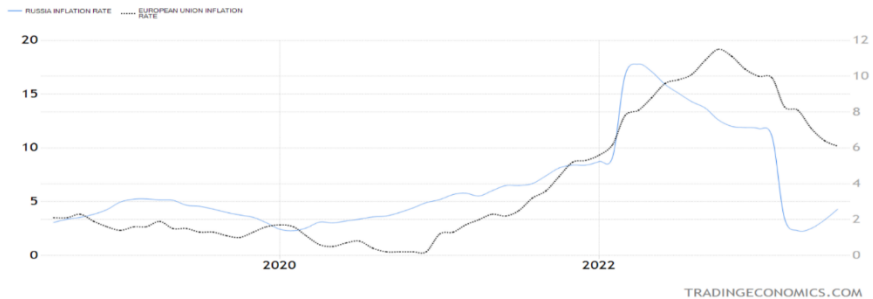
ANOVA				Significance F
	df	SS	MS	F
Regression	3.00	0.69	0.23	16.49
Residual	19.00	0.27	0.01	
Total	22.00	0.96		

	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.20	0.08	-2.47	0.02
United Kingdom Inflation	0.04	0.02	1.87	0.08
Europe Inflation	0.03	0.05	0.54	0.60
European Union Inflation	0.02	0.05	0.34	0.74

Time Line: 2000 till 2022, 23 years of Data by IMF

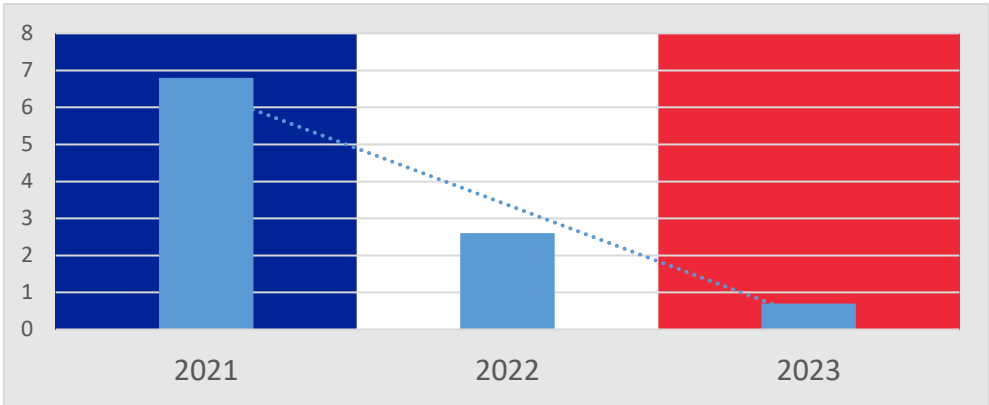
The study's selected confidence level stands at 99%. As a result, to effectively dismiss the Null hypothesis, which suggests that the sanctions imposed on Russia lacked a noteworthy impact on the economies of European nations, we would necessitate a significance level lower than the complement of 99%, i.e., 0.01. Remarkably, with a low Significance level of 0.00002—significantly below the threshold of 0.01—we possess the grounds to reject the Null hypothesis with an impressive 99.99% confidence level. This outcome leads us to infer that the sanctions directed towards Russia indeed wielded a substantial influence on the economies of the countries that initiated these sanctions within Europe, especially that the cost of defense for both the former and the latter increased significantly (Beainy and Kamel 2023).

Figure 4: European Surpassing Russian Inflation



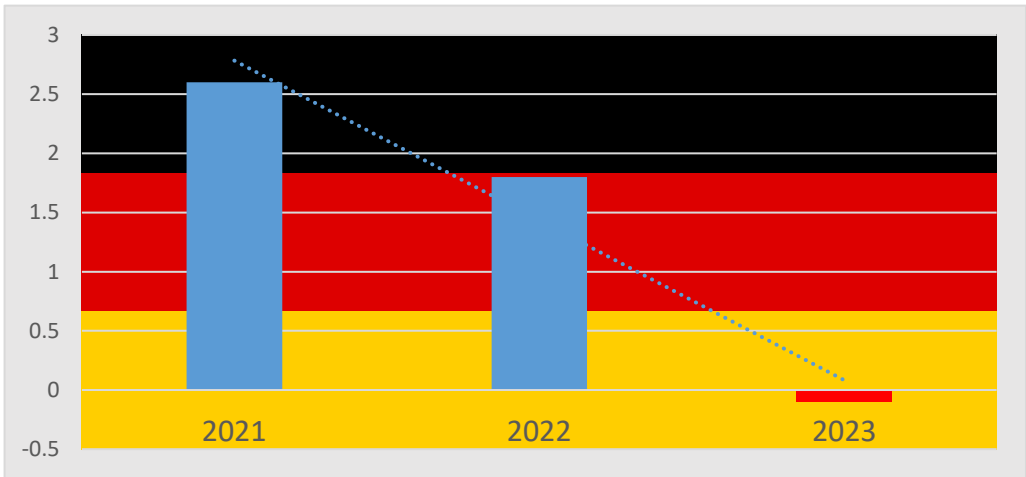
Source: Trading Economics

Figure 5: France GDP % Change Declining



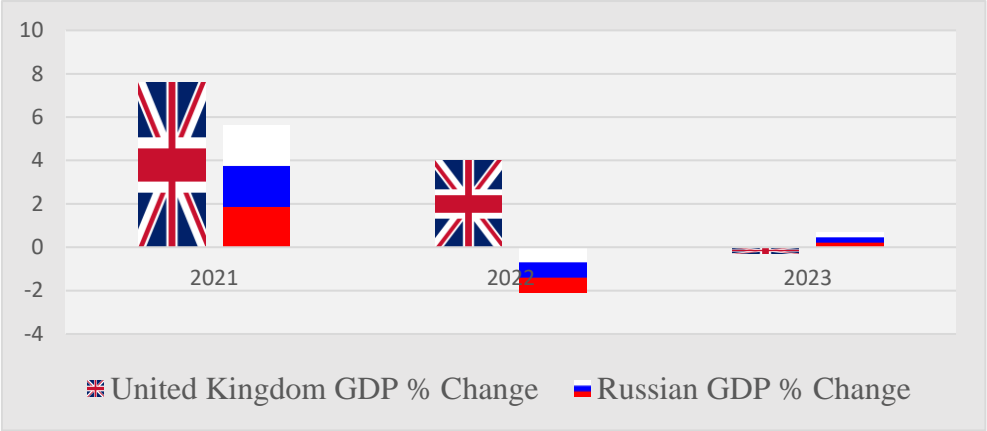
Source: IMF August 2023

Figure 6: Germany GDP % Change becoming Negative



Source: IMF August 2023

Figure 7: Russian GDP % Surpassing the United Kingdom in 2023

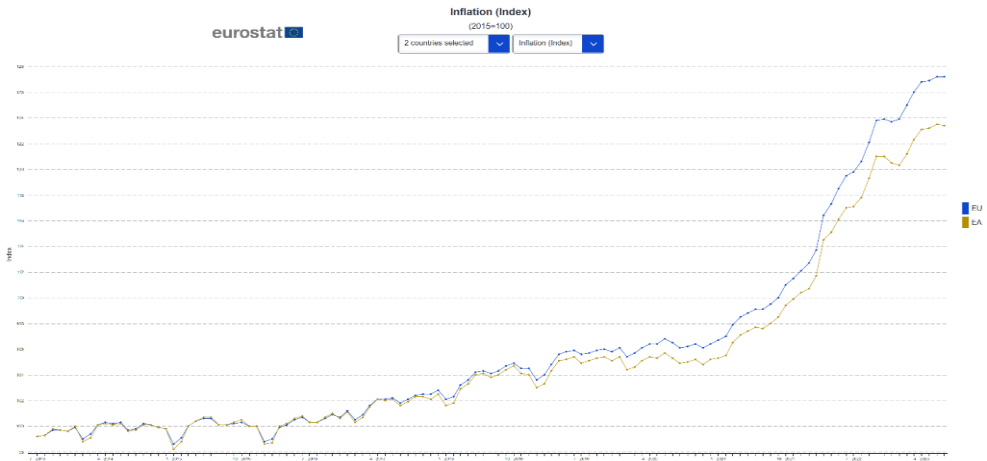


Source: IMF August 2023

Hypothesis 3

The Mary-Jeanne Economic Theory of the importance of Gas demonstrates a negligible influence on the European economy.

Figure 8: European Inflation Index Vs Russian Gasoline price





Source: Figure 8-A Euro Stat 2023 (The Official statistical office of the European Union)

Source: Figure 8-B Trading Economics (From Official data of the Russian Government)

Sanctions imposed on relatively small gas-oil exporters such as Iraq or Iran have historically shown to have negligible impacts on global inflation. However, official European data highlights a contrasting scenario with sanctions on Russia, the world's largest gas exporter (Rahman, Adeningtyas et al. 2023), leading to a substantial upswing in product prices across Europe. This surge is not merely correlated with gas prices, as illustrated by the declining Russian gasoline price depicted in the figure. This observation further bolsters the validity of the Mary Jeanne theory, which advocates for the European Union to enact a price cap, thereby harnessing the advantages of the decreasing cost of Russian gas.

Concluding Insights

5.1 Unveiling the What, Why, and How

In the What section, we have successfully demonstrated through quantitative analysis that the economic sanctions imposed by Western nations upon Russia yield more profound ramifications on the economies of these sanctioning nations than on Russia itself.

Moreover, in unveiling the why, the study employed an innovative theory called "Mary-Jeanne," this research postulates that the ineffectiveness of the sanctions on Russia, and their consequential impact on Europe, can be attributed to the imposition of sanctions on fundamental raw materials of primary production, including vital resources like oil and gas.

This leads to a situation where Russia experiences a relatively minor loss in the value of these raw materials, while Western industrial nations face substantial losses in the value of the final products.

Methodology about how optimizing the sanctions: According to the Mary-Jeanne hypothesis, rather than outright banning the trade of raw materials, Western nations should consider maintaining the supply of Russian gas while introducing a controlled pricing mechanism to maintain and promote a stable financial system.

5.2 Concluding Remark

Important Note: Presently, Western nations have adopted a price cap approach, yet they continue to restrict the supply of Russian gas (Neuhoff 2022).

This policy of embargo (Wolfram, Johnson et al. 2022) has led to unintended consequences, resulting in the economic growth of countries like India and China (Liadze, Macchiarelli et al. 2023), which are efficiently utilizing the Russian gas within the price cap limits. On the contrary, this strategy has had detrimental effects on the economies of Germany and France. These nations find themselves in a situation where factory closures are becoming inevitable due to gas shortages (Wolff and Gritz 2022), or they are compelled to seek costly substitutes with significantly higher expenses.

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