



Croatian
International
Relations
Review

CIRR

XXX (95) 2024,
1-35

DOI 10.2478/
CIRR2024.30.95.01

UDC 327 (4-6
EU:73:55)

Strategic Deployment and Economic Impact of Sanctions: Comparative Analysis of US Unilateral Economic Sanctions During the Oil Crisis Era (1970-1979) and EU Autonomous Economic Sanctions During the Eurozone Crisis (2009-2019)

Elena Daniela Sarau

M.A., M.Sc., Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic

Abstract

Keywords:

Economic Statecraft, Economic Crisis, Economic Security, National Security, Economic Sanctions.

JEL

Classification:

F5, F51, F52, F31, F43

The research examines the relationship between economic sanctions, geopolitical objectives, and economic crises, using a mixed-methods of comparative and descriptive approach to analyse US unilateral sanctions and EC/EU autonomous sanctions imposed before, after, and during crisis periods. The study examines the impact of US sanctions during different time periods, including before and after the oil crisis (1950–1969, 1970–1979) and during the oil crisis (1980–2000). It also analyses the effects of EC/EU autonomous sanctions before the Eurozone crisis (1980–2008) and during the Eurozone crisis (2009–2019). The findings indicate a shift towards a proactive and confident approach to sanctions during times of crisis. Imposed sanctions typically result in favourable economic outcomes for the sender, acting as proactive measures for sender countries to promote their political, economic, and security interests. The study reveals intricate patterns in target selection, highlighting the importance of economic factors, geopolitical dynamics, and regional proximity as key factors influencing the imposition of sanctions. Therefore, economic sanctions are seen as a strategic tool that serves political objectives and also strengthens the economic security of the sender states. Acknowledging certain limitations, such as not addressing recent pandemic-related challenges and relying on comparative and descriptive analyses, this research makes a valuable contribution by offering crucial insights into the design of effective sanctions and the significance of economic and geopolitical factors in understanding economic statecraft, international political economy, and crisis management strategies. These insights can be beneficial for policymakers, scholars, and practitioners.

Introduction

The intricate relationship between economic policies and national security strategies in international affairs necessitates thoughtful deliberation, as choices in this realm can have extensive consequences. The 2017 US National Security Strategy highlights the strong connection between economic and national security as a crucial aspect of contemporary strategic thought. An effective and thriving economy is crucial for safeguarding a nation's security interests. It plays a vital role in enhancing societal well-being through the creation of jobs, alleviating poverty, and bolstering critical services such as healthcare and education.

Strategic economic deployment entails purposefully utilizing economic tools and resources to accomplish enduring economic and political objectives. This approach involves implementing economic sanctions to influence the behaviour of other countries, engaging in trade negotiations to strengthen economic ties, and directing investments to promote growth and competitiveness. It also requires effective allocation of resources to important sectors and the use of monetary and fiscal policies to manage inflation, promote growth, and ensure economic stability. By aligning economic policies with broader strategic objectives, countries can promote their national interests, strengthen their economic security, and improve their global economic position.

Within this framework, unilateral economic sanctions serve as a potent instrument employed by nations amidst periods of geopolitical instability. For a comprehensive understanding of the dynamics of economic coercion and its impact during periods of instability, it is valuable to conduct a comparative analysis of two significant periods: the Oil Crisis of the 1970s and the Eurozone Crisis from 2009 to 2019. These periods are important for analysing the strategic implementation and economic impact of unilateral sanctions. The United States has been a pioneer in this approach, while the European Union has faced its own set of challenges.

This study highlights the important link between economic and national security, as emphasized in the 2017 US National Security Strategy. The strategy recognizes the crucial role of economic sanctions as essential tools in global geoeconomics and geopolitical policies. It serves as the dominant global geoeconomics framework. This research sheds light on the intricate dynamics of economic coercion and its impact during periods of geopolitical instability. It analyses the strategic utilization of economic sanctions in the Oil Crisis of the 1970s, the Eurozone Crisis from 2009 to 2019, and the EU sanctions against Russia.

During the 1970s Oil Crisis, the United States utilized economic sanctions to exert influence over OPEC policies and stabilize its economy. This approach led to a significant decrease in oil dependency and facilitated the development of energy innovation. During the Eurozone Crisis, the EU implemented strategic economic measures such as austerity policies and financial support mechanisms. These measures aimed to restore economic stability, prevent the collapse of the Euro, and promote economic reforms and fiscal integration among member states. The EU has imposed sanctions on Russia in response to its actions in Ukraine. These sanctions specifically target important sectors including finance, energy, and defence. The objective is to exert pressure on Russia to adhere to international norms, while also ensuring unity and resilience within the EU.

The data from these periods demonstrate the influence of sanctions and economic policies on national security. The Oil Crisis led to a significant decrease in oil imports by the late 1970s, with US sanctions playing a major role in causing a 50% reduction. The EU responded to the Eurozone Crisis by implementing a €500 billion financial stability mechanism, which effectively stabilized the economies of its member states. The imposition of EU sanctions on Russia has resulted in a notable decline in Russia's GDP growth and limited its ability to access global financial markets and advanced technologies. The examples highlight the importance of strategic economic deployment in achieving geopolitical goals and ensuring economic resilience.

This study will provide benefits to experts, policymakers, and scholars in the fields of international relations, economic diplomacy, and national security. This study offers valuable insights on the effectiveness of economic sanctions, the alignment of economic and security strategies, and the broader implications for global stability. The study examines the impact of strategic economic deployment, such as sanctions, trade agreements, and investment policies, on national interests and economic security during periods of economic turbulence.

The effectiveness of sanctions has been analysed in the academic literature, with notable works by [Hufbauer, Schott, & Elliott \(2009\)](#). [Drezner \(2003\)](#) examines the nuanced effects of economic measures, while [Baldwin \(1985\)](#) offers a fundamental understanding of utilizing economic tools in the field of international relations. [Kirshner \(1995\)](#) analyses the financial aspects of economic statecraft. The sources support the study's conclusions on the strategic use of economic sanctions and their wider geopolitical implications.

Literature Review

The academic discussion on economic sanctions is extensive and offers valuable insights from various disciplines, shedding light on the complex dynamics involved. Several studies have examined the economic consequences faced by targeted nations. These studies include [Hatipoglu & Peksen \(2018\)](#), [Peksen & Son \(2015\)](#), [Neunkirch & Neumeier \(2015\)](#), [Afesorgbor \(2019\)](#), [Crozet & Hinz \(2020\)](#), [Felbermayr et al. \(2020\)](#), [Gutmann, Neuenkirch, & Neumeier \(2022\)](#), [Běлін & Hanousek \(2021\)](#), [Biglaiser & Lektzian \(2011\)](#), [Mirkina \(2018\)](#), and [Gutmann, Neuenkirch, & Neumeier \(2023\)](#). The challenges faced include immediate issues like financial instability and inflation, as well as long-term impacts such as reduced income per capita, trade deficits, diminished international investment and capital flows, and a negative effect on GDP growth.

[Běлін & Hanousek \(2021\)](#), [Crozet & Hinz \(2020\)](#), [Gullstrand \(2020\)](#), [Kholodilin & Netšunajev \(2019\)](#), [Webb \(2020\)](#), and [Gutmann et al. \(2023\)](#) provide additional insights into the specific impacts of comprehensive sanctions compared to those targeting specific industries or individuals. Their findings support the idea that the scope and length of sanctions have a significant impact on their economic effectiveness, with broader measures often leading to more noticeable outcomes.

The works of [Drury \(2005\)](#), [Waelde \(1997\)](#), and [Kaempfer & Lowenberg \(2007\)](#) provide valuable insights into the decision-making processes related to sanctions. Their analyses emphasize the complex relationship between economic factors, domestic politics, and foreign policy goals, which influences the decision to impose sanctions. Furthermore, the study conducted by [Běлін & Hanousek \(2021\)](#) highlights the significant influence of interest groups on the extent of sanctions, emphasizing the complex relationship between domestic actors and geopolitical tactics.

However, the implementation of sanctions requires a careful evaluation of possible unintended outcomes. According to [Biglaiser & Lektzian \(2011\)](#), it is important to carefully consider the advantages and disadvantages of import sanctions. These sanctions have the potential to encourage domestic production and reduce dependence on foreign commodities. [Jones & Portela \(2014\)](#) provide a nuanced perspective by emphasizing the potential economic benefits to sender countries and their businesses from unilateral sanctions.

Empirical studies provide detailed insights into the economic mechanisms that drive the impacts of sanctions, going beyond mere theoretical speculation. [Wang, Wang, & Chang \(2019\)](#) and [Bělin & Hanousek \(2021\)](#) examine the relationship between exchange rate volatility, inflation, and sanctions. They provide insights into the mechanisms through which economic coercion affects national economies. [Alwadeai et al. \(2024\)](#) provide additional insights into the relationship between reserves-to-GDP ratio and exchange rate stability, highlighting the complexity of efforts to mitigate the destabilizing impact of sanctions.

The studies use diverse methodologies and data analysis techniques. [Hatipoglu & Peksen \(2018\)](#) employ econometric modeling to evaluate the direct economic consequences of sanctions. [Crozet & Hinz \(2020\)](#) employ a difference-in-differences methodology to assess the varying impacts of sector-specific sanctions compared to comprehensive sanctions. [Felbermayr et al. \(2020\)](#) employ panel data analysis to measure the long-term impacts on GDP growth, while [Gutmann et al. \(2022\)](#) use vector autoregression (VAR) models to understand the dynamic responses of financial markets to sanctions.

The results of prominent studies consistently indicate that sanctions cause substantial economic disruptions in targeted nations, such as higher inflation rates, currency devaluation, and reduced foreign direct investment. [Neunkirch & Neumeier \(2015\)](#) discovered that sanctions lead to a 2.4% annual decrease in the target country's GDP. A study by [Afesorgbor \(2019\)](#) found that trade sanctions result in a 33% decrease in bilateral trade.

This study provides new insights by analyzing historical cases and incorporating recent data on EU sanctions against Russia to assess the economic impact of the sanctions on the countries imposing them during times of crisis. This analysis offers a comprehensive understanding of how sanctions operate in the modern interconnected global economy. This study enhances our comprehension of economic sanctions as a multifaceted geopolitical instrument through comparative and descriptive analysis and interdisciplinary discourse. This statement highlights the importance of understanding the effectiveness of certain policies and the need for careful decision-making in a globalized world.

The Current Study

This study examines the economic consequences of unilateral and autonomous economic sanctions, focusing on strategic and economic aspects. The main goal is to determine the measurable impact of economic sanctions on the economies of the countries that impose them, with a specific focus on their economic outcomes.

This inquiry will focus solely on economic factors, excluding non-economic considerations and human rights issues in order to maintain clarity and precision.

Import sanctions restrict a nation's exports, leading to inflation and fluctuations in the exchange rate. This compels governments to purchase foreign currency at elevated rates, which may result in the appreciation of the sender's currency. Export sanctions increase raw material costs, devalue the target's currency, and raise the price of imports. Financial sanctions have a range of negative effects on the economy, including limiting investments, freezing assets, restricting credit, and causing inflation, exchange rate volatility, and economic instability. These factors hinder business growth.

The 2017 US National Security Strategy promotes the strategic use of economic sanctions to stimulate economic growth. This proposition suggests that economic sanctions can stimulate the mentioned economic mechanisms, leading to a revitalization of the sender's economy. Therefore, governments considering sanctions may view this approach as a possible means of promoting economic development. This hypothesis prompts the need to test several assumptions:

(1) The total value of the **sender's imports (ΣM)** from the target during the **entire period of sanctions (t)** or at **least three years (n)** should be higher than the total value of the sender's imports (ΣM) from the target country **before imposing sanctions (b)**:

$$\Sigma M^{tn} > \Sigma M^b \text{ (1) (ceteris paribus)}$$

(2) The total value of the **sender's exports (ΣX)** to the target during the **entire period of sanctions (t)** or at least three years (n) should be higher than the total value of the sender's exports (ΣX) to the target country **before imposing sanctions (b)**:

$$\Sigma X^{tn} > \Sigma X^b \text{ (2) (ceteris paribus)}$$

(3) The total value of the **sender's trade with the target (ΣT)** during the **entire period of sanctions (t)** or at **least three years (n)** should be higher than the total value of the **sender's trade (ΣT)** with the target country **before imposing sanctions (b)**:

$$\Sigma T^{tn} = \Sigma M^{tn} + \Sigma X^{tn} \text{ (3) (ceteris paribus)}$$

(4) In that case, it suggests that the sanctions **have positively impacted the sender's economic trade with the target** (ceteris paribus) during the **entire period of sanctions(t) or at least three years (n)** :

$$\Sigma T^{tn} > \Sigma T^b \text{ (4) (ceteris paribus)}$$

This raises the question of whether sending governments strategically employ sanctions to stimulate economic growth during challenging periods. The effectiveness of evaluating the number of sanctions and their economic impact during instability is crucial. The statement also implies that sanctions are imposed for internal reasons, necessitating a comprehensive analysis of political, economic, and geographical factors.

This study examines the differences between US unilateral and EU autonomous economic sanctions during the US stagflation (1970-1979) and the Eurozone crisis (2009-2019). This analysis also includes an examination of sanctions both before and after these time periods. It encompasses a comprehensive study of US sanctions from 1950 to 2000, as well as EC/EU sanctions from 1980 to 2019.

Studying the history of past sanctions can offer valuable insights into their effectiveness and consequences. Through the examination of how countries have historically dealt with crises, researchers can uncover recurring patterns and valuable insights that contribute to ongoing policy discussions and decision-making processes.

The study's findings will provide valuable insights into the frequency of employing unilateral and autonomous economic sanctions in times of economic crises. In addition, it will analyze the economic impact of these sanctions on the sender country to determine if they contribute to their economic security. Examining these events can provide valuable insights into the complex relationship between economic security and national security.

This study seeks to offer a thorough comprehension of the utilization of economic sanctions during the economic crisis by examining and contrasting the previously mentioned data.

Research Questions and Hypothesis

The present study endeavours to address the existing gaps in research through the formulation of the following research questions:

RQ1: Do the number of unilateral and autonomous economic sanctions increase or decrease during economic crises?

RQ2: What is the economic impact of unilateral US and EC/EU autonomous sanctions imposed during economic crises on the sender?

RQ3: Do the sanctions senders impose the sanctions for endogenous reasons?

These research questions should help to find evidence that either corroborates or refutes the hypotheses stated below:

H1: The frequency of US unilateral and EU autonomous economic sanctions tends to increase during economic crises in the sender country.

H2: Unilateral and autonomous economic sanctions imposed generally positively impact the sender.

H3: Economic sanctions serve in part the sender's economic security.

Data

The present study aims to analyse 97 unilateral and autonomous sanctions imposed between 1950 and 2019. Specifically, the US imposed 60 episodes of unilateral sanctions between 1950 and 2000 and 37 episodes of EC/EU autonomous economic sanctions between 1980 and 2019.

Hufbauer et al.'s 2009 study, "Economic Sanctions Reconsidered," is the main source of data on unilaterally imposed US economic sanctions. This analysis evaluates the effectiveness and impacts of economic sanctions using a database of over 200 cases from WWI to the early 2000s, making it one of the most extensive studies globally. Sanctions are found to achieve foreign policy goals approximately one-third of the time. The success of sanctions is influenced by factors such as the type of sanctions employed, international cooperation, the resilience of the target, and the presence of clear objectives. Data for the other variables are sourced from multiple databases including [Macrotrends \(2021\)](#), [Statista \(2021\)](#), [Jewish Virtual Library \(2023\)](#), [Trade in Goods with USA \(2023\)](#), [United States Census Bureau \(2023\)](#), [World Integrated Trade Solution \(2021\)](#), [CEICDATA \(2021\)](#), and [Country Economy \(2021\)](#).

The data on sanctions imposed by the EC/EU is sourced from a variety of reliable sources, including experts, official government records, international publications, and credible news outlets. These sources include [World Integrated Trade Solution \(2021\)](#), [CEICDATA \(2021\)](#), [Country Economy \(2021\)](#), the CIA World Factbooks 1982–2013, External and intra-European Union Trade EC Statistical Yearbook 1958–2002, [EC Directorate-General for Trade \(2021\)](#), [EU Sanctions Map \(2021\)](#), [European External Action Service \(2023\)](#), [Kreutz \(2005\)](#), [Becker \(1987\)](#), [Portela \(2005\)](#), [Giumelli, Hoffmann, & Książczaková \(2021\)](#), and [Hörbelt \(2017\)](#).

Methodology

The study employs both qualitative and quantitative methods. Qualitative methods explore subjective experiences through open-ended questions and observations, while quantitative methods utilize numerical data and statistical analysis to test hypotheses.

This study utilizes a comparative and descriptive analysis method to explore the similarities, differences, and key characteristics of the data, establishing a strong basis for future investigation.

Researchers must employ a comparative and descriptive analysis approach to comprehend the complexities of different phenomena. The comprehensive approach enables experts to analyze variations and similarities in datasets in order to extract nuanced insights that may be overlooked with a superficial examination.

This method enables researchers to gain a comprehensive understanding of the studied area, facilitating the identification of intricate patterns, subtle trends, and emerging phenomena that might otherwise be overlooked. Experts employ comparative analysis of multiple variables, groups, or contexts to reveal the underlying structures that govern complex systems. This approach aids in understanding the mechanisms that cause observed differences or similarities.

Moreover, comparative analysis promotes the generation of novel research inquiries, thereby advancing the field through the initiation of investigations in previously unexplored domains. Researchers have the ability to challenge and test existing hypotheses, as well as adjust conceptual frameworks, by making comparisons with observed realities.

This approach has value beyond result confirmation, as it aids researchers in developing a more comprehensive understanding of the intricate nuances inherent in various research methods. Experts can enhance their understanding of a subject by placing their findings within a broader investigation framework. This allows them to identify the distinguishing characteristics of phenomena and how they are interconnected across different contexts.

The method of comparing and describing is a hallmark of scholarly investigation, providing researchers with accurate and thorough guidance in navigating complex knowledge domains. This approach exemplifies the persistent quest for knowledge in scientific exploration by systematically analyzing various data sets and uncovering hidden connections between different elements.

Prior studies using a similar methodology have yielded valuable insights across multiple disciplines. [Hatipoglu & Peksen \(2018\)](#) conducted a study using comparative and descriptive analysis to examine the economic effects of sanctions on targeted countries. Their findings showed substantial economic disruptions and policy reactions. [Crozet & Hinz \(2020\)](#) utilized this method to distinguish between the impacts of sector-specific and comprehensive sanctions, emphasizing differences in economic outcomes depending on the extent and length of the sanctions. [Felbermayr et al. \(2020\)](#) employed comparative methods to analyze the lasting effects of economic sanctions on GDP, offering a comprehensive comprehension of their wider economic consequences.

This study employs a theoretical model and a unique dataset of 37 instances of autonomous sanctions imposed by the EC/EU between 1980 and 2019. It also includes references to relevant literature and databases. Furthermore, this study examines a dataset consisting of 60 unilateral economic sanctions imposed by the United States between 1950 and 2000. The dataset was selected from the existing database compiled by [Hufbauer et al. \(2009\)](#).

This study seeks to examine the effects of unilateral and autonomous economic sanctions on the sender's economy, with a specific focus on identifying the sanctions that result in positive economic outcomes. This study examines the factors that can influence a country's decision to impose sanctions, such as the economic implications and the role of economic security in national security.

The research considers multiple factors, such as trading relationships, economic progress, political and economic stability, nature of sanctions, and average GDP growth rate of both sender and target nations in the five years prior to the imposition of sanctions. The study will examine the geographical location of the targets to identify any internal factors that could either support or contradict the imposition of sanctions.

This article examines the unilateral US sanctions that were imposed before, during, and after the oil crisis that occurred between 1970 and 1979. This study examines the comparison of EC/EU autonomous sanctions imposed before (1980-2008) and during the Eurozone crisis from 2009 until 2019. The limitation of the study period to 2019 was motivated by two primary factors. The EU is currently dealing with the euro crisis and the 2020 pandemic, which could affect the comparison outcome and hinder accurate conclusions.

When examining the strategic deployment and economic impact of sanctions during two significant crisis periods lasting approximately ten years, it is important to use a nuanced temporal analysis and categorize findings by discrete decades.

The methodological approach provides valuable insights for scholars studying international relations and economic statecraft. Examining results in decade-long segments can reveal temporal trends, evaluate the adaptability of sanctions strategies, and provide historical context for outcomes. This approach facilitates the detection of shifts in sanctions dynamics and the identification of critical moments of evolution or stagnation in sanctions policy and practice.

An analysis conducted decade by decade enables the comparison of sanctions deployment and economic repercussions over time, thereby revealing patterns of continuity or change. This comparison examines the effectiveness of sanctions in comparable periods, providing insights into the relationship between geopolitical pressures and economic coercion strategies. Understanding the effectiveness of sanctions requires placing them within historical and geopolitical narratives. Researchers can analyze the relationship between external factors and sanctions outcomes to understand the complex causal connections in specific historical contexts.

The decade-by-decade approach offers policymakers valuable insights into the long-term effectiveness and unintended consequences of sanctions strategies from a policy standpoint. Policymakers can enhance sanctions frameworks, anticipate challenges, and adjust responses to changing geopolitical dynamics by analyzing trends and inflection points over time.

This methodological rigor enables a historical comparison of sanctions regimes in different crisis periods, enhancing our comprehension of the enduring principles and changing dynamics of economic statecraft. Expert audiences can analyze historical epochs to extract lessons learned, identify best practices, and inform future policy formulation in a dynamic global landscape. The adoption of a decade-by-decade analytical framework enhances the discussion on the strategic deployment and economic consequences of sanctions.

Generalizing the study's findings to encompass all economic sanctions could yield valuable insights regarding their effectiveness, consequences, and underlying mechanisms. Adopting a broader approach may facilitate the identification of patterns, nuances, and best practices that are relevant to various sanctions. This can contribute to a more comprehensive understanding of how sanctions affect targeted entities, economies, and geopolitical dynamics.

The study examines the economic and strategic consequences of financial (F), export (X), and import (M) sanctions. Financial sanctions, specifically those that involve withholding aid, are categorized as financial (F) sanctions. The study includes additional economic and geographic factors based on the framework developed by [Hufbauer et al. \(2009\)](#) for classifying objectives and variables related to sanctions. This framework categorizes sanctions according to the sender's policy objectives, including promoting regime change, undermining military capabilities, disrupting military operations, and effecting other significant changes in the target country. The study aligns unilateral sanctions with the sender's goals, as proposed by [Jones & Portela \(2014\)](#), using Hufbauer et al.'s (2009) classification.

Sanctions are identified by a numerical code consisting of the year they were imposed and their sequential order within that year. This study scrutinises explicitly the following economic variables:

"Cost to target as per cent of GNP" refers to the cost for the target as a percentage of its GNP annually ([Hufbauer et al., 2009](#)).

'Trade linkage' refers to the percentage of trade flow between the targeted state and the sender. Up to 10% is low trade linkage, up to 30% is middle, and over 30% is high ([Hufbauer et al., 2009](#)).

The *'GNP ratio'* shows the sender's economic size relative to the target's GNP. A ratio of up to 10% means low, up to 100% is middle, up to 1,000 is high, and over 1,000 implies the sender's GNP is significantly higher ([Hufbauer et al., 2009](#)).

The impact of sanctions on a country's *economic and political stability* is assessed using a scale ranging from 1 to 3. A rating of 1 signifies acute economic issues and political turmoil, while a rating of 2 indicates severe economic problems and internal dissent. A rating of 3 suggests that the government maintains firm control. The stability of the economy has been noted ([Hufbauer et al., 2009](#)). The *'sanction type'* refers only to financial (F), export (X), and Import (M) sanctions ([Hufbauer et al., 2009](#)).

The *'cost to sender'* categorizes the impact of the sanctions into four categories: The sender can experience a *'net gain (1)'* by withholding aid, resulting in an economic profit. This action has *'little effect on the sender (2)'* in terms of public comments and trivial postings. However, there may be a *'modest loss (3)'* in trade, which is not significant enough to provoke a political backlash. On the other hand, a *'significant loss (4)'* occurs when a large volume of trade is adversely affected, leading to a substantial backlash between businesses and communities. ([Hufbauer et al., 2009](#)).

The *'average of the target's GDP growth rate'* indicates the median GDP growth rate of the sanctioned countries five years before the imposition of the sanctions ([Hufbauer et al., 2009](#)).

The study incorporates additional variables, including the sender's average GDP growth rate five years prior to implementing sanctions and the target location's region (continent), in addition to Hufbauer et al.'s (2009) classification.

Thus, the '*median GDP growth rate of the sender*' describes the sender's median GDP growth rate five years before the imposition of the sanctions.

The '*region*' shows the location of the targeted countries.

This study differs from Hufbauer et al.'s (2009) classification by quantifying the 'cost to target' of EC/EU sanctions as a percentage of GNP, through the analysis of changes in EC/EU imports before and after the implementation of sanctions. The 'cost to sender' is determined by the percentage change in EC/EU exports relative to GNP. The economic impact can be classified into four categories: net gain from withholding aid (1), net profit from trade (2), modest loss (3), and significant loss (4). Hufbauer et al. provide a broad assessment of commercial, financial, and political costs, but do not provide specific information on monetary and political expenses.

Thus, in this study, the data provided by Hufbauer et al. (2009) will be randomly checked by comparing the US trade volume with the targeted countries during the sanction period or in at least three years. The study considers a transparent classification of the variables by differentiating between sanctions with a 'net gain (1)' due to withholding aid and sanctions resulting in a 'net profit (2)' due to increased economic activity to avoid confusion.

In contrast to Hufbauer et al. (2009), the '*average of the target's GDP growth rate*' refers to the median GDP growth rate of the countries subject to sanctions five years prior to the imposition of the sanctions. This measure is divided into three categories: higher GDP growth rate of the target country compared to the sender country, lower GDP growth rate of the target country compared to the sender country, and the same GDP growth rate as the sender country or no available data.

The research process consists of three key stages: data collection and selection, comparative analysis of variables, and formulation of a descriptive conclusion based on the findings.

This research exclusively examines 56 cases of unilateral US economic sanctions between 1950 and 2000. These cases are taken from Hufbauer et al.'s list, which includes examples such as Cuba (60-3), Indonesia (63-3), Libya (78-8), and the USSR (80-1). The US sanctions on Cuba, Libya, Indonesia, and the USSR aimed to achieve various objectives, including regime change, democratization, and military disruption. Nevertheless, the inclusion of these countries resulted in a duplication of counts, resulting in a dataset of 60 unilateral sanction episodes for the US.

US economic sanctions often involve withholding aid, which is advantageous for the sender to some extent. The economic impact assessment of the study relies on Hufbauer et al.'s (2009) research, which estimated the values of commercial, financial, and political costs and provided a general understanding of the impact. This analysis aims to evaluate the estimated values proposed by Hufbauer et al. (2009) by comparing the difference in US export and import volumes with the targeted countries before and after the implementation of sanctions. This approach will enhance understanding of the economic impact of sanctions on targeted countries.

The analysis of the original data set, which consists of 37 episodes of EC/EU autonomous economic sanctions, involves examining the same variables as previously discussed.

This study analyzes economic sanctions within the context of the 2017 US National Security Strategy, offering a novel perspective. The statement highlights the importance of a country's economic stability for its national security, particularly in times of crises. This perspective offers a distinct comprehension of the repercussions of economic sanctions and their impact on national security.

The study examines the Strategic Deployment and Economic Impact of Sanctions by comparing US unilateral economic sanctions during the Oil Crisis Era and EU Autonomous Economic Sanctions during the Eurozone Crisis. It focuses on the 2017 US national security strategy to highlight the complex relationship between economic statecraft, geopolitical dynamics, and national security imperatives.

Examining historical cases of sanctions deployment allows scholars to gain valuable insights into the effectiveness, limitations, and unintended consequences of using economic measures as foreign policy instruments. This comparative approach provides insight into the differences in strategies and outcomes among various actors, contributing to a nuanced understanding of the intricate geopolitical landscape in which sanctions are implemented.

Furthermore, placing this study within the context of the 2017 US National Security Strategy framework emphasizes the correlation between policy objectives, strategic priorities, and the utilization of economic tools to advance economic interests in order to safeguard national security interests. The connection highlights the importance of economic statecraft in modern security paradigms, emphasizing the necessity of a comprehensive approach to domestic and foreign policy development and execution.

In sum, this study enhances scholarly discourse by improving our comprehension of the strategic use of sanctions and their economic consequences. It provides practical insights for policymakers and encourages interdisciplinary dialogue among experts. Studying sanctions is crucial for shaping economic security and safeguarding national security in the 21st century, as we navigate a complex and interconnected global landscape. This perspective offers a distinct comprehension of the repercussions of economic sanctions and their impact on national security.

Results

Imposition of Sanctions During Economic Crises in the Sender Country

The research reveals that during economic crises, the US and the EU increased the frequency of economic sanctions. In the case of the US, between 1970 and 1979, the country imposed 25 unilateral economic sanctions per decade, while during the periods before and after the Oil

crisis (between 1950 and 1969 and 1980 and 2000), the number of sanction episodes was only 8.75 per decade. Similarly, the EU enforced an average of 7.59 autonomous sanction episodes per decade between 1980 and 2008. However, during the Eurozone crisis (from 2009 to 2019), there was a considerable increase in sanction episodes, with 15 episodes totalling 13.63 per decade.

Empirical research has confirmed a positive correlation between the frequency of sanctions and the occurrence of crises. The frequency of sanctions tends to increase during crises. The research supports hypothesis H1 and demonstrates that the frequency of US unilateral and EU autonomous economic sanctions tends to rise during economic crises in the sender country. Please refer to [Table 1](#) for the visual representation.

Table 1: Comparison Between Sanction Episodes Imposed Before, During and After The Crisis.

Period	Total Episodes	Total Episodes Per Decade	Episodes With Positive Impact Total	Episodes With Positive Impact Per Decade	Episodes With Negative Impact Total	Episodes With Negative Impact Per Decade	Data Not Available, Negligible
US sanctions before/after the Oil crisis 1950-1969, 1980-2000 (40 years)	35	8,75	25	6,25	10	2,50	-
US sanctions during the Oil crisis 1970-1970 (10 years)	25	25	23	23	2	2	-
EC/EU sanctions before the Eurozone crisis 1980-2008 (29 years)	22	7,59	15	5,17	1	0,34	6
EU sanctions during the Eurozone crisis 2009-2019 (11 years)	15	13,64	8	7,27	7	6,36	-

Source: own table based on [Hufbauer et al. \(2009\)](#), [Statista \(2021\)](#), [World Integrated Trade Solution \(2021\)](#), [CEICDATA \(2021\)](#), [Country Economy \(2021\)](#), the CIA World Factbooks 1982–2013, [Jewish Virtual Library \(2023\)](#), [Trade in Goods with the USA \(2023\)](#), [United States Census Bureau \(2023\)](#), [Kreutz \(2005\)](#), [Portela \(2005\)](#), [Hörbelt \(2017\)](#), [Macrotrends \(2021\)](#), [External and intra-European Union Trade EC Statistical Yearbook 1958–2002](#), [EC Directorate-General for Trade \(2021\)](#), [EU Sanctions Map \(2021\)](#) and [European External Action Service \(2023\)](#).

Unilateral and Autonomous Economic Sanctions Imposed During Economic Crises Generally Positively Impact The Sender

The study suggests that the imposition of sanctions that benefit the sender's economy tends to increase significantly during times of crisis.

During the Oil crisis, the US economy experienced positive effects in 23 out of 25 sanction episodes, while the number of episodes with negative consequences decreased from 2.5 to 2 per decade. Between 1950-1969 and 1980-2000, there were only 6.25 sanctions per decade that had a positive impact on the US economy. The analysis indicates that the autonomous sanctions imposed by the EC/EU followed a similar trend, albeit with less intensity. Between 1980 and 2008, the sender's economy experienced a positive impact of 5.1 episodes per decade. The number of episodes increased to 7.27 during the Eurozone crisis.

Unlike the United States, the European Union also saw an increase in detrimental economic sanctions. The number of sanction episodes rose from 0.34 before the crisis to 6.37 during the Eurozone crisis. However, the public generally viewed those sanctions as having a negative impact on the economy of the country imposing them. Please refer to [Table 1](#) for the visual representation.

US Bilateral Trade Before and After the Crisis (1950-1969, 1980-2000) versus During the Oil Crisis (1970-1979)

[Hufbauer et al. \(2009\)](#) introduced a variable called 'cost to sender' to categorize the impacts of sanctions into four categories. These categories include: 'net gain (1)' which refers to withholding aid and resulting in a positive outcome, 'little effect (2)' which indicates minimal impact and limited commentary, 'modest loss (3)' which involves some trade loss but no political backlash, and 'significant loss (4)' which entails substantial trade loss and political backlash. This classification provides the sender with an approximate understanding of the commercial, financial, and political costs, without specifically specifying the monetary and political expenses ([Hufbauer et al., 2009](#)).

The analysis of 60 US unilateral economic sanction episodes reveals that 48 of them had a positive impact on the US. Over the course of 28 episodes, the United States chose to withhold aid, resulting in a modest yet favorable economic benefit during times of crisis. A total of 24 sanction episodes were imposed during the period from 1950 to 2000. Among these, 14 occurred during the decade of the Oil crisis (1970-1979), while the remaining 10 were imposed in the decades before and after the Oil crisis (1950-1969 and 1980-2000). The trade with the targeted countries had a positive impact on US trade over the course of 20 episodes. The tracking of US exports and imports by country commenced in 1985, with certain countries being monitored at a later date. Therefore, this study exclusively examined data from 1985 onwards. [Table 1](#) presents the visual representation.

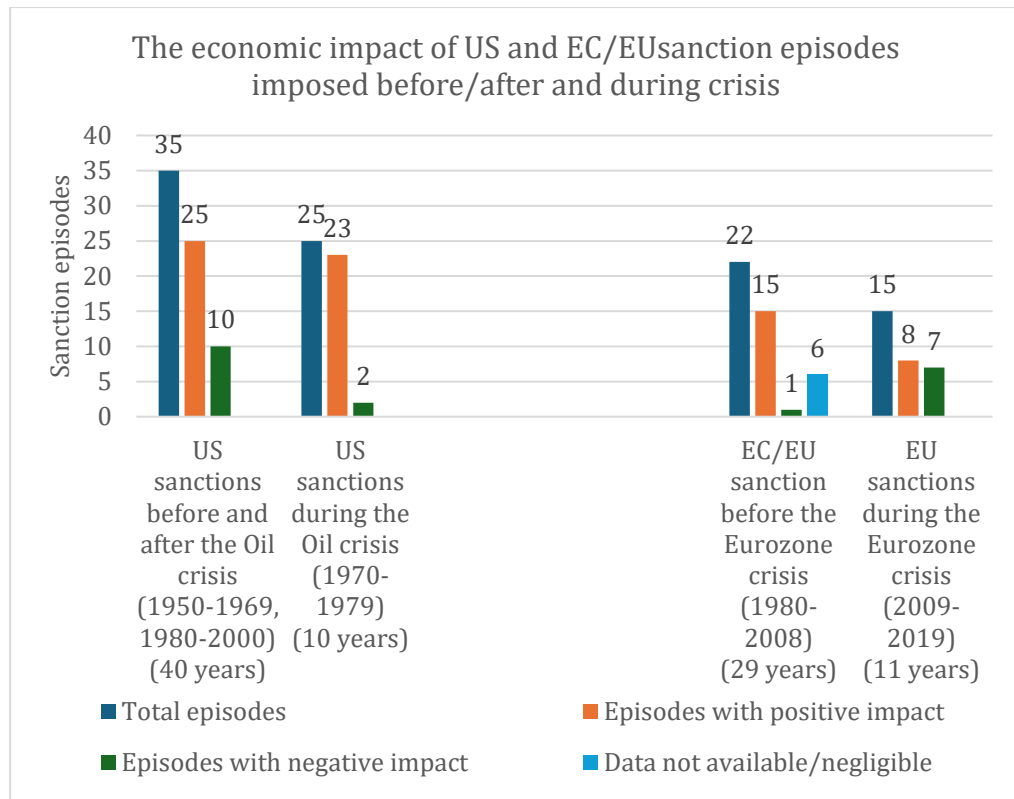


Figure 1: Episodes of US and EC/EU autonomous sanctions imposed before, during and after the US stagflation (1970-1979) and the Eurozone crisis (2009-2019).

Source: own graphic based on see [Table 1](#).

The tracking of US exports and imports by country commenced in 1985, with certain countries being included in the tracking system at a later date. Therefore, this study only analyzed data from 1985 onwards. An exception to this was the Israel (56-1) sanction episode, as the data was available in the U.S.-Israel Economic Cooperation: Bilateral State Statistics (1948-Present) database. The analysis of 11 out of 20 US sanction episodes, categorized by [Hufbauer et al. \(2009\)](#) as having 'little effect on the sender (2)', supports their classification and provides evidence for the validity of equations (1), (2), (3), and (4) presented in the Current Study chapter. The findings are reinforced by the limited public comments and insignificant postings associated with these episodes.

The validation enhances the credibility of their findings and reinforces the trustworthiness of their research outcomes. It ensures that the conclusions drawn from the analysis are not solely based on the initial dataset, but have been thoroughly verified, instilling greater confidence. This data validation approach enhances the trust of the scientific community in the research outcomes of this study, thereby enriching scholarly discourse and advancing knowledge in the field. This validation strengthens the study's findings, improves the reliability of the data analysis, and emphasizes the importance of the research's methodological robustness, ensuring the integrity and credibility of the results. For data visualization, refer to [Table 2](#).

Table 2: US Imports and Exports for Examined Sanction Episodes with "Little Effect on The Sender (2)", Resulting in a Net Economic Profit for The Sender.

Type of Sanction	US Importe (M)		US Exporte (X)	
	US imports (M) increase	US imports (M) decrease	US exports (X) increase	US exports (X) decrease
Financial (F) (1 episode)	Angola (86-2)		Angola (86-2)	
Financial and Export (F, X) (7 episodes)	Israel (56-1)		Israel (56-1)	
	Arab League (76-3)			Arab League (76-3)
	Pakistan (79-2)			Pakistan (79-2)
	China (89-2)		China (89-2)	
	Peru (95-1(1))		Peru (95-1(1))	
		Ecuador (95-1(2))	Ecuador (95-1(2))	
	India (98-1)		India (98-1)	
Financial and Import (1 episode)		Romania (83-5) ^o	Romania (83-5) ^o	
Financial, export and import (F, X, M) (1 episode)	Poland (81-2)		Poland (81-2)	
No data (1 episode)		Ecuador (00-1)	Ecuador (00-1)	

Source: own table based on [Hufbauer et al. \(2009\)](#).

Bilateral Import and Export Flow Patterns Before and During the Eurozone Crisis

Prior to the Eurozone crisis, the study discovered that the majority of sanctions imposed by the EC/EU did not have a substantial effect on the sender's imports and exports with the targeted countries. Some sanctions have been found to actually increase bilateral trade. Nevertheless, there were some notable deviations from this pattern, specifically observed in Ethiopia, Zimbabwe, and Yugoslavia, where both imports and exports experienced a decline prior to the onset of the Eurozone crisis. In contrast, exports in Belarus increased despite a ban on exports.

This study excluded four economic sanctions: Argentina, Azerbaijan, Armenia, and Eritrea. Argentina was excluded due to its short-term nature, while Azerbaijan, Armenia, and Eritrea were excluded because there were no records available regarding EC imports and exports from/to these countries. Prior to the Eurozone crisis, the EC/EU predominantly utilized individual sanctions, particularly export sanctions, which had limited adverse economic consequences. For visualization of this data, please consult [Table 3](#).

Table 3: EC/EU imports and exports from/to the targeted countries before the Eurozone crisis (1980-2008).

Type of Sanction	EC/EU importe (M)		EC/EU exporte (X)	
	EC/EU imports (M) increase	EC/EU imports (M) decrease	EC/EU exports (X) increase	EC/EU exports (X) decrease
Import (M) (1 episode)	USSR**(82-1)		USSR**(82-1)	
Export (X) (12 episodes)	Libya**(86-1) only EU sanctions		Libya**(86-1) only EU sanctions	
	Syria (86-2)		Syria (86-2)	
	Myanmar**(90-1)		Myanmar**(90-1)	
	Slovenia (91-2)		Slovenia (91-2)	
	Croatia (91-3)		Croatia (91-3)	
	FYR Macedonia (91-4)		FYR Macedonia (91-4)	
	Bosnia Herzegovina (91-5)		Bosnia Herzegovina (91-5)	
	Zaire**(93-1)		Zaire**(93-1)	
		Nigeria (93-2)	Nigeria (93-2)	
		Ethiopia (99-1)		Ethiopia (99-1)
		Indonesia (99-3)		Indonesia (99-3)
		Libya**(99-4) only EU sanctions		Libya**(99-4) only EU sanctions
Financial and Export (F, X) (3 episodes)	China (89-1)		China (89-1)	
		Yugoslavia**(Serbia-Montenegro) (91-1)		Yugoslavia**(Serbia-Montenegro) (91-1)
		Zimbabwe (02-1)		Zimbabwe (02-1)
		Belarus (06-1)	Belarus (06-1)	
Export and Import (X, M) (1 episodes)	South Africa (85-1)		South Africa (85-1)	

Source: own table based on [World Integrated Trade Solution \(2021\)](#), [CEICDATA \(2021\)](#), [Country Economy \(2021\)](#), the [CIA World Factbooks 1982–2013](#), [External and intra-European Union Trade EC Statistical Yearbook 1958–2002](#), [EC Directorate-General for Trade \(2021\)](#), [EU Sanctions Map \(2021\)](#), and [European External Action Service \(2023\)](#).

Between 2009 and 2019, the EU experienced an increase in sanctions with negative economic consequences during the Eurocrisis. This was due to a shift in the EU's approach, as they started using a combination of different types of sanctions instead of relying on a single type. Belarus, Russia, Iran, and Syria were all affected by this, with Syria being affected twice. The sanctions imposed on Egypt mainly consisted of financial and export restrictions. Imports from Egypt increased despite the sanctions.

However, Guinea-Bissau and Ukraine were subjected to broader sanctions, encompassing financial, export, and import restrictions. However, despite the restrictions, EU exports to these countries continued to increase. To view a visual representation of this information, please consult [Table 4](#).

Table 4: EU imports and exports during the Eurozone crisis (2009-2019).

Type of Sanction	EC/EU importe (M)		EC/EU exporte (X)	
	EC/EU imports (M) increase	EC/EU imports (M) decrease	EC/EU exports (X) increase	EC/EU exports (X) decrease
Export (X) (1 episode)	Myanmar (13-1)		Myanmar (13-1)	
Financial (F) (5 episodes)	Guinea (09-1)		Guinea (09-1)	
	Bosnia Herzegovina (11-1)		Bosnia Herzegovina (11-1)	
	Tunisia (11-5)		Tunisia (11-5)	
	Nicaragua (19-1)		Nicaragua (19-1)	
	Turkey (19-2)			Turkey (19-2)
Financial and Export (F, X) (3 episodes)		Belarus (12-1)		Belarus (12-1)
		Russia (14-1)		Russia (14-1)
	Venezuela (17-1)			Venezuela (17-1)
Financial, export and import (F, X, M) (5 episodes)		Egypt (11-2)	Egypt (11-2)	
		Iran (11-3)		Iran (11-3)
		Syria**(11-4)		Syria**(11-4)
	Guinea Bissau (12-2)		Guinea Bissau (12-2)	
		Syria** (13-2)		Syria** (13-2)
	Ukraine (14-2)		Ukraine (14-2)	

Source: own table based on see [Table 3](#).

Trade Linkage

During crises, sender countries tend to increase sanctions on targets with significant trade links, especially those with middle- to high-level trade ties.

Research indicates that the targets of US sanctions underwent changes in their characteristics during the oil crisis decade. The United States primarily imposed sanctions on countries with strong trade ties (3.25 sanctions episodes per decade) both before and after the crisis. Countries with weak trade ties experienced 3 sanctions episodes per decade, while those with moderate trade ties experienced 2.5 sanctions episodes per decade. After the oil crisis, there was a noticeable change in the pattern of sanctions imposed by the United States. The primary targets of sanctions were countries with moderate trade linkage to the US (19 episodes), while those with low and moderate trade linkage were equally targeted (3 episodes each).

The research findings indicate that the EU sanctions underwent a similar transformation as the US sanctions. In contrast to the United States, the European Commission/European Union focused primarily on countries that had significant trade links with the EC/EU both before and during the Eurozone crisis. The frequency of such episodes increased from 3.79 to 6.36 during the crisis. The frequency of imposing sanctions on countries with moderate trade connections increased from 2.75 to 4.5 episodes per decade during the Eurozone crisis.

During the crisis, the EU began imposing sanctions on countries with low trade links to the EU, which was a departure from the pre-crisis period. To view the data visually, please see [Figure 2](#).

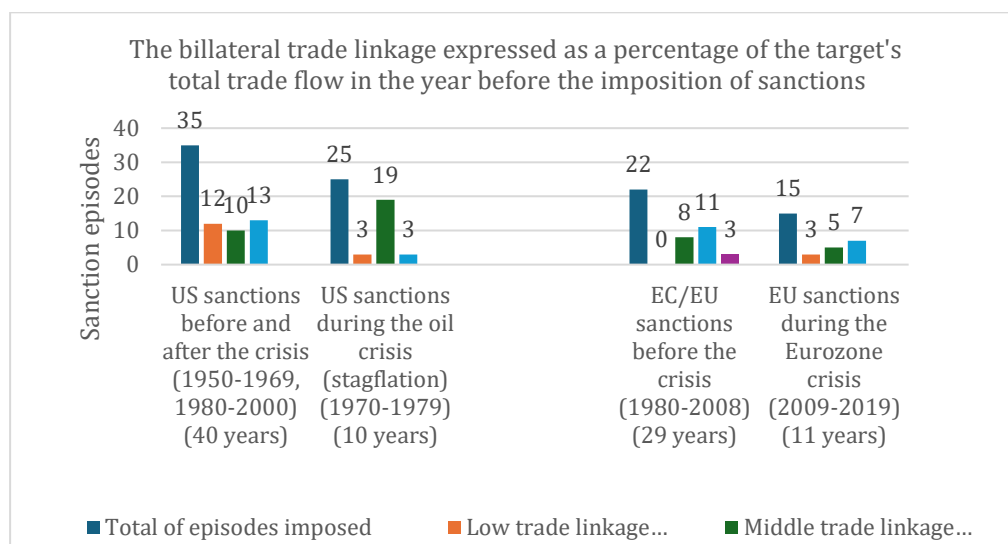


Figure 2: The Bilateral Trade Linkage Expressed as a Percentage of the Target's Total Flow in the Year Before the Imposition of Sanctions.

Source: own graphic based on see [Table 1](#).

GDP Ratio

Economic sanctions are commonly employed by nations to exert pressure on other countries, particularly developing or emerging ones, in times of crisis.

Research indicates that the United States primarily focused on developing countries prior to, during, and after the Oil crisis. Prior to the crisis, developing countries with GNP ratios that were up to 1,000 times lower than that of the United States experienced the highest frequency of sanctions, with an average of four episodes per decade. Emerging countries with a GDP ratio up to 100 times lower than the US had an average of 2.25 episodes per decade. Industrialized countries with a GDP ratio significantly lower than the US and failed countries with a GDP ratio significantly lower than the sender's experienced an average of 1.25 episodes per decade. During the oil crisis, there was a consistent trend of industrialized and failed states experiencing a slight decrease in the frequency of sanctions imposed, from an average of 1.25 to 1 episode per decade. Nevertheless, there was a significant rise in sanctions imposed on emerging markets, increasing from an average of 2.25 to 10 occurrences per decade. The number of sanction episodes in developing countries has increased significantly from 4 to 13 episodes per decade.

Research indicates a shift in the focus of EU sanctions during the Eurozone crisis. Prior to the crisis, the European Union focused on emerging markets at a rate of 3.45 episodes per decade, and on developing countries at a rate of 2.07 episodes per decade. In addition, the European Union has imposed sanctions on industrialized countries at a rate of 0.35 episodes per decade, and on failed states at a rate of 1.73 episodes per decade. During the crisis, there was a notable change in trend as the European Union (EU) intensified its sanctions on developing countries, increasing from 2.07 to 7.27 episodes per decade. Similarly, sanctions on failed states rose from 1.73 to 2.72 episodes per decade, and on industrialized countries from 0.35 to 0.90 episodes per decade. The sole observed decrease was in the sanctions imposed on emerging markets, which declined from 3.45 to 2.72 episodes per decade. To view the data visually, please see [Figure 3](#).

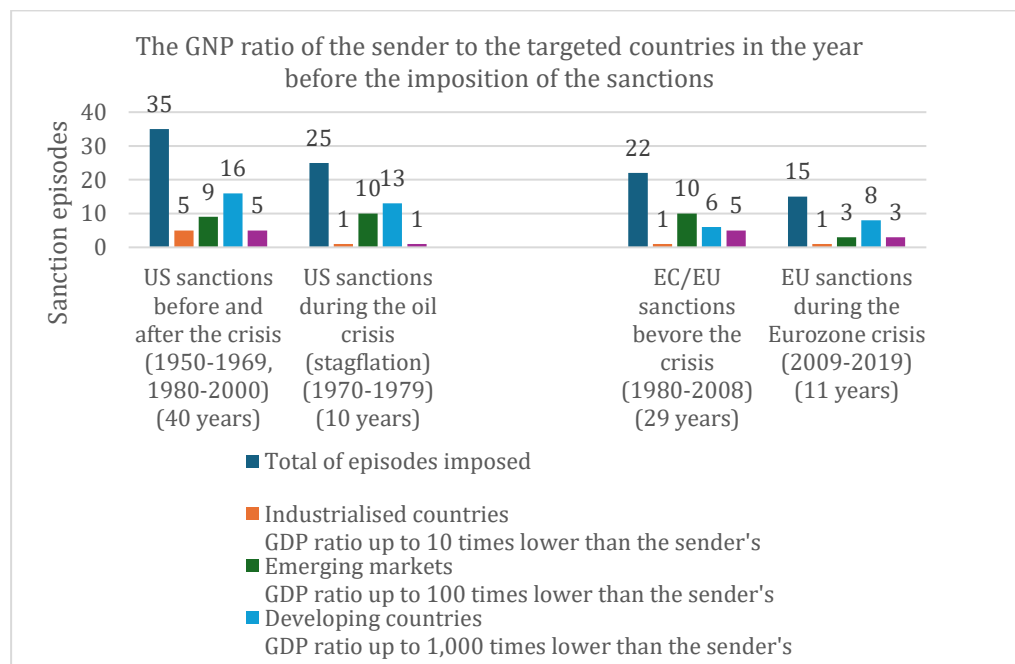


Figure 3: The GNP Ratio of the Sender to the Targeted Countries in the Year Before the Imposition of the Sanctions.

Source: own graphic based on see [Table 1](#).

Economic Health and Political Stability of The Target Countries

The study indicates that countries tend to increase the implementation of economic sanctions against nations facing acute economic and political instability (distressed situations (1)) and those with notable economic issues and internal dissent (significant problems(2)) during times of crisis.

Amidst the oil crisis, the United States escalated economic sanctions on countries facing substantial challenges (2). The number of episodes increased from 4 to 12 per decade. The frequency of imposing sanctions on countries experiencing distress increased from 2.75 episodes before and after the Oil crisis to 7 episodes per decade during the crisis. [Figure 4](#) provides a visual representation of the data.

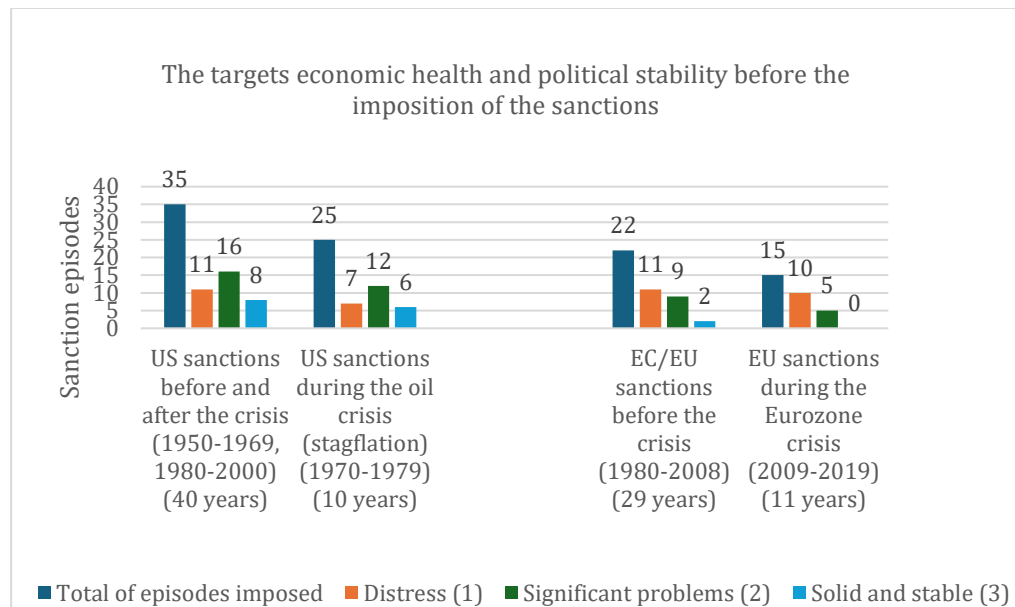


Figure 4: The Targets Economic Health and Political Stability Before the Imposition of the Sanctions.

Source: own graphic based on see [Table 1](#).

Following the Eurozone crisis, the EU implemented sanctions on countries facing economic and political difficulties (1). The results demonstrate a notable rise in the occurrence of sanctions, increasing from 3.79 to 9.09 per decade for countries experiencing distress. (2)The frequency of sanctions increased from 3.10 to 4.54 per decade for countries facing substantial problems. During the Eurozone crisis, countries with stable economic and political conditions were not subjected to sanctions, unlike the period before the crisis when there were 0.69 episodes of sanctions.

The Average of the Target's GDP Growth Rate Five Years Before the Imposition of Sanctions

Research findings indicate that during crises, sanction senders typically impose sanctions on targets with a higher average GDP growth rate in the five years prior to the sanctions compared to the senders themselves.

During the pre- and post-oil crisis period, the US government imposed an average of five sanctions per decade on countries with a lower GDP growth rate than the US. In contrast, it imposed an average of 2.75 episodes on countries with higher GDP growth rates than the US. During the Oil crisis (1970-1979), the US increased the number of sanctions applied to countries with higher GDP growth rates than its own from 2.75 to 18 episodes per decade. The incidence rate of episodes against countries also increased, albeit less dramatically, from 5 to 7 occurrences per decade. Amidst the Oil crisis, the US government refrained from imposing sanctions on countries that exhibited similar average GDP growth rates or lacked sufficient data, in contrast to the period preceding and following the oil crisis. This is interesting because four different sanction episodes targeted counties with similar characteristics both before and after the crisis. During the Eurozone crisis, the European Union (EU) imposed sanctions on countries with higher GDP growth rates, resulting in an increase in sanctions from 4.14 to 10 per decade. The number of sanctions imposed on countries with lower GDP growth rates decreased significantly from 4.14 to 1.82 sanctions per decade. By contrast, the number of sanctions per decade imposed on countries with comparable GDP growth rates or lacking available data rose from 0.69 to 1.82. To view the data visually, consult [Figure 5](#).

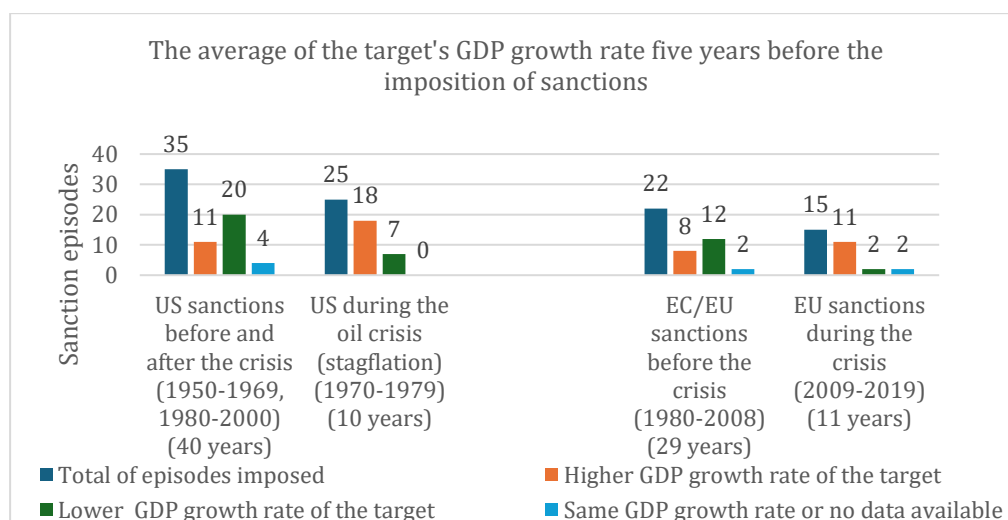


Figure 5: The Average of the Target's GDP Growth Rate Five Years Before the Imposition of Sanctions.

Source: own graphic based on see [Table 1](#).

Location of the Targeted Countries

Research findings indicate that countries tend to impose sanctions on their neighboring countries under normal circumstances. During times of crisis, nearby countries often experience a significant increase in the imposition of sanctions. The research indicates that the United States is more inclined to impose sanctions on countries in North, Central, and South America compared to other regions. During both the pre and post-Oil crisis periods, an average of 3.5 sanction episodes per decade were imposed on countries in North, Central, and South America. Asia had an average of two instances per decade, while Europe had an average of 1.5 per decade. In contrast, the

Middle East (MENA) region and Sub-Saharan Africa had even lower occurrences of sanctions, averaging 1 and 0.75 respectively. The Oil Crisis led to an increase in the frequency of sanction episodes in countries across the Americas, rising from 3.5 to 12 episodes per decade. In Asia, the frequency also increased from 2 to 7 instances per decade. In the Middle East, the number of cases increased from 1 to 3 per decade, while in Sub-Saharan Africa, it increased from 0.75 to 2. Nevertheless, Europe experienced a decrease in sanctions from 1.5 to 1 per decade.

Prior to the Eurozone crisis, European countries experienced an average of 3.10 instances of economic sanctions from the European Commission / European Union per decade, while Sub-Saharan Africa experienced an average of 2.07 instances. Countries in the MENA Region and Asia experienced an average of 1.03 episodes per decade. The number of EC/EU sanctions episodes targeting countries from North, Central, and South America is only 0.34 per decade. The frequency of EU sanctions increased during the crisis, reaching 4.54 per decade for Europe, MENA, and Sub-Saharan Africa. Central/South America experienced an increase to 1.82 per decade, while Asia saw a slight decrease to 0.91 per decade. Empirical research consistently shows patterns in the variables analyzed regarding the imposition of sanctions, suggesting that there are inherent motives behind the imposition of sanctions in general. When analyzing sanctions imposed during a crisis, the economic intentions of the sender are apparent as a significant factor. The research supports hypothesis H2 and demonstrates that unilateral and autonomous economic sanctions have a positive impact on the sender. Figure 6 provides a visual representation of the data.

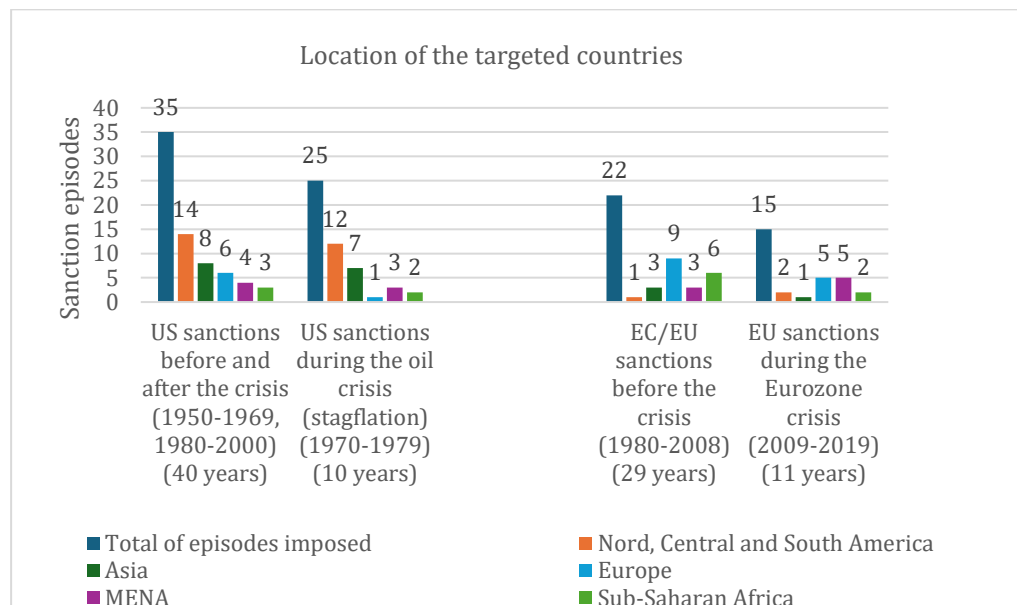


Figure 6: The Targeted Countries Location.

Source: own graphic based on see Table 1.

Economic Sanctions Serve in Part The Sender's Economic Security

Economic research indicates a link between economic sanctions and economic crises, particularly affecting developing countries that experience

political and economic instability. Implementing sanctions can be crucial for enhancing the sender's economic security, especially during times of crisis, as they impact trade, investment, and finance, ultimately strengthening the sender's economic outlook despite the geopolitical implications.

Economic sanctions effectively mitigate threats by safeguarding the sender's position and creating opportunities for domestic industries. These actions contribute to economic stability, advance economic interests internationally, and enhance diplomatic negotiations.

Sanctions are employed as a proactive measure to safeguard a nation's economic interests and accomplish strategic goals using economic methods. The empirical analysis indicates that political, economic, and geographic factors play a significant role in motivating the imposition of sanctions. This suggests that economic sanctions are utilized, to a certain degree, to safeguard the economic security of the sender country, thereby supporting hypothesis H3.

Discussion

Research suggests that senders are more likely to use unilateral and autonomous economic sanctions during economic downturns. These findings indicate that sanctions serve military, political, and economic goals. The increase in sanctions reflects a transition towards a proactive economic policy by the countries imposing them. This shift challenges the conventional understanding of sanctions as solely reactive measures to geopolitical threats, and it has significant implications for global trade and diplomacy. This research illuminates the factors that lead to the imposition of sanctions during economic crises, thereby contributing to a deeper comprehension of the 2017 US National Security Strategy. This statement also explains how this strategy influences the development of effective economic policies during times of crisis and in the future.

Studies have found a clear correlation between increased sanctions and economic instability in the countries implementing them. Governments frequently impose sanctions in times of instability to safeguard their interests, divert attention from domestic matters, and strengthen their bargaining position in negotiations. The use of sanctions has the potential to address crises and alter trade dynamics. However, their increased application during economic downturns can strain diplomatic relations, impede multilateral cooperation, and have wide-ranging impacts on trade, investment, and macroeconomic stability. This insight has important implications for international relations, political economy, and economics, highlighting the increasing influence of geopolitical and geoeconomic strategies during economic crises.

Research indicates that economic sanctions can have a positive effect on the sender's economy, especially during times of economic crisis in the sender's country. This insight is essential for comprehending the role of economic sanctions within the sender's economic framework. The results indicate a higher likelihood of countries imposing sanctions on their major

trading partners during periods of economic downturns. This proactive approach enables sender countries to address economic challenges and advance strategic goals by exerting influence over trade routes. The research suggests that sanctions have a dual purpose: to ensure compliance and exhibit preparedness in dealing with domestic crises and advancing national interests. They strategically focus on countries that possess valuable resources or strategic sectors, in order to gain market advantages, rebalance trade, increase exports, and strengthen the sender's economic position.

Moreover, sanctions can contribute to political stability and enhance global reputation. During the Eurozone crisis, the EU imposed sanctions on countries with lower trade levels but significant natural gas and oil reserves, such as Myanmar, Venezuela, and Nicaragua. They aimed to develop their own oil and gas resources and influence long-term political and economic activities. The intention behind these sanctions was to secure access to crucial markets and resources.

The research indicates that emerging and developing nations often face a significant number of sanctions during crises in sender countries. These sanctions are motivated by economic, geopolitical, security, and endogenous factors. These nations often possess valuable natural resources or untapped markets that senders aim to access during economic downturns. Senders exploit economic disparities to obtain advantageous trade agreements and access to markets. The instability in these regions is perceived as both a potential threat and an opportunity to exert influence. The imposition of sanctions serves to help senders achieve their economic and national objectives, secure trade agreements, and establish authority in emerging markets. This suggests that there are endogenous motivations behind the use of sanctions.

The imposition of economic sanctions is often influenced by domestic political factors, which are frequently employed to divert attention from internal issues or to gain public support. Countries impose sanctions during economic crises for reasons related to national security and economic interests. The United States and European Union focus on countries with vulnerable economies and politically unstable conditions. In contrast to the European Union's response to the Eurozone crisis, the United States has imposed sanctions on stable economies even during the Oil crisis. The findings indicate that sanctions are influenced by power dynamics and leaders' desire to demonstrate global strength during non-crisis periods. However, during times of crisis, the focus of sanctions shifts towards addressing internal issues and ensuring economic stability. Sanctioning distressed nations from an economic perspective increases the chances of obtaining concessions, entering new markets, accessing resources, and strengthening the sender's influence. This suggests that the sanctions are influenced by both external factors and internal considerations.

The study highlights that countries frequently impose sanctions during crises for reasons linked to national security and economic interests, targeting

nations with varying levels of economic health and political stability. Countries with weak economies and unstable politics have been sanctioned by the US and EU. In contrast to the European Union's approach during the Eurozone crisis, the United States also imposed sanctions on economically strong and stable countries during the oil crisis. Imposing sanctions on influential nations is a strategic manoeuvre with the goal of obtaining concessions or exerting influence over the actions of geopolitical rivals. The US has imposed sanctions on several stable countries, including South Africa, Chile, Taiwan, Arab League nations, Paraguay, and India, due to its perception of them as regional threats. The imposition of sanctions on Arab League countries was driven by specific economic factors. Targeting countries experiencing economic and political instability enhances the likelihood of obtaining concessions, accessing markets and resources, and bolstering the sender's global position. These findings indicate that the decision to impose sanctions is influenced by both internal and external factors, suggesting the presence of an endogenous component in the decision-making process.

The study reveals that countries frequently impose sanctions on nations experiencing higher GDP growth rates than their own during times of crisis. This trend indicates that sanctions are strategically used to exert pressure on economically strong adversaries. Selective sanctions are imposed by nations to target competitors whose economic growth poses a challenge to their interests. These decisions are driven by endogenous motives. The strategic decision to impose economic sanctions is intended to weaken economically powerful nations, decrease their global competitiveness, and bolster the relative strength of the countries imposing the sanctions. The selection of nations with higher GDP growth rates as targets demonstrates the influence and control of the sanctioning countries in terms of both economic and geopolitical aspects. This enhances their image as significant global actors, especially in times of crisis. Senders exploit vulnerabilities and disrupt stability in nations with robust economic growth to gain negotiation leverage. This approach utilizes economic interdependencies, employing sanctions not only as punitive measures but also to leverage economic resilience for geopolitical advantage.

Research indicates that countries often impose sanctions on neighbouring countries and those within their areas of concern, particularly during periods of instability. Sanctions in a regional context are intricate and shaped by geopolitical factors. The central role of proximity is attributed to shared infrastructure and economic interdependencies. Neighbouring states' vulnerability to each other's economic disruptions increases their susceptibility to sanctions.

Amidst the Oil crisis, the United States implemented sanctions on neighbouring countries such as Paraguay, Guatemala, Nicaragua, El Salvador, Brazil, and Bolivia. Notably, these countries exhibited higher GDP growth rates compared to the United States. The imposition of sanctions was motivated by economic and political factors, as the United States viewed the progress made by the targeted country as a potential threat to its own interests. The sanctions were implemented to safeguard US economic supremacy, minimize vulnerabilities in key markets, and exert influence on these nations' adherence to US objectives regarding their petroleum, natural gas, and oil reserves.

During the Eurozone crisis, the EU imposed sanctions on European and MENA countries, specifically targeting those with higher GDP growth rates, including Bosnia-Herzegovina, Belarus, Russia, and Turkey. These countries have valuable natural resources that are essential for maintaining economic stability. The sanctions were motivated by economic and geopolitical factors, such as regional alliances and security threats. The emphasis on neighbouring countries suggests that the motives for imposing sanctions are driven by internal factors.

The study reveals that sanctions are more prevalent and impactful in times of crises, particularly when imposed on neighbouring developing countries that have significant trade connections and higher rates of pre-sanction GDP growth. This study challenges conventional assumptions and deepens our comprehension of sanctions in the field of international relations.

The study emphasizes the substantial influence of economic sanctions on global economic and political strategies, in line with the 2017 US National Security Strategy. This study provides valuable insights for policymakers and scholars by demonstrating the effectiveness of sanctions in protecting national interests. The study highlights the interconnectedness of economies and the intricate effects of sanctions on trade relationships, emphasizing the need for a nuanced approach during crises. Economic factors, particularly trade connections, play a critical role in determining sanctions. The study highlights patterns in target selection and challenges assumptions about sanctions, emphasizing the importance of economic and geographic proximity as well as geopolitical motivations.

Conclusions and Policy Implications

The study demonstrates a growing trend among countries to employ sanctions as a proactive economic policy during periods of economic decline. Sanctions often focus on countries with strong economic growth and extensive trade connections, especially in times of crisis, in order to apply pressure and exert influence. This highlights the internal motives driven by economic, geopolitical, and security concerns. The strategic deployment of sanctions serves multiple purposes, including disrupting economic stability, gaining market advantages, and enhancing the sender's global position.

The findings emphasize the need for policymakers to adopt a nuanced approach to sanctions, taking into account economic, political, and security objectives. Sanctions should be customized to the socioeconomic and political context of the target nation in order to minimize unintended consequences and address underlying issues. It is important to consider the economic impacts on both the sender and target countries. Additionally, exploring alternative policy tools and diplomatic negotiations can help mitigate adverse effects. It is crucial to have crisis management strategies that consider diplomatic and economic consequences and prioritize regional diplomacy to prevent conflicts and promote stability.

The findings challenge conventional perspectives on sanctions, highlighting the necessity for additional scientific research to enhance our

comprehension of their intricate dynamics. Further research is needed to examine the effects of recent sanctions, sector-specific impacts, the correlation between sanctions and human rights, and the effectiveness of alternative policy instruments. The comparative effectiveness of multilateral versus unilateral sanctions, the intersection of sanctions and cybersecurity, and longitudinal impacts merit further investigation.

An analysis of effective sanctions, assessment of regional cooperation frameworks, and consideration of public opinion's influence on sanctions policies will enhance the development and effectiveness of sanctions as instruments for achieving geopolitical and economic objectives.

References

- Afesorgbor, S. K. (2019). The impact of economic sanctions on international trade: How do threatened sanctions compare with imposed sanctions? *European Journal of Political Economy*, 56, 11-26. doi: <https://doi.org/10.1016/j.ejpoleco.2018.06.002>
- Alwadeai, A., Vlasova, N., Mareeh, H., & Aljonaid, N. (2024). Beyond traditional defenses: Unraveling the dynamics of reserves and exchange rate volatility in the face of economic sanctions. *Russian Journal of Economics*, 10(1), 1-19. doi: <https://doi.org/10.32609/j.ruje.10.118769>
- Baldwin, D. (1985). *Economic Statecraft*. Princeton: Princeton University Press. Retrieved from <https://press.princeton.edu/books/paperback/9780691204420/economic-statecraft>
- Becker, A. S. (1987). *U.S.- Soviet Trade in the 1980s*. The RAND Corporation. Retrieved from <https://www.rand.org/content/dam/rand/pubs/notes/2009/N2682.pdf>
- Běllín, M., & Hanousek, J. (2021). Which sanctions matter? Analysis of the EU/Russian sanctions of 2014. *Journal of Comparative Economics*, 49(1), 244-257. doi: <https://doi.org/10.1016/j.jce.2020.07.001>
- Biglaiser, G., & Lektzian, D. (2011). The effect of sanctions on US foreign direct investment. *International Organization*, 65(3), 531-551. doi: <https://doi.org/10.1017/S0020818311000117>
- Crozet, M., & Hinz, J. (2020). Friendly fire: The trade impact of the Russia sanctions and counter-sanctions. *Economic Policy*, 35(101), 97-146. doi: <https://doi.org/10.1093/epolic/eiaa006>
- Drezner, D. W. (2003). The Hidden Hand of Economic Coercion. *International Organization*, 57(3), 643-659. doi: <https://doi.org/10.1017/S0020818303573052>
- Drury, A. C. (2005). *Economic Sanctions and Presidential Decisions: Models of Political Rationality*. New York: Palgrave Macmillan. doi: <https://doi.org/10.1057/9781403976956>
- Felbermayr, G., Kirilakha, A., Syropoulos, C., Yalcin, E., & Yotov, Y. V. (2020). The Global Sanctions Data Base. *European Economic Review*, 129, 103561. doi: <https://doi.org/10.1016/j.euroecorev.2020.103561>
- Giumelli, F., Hoffmann, F., & Książczaková, A. (2021). The when, what, where and why of European Union sanctions. *European Security*, 30(1), 1-23. doi: <https://doi.org/10.1080/09662839.2020.1797685>

- Gullstrand, J. (2020). What goes around comes around: The effects of sanctions on Swedish firms in the wake of the Ukraine crisis. *The World Economy*, 43(9), 2315-2342. doi: <https://doi.org/10.1111/twec.13000>
- Gutmann, J., Neuenkirch, M., & Neumeier, F. (2022). *Do China and Russia Undermine US Sanctions? Evidence from DiD and Event Study Estimation* (CESifo Working Paper No. 10100). CESifo. Retrieved from https://www.cesifo.org/DocDL/cesifo1_wp10100.pdf
- Gutmann, J., Neuenkirch, M., & Neumeier, F. (2023). The Economic Effects of International Sanctions: An Event Study. *Journal of Comparative Economics*, 51(4), 1214-1231. doi: <https://doi.org/10.1016/j.jce.2023.05.005>
- Hatipoglu, E., & Peksen, D. (2018). Economic Sanctions and Banking Crises in Target Economies. *Defence and Peace Economics*, 29(2), 171-189. doi: <https://doi.org/10.1080/10242694.2016.1245811>
- Hörbelt, C. (2017). A comparative study: Where and why does the EU impose sanctions. *Revista UNISCI*, (43), 53-71. doi: <http://dx.doi.org/10.5209/RUNI.54780>
- Hufbauer, G., Schott, J., & Elliott, K. (2009). *Economic Sanctions Reconsidered*. Washington: Peter G. Peterson Institute for International Economics. Retrieved from <https://www.piie.com/bookstore/economic-sanctions-reconsidered-3rd-edition-paper>
- Jones, L., & Portela, C. (2014). Evaluating the “Success” of International Economic Sanctions: Multiple Goals, Interpretive Methods and Critique. *Research Collection School of Social Sciences*, 1671. Retrieved from http://ink.library.smu.edu.sg/sooss_research/1671
- Kaempfer, W. H., & Lowenberg, A. D. (2007). The Political Economy of Economic Sanctions. *Handbook of Defense Economics*, 2, 867-911. doi: [https://doi.org/10.1016/S1574-0013\(06\)02027-8](https://doi.org/10.1016/S1574-0013(06)02027-8)
- Kholodilin, K. A., & Netšunajev, A. (2019). Crimea and punishment: the impact of sanctions on Russian economy and economies of the euro area. *Baltic Journal of Economics*, 19(1), 39-51. doi: <https://doi.org/10.1080/1406099X.2018.1547566>
- Kirshner, J. (1995). *Currency and Coercion: The Political Economy of International Monetary Power*. Princeton University Press. doi: <https://doi.org/10.1515/9780691222226>
- Kreutz, J. (2005). *Hard measures by a soft power?: Sanctions policy of the European Union*. Bonn International Center for Conversion. Retrieved from <https://www.files.ethz.ch/isn/15145/paper45.pdf>
- Mirkina, I. (2018). FDI and sanctions: An empirical analysis of short-and long-run effects. *European Journal of Political Economy*, 54, 198-225. doi: <https://doi.org/10.1016/j.ejpoleco.2018.05.008>
- Neuenkirch, M., & Neumeier, F. (2015). *The Impact of UN and US Economic Sanctions on GDP Growth*. New York: United Nations. Retrieved from https://www.econstor.eu/bitstream/10419/121131/1/N_138.pdf
- Peksen, D., & Son, B. (2015). Economic coercion and currency crises in target countries. *Journal of Peace Research*, 52(4), 448-462. doi: <https://doi.org/10.1177/0022343314563636>
- Portela, C. (2005). Where and why does the EU impose sanctions? *Politique Européenne*, (3), 83-111. doi: <https://doi.org/10.3917/poeu.017.0083>

- Waelde, T. (1997). Legal Boundaries for Extraterritorial Ambitions. In J. Mitchell (Ed.), *Companies in a World of Conflict: NGOs, Sanctions and Corporate Responsibility* (pp. 114-195). London: Earthscan Publications, Ltd.
- Wang, Y., Wang, K., & Chang, C.-P. (2019). The impacts of economic sanctions on exchange rate volatility. *Economic Modelling*, 82, 58-65. doi: <https://doi.org/10.1016/j.econmod.2019.07.004>
- Webb, C. (2020). Re-examining the costs of sanctions and sanctions threats using stock market data. *International Interactions*, 46(5), 749-777. doi: <https://doi.org/10.1080/03050629.2020.1788549>

Databases

- CEICDATA. (2021, December 18). *ceicdata.com*. Retrieved from <https://www.ceicdata.com/en>
- CIA. (2021, 04 02). *The World Factbook 1986*. Retrieved from Syria: <https://archive.org/details/worldfactbook86natiilli/page/238/mode/2up>
- CIA. (2021, 03 15). *The World Factbook 1982*. Retrieved from Soviet Union: <https://geographic.org/wfb1982/worldfactbook82natiilli.pdf>
- CIA. (2021, 04 02). *The World Factbook 1985*. Retrieved from South Africa: <https://geographic.org/wfb1985/worldfactbook85natiilli.pdf>
- CIA. (2021, 01 22). *The World Factbook 1986*. Retrieved from Lybia: <https://archive.org/details/worldfactbook86natiilli/page/144/mode/2up>
- CIA. (2021, 04 02). *The World Factbook 1989*. Retrieved from China Economy - 1989: https://theodora.com/wfb1989/china/china_economy.html
- CIA. (2021, 01 23). *The World Factbook 1991*. Retrieved from Yugoslavia Economy - 1991: https://theodora.com/wfb1991/yugoslavia/yugoslavia_economy.html
- CIA. (2021, 02 03). *The World Factbook 1993*. Retrieved from Zaire Economy 1993: https://theodora.com/wfb/1993/zaire/zaire_economy.html
- CIA. (2021, 04 03). *The World Factbook 1993*. Retrieved from Nigeria: https://theodora.com/wfb/1993/nigeria/nigeria_economy.html
- CIA. (2021, 04 03). *The World Factbook 1999*. Retrieved from Ethiopia: https://photius.com/wfb/wfb1999/ethiopia/ethiopia_economy.html
- CIA. (2021, 02 03). *The World Factbook 1999*. Retrieved from Libya Economy 1999: https://photius.com/wfb/wfb1999/libya/libya_economy.html
- CIA. (2021, 04 03). *The World Factbook 1999*. Retrieved from Indonesia: https://photius.com/wfb/wfb1999/indonesia/indonesia_economy.html
- CIA. (2021, 04 03). *The World Factbook 2006*. Retrieved from Belarus: https://theodora.com/wfb2006/belarus/belarus_economy.html
- CIA. (2021, 02 06). *The World Factbook 2011*. Retrieved from Syria: https://theodora.com/wfb2011/syria/syria_economy.html
- CIA. (2021, 02 08). *The World Factbook 2013*. Retrieved from Syria Economy 2013: https://geographic.org/world_fact_book_2013/syria/syria_economy.html
- CIA. (2021, 02 10). *The World Factbook 2017*. Retrieved from Venezuela: https://theodora.com/world_fact_book_2017/venezuela/venezuela_economy.html

- Commission, E. (2021, 02 10). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Venezuela: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_venezuela_en.pdf
- Commission, E. (2021, 03 11). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with China: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_china_en.pdf
- Commission, E. (2021, 02 17). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Turkey : https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_turkey_en.pdf
- Commission, E. (2021, 02 21). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Syria: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_syria_en.pdf
- Commission, E. (2021, 02 22). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Myanmar: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_myanmar_en.pdf
- Commission, E. (2021, 02 03). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Guinea Bissau: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_guinea-bissau_en.pdf
- Commission, E. (2021, 02 03). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Belarus: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_belarus_en.pdf
- Commission, E. (2021, 03 02). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Bosnia-Herzegovina: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_bosnia-herzegovina_en.pdf
- Commission, E. (2021, 03 05). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Iran: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_iran_en.pdf
- Commission, E. (2021, 03 04). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Egypt: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_egypt_en.pdf
- Commission, E. (2021, 03 04). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Guinea: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_guinea_en.pdf
- Commission, E. (2021, 02 17). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Nicaragua: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_nicaragua_en.pdf
- Commission, E. (2021, 02 20). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Russia: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_russia_en.pdf

- Commission, E. (2021, 02 20). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Ukraine: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_ukraine_en.pdf
- Commission, E. (2021, 03 02). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Tunisia: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_tunisia_en.pdf
- Commission, E. (2021, 03 11). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Zimbabwe: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_zimbabwe_en.pdf
- Commission, E. (2021, 02 11). *Directorate-General for Trade*. Retrieved from European Union, Trade in goods with Libya: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_libya_en.pdf
- Commission, E. (2021, 02 16). *External and intra-European Union trade - Statistical yearbook*. Retrieved from Data 1958-2002: <https://ec.europa.eu/eurostat/documents/3217494/5642633/KS-CV-03-001-EN.PDF/7e4ada1c-9803-4c36-bd48-e55dd1adc935>
- Country Economy. (2021, December 18). *countryeconomy.com*. Retrieved from <https://countryeconomy.com/>
- EU Sanctions*. (2021, 03 03). Retrieved from Sanctions Law, Practice and Guidance - Sanctions List: <https://www.europeansanctions.com/region/European-External-Action-Service>
- European External Action Service*. (2023, 06 24). Retrieved from Delegation of the European Union to Bosnia and Herzegovina & European Union Special Representative in Bosnia and Herzegovina EU Projects with Bosnia and Herzegovina: https://www.eeas.europa.eu/bosnia-and-herzegovina/eu-projects-bosnia-herzegovina_en?s=219
- Jewish Virtual Library*. (2023, 05 24). Retrieved from U.S.-Israel Economic Cooperation: Bilateral Trade Statistics (1948-Present): <https://www.jewishvirtuallibrary.org/u-s-israel-bilateral-trade-statistics-1948-present>
- Macrotrends*. (2021, 02 05). Retrieved from Bosnia GNP 1996-2021: <https://www.macrotrends.net/countries/BIH/bosnia/gnp-gross-national-product>
- Macrotrends*. (2021, 01 27). Retrieved from U.S. GDP Growth Rate 1961-2021: <https://www.macrotrends.net/countries/USA/united-states/gdp-growth-rate>
- Macrotrends*. (2021, 01 04). Retrieved from Azerbaijan GNP 1993-2021: www.macrotrends.net/countries/AZE/azerbaijan/gnp-gross-national-product
- Macrotrends*. (2021, 03 13). Retrieved from Argentina GNP 1964-2021: <https://www.macrotrends.net/countries/ARG/argentina/gnp-gross-national-product>
- Macrotrends*. (2021, 02 04). Retrieved from Belarus GNP 1992-2021: <https://www.macrotrends.net/countries/BLR/belarus/gnp-gross-national-product>
- Macrotrends*. (2021, 01 24). Retrieved from Armenia GNP 1992-2021: <https://www.macrotrends.net/countries/ARM/armenia/gnp-gross-national-product>

- Macrotrends*. (2021, 01 23). Retrieved from China GNP 1962-2021: <https://www.macrotrends.net/countries/CHN/china/gnp-gross-national-product>
- Macrotrends*. (2021, 03 05). Retrieved from Egypt GNP 1967-2021: <https://www.macrotrends.net/countries/EGY/egypt/gnp-gross-national-product>
- Macrotrends*. (2021, 02 03). Retrieved from Eritrea GNP 1994-2021: <https://www.macrotrends.net/countries/ERI/eritrea/gnp-gross-national-product>
- Macrotrends*. (2021, 02 02). Retrieved from Ethiopia GNP 1983-2021: <https://www.macrotrends.net/countries/ETH/ethiopia/gnp-gross-national-product>
- Macrotrends*. (2021, 01 22). Retrieved from European Union GNP 1972-2021: www.macrotrends.net/countries/EUU/european-union/gnp-gross-national-product
- Macrotrends*. (2021, 02 05). Retrieved from Guinea GNP 1988-2021: <https://www.macrotrends.net/countries/GIN/guinea/gnp-gross-national-product>
- Macrotrends*. (2021, 02 07). Retrieved from Guinea-Bissau GNP 1972-2021: <https://www.macrotrends.net/countries/GNB/guinea-bissau/gnp-gross-national-product>
- Macrotrends*. (2021, 02 03). Retrieved from Indonesia GNP 1969-2021: <https://www.macrotrends.net/countries/IDN/indonesia/gnp-gross-national-product>
- Macrotrends*. (2021, 02 06). Retrieved from Iran GNP 1962-2021: <https://www.macrotrends.net/countries/IRN/iran/gnp-gross-national-product>
- Macrotrends*. (2021, 02 07). Retrieved from Myanmar GNP 1963-2021: <https://www.macrotrends.net/countries/MMR/myanmar/gnp-gross-national-product>
- Macrotrends*. (2021, 02 02). Retrieved from Nigeria GNP 1962-2021: <https://www.macrotrends.net/countries/NGA/nigeria/gnp-gross-national-product>
- Macrotrends*. (2021, 01 22). Retrieved from South Africa GNP 1962-2021: <https://www.macrotrends.net/countries/ZAF/south-africa/gnp-gross-national-product>
- Macrotrends*. (2021, 02 08). Retrieved from Russia GNP 1991-2021: <https://www.macrotrends.net/countries/RUS/russia/gnp-gross-national-product>
- Macrotrends*. (2021, 01 23). Retrieved from Syrian Arab Republic GNP 2000-2021: www.macrotrends.net/countries/SYR/syrian-arab-republic/gnp-gross-national-product
- Macrotrends*. (2021, 02 07). Retrieved from Tunisia GNP 1967-2021: <https://www.macrotrends.net/countries/TUN/tunisia/gnp-gross-national-product>
- Macrotrends*. (2021, 02 12). Retrieved from Turkey GNP 1967-2021: <https://www.macrotrends.net/countries/TUR/turkey/gnp-gross-national-product>
- Macrotrends*. (2021, 02 04). Retrieved from Zimbabwe GNP 1962-2021:

- <https://www.macrotrends.net/countries/ZWE/zimbabwe/gnp-gross-national-product>
- Macrotrends*. (2021, 02 10). Retrieved from Nicaragua GNP 1962-2021: <https://www.macrotrends.net/countries/NIC/nicaragua/gnp-gross-national-product>
- Microtrends*. (2021, 02 10). Retrieved from Ukraine GNP 1989-2021: <https://www.macrotrends.net/countries/UKR/ukraine/gnp-gross-national-product>
- Statista*. (2021, 01 27). Retrieved from Annual growth of real GDP in the United States of America from 1930 to 2021: <https://www.statista.com/statistics/996758/rea-gdp-growth-united-states-1930-2019/>
- Trade in goods with USA*. (2023, 06 03). Retrieved from Arab League: <https://karirast.com/USA-GB/G-ARAB 2.html>
- United States Census Bureau*. (2023, 04 20). Retrieved from Trade in Goods with Poland: <https://www.census.gov/foreign-trade/balance/c4550.html>
- United States Census Bureau*. (2023, 04 23). Retrieved from Trade in Goods with Romania: <https://www.census.gov/foreign-trade/balance/c4850.html>
- United States Census Bureau*. (2023, 05 04). Retrieved from Trade in Goods with China: <https://www.census.gov/foreign-trade/balance/c5700.html>
- United States Census Bureau*. (2023, 06 14). Retrieved from Trade in Goods with Peru: <https://www.census.gov/foreign-trade/balance/c3330.html>
- World Integrated Trade Solution*. (2021, 03 09). Retrieved from South Africa trade balance, exports and imports by country 1994: <https://wits.worldbank.org/CountryProfile/en/Country/ZAF/Year/1994/TradeFlow/EXPIMP/Partner/by-country>
- World Integrated Trade Solution*. (2021, 03 09). Retrieved from Myanmar trade balance, exports and imports by country and region 1992: <https://wits.worldbank.org/CountryProfile/en/Country/MMR/Year/1992/TradeFlow/EXPIMP>
- World Integrated Trade Solution*. (2021, 04 04). Retrieved from Zimbabwe Trade Summary 2002: <https://wits.worldbank.org/CountryProfile/en/Country/ZWE/Year/2002/Summarytext>