EFFICACY OF ECONOMIC WARFARE IN A GLOBALISED WORLD: AN ASSESSMENT

A Dissertation Submitted to the Panjab University, Chandigarh for the Award of Degree of Master of Philosophy in Social Sciences, in Partial Fulfillment of the Requirement for the Advanced Professional Programme in Public Administration

(2022-23)

Submitted by

Brigadier Rohit Mehrotra (Roll No - 4822)

Under the Guidance and Supervision of

Dr Roma Mitra Debnath



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NEW DELHI

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SELF DECLARATION CERTIFICATE

I, the undersigned hereby declare that the dissertation titled 'Efficacy of

Economic Warfare in a Globalised World: An Assessment', submitted by me for

award of the Degree of Master of Philosophy in Social Sciences is original and this

work or part thereof has not been submitted for the award of any degree or diploma

either in this or any other University. All the sources I have accessed or quoted have

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Date: March 2023 (Rohit Mehrotra)

Place: New Delhi Brigadier

Indian Institute of Public Administration

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CERTIFICATE

I have the pleasure to certify that **Brigadier Rohit Mehrotra** has pursued his

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Warfare in a Globalised World: An Assessment' under my guidance and

supervision. The same is the result of research done by him and to the best of my

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of Master of Philosophy (M.Phil) in Social Sciences in partial fulfillment of the

requirement for the Advanced Professional Programme in Public Administration

(APPPA) of Indian Institute of Public Administration (IIPA), New Delhi.

I recommend that the dissertation of Brigadier Rohit Mehrotra is worthy of

consideration for the award of M. Phil degree of the Panjab University, Chandigarh.

Date:

March 2023

(Dr Roma Mitra Debnath)

Place: New Delhi

Professor

Indian Institute of Public Administration

New Delhi - 110002

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Date:

March 2023

(Rohit Mehrotra)

Place: New Delhi

Roll No – 4822

Brigadier

Indian Institute of Public Administration

New Delhi – 110002

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ACRONYMS/ ABBREVIATIONS

Acronyms/	<u>Full form</u>
<u>Abbreviations</u>	
AI	Artificial Intelligence
ASEAN	Association of Southeast Asian Nations
BRI	Belt and Road Initiative
CBRN	Chemical, Biological, Radiological, Nuclear
CCS	Cabinet Committee on Security
CDS	Chief of Defence Staff
CERT- In	Computer Emergency Response Team - India
CIPS	Cross Border Inter-Bank Payments System
CISADA	Comprehensive Iran Accountability, Sanctions and Divestment Act
C4ISTAR	Command, Control, Communication, Computers, Intelligence,
	Surveillance, Target Acquisition and Reconnaissance
CNA	Computer Network Attack
CNAS	Center for a New American Security
CNO	Computer Network Operations
CoG	Centre of Gravity
CPEC	China Pakistan Economic Corridor
CRPF	Central Reserve Police Force
CST	Comprehensive Security Theory
DFS	Department of Financial Services
DPC	Defence Planning Committee
DPSU	Defence Public Sector Undertaking
DSA	Defence Space Agency
DSRA	Defence Space Research Agency
EEZ	Exclusive Economic Zone
EU	European Union
EW	Electronic Warfare
FDI	Foreign Direct Investment

GDP	Gross Domestic Product
IDS	Integrated Defense Staff
ILSA	Iran-Libya Sanctions Act
IO	Information Operations
IOR	Indian Ocean Region
ISA	Iran Sanctions Act
ISIS	Islamic State of Iraq and Syria
IMF	International Monetary Fund's
JCPOA	Joint Comprehensive Plan of Action
LAC	Line of Actual Control
LeT	Lashkar-e-Taiba
LoC	Line of Control
MEA	Ministry of External affairs
MeitY	Ministry of Electronics and Information Technology
MIB	Ministry of Information and Broadcasting
MILDEC	Military Deception
MHA	Ministry of Home Affairs
MoD	Ministry of Defence
MoF	Ministry of Finance
NATO	North Atlantic Treaty Organisation
NCIIPC	National Critical Information Infrastructure Protection Centre
NCW	Non Contact Warfare
NGOs	Non Governmental Organizations
NSA	National Security Advisor
NSC	National Security Council
NSAB	National Security Advisory Board
NSCS	National Security Council Secretariat
NSS	National Security Strategy
NTRO	National Technical Research Organisation
NTS	Non Traditional Security
OECD	Organization for Economic Cooperation and Development

OODA	Observe Orient Decide Act
OPEC	Organization of the Petroleum Exporting Countries
OPSEC	Operations Security
PBOC	People's Bank of China
PSYOP	Psychological Operations
PPP	Public Private Partnership
RoE	Rules of Engagement
SDR	Special Drawing Rights
SLOC	Sea Lines of Communication
SPG	Strategic Policy Group
STEM	Science, Technology, Engineering, and Mathematics
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UAVs	Unmanned Aerial Vehicles
UCAVs	Unmanned Combat Aerial Vehicles
UN	United Nations
UNDP	United Nations Development Programme
WTO	World Trade Organization

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ABSTRACT

The present paper is an attempt to assess the spectrum, linkages and efficacy of economic warfare interventions in the emerging geo-economic world order, as also suggest strategies to optimally leverage it as a strategic tool to promote and guard national interest, primarily in Indian context. Globalization and the resultant interdependence has made instruments of economic warfare more effective and all encompassing. Countries like China have been aggressively leveraging their economic power to further national interests by setting up bases at strategic locations such as Hambantota, Djibouti and Gwadar in the guise of inclusive economic initiatives. Also, recent wars such as the Russia-Ukrainian War have further substantiated the potential of economic interventions as a dominant factor in furthering national interests. Despite this new found stimulation for employing the coercive instruments of economic statecraft, reservations still remained concerning the efficacy and sustainability of economic sanctions, as well as their place in the overarching gamut of the National Security Strategy.

The methods used for collecting Secondary Data include study of books, research papers and articles published by eminent authors. Newspaper articles and articles uploaded on various websites have also been studied. Primary Data has been obtained through a questionnaire administered to senior defence officers and senior officers in various other government departments. In order to understand the efficacy of economic interventions, certain specific cases of sanctions imposed primarily between 2001 and 2016 have been examined based on their political relevance, significance and diversity of policy concerns. The case studies include sanctions

imposed over Iran, Syria, Non State Actors posing transnational threats, the ongoing Russia – Ukraine War and the Chinese strategy of leveraging economic prowess.

It emerges that the U.S. financial sanctions have been successful primarily due to its centrality to global capital markets and the dominance of the dollar as the international trade currency, with no viable alternative. However, a year into the conflict in Ukraine, the effectiveness of the existing sanctions imposed on Russia, including the freezing of foreign reserves, trade embargos related to dealings with Western nations and expulsion from Society for Worldwide Interbank Financial Telecommunication (SWIFT), is a subject of ongoing debate among social scientists. China, on the other hand with its strong economic prowess, has effectively utilized its economic warfare strategy to further its national interest. Leveraging the Belt and Road Initiative (BRI) as a tool of economic weapon, China has expanded its influence in South East Asia, as also increased its presence in the Indian Ocean Region (IOR) by taking control of ports in strategic locations through economic coercion, effectively encircling India with infrastructure-debt trap diplomacy. The biggest challenge in evaluating the effectiveness of sanctions is the absence of a counterfactual scenario. It is impossible to determine what would have happened in Ukraine if the sanctions had not been imposed on Russia. One could argue that the sanctions, combined with the defense efforts of the Ukrainian people and the military support provided by Western countries, have been successful in preventing Russia's goal of turning Ukraine into a subservient satellite state. The effectiveness of past sanctions against countries such as Cuba, Iran and North Korea has also been a subject of debate. Overall, evaluating the success of sanctions is a complex and nuanced issue that requires a deep understanding of the historical, political, and economic factors at play.

The study recommends that for Economic warfare interventions to be effective, strategies and doctrines must be adapted to changing environmental realities and matched with tailored structures and corresponding capabilities to execute a grand strategy. Synergy among host of ministries/ agencies at the highest level, accompanied by political will and strategic vision need to be achieved. Also, other hybrid warfare tools such as Cyber, Resource and Information Warfare which are complementary and have linkages in enhancing efficacy of economic warfare should be optimally leveraged. A clearly enunciated and thought through National Security Strategy (NSS) is recommended to be enunciated to embark on a strategic long term vision for capability development and response matrix encompassing new age security threats. Overall, in the Indian context a comprehensive, whole-of-nation approach is the need of the hour under a nodal organization such as National Security Council (NSC) headed by the National Security Advisor (NSA).

To understand the true nature and potential of economic warfare instruments we need to understand the subtle difference between efficacy/ effectiveness and effect. Almost all economic warfare interventions will have some effect, be it in terms of economic, social or political fallouts, however efficacy would mean it has achieves its intended aim in the desired manner and quantum. The aspects deliberated above have ramifications for designing strategies that outline the optimal configuration for initiating economic interventions and maximizing their impact. The theory of compellance (Rosenberg, *et al*, 2016) dictates that for successful outcomes, a state must adjust the cost-benefit ratio of its target in a manner that it motivates the target to abandon its chosen path. Overall, Effective economic interventions must be combined with different forms of national power, such as military strength, cyber capabilities,

diplomacy, soft power and intelligence activities. In recent conflicts, some of the most impactful forms of power have been a blend of hard and soft power, not relying solely on military or economic strength. The success and legitimacy of the chosen instrument hinges on enhancing the connection between the sanctioned country's valued interests and the means used to target those interests. In the constantly evolving world of politics and geo-economics, it is indeed a challenge for any economic intervention to remain effective, especially given the long gestation period and changing dynamics.

CHAPTER 1

INTRODUCTION

General

Economic warfare can be defined as the use of, or the threat to use, economic means against a country in order to weaken its economy and thereby reduce its political and military power (Misra, 2020). It would include the use of economic means to compel an adversary to change its policies or behaviour. Some common means of economic warfare are trade embargoes, boycotts, sanctions, tariff bigotry, freezing of capital assets, suspension of aid, prohibition of investment and other capital flows. The concept and understanding of economic warfare has evolved over time. It has also been christened and practiced in different forms and measures ranging from Trade War, Financial War to more recently the all inclusive form of Geo-economic War including debt warfare, as is the case in Sri Lanka (Shambaugh, 2002). The term geo-economics is understood to mean use of geopolitical or military power for economic ends. It is also defined broadly, as the "entanglement of international economics, geopolitics, and strategy" (Blackwell, 2016). A comprehensive definition would be "The use of economic instruments to promote and defend national interests and to produce beneficial geopolitical results; and the effects of other nations' economic actions on a country's geopolitical goals" (Blackwell, 2016).

The Idea of Economic Warfare

For many years, historians have been amazed by the remarkable growth of global trade during the extended period of the nineteenth century, as well as the significant increase in the proportion of foreign trade relative to the world's economic output. Throughout the period spanning from 1800 to 1913, the per capita world output saw a doubling, whereas the amount of global trade per person increased by a factor of eleven. During the late 1800s, analysts who were focused on strategic affairs and political economy began to theorize that the growing interdependence and interconnectedness among the primary industrial powers would decrease the probability of war breaking out between them. These thoughts were not driven by idealism, but by the recognition of the fragility of urban industrial societies and the susceptibility of the global economic system to shock. Some even argued that warfare could lead to global trade dislocation and social collapse, making it a self-defeating proposition. This idea was popularized by Norman Angell's book written in 1910, "The Great Illusion," which sold over two million copies (Navari,1989). Although some military planners and theorists opposed this radical perspective, a large number recognized the validity of the main argument, which was that a major conflict would significantly disrupt the global economy, causing severe social, political, and economic ramifications with strategic implications. As a result, the prevailing belief in 1914 was that any future war must be short in duration to avert socio-economic collapse, and that the relative economic, social, and political resilience of warring societies would be more important than their military prowess. As a result, there was a prevalent belief that the soldiers would return home before the autumn leaves fell or that the war would conclude by the time Christmas arrived (Lambert, 2017).

Evolution of Economic Warfare

Until recently, many in the Western world believed that Liberalism was the ultimate political and economic system. The concept of economic warfare, as it was originally conceived in 1914 and as it is defined in this context, is not comparable to the strategic bombing campaign undertaken by the Allies from 1942. The differences

between the two approaches are significant. Strategic bombing aimed to weaken the state's ability to conduct warfare, relying on attrition to achieve this objective. In contrast, economic warfare sought to disrupt the enemy's national economy with the goal of quickly eroding support for the enemy state and delegitimizing it. Moreover, while civilian casualties were considered an unfortunate byproduct of strategic bombing, in economic warfare, civilians were intentionally targeted. The period spanning four to five decades prior to the onset of World War I is generally considered the initial era of "golden age" globalization. As globalization has grown, it has become evident that power dynamics in the economic domain cannot be disregarded. The conventional notion that global trade is solely based on supply and demand has become outdated (Zinkina, 2019). The threats to our economic system are no longer limited to military or political targets, but commercial, industrial, scientific, technological, and financial interests as well. These threats are asymmetrical, constantly changing, and travel through the Internet with great speed. They put the entire system at risk and require a new approach to intelligence and security. To deal with these new threats, we need to change our mentality and operational processes. We need to update our business culture and think about how to protect the weakest links in the chain of production. This requires close interaction between intelligence and the private sector, even though it can be challenging. We must protect not only the entire system but also individual economic entities to ensure the overall health of the economy. The crisis we are currently experiencing has made it clear that we must consider the concept of "economic warfare" seriously. Following the end of the Cold War, there has been a shift in the balance of power towards economic aspects. Most governments are now focused on building up technological, industrial, and commercial power to bring jobs and money to their own land. Globalization has

transformed competition from "gentle" and "limited" into authentic "economic warfare" (Gagliano, 2018). Economic intelligence is a critical component in this new era of economic competition. It involves a coordinated effort to collect and process information, monitor competitors, keep strategic information secret, and capitalize on knowledge to control and influence the world economic environment. It is a powerful weapon that nations can use to protect their economic interests. Many governments have recently adopted national economic intelligence strategies that assign central roles to private operatives in maintaining security. These agents are furnished with information technology systems and granted access to the most critical asset in the digital era: data. As a consequence, the differentiation between safeguarding private economic operations and safeguarding national economic welfare is becoming more indistinct. The new context of globalization has changed the way we think about economic security. Economic intelligence has become a vital tool in protecting the economic interests of nations. We need to be mindful of the changing nature of economic threats and adopt new approaches to intelligence and security that recognize the importance of the private sector in maintaining the overall health of the economy. The key players in economic warfare include:

- (a) Nation-states, who despite their declining influence in the world, remain the primary regulators in the economic arena. However, they now face greater scrutiny from stakeholders such as NGOs, international organizations, companies, and mass media. Other players often implore their intervention as the ultimate arbiter.
- (b) Companies, who in the current hyper-competitive geo-economic landscape, use strategic information control as a weapon for economic security and competitiveness.

- (c) Civil society, which plays an increasingly important role in economic warfare by expanding discussions on social issues related to corporate activities. The mass use of the Internet and involvement of the legal system have increased the risks of hacking attacks by hackers from civil society. Public discussion on topics such as the environment, sustainable development, socially responsible investment, and corporate social responsibility has brought greater legitimacy to social questions.
- (d) The info-sphere, which refers to the aggregate of interventions and messages spread through media and the internet (Wikipedia contributors, 2022). It has a powerful influence on individuals and organizations and can become a particularly effective weapon of destabilization. A simple statement launched in the infosphere can trigger harsh political reactions, media crises, and damage to a company's reputation, which is a strategic component of its capital affecting its commercial and financial activities.

Statement of the Problem

The achievement of grand political objectives (territorial, moral, psychological etc), while sustaining the least degradation, was the raison d'etre of joining a war. Though the prosecution of conventional war may attract luster from the traditionalists but the question that needs to be addressed is - are there any better ways of achieving the grand political objectives by controlling the collaterals, as well as providing better management of the end state in the 21st Century? Also, is a war without contact feasible, possible and more importantly winnable?

The exponential growth of information in the 21st Century and its permeation in every aspect of human life (civil and military) has totally altered the nature, method and policies used for governance. Furthermore, the speed at which globalization has

progressed since the end of the Cold War has led to an increasing interdependence among the world's economies, cultures, and people. This has been brought about by cross-border trade in goods and services, technological advancements, and the flow of investment, people and information. Countries have thus focused on building economic partnerships and linkages to further their national interest within this emerging paradigm. Globalization incentivizes nations to specialize in producing what they are best at with the least amount of resources, a principle known as comparative advantage. This approach enhances production efficiency, spurs economic growth, and reduces the prices of goods and services, making them more accessible. However, this arrangement consequently has also created significant vulnerabilities in social, political, economic and cultural spheres and established novel facets to existing paradigm of both military and non military threats. It has also unveiled lucrative vulnerabilities which when targeted may achieve capitulation of nation/society without 'firing a shot'. The infusion of interventions in the economic domain may thus become one of the predominant means for promote and defend national interests including mechanics of waging campaigns in the near future. Thus, there is a felt need to study the efficacy and linkages of economic warfare interventions and instruments as strategic tools, for promoting and defending national interests in a globalised world.

Research Objectives

The objectives of the research are:-

- (a) To identify the spectrum and linkages of economic warfare instruments for furtherance of national interests,
- (b) To assess the efficacy of economic warfare instruments for furtherance of national interests in the global context, post the World War I era, and

(c) To suggest strategies and capabilities required to optimally prosecute economic warfare as well as counter threats, in the Indian context.

Research Strategy

A mixed strategy approach will be adopted for undertaking this research utilizing a combination of quantitative and qualitative approaches.

Research Design

The research design would be Convergent Design based mainly on secondary data substantiated by primary data collected during course of the research. Research tools including content analysis will be used for collating and analyzing the data collected in the form of systematic literature review, online questionnaires and interviews of experts.

Rationale for Study

The practice of economic warfare involves countries attempting to weaken their adversaries' economies by preventing access to essential physical, financial, and technological resources or by hindering their ability to benefit from trade, financial exchanges, and technological interactions with other nations. Economic warfare consisting of blockades and embargoes between belligerents entities has been practiced even before the Peloponnesian War (431–404 BC) in ancient Greece (Misra, 2020). In contemporary times, economic warfare has evolved to include pressuring neutral countries from which target countries could obtain critical supplies and denying goods that might contribute to their war-fighting capabilities. In the 20th century, one of the most common forms of economic warfare was the imposition of partial or total embargoes on strategic goods necessary for military purposes. For instance, during World War I, the British Royal Navy blockaded Germany, while the US Navy used submarines to halt shipments of oil and food to Japan. Throughout

World War II, the Allied powers implemented policies to deprive the Axis economies of critical resources. During the Cold War, the US and its allies tried to prevent the Soviet Union and its allies from accessing computers, telecommunications equipment, and other high-value economic and military technologies.

Over the years, countries have increasingly leveraged their economic prowess to subjugate their adversaries overtly/ covertly. Globalization and the resultant interdependence has further made instruments of economic warfare more effective and all encompassing. China has established a military base in Djibouti port in Africa under the pretext of protecting its communication cables in the sea and ships from attacks and piracy. In order to advance its goal of surveillance and the ability to halt overseas and deep sea maritime traffic at its discretion, China actively participated in the development of Djibouti's ports, railways, highways, and other related infrastructure (Chaudhury, 2021). Also, recent wars such as the Russia - Ukrainian War have further substantiated the relevance and potential of economic interventions as a dominant factor in dictating the outcomes of conflicts and furthering national interests. Add to this the growing cost (both financial and human) of raising and maintaining conventional armies. Apropos, the nuances of the same need to be studied holistically to evolve strategies and develop focused capabilities to optimally leverage it as a strategic tool, across entire spectrum to promote and guard national interest.

Research Questions

The research will attempt to examine and analyse the following pertinent questions:-

(a) What are the various tools, instruments and resources that can be utilized to prosecute economic warfare and their linkages towards promoting and defending national interests?

- (b) What has been the efficacy of economic warfare instruments in promoting and defending national interests in the global context, post the World War I era?
- (c) What are the suggested strategies and capabilities required by India to effectively prosecute economic warfare for defending and promoting national interests?

Limitations of the Study

The scope of Non Contact Warfare including Economic Warfare is immense and ever increasing. With the infusion of technology the spectrum of instruments now available for prosecuting Non Contact Warfare including Cyber, Space and Electronic Warfare etc, in addition to Economic Warfare is huge. However, only a brief insight into the potential and efficacy of these instruments to include their interplay/correlation will be dwelled upon during the course of this research. This study will primarily be restricted to assessing efficacy of Economic Warfare instruments in present day geo-economic environment to protect and defend national interest and suggest capabilities/ strategies in Indian context, including their linkages to only those forms of Non Contact Warfare which have a substantial correlation to it, such as Cyber Warfare and Resource Warfare. Study will be based on information available in open domain only, being a sensitive subject.

Research Methods Applied and Data Source

The data collection and analysis has been undertaken in the following manner:-

(a) Secondary data has been collected from open source material, historical accounts/ documents, published government data, Seminar reports conducted by institutes, various think tanks, literature available on capabilities, strategies

and doctrines of USA, Russia, India, China, Pakistan and other relevant countries in context of economic warfare interventions.

- (b) A questionnaire has been prepared and inputs taken from the subject specialists and experts in the field on issues related to instruments, indicators, efficacy, dynamics, capability development and strategies related to prosecution of economic warfare in the overall domain of hybrid warfare both in global and Indian context.
- (c) Regular interaction with scholars and experts on the subject in government ministries/ departments and various think tanks during seminars/ Guest Lecturers/ interviews, has been another vital source of building up towards the research.
- (d) Data, comments and analysis on various issues available on the internet has been extensively used to answer primary questions building up to the research objectives.
- (e) Content and trend analysis have been undertaken as part of the research to analyze data collected and arrive at logical inferences.

Chapterisation Scheme

The broad chapterisation scheme for this research report is as follows: -

- (a) <u>Chapter 1. Introduction</u> This Chapter highlights the identified Statement of Problem, Research Objective, Research Strategy & Design, Rational, Research Questions and Limitations of the study.
- (b) <u>Chapter 2. Literature Review</u> This chapter explores various publications on the subject matter with focus on identifying and understanding the key themes, principles, concepts and gaps that exist within the topic.

- (c) <u>Chapter 3. Emerging Security Environment</u> This chapter includes Evolution of Warfare, Continuum of Conflicts and the Emerging Security Environment in light of globalization and technology infusion.
- (d) <u>Chapter 4.</u> <u>Spectrum and Linkages of Economic Warfare</u>

 <u>Instruments</u> This chapter covers the Spectrum to include the resources, tools and instruments specific to Economic Warfare and their linkages in present day geo-economic environment.
- (e) <u>Chapter 5.</u> <u>Efficacy of Economic Warfare Instruments</u> This chapter highlights the efficacy, as also evolving nature of economic warfare instruments in the global context including study of the U.S. and Chinese models and the ongoing Ukraine Russia Conflict.
- (f) <u>Chapter 6.</u> <u>Data Analysis</u> This chapter collates inputs collected through data collection and undertakes analysis of data to arrive at logical conclusions.
- (g) <u>Chapter 7.</u> Recommended Strategy to Leverage Economic

 Warfare This chapter suggest strategies and capabilities required to
 optimally exploit and counter economic warfare in Indian context, within the
 emerging geo-economic environment.

CHAPTER 2

LITERATURE REVIEW

To get a comprehensive overview and understanding of the existing research and literature relevant to the research topic a detailed literature review has been undertaken. It helps to provide a theoretical and conceptual framework for the research by highlighting key concepts, theories, and methodologies that have been used by other researchers in the field. Additionally, it helps to establish the significance and relevance of the research by demonstrating how it builds upon and contributes to the existing literature. Overall, the literature review is an essential component of a research paper as it provides the foundation for the research by establishing the context, identifying gaps and research questions, and providing a theoretical framework for the study.

Rosenberg, et al (2016), while commenting on the effects and effectiveness of Contemporary U.S. Financial Sanctions express the opinion that sanctions have recently evolved into a preferred and recurrently employed tool for advancing U.S. National Security priorities, with noteworthy success. Due to their usefulness in projecting power to accomplish desired policy goals, economic sanctions may thus turn into one of the most foreboding tools of economic competition or hybrid warfare in the future. Effective policy sanctions must, however, take into account the unfavorable outcomes that have resulted from the policy and enforcement environment that has been in place for the past few years. Nations like China and Russia are implementing de-risking practices and initiatives to establish alternatives to the U.S. dollar-denominated foundations of the international financial system. This serves as a reminder that the size, liquidity, and integrity of the U.S. financial system

are critical strategic assets in the effective deployment of sanctions. As a result, when designing sanctions policies, U.S. and partner governments must appropriately consider the structural characteristics of the international financial system that have made sanctions such a potent weapon thus far. The study proposes several recommendations for changes to the architecture of financial sanctions, including improved coordination within the U.S. government, between federal, state, and local entities with jurisdiction over sanctions issues, and among U.S. allies, as well as a better framework for engaging with and collaborating with the private sector and greater alignment with overarching strategic objectives. Only then will the subsequent generation of financial sanctions policies and practices achieve the same level of success as the preceding ones. The paper is silent on the exact mechanism required for ensuring that sanctions retain their coercive potential, which could assist in crafting a truly coherent and holistic framework for the use of financial sanctions. Also, more work on de-listing and its potential outcome, needs to be undertaken. The study is primarily U.S. centric and may not be as relevant to other countries with less economic prowess.

According to Basu (2019), China, the country of prominent strategist Sun Zu, has one of the oldest traditions of strategic thinking. Sun Zu in his work "The Art of War," views war as a form of diplomacy; in other words, he interprets it as diplomacy by other means. Chinese have mastered the leveraging of economic interventions as one of the most powerful tools for advancing and defending national interests. China has stepped up its use of economic warfare as a strategic tool in its conflict with Japan over control of the Senkaku Islands chain. In 2010, China retaliated by placing a ban on the sale of rare earth materials and metals to Japan after the captain of a Chinese fishing trawler was detained after colliding with Japanese coast guard vessels. Along

with forcing Japan to free the prisoner, this restriction also created a new dimension. After being subjected to the ban, Japanese industrial juggernauts Hitachi and Toyota relocated their facilities to China. The lofty Chinese ambition of the Belt and Road Initiative (BRI), which is marketed as "shared growth through inclusion and collaboration," is actually an expression of the Chinese approach to achieving the national will without engaging in direct conflict. The Shi element in the big Chinese dream of BRI is now being recognised by the rest of the world, and nations like Bangladesh and Myanmar have recently expressed apprehensions in accepting the Chinese proposal of financing infrastructure projects and have turned down/ cut back certain BRI projects. The study is primarily China centric. A need exist to understand the nuances of economic warfare in context of developing nations and how they can leverage the same within their limitations.

Harrison (2020) states that in the two World Wars, both sides committed substantial resources to economic warfare. Influential thinkers believed that the threat of blockade and then bombing would deter aggression prior to the event. They hoped that the threat of economic action would preclude war without the need for a decisive military conflict. However, the reason for their disappointment prompted an inquiry into the true nature of the connection between a military conflict and economic warfare. As per the author, the key to understanding the impact of economic warfare lies in considering the adversary's adaptive responses. Only by taking into account the full range of adaptations can we appreciate that economic warfare and combat tend to be strategic complements, working together rather than simply replacing one another in a traditional sense. Olsonian substitution, nationalism and the escalation of violence were the main suggested countermeasures. While nationalism and substitution did not eliminate the effects of economic warfare, they did redistribute and delay them. The

study does not take into account the evolving dynamics of the geo-economic environment of today because it is primarily based on the Allied air campaign against Germany during World War II.

Kavanagh (2022), while commenting on the changing nature of power in the context of the ongoing Ukraine-Russia conflict states that the outcomes over the first few months of the war has surprised many strategist, challenging some traditional assessments and linkages of military and economic power. The unexpected aspect of Russia's military campaign in Ukraine is that its military advantages did not lead to achieving its initial objectives within the expected timeframe. Instead, the Ukrainian forces have made significant progress in their campaign and have pushed back the Russian military in certain sectors. This may be partly due to changes in the exercise and nature of power that have emerged over the past few decades. Three developments have been particularly influential in leveling the playing field for Ukraine. The first development is the extensive influence of non-state groups that can act autonomously on the international stage. The second development is the extent to which relationships between states serve as key sources of power that are decisive factors in shaping conflict outcomes. The third development is that some of the most decisive forms of power in the current conflict have not relied solely on hard power derived from military capabilities or economic wealth, nor have they been instances of soft power, which influence through norms and ideas. Instead, they have been forms of power that blur this distinction and combine the two. However, the study does not delve into the nuances and mechanics of capability building required to optimally synergize non-state actors and blend hard and soft power.

Thomas (2022), quotes that "India is now the fastest growing major economy in the world and it is significantly interconnected, particularly with the advanced

economies. 16 per cent of our exports are to the U.S, while China is our major source of import with 16 per cent share". He further substantiates that to counter the ever growing vulnerabilities due to globalization and inter-linkages between economies, initiatives such as Atmanirbhar Bharat are a constructive step in the long run. This approach will counter India's vulnerability when it comes to the dependence on imports from developed countries like China which was palpable post the deterioration of relations between the two countries after the Galwan faceoff. India also implemented a strategy of imposing additional duties on imports from China, prohibiting Chinese companies from automatically starting businesses in India, and establishing a production-linked incentive scheme to encourage domestic manufacturing of goods. These measures were taken as a countermeasure and to support domestic players. However, long term effects of de-globalisation have not been analysed and commented upon in the study.

According to Meredith's (2022) analysis of the ongoing Ukrainian War, Russia has claimed that the West's punitive economic sanctions are responsible for the indefinite suspension of gas supplies through Europe's Nord Stream pipeline. It represents a clear indication that the Kremlin is seeking to force Europe/ North Atlantic Treaty Organization (NATO) to lift the economic measures imposed on Russia as part of economic interventions, if they want the oil supplies from Russia to resume prior to the impending winter. This latest move has significantly increased the risk that Europe may not get the required gas requirements through the Nord Stream 1 during coming winter and could potentially trigger a recession in the near future. The study does not incorporate economic interventions tools other than oil and their linkages.

Kennedy (2022) while commenting on gas as an economic weapon against Europe, China's latest stimulus plans and what de-globalization means for U.S. inflation highlights that Russia's decision to cut off gas to Poland and Bulgaria marks a fresh round of economic warfare between Moscow and those governments that want its invasion of Ukraine to end. The crackdown relates to an earlier demand for energy to be paid for in Rubles, which the European Nations have not conceded to. This is a classic example of the growing potential of economic interventions to further one's own national interests. Aspects related to the blurring line between hard and soft power and its fallout have not been analyzed in the study.

Taillard (2012), in his book titled 'Economics and Modern Warfare' states that the application of economics to international conflict is old but not yet well understood and is nearly always used improperly. According to him, modern economic warfare consists of sanctions, embargoes, and other macroeconomic political strategies designed to resolve a conflict of interest without the need of armed confrontation. In 1940, the U.S. established a specialized office to manage economic warfare operations. This office underwent a series of name changes and successors, including the Economic Defense Board, the Board of Economic Warfare, and the Foreign Economic Administration, after the Office of Administrator of Export Control was disbanded in 1945. Although both Presidents Franklin Roosevelt and Harry Truman acknowledged significant ongoing mismanagement, it could be argued that this department generated no benefits whatsoever. As per Taillard, the objective of resolving conflicts without imposing difficulties or violent war on either nation is an admirable and nearly realizable one, but the economic instruments currently employed are completely ineffective. Such actions, as they have been frequently employed in recent history and current events, are just too broad to have a real impact and produce a significant amount of collateral harm, including to the sanctioning nation. The US embargo on Cuba, which began in October 1960 and eased out in 2014 after the Obama administration announced its desire to reestablish relations with Cuba, is an apt example of this phenomenon. Even though Cuba's economy has struggled for a long time due to weak economic policies, the embargo has further exacerbated the devastation, making the U.S. the target of Cuban residents' resentment. This embargo has had a greater impact on the general populace than on the Communist Party of Cuba's authoritarian dictatorship or on its members. The embargo has had an even greater impact on the United States, as the policy prevents the country from benefiting from the importation of inexpensive sugar and tobacco as well as the exportation of much-needed products. This prolonged embargo has resulted in harm to all parties except the desired political infrastructure. According to Taillard, while there have been previous attempts to use economics as a form of warfare on a macro or political scale, there have been few successful attempts at replicate those strategies. This has led to misdirection related to how economic warfare is approached, with nations attempting to influence others by withholding economic benefits in ways that are often ineffective, rather than using economic force. A detailed critique of the existing economic warfare intervention of that era has been undertaken to substantiate his view point. He has also introduced the term 'Economic Combat', meaning the use of applied economics specifically for combat purposes. As per him, the science of economic combat, as was available at that time and understood, could be separated into three primary divisions namely Supply Manipulation, Trade Manipulation and Market Manipulation. The book primarily deliberates on the mechanics of executing the instruments for Economic Combat stated above and not on the entire spectrum of economic warfare interventions.

Nolan (2007) in his paper titled 'Economic Warfare: A Study of U.S. and China Strategy Using the Economic Element of National Power', observes that after the collapse of the Soviet Union in 1991, the U.S. became the sole global superpower. Many political scientists hypothesize that the United States will continue to enjoy this status for the next 25 years, with only China as a potential near-peer competitor. China has been concentrating on economic growth and gaining recognition as a great power. The U.S. military has dominated the battlefield for the past several decades, but recent operations have shown that victory cannot be achieved solely through the traditional destruction of enemy forces. The U.S. can only achieve victory by synchronising and integrating all elements of national power. Operations in Kosovo, Afghanistan, and Iraq are indicative of the nature of warfare in the future. This evolution in warfare necessitates a shift from the annihilation strategy of the 20th century to a comprehensive strategy that employs all elements of national power. The United States has the diplomatic, informational, military, and economic elements of national power necessary to support its National Security Strategy. Utilizing these elements of national power protects and enables the United States to remain the sole superpower in the world. Utilizing America's assets efficiently and effectively is essential to the National Security Strategy. The economic arm is a crucial component of national power in light of the recent technological and globalisation explosions. Nolan further emphasises that the Chinese and American economies are interdependent. Due to this interdependence and the economic policy of the United States, both nations will engage in economic conflict in the future. This paper analyses both the Chinese and American economic policies in an effort to identify areas of conflict. Using the published Chinese concept of "Unrestricted Warfare," the true economic strategy of China was determined. Utilizing an analysis of trade alliances and currency devaluation, current Chinese methods and strategies on the global market have been determined. The paper dwells specifically on U.S. and Chinese Strategy of using economic elements and predicts the future scenarios as they may unfold. However, a number of political and economic developments have manifested post the publication of this paper in 2007 which have the potential to change the geo-economic dynamics of the worlds and need to be incorporated into the scenario to derive realistic conclusions.

Liang and Xiangsui (2007), in their book 'Unrestricted Warfare: China's Master Plan to Destroy the United States,' while commenting on new warfare, state that War in the era of technological integration and globalisation has eliminated the right of weapons to label war and, with respect to the new starting point, has realigned the relationship between weapons and war, while the emergence of weapons of new concepts, and particularly new concepts of weapons, has gradually obscured Does a single "hacker" attack constitute hostile behaviour? Can the use of financial instruments to destroy a country's economy be considered a battle? Did CNN's coverage of the exposed corpse of a U.S. soldier in the streets of Mogadishu weaken the United States' resolve to act as the world's police force, thereby altering the global strategic situation? And should an evaluation of military actions focus on the means or the results? Considering the traditional definition of war, it is no longer possible to answer the above questions. All of these non-military actions may become the new components of future warfare, which they have dubbed Unrestricted Warfare. Thus, Unrestricted Warfare is warfare that transcends all boundaries and restrictions. Bloodand-iron warfare played a significant role in the formation of the majority of the first nation-states at the time of their emergence. Likewise, it is impossible to avoid collisions between massive interest blocs during the transition from nation-states to globalisation. However, we no longer need to be like our ancestors, who viewed armed conflict as the final court of appeals, in order to untangle the "Gordian Knot," as we now have tools other than swords with which to do so. Political, economic, and diplomatic means can now be substituted for military ones. According to the authors, while simultaneously reducing the battle space in the narrow sense, the entire planet has become a battlefield in the broad sense. On this battlefield, people continue to fight, pillage, and kill one another, but the weapons and tactics are more advanced and sophisticated, so it is less bloody but still brutal. The dream of world peace remains as elusive as ever in light of this reality. Even in an optimistic scenario, war will not be eliminated quickly in the near future, regardless of its severity. It is emphasised that, in the face of warfare in the broadest sense that will occur on a battlefield without borders, it is no longer possible to rely solely on military forces and weapons to achieve national security in the broader strategic sense or to safeguard stratified national interests. The scope of warfare is expanding beyond soldiers, military units, and military affairs to include politicians, scientists, and even financiers. Consequently, the question of how to wage war is no longer restricted solely to military personnel. They conclude that future conflicts will involve more hostilities similar to financial warfare, in which a nation is subjugated without shedding a drop of blood. The example of what would have happened to the economies of Hong Kong and China, if the battle to protect Hong Kong's finances in August 1998 had failed, demonstrates the same point. Three years prior to the terrorist attack on the World Trade Center on September 11, 2001, this very Chinese military manual suggested that the United States military would find it difficult to respond to a similar attack. Consequently, there is a school of thought that promotes the notion that the events of September 11 were not the result of arbitrary actions by independent actors.

According to them, the doctrine of total war outlined in Unrestricted Warfare demonstrates that the People's Republic of China is prepared to confront the United States and its allies by launching "asymmetrical" or multidimensional attacks against nearly every aspect of our social, economic, and political life, and that this may be the future spectrum of Warfare. The canvas of Unrestricted Warfare is all encompassing and economic warfare is just one aspect of the same and thus not enough thought has been given related to the mechanics of executing the same in the book.

Mulder (2022) in his book 'The Economic Weapon: The Rise of Sanctions as a Tool of Modern War', argues that economic sanctions which are now viewed as an alternative to war were the core of total war for the vast majority of people during the interwar period between the two World Wars. The author emphasizes that the economic weapon was designed with the intention of never being used. Interwar internationalists used economic penalties as a deterrent, foreshadowing the Cold War's nuclear strategy. However, in the pre-nuclear era of the early twentieth century, they presented a terrifying possibility, as a nation placed under a total blockade was definite to slip into a social collapse. The consequences of poor health, starvation, and malnutrition were passed down to future generations, leaving the experience of material isolation indelibly on our society. As per the book when the three main anticivilian weapons of the interwar period i.e. air power, gas warfare, and economic blockade were compared, it clearly emerged that economic blockade was by far the most lethal. An additional 500,000 people died as a result of blockade induced famine and sickness in the Ottoman regions of the Middle East affected by the Anglo-French blockade. Prior to World War II, economic isolation was the leading man-made cause of civilian death in twentieth-century conflicts, killing hundreds of thousands. However, unlike aerial bombing and chemical warfare, the fatal effects of blockade

were extremely difficult to demonstrate and thus condemn even for their initiators. The author states that humans have used material channels to persuade, cajole, and coerce one another since the dawn of political organisation. Economic pressure thus is an age-old tactic, but the use of economic sanctions to enforce international order is a uniquely modern innovation. Sanctions can be traced back to Thucydides' account of hostile Greek city-states. Nonetheless, two distinguishing features of modern economic penalties are, firstly their link to standard enforcement and secondly, the international legal and economic imagination that underpins them. The author stresses that economic sanctions have undoubtedly become "a permanent part of organized humanity's machinery" in the twenty first century, but not without significant changes to their scope and purpose. The interwar history of sanctions sheds light on three aspects of its current avatar. For starters, it emphasises how profoundly the war period from 1914 to 1945 influenced liberal internationalism. Second, it shows how American hegemony has normalized and expanded the use of sanctions. Third, it compels us to consider how economic pressure influences or does not influence political outcomes, emphasizing a critical distinction in world history between the consequences and effectiveness of sanctions. Despite the fact that the success rate of economic sanctions varies depending on the purpose, history shows that the majority of economic sanctions have not always been effective. Only one in every three sanctions deployments in the twentieth century was successful. The author finally cautions that to focus solely on whether sanctions have efficacy in achieving their goals would be to miss out the extraordinary effects they have had on the world's political and economic history. The book focuses primarily only on one instrument of economic warfare i.e. sanctions and its efficacy prior to the cold war era, which may not be the ideal benchmark to extrapolate in today's geo- economic environment.

Thaliyakkattil (2019) analyses Chinese discourse on Indian attitudes toward the BRI in this book "China's Achilles' Heel: The Belt and Road Initiative and Its Indian Discontents" argues that the Indian discourse is becoming one of the biggest obstacles to China creating its own narrative about China's rise in Asia and beyond. Following a brief introduction to the BRI, the author proceeds to build a case for the Chinese behind the BRI, which is to aim for a dominant role for their nation in the global arena by creating new realities and worldviews of China. The author also discusses how the initiative is not going down well with South Asian nations, including Pakistan, and points out that while the BRI benefits Chinese companies and advances Chinese interests, it does not benefit countries that have accepted infrastructure projects, as the Chinese have propagated. The book also discusses the United States' full support for India against the BRI, which has since been dubbed the Indo-Pacific strategy. Though the main idea behind the BRI was to shape a global narrative of China, the author also points out that the BRI was initially criticized by India because it infringed on its sovereignty and territorial integrity. Finally, the author discusses how India has been able to address her security concerns, at least for the time being, through a containment strategy based on a collaborative partnership with the US.

Wolf (2020), in his book titled 'The China-Pakistan Economic Corridor of the Belt and Road Initiative', discusses the rationale for both China and Pakistan to pursue the China-Pakistan Economic Corridor (CPEC) project, which is one of the most vital components of BRI. While Chinese interests are primarily centered on projecting itself as an international standard-setter, upgrading its own industry, exporting excess capacity and ensuring energy security, Pakistani motivations have been described as ranging from improving economic and social conditions, enhancing

infrastructure and trade, enhancing production capabilities, and of course ensuring energy security. Although CPEC is the primary cause for India's opposition to the BRI, the author also discusses another issue related to CPEC that has direct implications for India: the desire to expand CPEC's scope by incorporating Afghanistan. The author concludes that the CPEC has been more beneficial for China than for both countries and has rendered Pakistan's economic development even more dependent on China. The book is focused primarily on BRI and its fallouts as part of the overall economic hegemony being attempted by China and not the complete spectrum of initiatives being employed.

Anwar (2019) in his article 'Belt and Road Initiative: What is it in for China?' discusses the benefits that China hopes to derive from the BRI. In addition to addressing the disparity between its inland Western regions and the prosperous provinces on the Eastern seaboard, China hopes to provide an outlet for the excess infrastructure construction capacity of Chinese companies. On the international stage, China benefits from the BRI by resolving its "Malacca dilemma" and expanding its political and economic influence in other nations. The author concludes by stating that the BRI has become synonymous with China's image, and that failure to complete successful projects and gain positive international recognition would be disastrous for the party and the Chairman.

According to Baruah (2018) in his paper titled 'India's Answer to the Belt and Road: A Road Map for South Asia', the growing collaboration between Beijing and India's neighbours is causing unease in New Delhi. In order to grasp India's concerns, it is essential to closely examine the four specific corridors of the Belt and Road Initiative (BRI) that run through India's South Asian neighborhood: the China-Pakistan Economic Corridor (CPEC), the Bangladesh-China-India-Myanmar

Economic Corridor, the Trans-Himalayan Economic Corridor, and the Maritime Silk Route. These corridors and their associated infrastructure projects directly affect India's strategic interests. With China's expanding influence in South Asia, India is faced with the challenge of maintaining its regional prominence, with the BRI underscoring the escalating rivalry between India and China in the subcontinent and Indian Ocean region. China's ability to elicit an impressive response from India's neighbours demonstrates India's inability to provide substantial development assistance to its smaller neighbours, in addition to India's lack of strategic engagement with its neighbourhood. While it is true that India has limited resources and must address domestic infrastructure and development needs, it must also provide an alternative to China's overtures to the region. As connectivity is essential to regional development, the author argues that Australia, France, Germany, the United Kingdom, and the United States are eager for India to assume a leadership position in the region. India must therefore leverage the assistance offered by each of these states and pursue its strategic connectivity objectives.

In his book "The Russia-Ukraine War: The Conflict and Its Global Impact," Ajay (2022) provides a comprehensive account of the conflict, tracing the background and major flow of events from the initial battles of Kyiv and Kharkov to the Russian capture of the coast, the Donbas battles, the Ukrainian counteroffensive, and the Russian response. The significance and impact of economic and geopolitical factors are also emphasised. The effects on India and the rest of the world, including the likely emergence of a new global order, have been examined in depth. It also crystal gazes into the potential scenarios for the war's including a grim "Armageddon Scenario" in which the author paints a chillingly plausible picture of a Russian nuclear attack triggering a chain of events that leads to World War III. A likely final state also

implies the consolidation of the front along the Dnieper and Donetsk rivers. This line could become the Line of Contact between Russia and Ukraine and de-facto between Russia and Europe, continuing to simmer indefinitely like the Line of Control (LoC) between India and Pakistan. This conflict could even turn into an interminable "frozen conflict". The book emphasises how the war would affect global power dynamics and how India's geopolitical standing could be strengthened in the future. The need to study the impact of the war on India and how its lessons in tactics, equipment, strategy, and doctrines need to be studied and assimilated, particularly in context to relations with China and actions along the Line of Actual Control (LAC) and LoC, are also commented upon. The primary focus of the book is on the strategic outcomes of the conflict with mention of economic aspects. The predictions made in relation to the war, seem plausible, and it remains to be seen how they pan out since the ground situation is dynamic in nature.

Lopez and Cortright, (2004) in their article titled "Containing Iraq: Sanctions Worked" published by Council on Foreign Relations, state that the failure to find weapons of mass destruction in Iraq has prompted much handwringing over the veracity with pre war intelligence. However, little attention has been paid, to the flip side of the picture which reiterates that the much maligned United Nations (UN) enforced sanctions regime was substantially effective. This view point highlighted in his article is contrary to what most critics have said in general. The author is of the view that containment through sanctions did indeed helped destroy Saddam Hussein's war machine and his capacity to produce weapons. The article has a contrary view point to the popular harboured opinion and is a different take on the efficacy of sanctions and thus needs to be factored in while researching on the topic.

In his book "Chip War: The Fight for the World's Most Critical Technology," Millar (2022) emphasizes the increasing importance of technology in achieving selfreliance. According to the author, microchips have become a scarce resource that the modern world relies on, just like oil. In today's world, computer chips are used in almost everything from missiles to microwaves, including cars, smartphones, the stock market, and even the electric grid. Until recently, the U.S. has maintained its position as the leader in chip design and manufacturing, producing the fastest chips. However, its edge is now in danger of slipping as players in Taiwan, Korea, and Europe take over manufacturing. The author reveals that China is investing billions of dollars in a chip-building initiative to catch up with the U.S. as it spends more on chips than any other product. This is crucial because America's military superiority and economic prosperity are at stake. The book underscores the critical importance of microchips in modern warfare, where the side with the best technology has the upper hand. The ability to design and manufacture chips locally gives countries greater control over their supply chains and enables them to respond quickly to security threats. It also ensures that countries can build the most advanced military and civilian technology, which is crucial for their economic and geopolitical power. To maintain its lead in chip design and manufacturing, the U.S. must prioritize investments in chip research and development and establish a robust domestic manufacturing base. This requires a significant shift in the government's approach to technology policy, with greater investment in research and development, and stronger public-private partnerships to accelerate innovation. Failure to take these steps could result in the U.S. losing its technological edge and with it, its military and economic superiority. The book is primarily focused on the U.S - China race to become the leader in chip technology and manufacturing.

CHAPTER 3

THE EMERGING SECURITY ENVIRONMENT

To have an overall perspective of the instruments nations have used over ages to further their national interest and how the nature and character of these instruments has evolved including reasons for the same, we need to broadly understand the evolution of warfare. Since the start of civilization, warfare has been an integral part of human existence. The history of warfare is in essence the history of mankind. Before we try to dwell further into the intricacies of how warfare has evolved, it will indeed be prudent to understand the complete gamut of warfare as it stands evolved in contemporary times. In addition to the conventional warfare, we also have the unconventional and the asymmetrical warfare. The history of evolution of warfare to its present form has been gradual and certain landmark developments to which it owes its genesis are as discussed in this chapter.

Shift from Classical Inter-States Wars to Intra-State War

For the second half of the 20th century post the Second World War in 1945, there has been a relatively decline in classic inter-state wars as compared to the earlier times. Correspondingly, there has been a steady increase in intra-state wars i.e. liberation movements, ethnic and religious strife, revolutions and counter-revolutions, insurgencies etc. However, for the major part of the first two decades of the 21th century technically no conventional wars have been fought. But the intensity and frequency of intra – state wars have increased. These though largely remain physically confined to that region do have support of other nations, primarily due to ideological affiliations or economic interests. Insurgency, terrorism, Low Intensity Conflicts etc have become the most common form of armed conflict.

Asymmetric Warfare: An Alternative Strategy

To circumvent international scrutiny and need to justify its actions within the realms of "jus bellum justum", a large number of weaker nations resort to asymmetric warfare to achieve their political aims. This method has an inherent deniability factor attached to it which helps keeps the engagement below the threshold of conventional war, a distinct advantage for the conventionally weaker adversary. Technological gap between nations is another factor which promotes asymmetric warfare. E.g. Pakistan has effectively employed the tenets of asymmetric warfare against India since its inception. Pakistan has adopted asymmetric warfare as a key component of its state policy since gaining independence in 1947. The acquisition of nuclear weapons and Pakistan's declaration of a "low threshold policy" and "doctrine of irrationality" in their use has further bolstered their confidence. However, history has demonstrated that weaker states can triumph over stronger ones. According to Ivan Arreguin-Toft's analysis of around 200 asymmetric conflicts fought since 1800, weaker states have emerged victorious in 28.5% of these conflicts. Interestingly, there is a noticeable trend that has emerged over time: stronger states have been losing more and more asymmetric conflicts. For example, their victory rate has declined from 88.2% in the period of 1800-49 to 79.5%, 65.1%, and 48.8% in the subsequent 50-year periods. In fact, in the most recent 50-year period (1950-99), weaker actors have secured more victories than their stronger counterparts. (Gurung, 2011) (**Refer Figure 1**).

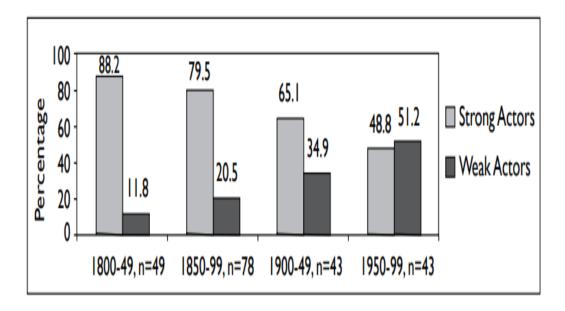


Figure 1: Percentage of Conflict Victories by Type of Actor over Time

(Source: Countering Pakistan's Asymmetric Warfare, Manekshaw Paper No. 25, 2011, Centre for Land Warfare Studies New Delhi)

Role of Non-State Actors

In international relations, non-state actors are individuals or groups that hold influence and which are wholly or partly independent of state governments (*Non-state actors*, Wikipedia, 2017). Non-State Actors could range from liberation movements, corporations, media houses, business magnates, lobby groups, religious/ethnic groups and aid agencies. The interests, structure and influence of Non-State Actors may vary widely in different situations. In many cases, conflicts involve not just states and non-state actors, but also multiple non-state actor groups. This makes interventions in such conflicts especially difficult, as international law and norms regarding the use of force for intervention or peacekeeping are primarily focused on nation-states. In recent times, many non-state actors and terrorist organisations have initiated conflicts with nation-states e.g. Al Qaida's attack on U.S. on 09 September 2001, Hezbollah - Israel War (July-August 2006), attack by Lashkar-e-Taiba (LeT) in Mumbai on 26 November 2008, to highlight a few which had long term repercussions on world politics. Ranging from Al Qaeda, the Islamic State of Iraq and Syria (ISIS), Antifa

G20 rioters, Somali pirates, Wikileaks, the Taliban, Hezbollah or other trans-national criminal organisations, non-state actors continue to demonstrate their capacity to impact warfare, security, geo-political stability and economics around the world. As per International Laws any incursion by foreign ships to within 12 nautical miles of the coastline is an infringement of territorial sovereignty. Given the aforementioned circumstance, China's actions to reclaim and militarize artificial islands in the South China Sea serve as a critical example of how non-state actors can be effectively utilized for strategic purposes. China's initial attempts to claim the seas and surrounding areas began with the use of fishermen. In fact, China boasts the largest non-military armed fishing fleet, also known as the "fishing militia," in the world. According to a 2016 Reuters report, which is corroborated by similar sources, the fleet based on Hainan Island receives military training and fuel subsidies (Thomas, 2018). Between 2012 and 2013, Chinese fishing boats began harassing and pushing out Philippine vessels from islands that the Philippines had previously claimed or occupied in the Spratly archipelago. Any attempts at retaliation by the Philippines or threats of action were met with protest from Chinese fishermen or counter-threats from the Chinese government, citing the fishermen's Chinese citizenship. It made strategic and economic sense for China to use non-state actors to assert its hegemonic, strategic, and resource-related claims and to potentially engage in low-level, yet aggressive conflicts. As per the changing landscape of warfare, non-state actors are effectively utilizing asymmetric methods to target a state's vulnerabilities. Thus, we need to factor into our future grand strategy means to harness non-state actors to target geo-political opponents to achieve disproportionate effects. Also, protracted conflicts using militaries create diplomatic tensions and involve the inherent risk of an escalation from the adversary and/or their allies.

Technology: The Enabler

Since ancient humans carved arrows from stones, military advancements ranging from wooden catapults to nuclear bombs have revolutionized the way wars are fought. Technology has always been the forerunner to development of warfare doctrines and strategies over ages. Be it the advent of gun powder leading to dominance of artillery to invention of the internal combustible engine leading to mechanization of warfare and advent of maneuvered warfare. With the passage of time cutting edge technology in the domain of cyber, space, nanotechnology or Artificial Intelligence (AI) has been successfully integrated into weapon systems. Due to advancements in warfare, large-scale, human-intensive confrontations between forces at the strategic and operational levels are becoming outdated. Instead, longrange, contactless actions against adversaries are becoming the predominant method for achieving strategic and operational objectives. The canvas has transcended from the famed cavalry charges in the pre First World War era to the cruise missiles of the First Gulf War and further on to the Unmanned Aerial Vehicles (UAVs) and Unmanned Combat Aerial Vehicles (UCAVs) of 2000s. Precision guided, unmanned, long range stealth/ smart weapon systems have reduced the element of face to face combats at almost all levels barring the tactical levels of war fighting. The result is a shortening of the Observe Orient Decide Act (OODA) loop and blurring of lines between the classical and progressive stages of war. Thus it would be prudent to say that warfare and technology make the perfect partners for destruction and we need to integrate the same optimally.

Non-Military Means: The New Paradigm

Over the years the dynamics of what constitutes the drivers which dominate world policies has changed from geo-strategic to geo-political to more recently geoeconomics. The ongoing tension between US and China related to trade imbalance reiterates this philosophy. New set of stringent policies related to e-retailer and Foreign Direct Investment (FDI) in industry by all governments including our own lend impetus to the powerful linkages that economic interests have in today's dynamic and global eco system. The world is changing and so are the instruments used to further national interest. The aphorism of Clausewitz that war is politics conducted by other means could be interpreted and modified to say that politics and economics is war conducted by the means of information. Thus, if non-military means can enable the accomplishment of greater political goals, then conventional war may become redundant. Also, the effective use of non-military means like economic prowess, soft power, smart power and the all encompassing Comprehensive National Power is on the rise. With enhanced understanding and implementation of these new instruments of waging war the innate nature of war will change from contact/ overt to non contact/covert.

The Changing Dynamics of Warfare

It will be safe to assume that the era of pure conventional wars being fought primarily with Kinetic Weapons, in an orthodox manner between two adversaries with a limited scope, over long durations is passé. Any war of the future will definitely have an element of unconventional warfare integral to it. This thread could either run through the complete spectrum of built up, execution and consolidation stages of battle or come into play at relevant stages as deemed suitable or viable by the strategist. In the present context, as science, technology, geo-economics and strategy

stand, one cannot visualize a scenario of a war being fought purely within one of the above domains. Thus, emerges the concept of Hybrid Warfare, a blend of various forms of warfare tailor-made for the situation at hand to optimize resources and achieve the desired end state in an efficient manner. Also, a lot depends on the resources available at the discretion of the parties involved including their allies. A plethora of other terms have also been use to describe future warfare such as Non Contact Warfare (NCW), Unrestricted Warfare and Total Warfare, to name a few. So where does NCW fit in? Primarily it should be a sub sets under the umbrella of unconventional warfare. However, we need to understand that the scope of NCW is vast, equally vague and not limited to only non-kinetic weapons to say the least. As a metaphor, non kinetic weapons could be assumed as the conventional component of NCW which is just the tip of the iceberg of opportunities now available. The actual potential definitely lies in the other intricate forms of NCW which could yield disproportionate results.

The Transition: Kinetic to Non- Kinetic

The non-kinetic sphere of warfare is not a new phenomenon and bears similarities and areas of overlaps with other terminologies which have been in use such as, traditional or non- traditional threats, direct or indirect strategies, lethal or non-lethal operations. However, the demarcation achieved through categorizing these means under kinetic and non-kinetic domains is more apt and addresses the complete spectrum in an encompassing manner. Also, with the ever increasing international scrutiny on use of kinetic means primarily due to their inherent overt nature of delivery, resultant collateral damage and high cost of execution, these so called traditional means are fall out of favour. Since World War II, there has been a fundamental shift in the blueprint of statecraft and the nature of conflict, driven

primarily by the active role of supranational organizations such as the United Nations (UN), the advent of nuclear, chemical, and biological weapons, the Revolution in Military Affairs, the rapid advancement and accessibility of information technologies, and their impact on globalization, which has led to a dilution of the sanctity of international borders. The 21st century has brought about two significant shifts in power: the diffusion of power from states towards non-state actors, and the emergence of geo-economics as the defining medium of inter-state relationships. As a result, traditional kinetic options for advancing state policies, such as conventional military operations, have become less viable due to their high cost, difficulty in limiting their effects, and their potential for causing damage to both the victor and the aggressor. Consequently, the non-kinetic dimensions of statecraft, including economics, information, and diplomacy, have gained greater prominence in shaping global security narratives. Given the complexities of the current security environment, it is essential to have a thorough understanding of the emerging threat paradigm, particularly the intricacies of non-kinetic warfare, in order to develop a comprehensive response to the multitude of threats that impact national security. Also, most of these non - kinetic means such as economic interventions would be the defacto tools or instruments to prosecute NCW.

Hybrid Warfare Taxonomy

Due to the asymmetric nature of the evolving hybrid threats the focus has now shifted towards hybrid warfare in strategic and academic thought processes. A 'hybrid threat' can be described as: "Any adversary that simultaneously and adaptively employs a tailored mix of conventional, irregular, terrorism and criminal means or activities in the operational battlespace. Rather than a single entity, a hybrid threat or challenger may be comprised of a combination of state and non-state actors".

According to some analysts, the combination of irregulars, political indoctrination, regular military forces, and diplomacy should be referred to as "compound warfare" instead of hybrid conflict. The examples given include the British campaigns in Malaya and Northern Ireland, as well as the resistance against US forces by North Vietnam. Additionally, Chinese Colonels Qiao Liang and Wang Xiangsui introduced another variation of hybrid conflict called "unrestricted warfare," which refers to warfare beyond bounds. In their book with the same title, they argued that weaker nations can utilize various forms of warfare, such as diplomatic, economic aid, financial, network, trade, bio-chemical, intelligence, resources, ecological, psychological, space, regulatory, electronic, sanction, guerrilla, drug, news media, terrorist, ideological, and virtual warfare, among others.

Components of Hybrid Conflicts

At what point does a conflict qualify as hybrid? The term "hybrid" implies a combination of multiple elements of power or components of the spectrum of conflict, typically characterized as conventional and unconventional, or regular and irregular. However, these distinctions are relative and subject to change over time. What is unconventional today may become the norm tomorrow, and what is considered irregular may become regular as its usage increases. Therefore, these subsets are imperfect and continuously evolving. On the other hand, the distinction between kinetic and non-kinetic components of conflict is more distinct and lends itself to clear categorization. Kinetic components encompass a range of activities such as artillery, missiles, space weapons, Chemical, Biological, Radiological, Nuclear (CBRN) options, conventional and special forces, insurgents, terrorists, and black operatives conducting illegal activities, including sabotage and violent agitations. Non-kinetic components, on the other hand, include diplomatic and political actions,

information operations, including cyber and social media activities, network warfare aimed at disrupting critical network infrastructure, subversion, dissension, economic coercion, resource warfare, environmental warfare, ideological warfare, non-violent agitations, and so forth.

Non Contact Warfare (NCW)

The modern day genesis of NCW could be credited to the Predator drone and its Hellfire missiles. On 04 February 2002, an MQ-1 armed Predator fired a Hellfire missile at three men, standing near a known Mujahedeen base at Zhawar Kili, Afghanistan, killing them (Alderman, 2016). Thus, in 2002 dawned the new era with precision weapons killing specific human targets. Post Operation Desert Storm Russian General Vladimir Slipchenko realized that with the existing technological imbalance between forces augmented by long range weapons, it was increasingly possible to target the adversaries Centre's of Gravity (CsoG) without engaging in physical combat, characterized by heavy attrition. He thus propagated the concept of 6th Generation Warfare to refer to the "informatization" of conventional warfare and the development of precision strike systems (Kipp, 2012). War is not only an act of violence but a political instrument, a continuation of political intercourse, carried on through other means. Thus, application of all available means ranging from political, diplomatic, intelligence to economic and so on could be utilised to achieve the greater political aims. These resources are applied off the battlefield, prior to the onset of war. When diplomacy fails, the military means become the last instrument of the nationstate to achieve the political aim. The underlying principle of NCW is "fighting wars without suffering casualties". Initially, this definition was limited to conventional warfare and included information warfare/operations, missile warfare, remote warfare such as drone attacks, and the use of robotics in an environment of battlefield transparency, with command and control facilitated by Command, Control, Communication, Computers, Intelligence, Surveillance, Target Acquisition, and Reconnaissance (C4ISTAR) systems. However, with passage of time the scope has enhanced to include non- conventional approach using all means at a countries disposal. Some of the warfare's which would ideally fall under the gamut of NCW are as listed below:-

- Space Warfare
- Economic Warfare
- Media Warfare
- Ecological Warfare
- Cyber Warfare
- Information Warfare (IW)/ information Operations (IO)
- Resources Warfare
- Water Warfare
- Legal Warfare
- Cultural Warfare
- Sub National Warfare
- Religious Warfare
- Perception Management (PM) Warfare/ Psychological Warfare
- Demographical Warfare
- Warfare Using Long Distance Vectors Missiles, Artillery, UAVs
 Fighters etc

Continuum of Conflicts and the Emerging Security Environment

Heraclitus, a Greek philosopher, famously quoted that "Change is the only constant in life". The traditional concept of security over ages has primarily revolved around the notions of "defending" national interest ignoring the necessity to "redefine" national security based on existential threats or emerging threats. This outlook which was dominant till the end of cold war did undergo a sea change post the 9/11 watershed. The magnitude and feasibility of threat to the security of a nation or for that matter to a region in particular from non-traditional means such as terrorism dawned on to the strategic thinkers. Efforts and alliances were made to counter the same at the macro level with US spearheading the charge. However, due to the complexities involved in countering this menace only limited headway has been made in this field and the threat is still real and simmering. A lot of integration both intra and inter agencies/ nations has taken place in the global fight against terrorism. However, the spectrum of new age Non Traditional Security (NTS) threats goes much beyond just transnational terrorism. This realization has slowly dawned on the international community which for the last decade or so has primarily been focusing its energies to counter the terrorism bandwagon. Also, conventionally powerful nations have been the most reluctant to accept these threats, while the weaker and more vulnerable nations had realized the potential of these threats much earlier. Glaring examples are US and China. While US has been relying traditionally on its military ascendancy to dominate world order and guard its national security interests, China till recently followed a more indirect approach focusing on enhancing its economic dominance to the extent that it now calls the shots across the world and can influence almost all political decisions just by the mere threat in being of an economic spin off. Also, it has addressed its vulnerabilities related to energy security by initiating the Belt and Road Initiative (BRI), achieving the twin benefits of economic gains and strategic presence using the debt trap method in countries such as Pakistan and Sri Lanka. One of the early published mentions of the term NTS Threats was in a July 1990 keynote address to the National Classification Management Society by Craig Alderman, Jr., Deputy Under Secretary of Defense (Security Policy). Alderman said "we are facing an increasing number of non-traditional threats, such as the economic and industrial intelligence programs of allies and friends; the rise of state-supported terrorism; and the increased efforts of narcotics elements to penetrate our operational, intelligence, and security arenas" (Paskal, 2014).

Dual Nature of Non Traditional Security (NTS) Threats

NTS threats such as economic security, energy security and resource security even in standalone mode with no interference from a potential adversary can have an overbearing adverse effect on the socio - economic and political environmental within a nation, which could manifest into internal security issues of grave nature. Furthermore, these vulnerabilities can easily be exploited and accentuate by external agencies, adversary nations or terrorist/ criminal organisations working as proxy for them. Thus the challenge it to identify these fault lines and put in place mechanisms to prevent them from been exploited to ones disadvantage. This in itself is no mean task since they could be transnational and require major policy decisions and capability building, duly supported by political will and economic support. This is just the defensive part of the security paradigm. Also, such existing non traditional vulnerabilities of the adversaries could be capitalized upon or if not already existing be artificially engineered through coercive/ indirect means. Thus, NTS threats/ vulnerabilities are one of the primary instruments to execute non conventional warfare

such as NCW. We need to understand their dynamics both from the defender and aggressors mindset to be able to develop a long term comprehensive approach.

<u>Conceptual Framework of National Security: Traditional Versus Non-</u> <u>Traditional Security Threats</u>

Globalization and the resultant interdependence and interconnectedness have resulted in national security of nations too becoming interlinked. This has necessitated a change in the way states approach these challenges, shifting from an exclusive statecentric approach to an active cooperative and collaborative societal approach to ensuring security, both traditional and non-traditional and arrive at comprehensive policies. We need to understand what contemporary traditional and non-traditional issues are and whether there is a need to make a distinction between them while dealing with them. The Cold War era under currents and resultant threat calculations led a majority of Western think tanks and policy making to equate security studies primarily with military strategy. According, a focus on threat manipulation and force projections became central to security studies during this period. Additionally, it is simpler for political leaders to concentrate on military dangers rather than nonmilitary security challenges and to rally support for policies aimed at a military foe, rather than to pursue non-military strategies that involve diverse methods of influence and necessitate a more comprehensive comprehension and cooperation to address. However, the collapse of the erstwhile Soviet Union unequivocally ended the twoway strategic competition that was fundamental to the Cold War security calculus. This fundamental shift away from the bipolar world order in international security propagated a mindset for expanding the security discourse toward a wider range of security concerns.

The post-Cold War re-conceptualizations that brought a host of so-called 'non-military' issues into the security conversation did so in large part because it was hypothesized that such issues could cause conflict and instability. Unsurprisingly, therefore, proposals for security expansion extended to traditionally military circles as well. In 1992, the sitting North Atlantic Treaty Organisation (NATO) Secretary General Manfred Worner argued that "the immense conflict building up in the Third World, characterized by growing wealth differentials, an exploding demography, climate shifts and the prospect for environmental disaster, combined with the resources conflicts of the future, cannot be left out of our security calculations". Similarly, in 1992 the London based International Institute for Strategic Studies, an organization with a history of traditional security analysis, expanded its focus from the "influence of modern and nuclear weapons of warfare upon the problems of strategy, defence, disarmament and international relations" to an encompassing agenda including "any major security issues, including without limitation those of political, strategic, economic, social or ecological nature" (Dadwal, 2015).

Comprehensive Security Theory (CST)

Barry Gordon Buzan (1983) a Professor of International Relations at the London School of Economics and his colleagues gave further attention to questions of who or what is being secured, and their work deserves particular attention given the lasting influence it has had over the field. The authors' CST engages with multiple referent objects and includes numerous non-military sectors in its gamut. Specifically, CST divides security enquiry into five sectors, each of which have unique and specific approaches to the referent object question:-

- (a) <u>Military Security</u>. This pertains to the interplay between the offensive and defensive military capabilities of states on two levels, as well as the perceptions of states regarding each other's intentions.
- (b) <u>Political Security</u>. This pertains to the stability of state organizations, the systems of governance, and the ideologies that legitimize them.
- (c) <u>Economic Security</u>. This pertains to the access of states to resources, finances, and markets needed to maintain a desirable level of welfare and state authority.
- (d) <u>Societal Security</u>. This refers to the sustainability of traditional patterns of language, culture, religious and national identity, and customs within acceptable conditions for their evolution.
- (e) <u>Environmental Security</u>. Concerns the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend.

Contemporary trends and challenges in food, environmental, energy, development and other sectors in the NTS domain are distinct and require urgent policy prioritization. Coherence and utility is possible within the NTS framework, provided the pitfalls are well understood and catered for in the planning. The problem is that, often, the term NTS is used to imply that these are second tier challenges worthy of second tier, or lower, strategic concern.

Key Takeaways

The Key takeaway of this chapter has been to identify and review emerging non-traditional security challenges holistically. The two fold intend has been firstly to understand how these emerging trends could affect the world at large in times to come and secondly to be able to guard against and concurrently device strategies/policies to

employ them as instruments of war to further National Interest. Our adversaries to may use these existing/ emerging vulnerabilities and their inter linkages to destabilize us to further their strategic interest. To some extend implementations of these indirect approaches has already been in vogue, especially if you analyse the overall strategy being adopted by countries like U.S., China and more recently the NATO in Ukraine. Most of these initiatives would come under the umbrella of hybrid warfare and have immense potential if harnesses optimally. In Indian context understanding and utilization of various facets of unconventional, asymmetric and NCW is still in the nascent stage. However, post the Pulwama suicide attack on a Central Reserve Police Force (CRPF) convoy and the Doklam and Galwan standoffs a paradigm shift seems to have taken place in our approach towards use of these instruments of war, which is a positive step towards ensuring national security and sovereignty in today's dynamic world environment.

CHAPTER 4

SPECTRUM AND LINKAGES OF ECONOMIC WARFARE INSTRUMENTS

Overview

In Adam Smith's (1776) "An Inquiry into the Nature and Causes of the Wealth of Nations," he introduces the concept of the "invisible hand of the market." This metaphorical term refers to the market forces of supply, demand and price that regulate production and consumption in the absence of government intervention. Smith delves into the principles of a free market and how individuals allocate resources through production and trade. He believed that human behavior and the processes for obtaining necessities for survival and comfort were predictable and quantifiable. Over time, and especially in the 20th century, economics has evolved and our understanding of it has become more sophisticated, allowing us to manipulate these processes and behaviors for specific outcomes, including using economics as a tool of coercion in times of conflict (Taillard, 2012). The spectrum of economic warfare interventions in vast and salient instruments of the same are discussed in the succeeding paragraphs.

SPECTRUM OF ECONOMIC WARFARE

Protectionism refers to any economic measures that restrict international trade for a particular nation. These policies are designed to protect domestic industries from foreign competition and can take various forms. They can range from imposing tariffs or taxes on imports, to banning exports or imports from a specific country, to providing subsidies to domestic companies to make their products more competitive.

Protectionist policies are often targeted towards a specific nation and are seen as a form of economic warfare. They are implemented in order to safeguard the domestic economy and protect domestic industries from being threatened by foreign competition. For example, a nation that imports a significant amount of low-cost manufactured goods might impose a tax on these goods in order to level the playing field for domestic producers who cannot compete with the lower prices. However, protectionist policies are not without their drawbacks. They can lead to trade wars and other forms of economic retaliation, ultimately causing harm to all participating nations. Additionally, even in cases where the intention is to avoid violent engagements, relying solely on protectionist measures can lead to unintended consequences and may not necessarily achieve the desired results. Overall protectionism is a complex issue that has far-reaching implications for international trade and the global economy. While it may provide short-term benefits for domestic industries, its long-term effects can be detrimental and lead to economic instability and global trade disputes. As insight into the spectrum of basic economic warfare tools prevalent is discussed in succeeding paragraphs.

Embargoes

As defined by Liberto (2022), "An embargo is a trade restriction, typically adopted by a government, a group of countries or an international organization as an economic sanction". The objective is to penalize a targeted country for its actions or policies deemed as undesirable. Embargoes can be total or partial, and can apply to various areas of trade, such as arms imports. Instead of resorting to military action, embargoes serve as a tool to curb and discourage objectionable behavior, often in response to human rights violations and armed conflict. A well-enforced embargo can be highly effective in isolating a targeted country and limiting its access to

international trade. However, countries that heavily rely on global trade or technology imports are particularly susceptible to the effects of embargoes. On the other hand, authoritarian regimes that are determined to resist may be able to do so for extended periods of time, even at the expense of their citizens' standard of living.

Embargoes are often found to be ineffective in achieving the desired outcome of altering the policies or government of the targeted country. For instance, the longstanding U.S. embargo imposed on Cuba since 1962 has failed to bring about a change in the communist party's rule or to promote political dissent. Similarly, the oil embargo imposed by Arab members of Organization of the Petroleum Exporting Countries (OPEC) during the 1973 Arab-Israeli War did not diminish U.S. support for Israel. However, embargoes can be successful in exerting pressure on the targeted country. For example, the Arab oil embargo of 1973-1974 resulted in fuel shortages, rationing, and increased gas prices, leading to a rise in the cost of foreign policy for the United States. The limited trade restrictions imposed on South Africa in the 1980s, along with economic sanctions from several countries, including the U.S., were instrumental in bringing about the end of apartheid. The limited trade sanctions imposed on Russia after its 2014 invasion and occupation of parts of Ukraine were insufficient in deterring renewed Russian aggression in 2022. Since February 2022, the broader U.S. and allied sanctions have reportedly resulted in the denial of semiconductors crucial for military electronics and parts required for tank manufacturing to the Russian military. Apart from their limited success in influencing policy changes, embargoes have been criticized for causing harm to the population that has no control over the objectionable policies. For example, the international economic embargo imposed on Iraq following its 1990 invasion of Kuwait faced criticism for affecting the poorest and sickest Iraqis the most. Similar arguments have been made in opposition to the U.S. embargo on Iran for its violations of the Nuclear Non-Proliferation Treaty (Liberto, 2022).

Blockade

A blockade is a measure taken by one nation with the aim of inhibiting trade between the target nation and other nations or entities (Encyclopedia Britannica, 2019). It is a restrictive strategy that impedes commerce and communications between the target nation and others. Since nations are usually not amenable to written requests to stop trading, the implementation of this policy often necessitates the deployment of military forces to physically hinder shipments entering or leaving the target nation. This is why the term "blockade" is used to describe such a policy (Definition of Blockade, 2023). A full blockade involves the use of force by a nation to patrol and protect the main shipping routes used by the target nation. However, such blockades are susceptible to the same issues as embargoes, including higher costs and inefficiencies for the enforcing nation in terms of goods it would have imported from the target nation. Moreover, full blockades cannot precisely target certain groups, leading to general economic difficulties that affect workers and businesses instead of organizations linked to the conflict (Taillard, 2012).

Blockades are considered to be more detrimental than embargoes as they aim to restrict a nation from conducting trade with any other country, instead of just the issuing nation. Despite this, blockades prove to be of little strategic significance on their own as they fail to effectively target a nation's military. For a blockade to be effective, it must be accompanied by advantageous circumstances, such as the targeted nation relying on a single source for supplies, or be properly anticipated and managed. The use of submarine warfare demonstrated some impact during the First

World War, however, it became much more relevant and noteworthy during World War II when German U-boat packs aimed to establish a blockade in Europe.

Tariffs & Quotas

A tariff refers to a tax imposed on a specific category of imports. The focus of tariffs is usually narrow and specific to certain goods imported from a particular country, as opposed to all goods from a nation (Nevil, 2022). The primary objectives of tariffs are to increase government revenue and/or raise the market price of foreign goods. In instances of economic conflict, tariffs are solely imposed for the latter purpose. When a nation is targeted by a tariff, it is common for the targeted nation to respond by implementing a countervailing duty, also known as a retaliatory tariff, which affects exports from the original issuer. For example, in 2009, the United States imposed a 35% tariff on tires imported from China, alleging that Chinese tire manufacturers were engaging in unfair trade practices, such as selling tires below market value, also known as "dumping." Despite the predictions of the Tire Industry Association, this tariff did not result in any improvement for the American tire industry. China also experienced economic consequences and, in response, imposed a countervailing duty on poultry imports from the United States, with some tariffs reaching as high as 105.4%. This resulted in a self-destructive political cycle where both nations engaged in domestic economic policies that had negative impacts on each other's economies (Taillard, 2012).

Another trade measure that is similar to tariffs is a quota, which places a limit on the number of imports allowed into a nation. Like tariffs, quotas are usually targeted to specific goods from specific nations, and the result is the same, i.e., a decrease in the number of imports, but unlike tariffs, the government does not receive any revenue from quotas. This is one of the reasons why quotas are less common than

tariffs. Despite the different approaches, tariffs and quotas have similar impacts on both the target nation and the issuing nation, and the benefits and risks are equally present.

During the Trump administration, several rounds of tariffs were imposed, which resulted in a total tax increase of approximately \$80 billion. The Biden administration has maintained the majority of these tariffs, with the exception of suspensions on certain imports from the European Union and the replacement of tariffs with Tariff Rate Quota systems for steel and aluminum imports from the European Union and United Kingdom and for steel imports from Japan. Currently, the total amount of tariffs in place stands at \$52.6 billion. It should be noted that the revenue generated from the tariffs will be lower than expected, as they reduce real income, thus offsetting some tariff revenue through the decrease of other tax revenues. According to the Tax Foundation model, the tariffs imposed during the Trump administration and still in place under the Biden administration will lead to a reduction in long-run Gross Domestic Product (GDP) by 0.22 percent (\$55.7 billion), a decrease in wages by 0.14 percent, and the elimination of 173,000 full-time equivalent jobs. Additionally, other countries have imposed retaliatory tariffs on U.S. exports, which is estimated to further reduce U.S. GDP by 0.04 percent (\$9.4 billion) and result in the elimination of 29,000 full-time equivalent jobs (Refer Table 1). Therefore, it is crucial to conduct a cost-benefit analysis and complement it with other means of hard power, such as war, before imposing tariffs and quota systems.

	Total	Section 232 – Steel and Aluminum	Section 301 - China (25% on 34, 16, 200; 7.5% on 112)	Solar Panels and Washing Machines
Tariff Revenue	\$74.7	\$2.9	\$71.2	\$0.6
Long-run GDP	-0.22%	-0.01%	-0.21%	0.00%
GDP (\$2018)	-\$55.7	-\$3.6	-\$51.7	-\$0.4
Wages	-0.14%	-0.01%	-0.13%	0.00%
FTE Jobs	-173,000	-11,000	-160,000	-1,000

Table 1: Impact of Remaining Trump Administration Tariffs

(Source: Tax Foundation and Growth Model, March 2018)

Subsidies and Dumping

The objective of tariffs as stated by Grahem (2020) is to make imports more expensive for domestic consumers, while the aim of subsidies is to make exports cheaper for foreign consumers. Subsidies are financial contributions made to businesses or economic sectors with the purpose of reducing prices or enhancing profitability. Although subsidies are not exclusively utilized for exports, they can also be given for domestic purposes, such as for farmland to lower the cost of food for domestic consumption or for businesses to cover the expenses of hiring new employees during a government's efforts to increase employment rates. During economic conflict, subsidies are used to increase the volume of a specific product or products, potentially all products, being purchased from the businesses of the issuing nation by consumers of the targeted nation. They can also be utilized to make goods produced within one's own nation cheaper to reduce the volume of exports purchased domestically. The aim of both tariffs and subsidies is to redirect profits and production from the businesses of the target nation and redirect them to benefit one's own businesses. Countering subsidies can be a difficult task, as a foreign nation may

issue a subsidy on their own exports to offset the price difference caused by tariffs on those exports. If the aggressor nation were to issue a subsidy to make their own goods cheaper, it would lead to greater profitability for them. Countervailing duties can be used to counter subsidies issued on exports, but the costs of subsidies can be extremely high and can lead to domestic dependency on them, making them a resilient approach to economic warfare despite a defending nation's efforts to negate them.

The practice of exporting goods through the use of subsidies constitutes a form of "dumping" in international trade. Dumping refers to the act of exporting goods at a value below the fair market value to other countries. This can be achieved through the utilization of government subsidies or through the predatory pricing practices of individual companies. The objectives and consequences of dumping are similar to those of subsidies. For instance, in the year 2000, China accused Japan and South Korea of engaging in dumping of processed steel products, including cold-rolled and hot-rolled steel, in the Chinese market. The Chinese government argued that the Japanese and South Korean governments were providing subsidies to facilitate the inexpensive sale of steel in foreign markets as a means to revive their struggling economies. In response, China imposed a countervailing duty on the imported steel to counteract the effects of the claimed subsidies. Subsidies and dumping can be effective tools in certain scenarios and need to be use with due discretion.

Freezing of Capital Assets

The freezing of capital assets is a valuable but underutilized form of economic sanction that has the potential to cause significant harm to political leaders and elites while minimizing harm to innocent civilians. The historical record of 115 instances of economic sanctions from 1914 to 1989, shows that asset freezing was rarely used and was often limited to cuts in bilateral foreign aid, which had little impact (Rogers *et al.*,

1996). Many of these sanctions were imposed unilaterally, primarily by the United States, and were done for symbolic or cosmetic reasons, which further limited their effectiveness. The notion that freezing assets may discourage future depositors is probably exaggerated. Firstly, it's probable that only unscrupulous leaders would be dissuaded from depositing, and these individuals are few in number, meaning the impact on banking profits is minimal. Secondly, despite the US freezing assets more frequently in the last fifteen years (e.g. Iran, Libya, Panama, Iraq), no evidence has been found that the costs to the US banking industry are substantial. Lastly, the potential loss of future deposits should be weighed against the significant benefits that freezing assets can bring. It doesn't have to be implemented on a global scale to be effective. Furthermore, there is no evidence that the US banking industry has suffered significant losses from asset freezes, and any costs must be weighed against the benefits of freezing assets. By reducing the pool of money available to the target state, asset freezing can force the use of unfrozen accounts and put pressure on the ruling regime to change its behavior. The recent asset freezes in Iraq and Haiti, and the World Court's decision to release the assets of Ferdinand Marcos, are encouraging signs that the anti-freezing culture is fading, and that the international community is becoming more willing to use this tool. In conclusion, the freezing of assets is a powerful and precise form of economic sanction that can be used to force change in dictatorial regimes, reduce the likelihood of conflict, and serve as a deterrent to future dictators. As the anti-freezing culture begins to fade, it raises the possibility of greater cooperation on asset freezing among the industrial democracies.

Debt Trap Diplomacy

The term "Debt-trap diplomacy" was first introduced by Indian academic Brahma Chellaney in 2017. It refers to a lending strategy where a creditor country or

institution extends excessive credit to a borrowing nation with the aim of increasing its political influence. When the debtor country becomes unable to repay the loan, the creditor may demand economic or political concessions as a condition for further lending or debt relief. The details of these loan agreements are often kept confidential. The borrowed funds are often used to pay for contractors and materials sourced from the lender. China has been accused of using this tactic to further its national interests. In China's "debt-trap diplomacy," large loans are provided to developing nations, usually for infrastructure projects, with the intention of trapping those countries in a cycle of debt and dependence on China. If the borrowing country is unable to repay the loan, China may use this as an opportunity to gain control over the country's resources, land, or strategic assets. This has been alleged to have happened in several countries, such as Sri Lanka, Pakistan, and the Maldives. (The Complete Story of China's Debt-Trap Diplomacy, 2023).

In July 2017, the Sri Lankan government and the China Merchant Port Holdings Company signed a contract that involved the provision of a 1.2 billion dollar loan to Sri Lanka in exchange for a long-term lease on Hambantota Harbor and 15,000 acres of Sri Lankan land. However, the COVID-19 pandemic has severely impacted Sri Lanka's economy, leading to its worst economic downturn and default on most of its foreign debt, including the loan from China. As a result, China has taken control of the assets through a 99-year lease due to Sri Lanka's inability to repay the debt. Similarly, Pakistan, which has a weak economy, has also borrowed heavily from China and awarded various strategic projects to the country under the Belt and Road Initiative. Now, China is demanding repayment of around 55.6 million dollars from Pakistani power producers. China's stringent approach to recovering its money has put

Pakistan in a similar economic crisis as Sri Lanka, giving China a strategic advantage in expanding its power and influence. Between 2000 and 2014, African countries increased their borrowing from China in an effort to reduce their dependence on the International Monetary Fund and the World Bank. By 2016, African debt to China had reached 30 million dollars, with the largest debt owed by Angola, Ethiopia, Zambia, the Republic of Congo, and Sudan.

China's international loans have long surpassed 5 percent of the global GDP (Chellaney, 2021), making it a major lender that surpasses traditional finance institutions such as the World Bank, the International Monetary Fund, and the creditor nations of the Organization for Economic Cooperation and Development (OECD) combined. By offering large loans with attached conditions to financially struggling states, China has not only increased its influence over them, but has also trapped some in debt that undermines their sovereignty. The latest example of this "debt-trap diplomacy" is seen in the small nation of Laos, which recently entered into a 25-year concession agreement that allows a Chinese-owned company to control its national power grid, including its ability to export electricity to other countries. This demonstrates that China continues to utilize debt as a means to further its economic, political, and military presence, in line with its goal of advancing its national interests (Chellaney, 2021).

Currency War

A currency war occurs when nations attempt to lower the value of their currency through various means, in an effort to gain an unfair advantage over one another. However, this action can lead to a situation of competitive devaluation, where each country strives to decrease the value of their currency. This competition results in an imbalance in trade and can lead to increased economic growth, among

other effects. History has shown us that there have been instances where nations have deliberately engaged in competitive devaluations. (Pettinger, 2015) Currency wars are a common phenomenon among nations in an effort to gain a competitive edge in international trade. By devaluing their currency, countries make their exports cheaper and more attractive to foreign buyers, thereby boosting their export businesses, creating jobs, and driving economic growth. The devaluation also attracts foreign investment, as foreign investors find the country's assets more affordable, leading to an increase in foreign direct investment and potentially even the acquisition of the nation's natural resources. While some countries have a fixed exchange rate and can simply announce a reduction in their exchange rate, most countries operate with a flexible exchange rate. In order to devalue their currency, they need to increase the money supply, causing an excess of supply over demand, which results in a drop in the currency's value. The central bank has various tools at its disposal to increase the money supply, such as open market operations or quantitative easing. Additionally, the government can also use expansionary fiscal policy, such as spending more or cutting taxes, to influence the currency's value. The significance of currency wars is demonstrated by the fact that as early as the 1970s, the United States has been conducting high-profile war gaming scenarios at the Applied Physics Laboratory near Washington D.C. to test the hypothesis of a worldwide currency war and its impact on national security (Rickards, 2011). The results of these simulations are not widely known, but they demonstrate the importance that leading powers accord to this issue. It is therefore critical for countries to have a deep understanding of the dynamics of currency wars and how they can safeguard their national interests.

The manipulation of currency exchange rates is just one of the many economic weapons used by countries. Other tactics include trade protectionist policies, strategic

buying and selling of sovereign wealth funds and bonds, punitive taxes and regulations on goods and services from other nations (such as the U.S. tax on Chinese imports), economic sanctions (such as on North Korea and Iran), and economic isolation (such as the isolation of Qatar by other Gulf nations). These strategies can be used alone or in combination, and can range from subtle actions within the bounds of the World Trade Organization (WTO) to more overt actions, depending on a country's level of influence in the global economy. No nation is immune to these practices, making it crucial to have an understanding of these mechanisms in order to defend against them.

Cooley (2008) in his book "Currency Wars: Forging Money to Break Economies" sheds light on the dark side of currency wars - counterfeit money. According to Cooley, counterfeiting is not just a crime committed by organized groups, but it can also be used as a weapon of economic warfare by nations seeking to destabilize their enemies. He argues that this problem has reached epidemic proportions and is used by states such as North Korea and Iran to fund their weapons programs. Cooley's research demonstrates that counterfeiting has a long history, playing a significant role in events such as the American and French Revolutions, the Napoleonic era, the American Civil War, and both World Wars. He also highlights the involvement of KGB, CIA, IRA, Hezbollah, the Medellin cartel's and the Chinese Triads in grand-scale forgery. The author warns that counterfeit currency can have severe implications for global economic, political, and social stability, making it the world's quietest weapon of mass destruction.

Chinese Devaluation of Yuan (2015)

On August 11, 2015, the People's Bank of China (PBOC) sent shockwaves through the global markets with its surprise devaluation of the Yuan by more than

3%. This marked the largest single drop in the currency's value in two decades, since 2005. Despite being viewed by many as a desperate attempt to revive a slowing economy, the PBOC insisted that the devaluation was part of its efforts to shift towards a market-oriented economy (*The Impact of China Devaluing the Yuan in 2015, 2021*). The devaluation had far-reaching consequences around the world as listed below:-

- (a) For a decade, the yuan experienced consistent growth against the US dollar, causing investors to become confident in its stability and increasing strength. However, a sudden drop shook these investors, leading to significant decreases in stock markets across the United States, Europe, and Latin America, as well as depreciation in most global currencies (Amadeo, 2022).
- (b) Effect on the IMF. The devaluation of the yuan by China was also driven by the country's desire to be included in the International Monetary Fund's (IMF) Special Drawing Rights (SDR) basket of reserve currencies. The SDR is a global reserve asset that IMF members can use to buy domestic currency in foreign exchange markets to stabilize exchange rates. The IMF reassesses the currency composition of its SDR basket every five years. In 2010, the yuan was not included because it was not deemed "freely usable." However, the IMF welcomed the devaluation, which was justified as a market-oriented reform, and the yuan was finally included in the SDR basket in 2016. Within the basket, the yuan holds a weight of 10.92%, surpassing the weights of the Japanese yen (JPY) and U.K. pound sterling (GBP) at 8.33% and 8.09%, respectively. The cost of borrowing funds from the IMF for its 188 member nations will thus be influenced by China's interest and currency rates

as the rate of borrowing is linked to the interest rate of the SDR (Special Drawing Rights, 19 Apr 18).

- (c) Despite China's assertion of market-oriented reforms for its economy, many were skeptical of its true intentions. The devaluation of the currency came just days after the release of the July 15 export data, which showed a 8.3% decline from the previous year. This fueled suspicions about the underlying motives for the devaluation and suggested that the Chinese government was attempting to revive its slowing economy and prevent further decline in exports. Exports play a significant role in China's economy, and by devaluing its currency, the price of exports was reduced, giving China a competitive advantage in the international market. At the same time, the weaker currency made imports more expensive, which encouraged the production of domestic substitutes to support the domestic industry.
- (d) <u>Impact on Global Trade Markets</u>. Due to its status as the world's largest exporter and the second-largest economy, any shift made by China can have major impacts on the global economy. The devaluation of Chinese goods has led to a decrease in trade revenues for smaller, export-driven economies. This can be particularly devastating for nations like Vietnam, Bangladesh, and Indonesia, which heavily rely on their footwear and textile exports and are burdened by debt. As China's cheaper goods flood the global marketplace, these countries may experience significant economic hardship.
- (e) <u>Impact on India</u>. Due to China's choice to devalue the Yuan against the US dollar, there was a worldwide increase in demand for dollars, including in India. Investors sought the stability of the dollar, causing the

Indian rupee to plummet to a two-year low against the dollar, remaining weak throughout the latter half of 2015. The fear of further emerging market risk caused by the yuan's devaluation led to heightened volatility in the Indian bond market, further weakening the rupee. In industries such as textiles, apparel, chemicals, and metals, China and India are competitors, and a weaker Yuan results in decreased profits for Indian exporters and increased competition. Furthermore, it enables Chinese manufacturers to flood the Indian market and undercut local producers. From 2008-2009 to 2014-2015, India's trade deficit with China nearly doubled.

LINKAGES OF ECONOMIC WARFARE INSTRUMENTS WITH OTHER INSTRUMENTS OF HYBRID WARFARE

The 21st Century has seen a shift in the way wars are fought and won. The traditional warfare of the past, which involved physical armies and weapons, has given way to a new form of conflict known as hybrid warfare. This type of warfare involves the use of both conventional and unconventional methods of warfare, including economic, cyber, and psychological operations. Economic warfare refers to the use of economic measures as a tool of conflict, with the aim of achieving strategic objectives. It encompasses a range of activities such as sanctions, blockades, embargoes, currency manipulation, and cyber attacks aimed at the financial and economic systems of adversaries. In the current era of globalization and interdependence, economic warfare has become an increasingly prevalent form of conflict. In recent years, economic warfare has become closely linked with other forms of hybrid warfare, such as cyber warfare, resource warfare, information

warfare, legal warfare, media warfare, and environmental warfare. These instruments are often used in combination to achieve maximum effect, and they are particularly effective in undermining the stability and resilience of target states.

Cyber warfare refers to the use of computer networks and the internet to disrupt, destroy, or compromise the ability of an adversary to operate. It involves the use of malware, hacking, and other forms of digital attacks to achieve strategic goals. In the context of hybrid warfare, cyber warfare is used as a tool of economic warfare. For example, a state may use cyber attacks to disrupt the financial systems of an adversary, making it more difficult for the adversary to access resources and finance its military. In this way, cyber warfare can be used to indirectly achieve strategic objectives through economic means. There are several ways in which cyber warfare can support economic warfare. For example, cyber attacks can be used to target key infrastructure such as power grids and financial systems, causing significant disruption and weakening the ability of an adversary to respond to military threats. Cyber attacks can also be used to steal sensitive financial and economic information, providing valuable intelligence to support economic warfare operations. Additionally, cyber attacks can be used to manipulate financial markets, causing instability and undermining confidence in the economy of an adversary. Thus the linkages between economic warfare and hybrid warfare instruments, particularly cyber warfare, are significant. Economic warfare has become an increasingly important aspect of hybrid warfare, and cyber warfare is used as a tool to achieve economic goals. As the world becomes more interconnected and dependent on digital systems, the role of cyber warfare in supporting economic warfare is likely to grow. It is important for states to understand these linkages and take steps to defend against cyber attacks that may support economic warfare operations.

Cyber based economic warfare involves hostile actions using cyber technology aimed at weakening a nation's economy to reduce its political and military influence. While economic warfare has been around for centuries, today's adversaries have advanced asymmetric cyber tools to strike at the very foundation of a nation's strength: its economy. The Chinese and North Koreans are two of the most active players in this realm. The commonly held perception is that China steals trade secrets to benefit its own industries and North Korea steals money due to its lack of an economy. However, these motivations only scratch the surface of a much more comprehensive strategy that we are only starting to grasp. For decades, China has been engaged in an extensive campaign of intellectual property theft and increasingly, they are using cyber technologies to target almost every sector of the US economy. Unfortunately, Washington and its allies have been slow to recognize the threat due to a tendency to view each attack in isolation rather than as part of a coordinated campaign. North Korea, on the other hand, has conducted waves of destructive cyber attacks against South Korea not to eliminate its business competitors but to disrupt elements of the South Korean economy, thereby sapping its strength, both financially and militarily. North Korea's per capita GDP of around \$1,300 may partly explain their involvement in the WannaCry ransomware attack and the Bangladesh bank heist, as they seek ways to acquire cash. However, their ultimate goal is not limited to financial gain but also includes leveraging any capability to reduce the military advantage of the US and South Korea. Targeting economies through cyberattacks could create panic in markets and streets, giving North Korea a potential battlefield advantage. While China's actions are often seen as corporate espionage, North Korea's activities may appear to be criminal in nature. Regardless, the US should not be fooled into believing that these attacks are not a threat to national security and part of a larger adversarial campaign plan (Kuo, 2018).

Resource warfare involves the control and manipulation of key resources, such as oil, gas, water, minerals, and food. The aim is to disrupt the normal functioning of economies, create scarcity, and increase dependence on the controlling state. For example, the use of sanctions or blockades to restrict the flow of key resources can have a profound impact on the stability and resilience of target states, especially if they are heavily dependent on those resources. As per some experts, the Iraq war was probably the first of this century's "resource wars", in which powerful countries use force to secure valuable commodities for themselves. It is predicted that with human population growing, natural resources dwindling and seas rising because of climate change, the squeeze on the planet would lead to more such conflict (UK Government's Former Chief Scientific Adviser Says Iraq War Was First of Global "resource Wars," 2009). Information warfare refers to the use of information and communication technologies to manipulate public opinion and undermine the credibility of political and economic systems. This can include propaganda, disinformation, hacking, and cyber attacks aimed at critical infrastructure and financial systems. Information warfare is particularly effective in creating confusion and instability, and it can be used to undermine confidence in political and economic systems, which can ultimately lead to their collapse. Legal warfare involves the use of legal measures to achieve strategic objectives. This can include the use of international treaties and laws to restrict the actions of target states, as well as the manipulation of domestic legal systems to achieve political objectives. Legal warfare is often used to create confusion and uncertainty, which can undermine the stability and resilience of target states. Media warfare refers to the use of media to manipulate

public opinion and shape perceptions of events. This can include the use of media to create propaganda and disinformation, as well as to spread false or misleading information. Media warfare is particularly effective in creating confusion and instability, and it can be used to undermine confidence in political and economic systems. Environmental warfare refers to the use of environmental degradation as a tool of conflict. This can include the release of toxic substances, the destruction of ecosystems, and the manipulation of climate and weather patterns. Environmental warfare is particularly effective in creating instability and undermining the resilience of target states, especially if they are heavily dependent on their natural resources.

Key Takeaways

If proactive measures are not taken, our economy could become more susceptible to hostile actors who seek to diminish our military and political influence. Although comparisons to the early days of the nuclear era may be excessive, we can still draw valuable lessons from the extensive planning and development of intelligence gathering tools, target identification methods, and analytical processes that were implemented to address that threat. In this new reality, we have a lot of work to do. The intelligence community must maintain its focus on understanding the capabilities and objectives of our adversaries. The government should invest more in research and development that the private sector may not pursue. There must be a comprehensive, government-wide process of observing, assessing, making decisions, and taking action to accurately evaluate the enemy's escalation tactics. And it's critical that we work closely with our allies to protect the networks and systems that are vital to our economy. In conclusion, economic warfare is closely linked with other forms of hybrid warfare, such as resource warfare, information warfare, legal warfare, media warfare, and environmental warfare. These instruments are often used in combination

to achieve maximum effect, and they are particularly effective in undermining the stability and resilience of target states. It is important for states to be aware of these interconnections and to take appropriate measures to protect themselves against the potential impacts of economic and hybrid warfare.

CHAPTER 5

EFFICACY OF ECONOMIC WARFARE INSTRUMENTS

Efficacy Versus Effect: Connotation

To understand the true nature and potential of economic warfare instruments we need to understand the subtle difference between efficacy/ effectiveness and effect. Almost all economic warfare interventions will have some effect, be it in terms of economic, social or political fallouts. However efficacy/ effectiveness would mean it has achieves its intended aim in the desired manner and quantum resultantly inducing the requisite response/ reaction manifesting in defending/ promoting national interest at large. The two biggest economies of the world U.S. and China have had two distinct approaches towards leveraging economic warfare for furthering national interest. U.S. by virtue of being a superpower for most part of the modern era has had an inherent advantage to begin with. It has always been belligerent especially post the breakup of USSR and followed a more overt approach. China on the other hand initially focused singularly on silently building up the required economic prowess to support and complement economic warfare strategies. Also, initially it primarily employed covert methods or indirect approach such as debt trap strategy ranging from String of Pearls to BRI for garnering strategic gains. Recently though boosted by both its military and economic power it has become more belligerent, as is obvious in the context of the ongoing Taiwan issue and its stand on the Ukraine War. A detailed insight into the efficacy of the approach adopted by both the countries is attempted in this chapter through the medium of case studies based mainly on secondary data, to get a realistic perspective. The Russia-Ukraine War in economic warfare realms has also been studied, although it is probably a bit premature to comment on its efficacy as yet. The intent is to garner a realistic understanding of the way various forms of economic interventions have manifested over time and assess their efficacy under various geo-economic scenarios.

THE U.S. APPROACH TO ECONOMIC WARFARE: CASE STUDIES

The Landscape of Contemporary Sanctions

Since the early days of the Republic, American leaders have utilized sanctions to promote their national agenda. In December 1807, with support from the Jefferson administration, the Congress passed the 'Embargo Act', the first of the many U.S. sanctions. The agenda was to punish U.K and France for seizing U.S. ships and intimidating its sailors during the Napoleonic Wars. The law prohibited most trade with both the targeted countries. Unfortunately for the U.S., the Embargo Act had little coercive effect. On the contrary the sanctions were equally damaging to the U.S. economy as they were to the British and French economies (Irwin, 2005). Also, both targeted countries refused to make any political compromises. Thus, within just 18 months, U.S. repealed the 'Embargo Act', due to its self inflicting cost and ineffectiveness. The emergence of coercive economic interventions methods can be attributed to the globalization of commercial markets, the expansion of global finance, and the pursuit of non-military strategies to protect American interests and extend its global leadership influence. The U.S. has a long history of economic coercion, and in the years following the September 11, 2001 water shed event, financial sanctions have assumed a dominant role in the National Security Strategy of the U.S. and its allies. This era witnessed a tremendous rise in the use of financial sanctions as a policy instrument, as well as significant innovation in the type of sanction instruments utilized by policymakers to combat security risks and further national interests. Despite this new found stimulation for employing the coercive instruments of economic statecraft, reservations still remained concerning the effectiveness and sustainability of economic sanctions as they were being employed, as well as their place in the overarching gamut of the National Security Strategy. Thus, there is a need to evolve an understanding of the functioning and implementation nuances of various types of sanctions to enhance their effectiveness.

Before the turn of the 21st century, there appeared to be a broad consensus in Washington that economic sanctions were not effective enough. A majority of policymakers and specialists had internalized the difficult lessons of the post 1991 Iraq sanctions (Drezner,1999). The broad but erroneous conviction that the U.N. sanctions regime had failed to prevent Saddam Hussein from amassing weapons of mass destruction was a driving force for the 2003 invasion of Iraq (Lopez & Cortright, 2004). As the sanctions have grown as a tool of statecraft, many statesmen are now more favourable toward economic penalties. The argument is that the understanding of 'economic sanctions' by policymakers has evolved significantly over time. Currently, targeted financial measures are associated with economic sanctions. The emergence of targeted financial sanctions resulted from an iterative policy process meant to minimize the adverse impact of broad trade embargoes and mitigating the connection between trade restrictions and the rise of corruption (Andreas, 2005). As a result of the Iraq case and other developments in the world of sanctions, there was a movement to develop alternatives to traditional trade sanctions. This resulted in the development of "Smart Sanctions," which would inflict costs on the target regime and its supporters/ targeted groups while minimizing the collateral damage that frequently accompanied trade embargoes. Asset freezes, travel bans,

restrictions on luxury goods imports and arms embargoes were the most prominent examples of smart sanctions. Smart sanctions, apart from financial sanctions, seem to have a lower efficacy in eliciting policy concessions compared to conventional trade embargoes, likely due to their failure in inflicting substantial costs on the target economy. During the Cold War and before, there were financial sanctions, which were more effective and shorter lasting than trade sanctions (Shagabutdinova & Berejikian, 2007). At the turn of the century, the threat of targeted financial sanctions was also effective in pressuring nations to alter their anti-money laundering regulations (Baccini, 2008). Financial sanctions, in comparision to other forms of targeted sanctions, imposed considerable costs on target nation's economy (Eckert, 2008). Another distinguishing characteristic of financial sanctions was that they created substantial incentives for third parties to comply with the sanctions or face severe consequences. In 2014, the Department of Treasury settled a \$10.5 million civil liability case against Fokker Services B.V. for more than 1,150 alleged violations of U.S. sanctions against Iran and Sudan (U.S. Department of the Treasury, 2014). The different types of sanctions employed by the U.S. over the years including their pros and cons are categorized in Table 2 below. Targeted financial and sectoral sanctions combine the narrower focus of smart sanctions with the greater impact of trade sanctions on the target, making them effective (Rosenberg & Goldman, 2016).

ТҮРЕ		DESCRIPTION	PERCEIVED PROS	PERCEIVED CONS
TRADE SANCTIONS		Curtail cross-border investment and trade of goods and services	Maximizes economic effect on target country	Negative effect on civilian population; easier to circumvent
TARGETED SANCTIONS (AKA SMART	FINANCIAL	Disrupt ability of individ- ual or entity to access international financial system, rather than target economy as a whole	Maximizes effect on target; strong private sector participation amplifies economic and commercial effects and deters evaders and violators	May undermine dollar's status in international financial markets; may have an impact on uninvolved third parties
SANCTIONS)	NON- FINANCIAL	Disrupt travel and visa rules for individuals	Minimizes collateral damage; narrow focus maximizes chances of multilateral cooperation	Lack of clear success at generating concessions; questions about due process rights of target
SECTORAL SANCTIONS		Prohibit specific trans- actions with specific economic sectors, rather than target the economy as a whole	Minimizes collateral damage; narrow focus maximizes chances of multilateral cooperation	Lack of clear success at generating decisive outcomes

Table 2: A Typology of U.S. Sanctions

(Source: CNAS Report on The New Tools of Economic Warfare by E Rosenberg et al)

Effects of Sanctions on Targeted States

Since most economic sanctions could have a long gestation period and may not always show immediate results Rosenberg et al (2016) under the aegis of Center for a New American Security (CNAS), titled "The New Tools of Economic Warfare: Effects and Effectiveness of Contemporary U.S. Financial Sanctions" studied some of the contemporary claims and counterclaims regarding the use of U.S. economic sanctions since the 9/11 twin tower terrorist attacks in 2001 till 2016 encompassing a period of 15 years. The aim was to examine countries subject to sanctions by analyzing a dataset that compares them to "peer economies" with comparable regional, economic, and political characteristics. In order to evaluate the impacts and efficacy of modern coercive economic measures, information was collected on all instances of economic sanctions imposed by the U.S. from 2001 to 2016. Each sanctioned nation was compared to its peer group to determine whether the implementation of sanctions had significant effects on the target's economy and

political system. The performance of sanctioned countries was examined and tabulated across a wide range of economic and political measures such as Measures of economic performance include GDP trend, inflation, investment, exports, imports, current account balance etc. The summary of effects of sanctions imposition on the target country's economy and polity are as compiled below.

- (a) Overall Success Rate. The findings suggest that there were nine successful outcomes out of the 22 sanctions cases considered, indicating a 40.9 percent rate of success.
- (b) Measures of Economic Performance (Refer Table 3). The effect of sanctions on economic growth was predicted to be negative. The target's countries current account deficit was more likely to increase. Also, the imposition of sanctions causes investment to lag dramatically. Sanctions are correlated with stronger growth relative to the target's peer economies including inflation, imports and exports. Overall, it emerges that sanctions do not have a significant effect on GDP growth however; they do have a considerable impact on investment.

INDICATOR	PREDICTED EFFECT	ACTUAL EFFECT OF SANCTIONS AFTER FIRST YEAR	SIGNIFICANCE OF SANCTIONS AFTER FIRST YEAR	ACTUAL EFFECT OF SANCTIONS AFTER THIRD YEAR	SIGNIFICANCE OF SANCTIONS AFTER THIRD YEAR
GDP Growth (% change)	-	+		+	
Inflation (% change in average consumer prices)	+	+		-	
Volume of imports of goods and services (% change)	-	+		-	
Volume of exports of goods and services (% change)	-	+		+	
Total Investment (% of GDP)	-		***	-	***
Current Account Balance (% of GDP)	-	-	***	-	
*5% significance **1% significance	*** 0.1% significance				

Table 3: Economic Effects of U.S. Sanctions

(Source: CNAS Report on The New Tools of Economic Warfare by E Rosenberg)

(c) <u>Effect of Sanctions on the Political Risk Variables (Refer Table 4)</u>.

Statistics substantiate the finding that economic coercion affects political risk, which in turn reduces investment. Countries that are subjected to coercive economic measures face various risks such as economic risk, financial risk, political risk, risks to GDP growth, and risks to international liquidity. The implementation of sanctions results in a detrimental and notable impact on the target nation's socio-economic circumstances, as well as the level of support from the populace for the ruling regime.

INDICATOR	PREDICTED EFFECT	ACTUAL EFFECT OF SANCTIONS AFTER FIRST YEAR	SIGNIFICANCE OF SANCTIONS AFTER FIRST YEAR	ACTUAL EFFECT OF SANCTIONS AFTER THIRD YEAR	SIGNIFICANCE OF SANCTION AFTER THIRD YEAR
Civil Disorder	+	+		+	
Composite Risk Rating	+	+	**	+	**
Corruption	+	+	**	+	**
Economic Risk Rating	+	+	***	+	***
Financial Risk Rating	+	+	***	+	•••
Government Stability	-	-		-	
Political Risk Rating	+	+	***	+	***
Popular Support	-	-	*	-	
Risk for GDP Growth	+	+	***	+	**
Risk for Inflation	+	+	*	+	
Risk for International Liquidity	+	+	***	+	•••
Socioeconomic Conditions	-	-	***	-	***

Table 4: Effect of Sanctions on Perceived Risk

(Source: CNAS Report on The New Tools of Economic Warfare by E Rosenberg)

(d) Effect of Sanctions on Socio-political Factors (Refer Table 5).

The results strongly suggest that 21st century sanctions still have many negative second order effects on the target country (United Nations Development Programme (UNDP), Human Development Report, 2015). The World Bank measures of political stability, voice and accountability, government effectiveness and regulatory quality all decline appreciably in the target countries. However, the effect on political stability is insignificant after

three years. Regardless, the collective impact of sanctions may lead targeted regimes towards a less democratic trajectory.

INDICATOR	PREDICTED EFFECT	ACTUAL EFFECT OF SANCTIONS AFTER FIRST YEAR	SIGNIFICANCE OF SANCTIONS AFTER FIRST YEAR	ACTUAL EFFECT OF SANCTIONS AFTER THIRD YEAR	SIGNIFICANCE OF SANCTIONS AFTER THIRD YEAR
Human Development Index ^a	-	-	•	-	
Control of Corruption ^b	-	-	***	-	**
Government Effectiveness ^c	-		•••	-	***
Rule of Law ^c	-	-		-	
Regulatory Quality ^c	-	-	•••	-	***
Political Stability & Absence of Violence / Terrorism ^c	-	-	•	-	
Voice & Accountability ^c	-	-		-	
Corruption Perceptions Index ^c	+	+		+	*
Polity Score ^c	-	-	***	-	***

Table 5: Socio-political Effects of U.S. Economic Sanctions

(Source: CNAS Report on The New Tools of Economic Warfare by E Rosenberg)

Overall, economies that are subjected to sanctions experience decreased investment, heightened risk perceptions, an increase in authoritarian rule, lower quality of governance, and higher levels of corruption. Taken together, these factors would likely have an adverse effect on human development.

CASE STUDIES WITH RESPECT TO EFFECTIVENESS

To evaluate the effectiveness, rather than simply the impacts of sanctions, particular instances of sanctions were analyzed. These cases represent significant instances of U.S.-led sanctions and are linked to crucial current and prospective U.S. security interests. They were selected for their relevance to current and forthcoming policy-making, their prominence in terms of scope and significance among different

sanctions regimes spanning a period of 15 years, and the diversity of policy concerns they encompass. The cases include sanctions imposed over nuclear proliferation (Iran), civil war (Syria) and Effects of Sanctions against Transnational Threats. In my analysis, the criteria for gauging the effectiveness of U.S. sanctions should be the following:-

- (a) Ability to meaningfully shape the political environment and balance of political leverage, including through changed economic circumstances.
- (b) Catalyzing relevant communities, whether domestic or international, to take concerted action, which may involve sending messages regarding the targets of sanctions.
- (c) Achieving discrete, high level political objectives in support of overallU.S. policy goals.

CASE STUDY 1: SANCTIONS ON IRAN (NUCLEAR PROLIFERATION)

Background

Since 1979, U.S. foreign policy has restricted trade with the Islamic Republic of Iran, and since the hostage crisis, certain Iranian assets in the U.S. have remained frozen. The U.S. was able to impose a more extensive range of sanctions against Iran, such as a prohibition on direct financial aid, withholding of payments to countries or organizations that aided Iran, and an obligation to oppose multilateral lending, due to its classification as a "state sponsor of terrorism." In 1996, the Iran-Libya Sanctions Act (ILSA) was passed by Congress, which later was amended and rebranded as the Iran Sanctions Act (ISA), to limit substantial investments in Iran's oil sector. However, Iranian oil exports retained access to global markets, allowing the regime to

continue selling the commodity and allowing the country to run a sizable trade surplus due to export earnings denominated in dollars.

Targeted Sanctions

In response to evidence that Iran was developing uranium enrichment capability in 2002, the U.S. sought to curb the expansion of Iran's nuclear program by significantly increasing targeted economic sanctions. Between 2007 and 2010, targeted sanctions became a primary component of U.S. policy towards Iran. The Comprehensive Iran Accountability, Sanctions and Divestment Act (CISADA) was passed by the U.S. in 2010 to expand the ISA, imposing new and extensive limitations on Iran's energy sector and financial transactions with Iranian institutions. The legislation prohibited U.S. banks from maintaining correspondent accounts for foreign financial institutions that conducted business with designated Iranian banks, which facilitated transactions for the Army of the Guardians of the Islamic Revolution (IRGC) or its affiliates. After CISADA was implemented, a series of executive orders and statutes were introduced by 2012, which imposed secondary sanctions on foreign entities that did business with Iranian entities that were sanctioned and further limited Iran's access to the international financial system. Concurrent with the tightening of U.S. sanctions and subsequent to the adoption of UNSCR 1929, the European Union (EU) extended its own sanctions against Iran and eventually imposed an embargo. Together, the diverse targeted financial measures implemented by various jurisdictions against Iran constituted a comparatively comprehensive multilateral trade embargo that covered an extensive range of Iran's economic activities.

Operational Aspects of the Iran Nuclear Agreement

Formally known as the Joint Comprehensive Plan of Action (JCPOA), the Iran Nuclear Deal was signed by Iran, Germany, and the five permanent members of the

United Nations Security Council. Also, involved were the EU as well as several Middle Eastern countries. The purpose of the agreement was to incentivize Iran through massive sanctions relief to dismantle their military nuclear capability, and to implement regulations to prevent Iran from developing a non-civilian nuclear program. The main objective of the agreement was to increase Iran's nuclear breakout time from 2-3 months to one year, i.e. the time it would take a nuclear state to enrich uranium sufficiently to weaponize. This extension of Iran's breakout time would allow the P5+1 to respond appropriately to any progress in Iran's nuclear program, reducing the likelihood of a strategic surprise. In the event that Iran begins reorienting its civilian nuclear program towards military purposes, the increased breakout time would also allow diplomatic channels to be pursued first. The agreement was enforced through the threat of sanctions. If any P5 state suspects Iran of violating the agreement, the Security Council may vote to impose sanctions. The imposition of sanctions in response to a potential violation is referred to as a "snapback" mechanism, which has become one of the principal conditions Iran is attempting to eliminate in the ongoing negotiations for a new agreement (Middle East Policy Council, 2022).

Present Status

The JCPOA granted Iran sanctions relief in exchange for limitations on its nuclear program. However, after the U.S. unilateral withdrawal in 2018, Iran abandoned some restrictions and is now enriching uranium to 60 percent using advanced centrifuges (Al Jazeera, January 6, 2022). After withdrawing, the U.S. reinstated crippling sanctions against Iran. Tehran is now demanding the complete lifting of U.S. sanctions, as also assurances that the U.S. will not withdraw from the accord again, including a period of time to verify that the sanctions have been lifted

effectively. The Russian invasion has become one of the most significant contributing factors to the impasse in nuclear negotiations. Officials from Russia expressed concern over the sanctions imposed on their Nation and their direct impact on relations with Iran. Despite recent setbacks, it is likely that an agreement will be reached. There has been considerable speculation about alternative options for both parties. However, Iran cannot benefit from an agreement with Russia that excludes the U.S. and other European powers due to the interconnectedness of the global financial system. Affected by geopolitical events and future consequences, Iran's nuclear situation is one of the most pressing issues facing the international community at present. If Iran develops nuclear weapons without a potential agreement, global geopolitical dynamics will shift. In addition, an Iranian nuclear military capability may force Saudi Arabia to develop its own program. Israel may conduct a preemptive or preventative strike against Iran if the P5+1 cannot reaffirm the JCPOA. There will be an unprecedented paradigm shift in Middle Eastern politics, altering the power balance irreparably. The ongoing Russian invasion of Ukraine has hindered the current anti-proliferation effort, particularly with regard to Iran. Given the potential consequences of a nuclear-armed Iran, it is likely that all parties will make concessions in order to reaffirm the agreement.

Indicators of Effectiveness of Targeted Sanctions

Sanctions usually come with costs and consequences, and the key question is whether the benefits of imposing them outweigh the negative impacts. In the case of Iran, the U.S. implemented various measures such as increased sanctions on Iranian oil imports, targeted sanctions on financial ties with the Central Bank of Iran, and banning specialized financial messaging between member state institutions and designated Iranian financial institutions. The new sanctions were significantly more

effective than the previous restrictions on Iran, and had an immediate negative impact on economic growth. In accordance with statistical findings, the targeted sanctions restricted investment in Iran's oil sector. They also substantially increased the difficulty of selling and receiving payment for the nation's oil exports. Oil exports fell from 2.5 million barrels per day (bpd) in 2011 to 1.1 million bpd in 2013. EU imports dropped from approximately 600,000 bpd to effectively zero, and Iran's oil exports to OECD and non-OECD Asian countries (China, India, South Korea and Japan) fell by more than 525,000 bpd (The U.S. Energy Information Administration, 2015). Iran was unable to access the majority of hard currency held in foreign accounts, despite continuing to export oil to other buyers. Iran's oil minister acknowledged in 2013 that declining exports were costing the country between \$4 and \$8 billion per month (Iran nuclear crisis, BBC, 2015). In an effort to increase its revenues, Iran sought out new payment mechanisms, eschewing its traditional trading relationships with Europe and Russia in favour of closer ties with Turkey and the United Arab Emirates (UAE). The financial restrictions were so extensive that the Society for Worldwide Interbank Financial Telecommunication (SWIFT) was compelled to block all transactions involving EU sanctioned Iranian banks from its system. According to then U.S. Treasury Secretary Jacob Lew, the combination of these restrictions and falling oil production caused Iran's economic growth to decline by 9 percent between 2012 and 2013 (U.S. Department of the Treasury, 2015). The restrictions imposed on Iran also led to negative consequences such as a decline in the value of the Rial, rising inflation, an increase in unemployment to around 20%, and a significant rise in nonperforming loans in Iranian banks. Despite criticisms about the ability of targeted sanctions to achieve political change, their use in Iran seems to have had some impact on the political system. One notable effect was the election of relatively moderate cleric, Hassan Rouhani, as president in 2013. He campaigned on a platform of easing sanctions and ending Iran's international isolation, following the controversial two terms of his predecessor, Mahmoud Ahmadinejad. After assuming office, Rouhani acknowledged the severe impact of sanctions on the Iranian economy and called for quick negotiations to resolve the nuclear issue (Erdbrink, 2013). Iran's subsequent behavior during the JCPOA negotiations suggests that lifting sanctions was the main motivation for Iran to strike a deal. Given the international community's success in obtaining substantial nuclear concessions from Iran in exchange for the easing of financial sanctions pressure, it is evident that sanctions in the Iran case were reasonably effective. Their imposition compelled the Iranian regime to alter its behaviour and incentivized it to negotiate substantial concessions on its nuclear program. The 2015 nuclear agreement could be seen as a demonstration of the success of sanctions on Iran, given the economic pressure they exerted and the consistent and coordinated multilateral messaging they facilitated, although it remains uncertain whether the agreement will ultimately resolve concerns about Iran's nuclear program in a definitive and permanent manner. Other factors, such as corruption, economic mismanagement, and low oil prices, may also have played a role in Iran's economic difficulties. Nonetheless, the agreement serves as a compelling example of the efficacy of sanctions in effecting change that aligns with U.S. objectives on issues related to Iranian nuclear proliferation.

Deductions

Effectiveness evaluations do not necessarily imply that sanctions have no adverse economic or political effects on the target, the international financial system or the U.S. With the exception of a few unanticipated roadblocks, we can confidently assert that the Iranian Experiment has thus far been reasonably successful. Since the

gestation period itself is at least a few years, it is a challenge for any economic intervention to withstand the ever changing geo-economics dynamics of world politics.

CASE STUDY 2: SYRIAN CIVIL WAR AND U.S./ EUROPEAN UNION (EU) SANCTIONS

Background

Taking cognizance of Syria's role in Lebanon's political turmoil, the U.S. first labeled it as a state supporter of terrorism in the year 1979. Subsequent, restrictions were put in place in 2004. Only a few Executive Orders such as, 13399 and 13441 were issued from 2007 until the start of the Syrian uprising in March 2011. In 2011, the Syrian Civil War was triggered as part of the Arab Spring protests, with citizens rooting for the removal of President Bashar al-Assad. The conflict swiftly escalated into a full scale civil war, with various factions vying for control of the country. Till date, the war has resulted in a large number of civilian casualties and related displacements, simultaneously fueling the rise of extremist groups such as ISIS. Sweeping economic sanctions have been imposed on Syria by both the U.S. and EU in response to this crisis. These sanctions have primarily targeted the Syrian government and its supporters, with the sole purpose of pressuring the government in power to end violence and respect human rights. The spectrum of sanctions ranges from measures such as freezing assets, banning imports and exports and prohibiting financial transactions. Executive Orders 13572 and 13573, signed in May 2011, targeted high level Syrian government officials including President Bashar al-Assad and members of his cabinet with subsequent measures targeting the energy sector including freezing of government assets. Given the limited employment of hard power by the U.S. and EU against the Syrian regime, the imposition of economic sanctions was the primary non-kinetic tool employed to rein in the Regime's mayhem. The limited use of force was probably an offshoot of the backing Assad regime's enjoying of global and regional powers like Russia and Iran, something which Iraq, Libya and the ISIS lacked conversely. Notwithstanding the aspect that prior to operations initiated by the international coalition in September 2014, Islamic State of Iraq and Syria (ISIS) was responsible for approximately 0.5 percent of the total Syrian civilian casualties during the civil conflict, while the balance were killed mostly by the Assad regime (Karam Shaar website, July 27, 2020).

Caesar Syria Civilian Protection Act

The Caesar Syria Civilian Protection Act, passed by the US Congress in 2019 which came into effect in the mid-2020, marked a breakthrough in sanctions against the regime (U.S. Congress, House, Caesar Syria Civilian Protection Act Of 2019, HR 31). The Act empowered the U.S. government to impose a new category of sanctions, referred to as "secondary sanctions", in addition to the existing "list-based" and "sectoral-based" primary sanctions. These secondary sanctions can be applied to non-US individuals and entities that have significant involvement with any entities or individuals that are subject to primary sanctions, as well as those related to Syria. More importantly, being a legislation passed by the U.S. Congress, as compared to an Executive Order, the delisting process resultantly became more intricate and formal, enhancing its effectiveness.

EU Sanctions

Subsequent to the U.S., the EU, the Arab League and Turkey have imposed economic penalties against Syria, including travel bans and asset freezes. This

included freezing of Syrian Central Bank's assets in the EU and prohibiting issuing of fresh grants, trading public bonds and extending loans to the Syrian government, targeting critical sectors such as the energy sector, banning crude oil imports, prohibiting trade in precious metals, and imposing an embargo on equipment that may be used for surveillance of the opposition or other types of violent repression. The EU also eased a number of trade restrictions in 2013 to aid opposition forces.

Fallout of Sanctions

Prior to the imposition of sanctions, Europe was Syria's largest trading partner, accounting for between a quarter and a fifth of its total trade. Iraq and Saudi Arabia followed close behind (European Commission, 2015). Given that oil revenues made up about 20% of Syria's GDP, the EU's ban on oil imports had a devastating impact, as Europe had imported over \$3 billion worth of crude oil from Syria in 2011. Furthermore, the civil war severely impacted Syrian oil production, which plummeted from 400,000 barrels per day in 2010 to just 25,000 barrels per day in May 2015. Additionally, the loss of government control led to the transfer of oil revenue from the government to ISIS. As a result, the Syrian government had limited motivation to make political concessions to lift the oil sanctions, as its infrastructure was severely damaged and some of its functioning oil assets were no longer under its control. The Syrian economy was in a state of complete chaos by 2013, with real GDP estimated to have fallen by 50 to 80 percent in 2012 (Khan & Itani, 2013). Hyperinflation was rampant, with the Syrian pound losing 80 percent of its value, and foreign currency reserves dropping by nearly 90 percent due to government spending to offset the decline in foreign investment. The regime continues to rely on credit lines from its allies in Tehran, Moscow, and Beijing, with Russia continuing to provide billions of dollars in arms and military equipment (Bremmer, 2015). The Syrian economy was

performing relatively well in the five years prior to the uprising, but the benefits mostly went to the business elite who were close to the Assad regime. US and European sanctions have attempted to sever the ties between the state and its benefactors, but these efforts have been largely ineffective (Butter,2015). According to Rashad al-Kattan, a researcher at the University of St. Andrews, "Most of these businessmen have significant investments in the country that outweigh their overseas assets and commercial interests. Their close ties to the ruling political elite have made them deeply invested in the survival of the regime," making them less concerned with the present negative returns on investment than with the potential benefits of remaining once the conflict is ultimately resolved (Al-Kattan, 2015).

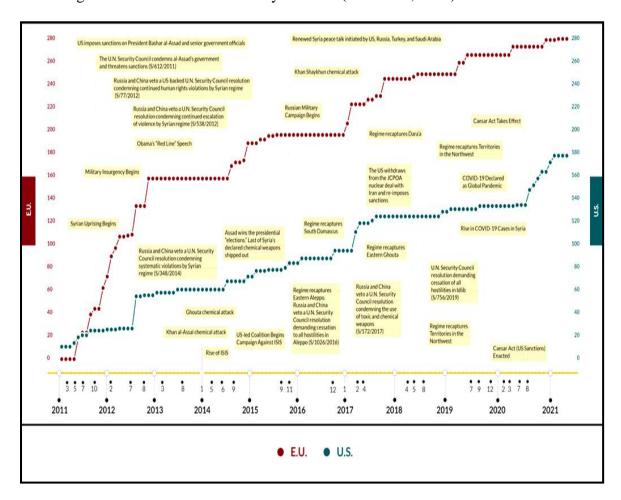


Figure 2: Timeline Chart Mapping Major Events in Syria to US/EU Sanctions (Source: Middle East Institute. https://www.mei.edu/ publications/ comprehensive -

review-effectiveness-us-and-eu-sanctions-syria)

Analysis of the U.S./EU Sanctions

The cumulative area chart in **Figure 2** given above highlights the EU and U.S. sanctions data on Syrian individuals from January 2011 to April 2021 (Alalwani & Shaar, 2021). The data reveals that before the 2011 uprising, the EU had not imposed sanctions on Syrian individuals. However, by April 2021, the total number had increased to 280. The chart includes key events and turning points in the Syrian conflict to provide context and explain the reasoning behind the sanctions.

- (a) The findings show that around 40% of EU sanctions were imposed in the first year of the uprising, compared to 25% of U.S. sanctions during the same period. This sharp increase in EU sanctions is due to their swift change in approach towards enforcing political and economic reforms in Syria. Previously, the EU relied on the Euro-Mediterranean Partnership and the European Neighborhood Policy, but they switched to harsh economic sanctions when the peaceful uprising was met with brutality (Turkmani & Haid, 2016).
- (b) The EU sanctions are largely aligned with the outcomes of UN Security Council meetings, reflecting Western frustration with repeated Russian and Chinese vetoes on condemning the Syrian regime. This is particularly evident between the end of 2011 and the beginning of 2012, with both EU and U.S. sanctions lists witnessing an upward surge in July 2012, following President Barack Obama's famous "red line" speech in August (Obama Draws "red Line" for Syria on Chemical and Biological Weapons, 2012).
- (c) The data shows that 97.4% of the 333 sanctioned individuals are Arab, which is higher than their demographic representation in the population,

estimated at 80-85% (*Syria - the Winds*, n.d.). On the other hand, Kurdish representation is significantly low at 1.3%, despite being the second-largest ethnic group in Syria, with nearly 10% of the population (*Syria - the World Factbook*, 2023). This is a result of systematic disfavor towards Kurds and institutional racism in Syria. The remaining 1.3% includes ethnicities such as Armenians, Assyrians, Turkmen, and Circassians.

(d) A sector-based distribution of sanctioned individuals and their affiliation with the army and security agencies is shown in **Figure 3**. The chart explains the power distribution between Sunni business elites, who hold significant sway over the economy, and Alawites, who hold influence over the army and security apparatus. According to the data, approximately 34.4% of the individuals targeted by sanctions are linked to the army or security agencies. The representation of Christians and Druze in the sanctions list is lower than their overall representation in the population.

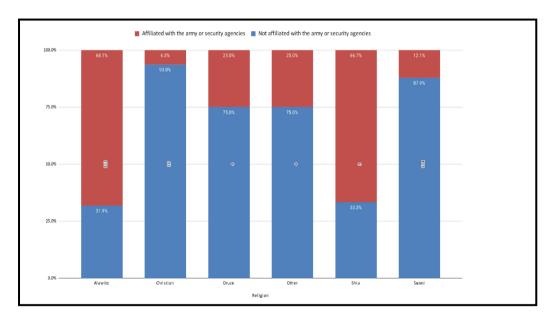


Figure 3: Affiliation of EU and U.S. sanctioned Syrians

Note: Total counts per religion/sect are shown in the middle of the bars.

(Source: Middle East Institute. https://www.mei.edu/ publications/ comprehensive-review-effectiveness-us-and-eu-sanctions-syria)

The Effectiveness of Sanctions

When evaluating the effectiveness of sanctions, it is important to acknowledge the limitations of the empirical literature, such as small sample sizes, time constraints, and difficulty in establishing causality. As a result, our analysis will be qualitative and focus on the positive and negative impacts of sanctions.

Positive Impacts

- (a) **Coercion Towards Behavioral Changes.** The success ofsanctions in promoting behavioral change can be seen in the case of delisted entities. For example, the Turkish Ministry of Defense and Ministry of Natural Resources, along with their ministers, were sanctioned and then delisted in October 2019 under Executive Order 13894 for "Contributing to the Situation in Syria." Also, the private sector entities Blue Marine Shipping Agency and Skirron Holding AG were sanctioned under Executive Order 13582 for engaging in economic transactions with the regime. However, they were delisted merely three days later as they changed their behavior following the imposition of sanctions, which led to the lifting of the sanctions. The success of sanctions in promoting change depends on the location and business dealings of the targeted entities. For instance, entities in Switzerland may comply with sanctions to avoid jeopardizing their ties with EU and U.S. markets, whereas entities with limited involvement in these areas may not be as easily influenced.
- (b) <u>Pressure for Political Settlement</u>. Sanctions can put pressure on the targeted regime and its backers to seek a political settlement to a conflict. The regime may want to end its financial constraints, while its backers, such as Russia and Iran, may seek to exit the conflict and benefit from a political

settlement. While sanctions alone are unlikely to collapse a regime, they can hinder the targeted individuals and entities and make it more difficult for them to carry out atrocities.

- (c) <u>Deterrence</u> Sanctions serve as a deterrent tool by sending a clear message to individuals and entities involved with sanctioned targets that they are being monitored and could face similar consequences if they continue to associate with the targets. For instance, foreign companies' involvement in reconstruction activities in Damascus is minimal due to U.S. /EU sanctions. This tool can be more effective now that it has become easier to implement secondary sanctions under the Caesar Act.
- (d) <u>Message to other Countries</u>. Sanctions send a message to other dictatorial and autocratic governments that the world will not tolerate their actions and that corrective action can be taken against them. This serves as a warning that atrocities cannot be carried out with complete impunity.

Negative Impacts

The negative impacts of sanctions must be carefully differentiated from those that are merely coincident with them. While sanctions regimes have certainly played a role in exacerbating Syria's economic difficulties, other factors such as institutional corruption, a war economy, aid diversion, mismanagement, and the COVID-19 pandemic and banking crisis in Lebanon also contribute. The following are the key negative impacts of sanctions on Syria:-

(a) Negative Impact on Syrian Non-Governmental Organizations
(NGOs). A report by IMPACT Civil Society Research and Development showed that Syrian organizations in France, the UK, Germany, Turkey, and Lebanon face various challenges, including the closure of their bank accounts,

difficulties in opening new accounts, and restrictions on sending or receiving wire transfers (Daher, 2020).

- (b) <u>Difficulty for Syrian Civilians Abroad</u>. Over compliance with sanctions has led to account closures and restrictions on financial transactions for Syrians living abroad, causing a chilling effect on business dealings with them.
- (c) <u>Negative Impact on National Economies</u>. Economic sanctions generally have a negative effect on national economies, particularly in countries with dictatorships, crony capitalism, and a highly skewed distribution of wealth. In Syria, powerful individuals and entities are better able to weather the sanctions, while small and medium-sized enterprises are more likely to fail due to limited access to resources.
- (d) <u>Blocked Rehabilitative Services in Non-regime Controlled Areas.</u>

 The Caesar Act has made it challenging for international Non Governmental Organizations (NGOs) to provide small-scale infrastructure rehabilitation in rebel-held territories in northwestern Syria. Furthermore, a growing list of technology resources, including Google Workspace and popular platforms like Netflix and Zoom, are now blocked in these areas. This extensive technology ban, even on online services such as Netflix and Zoom, not directly connected to Syria, is hampering the efforts of Syrian civil society organizations and NGOs (*Google Blocks Chrome Browser Use in Syria, Iran MediaShift*, 2008).

Deductions of Study

The impact of the sanctions on Syria is a complex issue, with multiple factors playing a role in determining their effectiveness. On the one hand, the sanctions have

had a noticeable impact in reducing the Syrian government's military capabilities. However, on the other hand, the brunt of the sanctions has fallen on the Syrian people, rather than the government. The effectiveness of the sanctions has also been weakened by the political and economic support provided to Syria by countries like Russia and China. Despite some countries coming together to express their concerns about the Al-Assad regime, the sanctions were not widely supported and lacked the backing of the U.N. Moreover, there is limited evidence to suggest that the sanctions have succeeded in limiting Syrian support for terrorism or in reversing President al-Assad's brutal campaign against rebels in Syria. Furthermore, there is little indication that the sanctions have created leverage for the U.S. and Europe in advancing their goals. One of the shortcomings of the sanctions is their design, which does not target the financial vulnerabilities of the Syrian regime, thereby limiting their effectiveness. Despite the U.S. Caesar Act introducing secondary sanctions in mid-2020, which imposed sanctions on any person or entity that has significant dealings with entities on Syria's sanctions list, the sanctions have only targeted the surface of the problem and have not effectively addressed the illicit activities and networks built over decades by the regime. The sanctions have had a negative impact on the Syrian people and economy, worsening the humanitarian crisis, and finding a resolution to the ongoing conflict in Syria remains a major challenge for the international community.

CASE STUDY 3: THE EFFECTS OF SANCTIONS AGAINST TRANSNATIONAL THREATS

The purpose of this study is to examine the impact and efficacy of sanctions aimed primarily at non-state actors. This encompasses sanctions programs designed to

counter terrorism, drug trafficking, transnational organized crime, human rights violations, and malicious cyber activities for the protection of national interests. Measuring the effects of sanctions on non-state actors is challenging due to the elusive nature of their activities. A key objective of sanctions against transnational illicit actors or groups is to exclude them from the international financial system, making it harder for them to carry out illicit activities. This helps to mitigate the threats posed by these actors who operate outside of acceptable international norms, making it "costlier, riskier, and less efficient" for them to access and use funds for their illicit activities.

Intended Effects of Sanctions on Non-State Actors

The focus of this discussion will be on counterterrorism sanctions programs, which are widely adopted by nations and international organizations such as the United Nations. Despite the lack of comprehensive data on their effects, the following three primary outcomes are intended from such sanctions against non-state actors:-

(a) Exclusion from the International Financial System. Sanctions imposed on terrorist organizations aim to restrict their access to funds and the international financial system used for monetary transactions and storage. The U.S. government was one of the first to implement a financial sanctions program targeting terrorist financing in the aftermath of 9/11(The White House, press release, September 24, 2001). The objective was to "starve" terrorist groups of funds by freezing assets and prohibiting U.S. entities from doing business with designated individuals or groups. Subsequently, the United Nations Security Council passed a resolution (UNSCR 1373) requiring all states to criminalize the provision of financial support to terrorists, deny safe haven to them, bring them to justice, prevent their movement, and hinder

their financing. The goal is absolute, like with sanctions against regimes, and applies to both narco-trafficking and transnational organized crime groups. The objective of the sanctions is also to protect the international financial system from abuse, thereby promoting confidence in financial markets (U.S. Department of the Treasury, press release, April 16, 2015). By restricting the ability of terrorists and other nefarious actors to access and participate in the international financial system, sanctions help maintain stability and effectiveness in financial markets.

(b) Coercion: Shifting the Behavior of Supporters and Potential Terrorist organizations operate within a larger network of Supporters. individuals and entities that provide them with resources such as personnel, financing, and materials. To counter terrorism, sanctions are imposed not only on these groups but also on those who support them, such as financiers, enablers, and others. The success of financial sanctions in this regard is challenging to measure, as it is difficult to determine the number of individuals who refrain from becoming involved in illegal activities as a result of these sanctions. The concept of disrupting terrorist financing networks by targeting their component parts was a key insight in adapting Cold War era deterrence research to tackle terrorism after the 9/11 attacks. The 2002 U.S. National Security Strategy recognized that traditional methods of deterrence would not be effective against a terrorist enemy who seeks death as martyrdom and who operates in a stateless environment (National Security Strategy, of the U.S. September 15, 2002). In other illicit activities, such as drug trafficking, the U.S. government has used delisting as a tool to incentivize positive behavior changes. For instance, in 2013, the Treasury

Department removed the sanctions on a Colombian soccer team that no longer had connections with drug cartels.

(c) Messaging: Shifting the Public Narrative. Financial sanctions also aim to influence public perception about a specific threat or person, in order to spur action from domestic or international communities. This aspect of sanctions, often neglected in academic and policy discussions, plays a crucial role in the utilization of economic statecraft (Thomas & Bergeijk, 2015). There are two distinct reasons behind this strategy. Firstly, it aims to raise public awareness about the ways in which support is provided to illicit non-state actors, enabling intermediaries such as banks and money transmitters to identify and halt illicit financial activity. Secondly, it aims to counter the narratives of these groups by presenting counter-narratives that challenge their operations, operators, and support structures, undermining their ability to portray themselves and seek support. An example of using sanctions to shape public perception is the case of the United States Department of the Treasury designating four leaders of Hezbollah's external operations wing in 2013. The press release emphasized the group's role as a transnational terrorist organization responsible for destabilizing multiple countries in the Middle East, dispelling the myth of it being simply a Lebanese "resistance" group. (U.S. Department of the Treasury press release, August 22, 2013).

Efficacy of Sanctions on Non State Actors

Despite being crucial to the worldwide effort against illegal entities such as terrorist organizations and drug traffickers, it is challenging to assess the impact of sanctions against non-state actors in the same way as sanctions against states. In the aftermath of 9/11, it has been observed by scholars that the international community

has been successful in limiting the access of terrorists to legitimate financial channels, which is a major component of the global strategy against organizations like ISIS. The UNSC has recognized the significance of sanctions in maintaining international peace and security, including countering terrorism, through recent resolutions aimed at addressing the threat posed by ISIS. While measuring the overall impact of sanctions may be difficult, it is feasible to assess their impact on specific groups or during particular periods. Furthermore, advancements in record-keeping and transparency in some regions have made it possible to estimate the extent to which sanctions have led to a shift from formal to informal financial systems. However, it is unlikely that groups involved in terrorism or drug trafficking will generate the data needed to determine the impact of financial sanctions on their operations. Improving transparency in the financial sector and making sanctions smarter will be ongoing challenges in determining their effectiveness. Despite the lack of data, there is enough evidence from government officials' public statements and some available data to support the idea that financial sanctions have a significant impact on non-state actors. Nevertheless, the challenges of measuring their impact and making sanctions more effective remain constant (United Nations Security Council report, 2015).

The Challenges of Contemporary Sanctions for U.S. and Global Financial System

To fully grasp the long-term impact and strategic significance of financial sanctions, it is important to highlight their effects on the U.S., its allies, and the global financial system. With modern financial sanctions becoming increasingly targeted, sophisticated, and relying on financial services as the primary means of exerting pressure on targeted countries, some negative consequences have arisen for the US and the international financial system. These externalities may eventually compromise

the effectiveness and reliability of sanctions as a tool of US diplomacy and impact the US' ability to leverage sanctions to shape the behavior of adversaries in the future, without resorting to military force. The three main categories of impacts from the use of sanctions are:-

- (a) Impact on the Global Financial Sector. The global financial sector is facing significant impacts due to the growing number of sanctions regimes and enforcement actions for sanctions violations. To avoid the risk of financial crimes, some companies in the private sector are taking proactive measures to reduce their exposure. The fear of hefty regulatory fines and damage to reputation has led many financial institutions, particularly in the banking and finance sector, to shy away from foreign opportunities that they consider too risky. Governments, in response, are establishing alternative financial platforms outside the US and turning to non-US currencies to avoid being under US jurisdiction for sanctions compliance and enforcement purposes. This trend can manifest in two ways:-
 - <u>De-risking</u>. The process of de-risking refers to when private companies proactively avoid participating in activities that they believe pose a risk of financial crimes compliance, due to the fear of substantial fines in case of accidental violation. This phenomenon not only impacts other policy objectives, such as financial inclusion and the sustainability of financial sanctions, but also poses challenges for the U.S. government. De-risking weakens the potency of sanctions measures, as it limits the ability of the U.S. government to use sanctions as incentives for behavior change. If there are no financial connections with a specific jurisdiction, prohibiting transactions and

financing through sanctions will not serve as leverage. Additionally, de-risking can hinder the government's ability to unwind sanctions and create positive incentives, as financial institutions may decline to reengage with formerly sanctioned states. De-risking can take various forms, such as banks closing accounts that could draw regulatory attention or severing correspondent relationships with countries/entities exposed to potential sanctions or through "pre-risking" i.e. not opening up any accounts at all with respect to certain categories of activity (McKendry, November 17, 2014). De-risking may also impact the U.S.'s financial dominance and the role of the dollar as an international medium of exchange. Despite its complexities, de-risking is expected to remain a part of the financial crimes compliance landscape in the future.

• Architectural Changes: Shifts in the Structure of the International Financial System. The implementation of financial sanctions relies heavily on the widespread utilization of the US dollar in the global financial sector. Despite accounting for only 24% of the global economy, the U.S. plays a significant role in international finance. Approximately 60% of central banks' foreign exchange reserves are held in dollars, and half of international trade is invoiced in dollars. Furthermore, half of all international loans and global debt securities are denominated in dollars. Additionally, nearly 90% of all foreign exchange transactions involve dollars (Nelsor, 2022). However, changes are emerging in the international financial system that could reduce the reach and power of US economic sanctions. For

instance, in 2015, China launched the Cross Border Inter-Bank Payments System (CIPS) to establish a yuan-denominated payment clearing system that operates independently from SWIFT. The CIPS was created to address China's economic and commercial aspirations in East Asia, as well as concerns about SWIFT's relationship with Western security services (Eichengreen, 2022). Similarly, Russia is working to insulate its economy from sanctions by creating an alternative to SWIFT and forming international partnerships with other BRIC countries. The country has already established a domestic alternative to SWIFT and has signed agreements with MasterCard and Visa to continue transactions despite US sanctions. Despite these efforts, the dominance of the US dollar is likely to persist as long as global commodities, particularly oil, are traded in dollars. Nevertheless, it is crucial to understand the relationship between the use of financial sanctions and the global strength and position of the US dollar (Norrlof, 2021).

(b) <u>Internal U.S. Government Structure for Sanctions Programs</u>.

The growing complexity of sanctions and their central role in U.S. security strategy have made coordination among the various agencies involved in sanctions policy and enforcement increasingly important. Yet, despite this need for coordination, the number and nature of entities at the federal, state, and local levels involved in sanctions enforcement has significantly expanded, leading to a fragmentation of authority and a disconnect between policymaking and enforcement responsibilities. For instance, new entities such as the New York Department of Financial Services (DFS) have started

enforcing sanctions without coordination with federal bodies. In 2012, the DFS fined Standard Chartered Bank without informing federal regulators, despite the fact that they were also pursuing similar cases in collaboration with the DFS.

- (c) <u>Sanctions Strategy</u>. The utilization of sanctions by the U.S. and its allies in the post-9/11 era has brought about shifts in the international landscape which the U.S. will have to deal with in the near future. These shifts are primarily divided into three categories i.e. difficulties in lifting sanctions, potential conflicts with U.S. allies over sanctions policies, and the increasing use of financial sanctions by other nations and the need to brace for possible retaliation. A more in-depth examination of these three areas is outlined below.-
 - Challenges in Unwinding Sanctions. The unwinding of sanctions can pose difficulties and hinder the attainment of their intended goals. If sanctions can't be lifted in response to improved behavior by target states, it may result in future targets losing incentives to comply, rendering sanctions more punitive than coercive. The aftermath of lifting sanctions on Burma shows that unwinding long-standing sanctions in a politically unstable environment for both the sanctioning and sanctioned countries is a challenge. There was initial excitement from the private sector to re-enter the market, but that hope was later dashed when Western investors failed to materialize.
 - <u>Divergences on Sanctions Policy</u>. To be effective, sanctions must be implemented with the cooperation of allied countries, who

must work with the U.S. to achieve common foreign policy goals. However, in recent years, the U.S. has faced difficulties in securing multilateral support for its sanctions and in ensuring the support of its allies. In 2014, when the U.S. imposed sanctions on Russia, Senator Chris Murphy linked the EU's support for the sanctions to the broader transatlantic diplomatic relationship, pointing out that the U.S.'s relationship with allies in the Western Hemisphere also faced challenges with regards to sanctions. The U.S. sanctions against Venezuela in 2015 also faced opposition from Latin American and Caribbean countries, marking the most significant resistance to a U.S. sanctions regime since the U.S. embargo on Cuba. Since sanctions have become a hallmark of U.S. foreign policy, alignment on sanctions serves as a barometer of diplomatic goodwill. The U.S. must work to ensure that its sanctions are implemented with the cooperation of its allies to maintain strong and productive relationships.

• Potential for Retaliation. Retaliation against sanctions imposed by nations or other entities is a major challenge facing the sustainability of sanctions as an instrument of national security. Prominent examples of such retaliation include a series of cyberattacks that have been linked to the implementation of financial sanctions. In 2012, for instance, the US Department of Defense claimed that Iran was responsible for a series of cyber-attacks launched against US banks as a response to sanctions. Other cyber-attacks have targeted commercial entities associated with US allies, such as Saudi Aramco and Qatar's RasGas. North Korea has also used cyber-attacks

as a means of retaliation, as seen in its attack against Sony Pictures in 2014. The attack resulted in significant financial and reputational losses for Sony, as their networks were disrupted, computers were destroyed, sensitive information was leaked, and legal action was taken. As the US becomes more dependent on collaboration with its allies for the success of sanctions, maintaining alignment of interests with the EU has become increasingly difficult due to the threat of retaliation, to which the EU is more vulnerable.

Many of the trends in the field of financial sanctions are still unfolding and demonstrate a shift in the way these types of sanctions have been employed since the 9/11 terrorist attacks. Although it may be difficult to fully resolve any one of the challenges presented by these evolving trends, it is important to continuously consider them when designing sanctions programs. To effectively evaluate the efficacy of financial sanctions, a holistic approach must be taken into account. This approach should consider the impact of the sanctions on the targeted entities, the extent to which the sanctions are able to achieve the desired policy outcomes, and any unintended consequences that may result from the implementation of sanctions on the larger environment in which they operate.

CASE STUDY 3: RUSSIA-UKRAINE WAR- THEIR EFFECTS AND EFFECTIVENESS

Background

On February 24th, the world was stunned by Russia's invasion of Ukraine.

This was followed by a series of unprecedented actions and economic sanctions from

nations around the world. Despite the shock, tensions between Russia and Ukraine had been escalating for some time. The final trigger was Ukraine's request to join NATO, which incensed Russia, leading to their "training exercises" along the Ukrainian border in the spring of 2022. In December, the US began to raise the alarm about the deployment of Russian troops, and President Biden threatened Russia with severe consequences if they attacked Ukraine. Russia requested a legally binding guarantee from the West that NATO would not engage in military operations in Eastern Europe or Ukraine. The rising tensions between Russia and Ukraine, who share a border with European nations, have affected the entire EU, resulting in the imposition of sanctions on Russian entities and companies by both the U.S. and EU.

Analysis of Sanctions Imposed on Russia

Drying up of Financial Flows. The Russian financial sector has (a) been greatly impacted by the ongoing conflict and imposed sanctions. A considerable amount of Russia's currency reserves has been frozen, which has impeded their access to international financing and created difficulties for international payment transactions. Following the invasion, the Central Bank of Russia had to implement stringent restrictions on capital flows to stabilize the ruble's exchange rate and avoid a financial crisis (Mukhin & Itskhoki, 2022). In June 2022, Russia defaulted on its external debt for the first time in decades as a result of the sanctions that prevented payment to international creditors. Historically, Russia's foreign financing came primarily from countries that are now imposing sanctions (Simola, 2022a). Available data suggests that Russia's net foreign direct investment inflows declined significantly after the invasion of Ukraine (Figure 4). Numerous foreign companies have decided to leave Russia, but the exit process has been complicated by the actions of Russian officials. The loss of foreign direct investment is considered to be one of the most detrimental consequences of the sanctions for the Russian economy (Mahlstein et al. 2022).

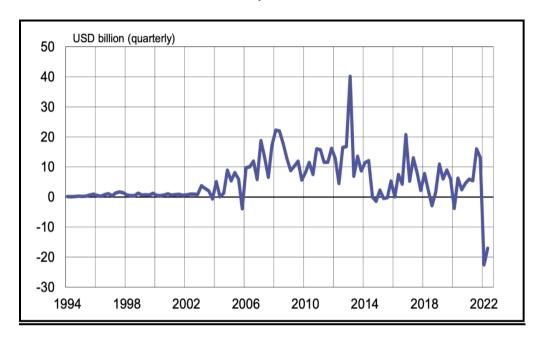


Figure 4: Net flow of Inward FDI to Russia

(Source: Macrobond and bank of Russia, 2022)

(b) Technology Sectors Hit by Loss of Imports. The restrictions placed on exports to Russia primarily target high-tech goods with the aim of limiting the country's military production. As a result of the sanctions, Russia has ceased publishing its international trade statistics. However, it is estimated that imports have significantly declined due to the war and sanctions. In particular, technology imports have seen a significant decrease (Borin 2022). Alternative data sources, such as exports from key trading partners, indicate that imports of Russian goods in September decreased by 28% compared to pre-invasion levels (Figure 5). This alternative indicator has consistently mirrored Russian imports, with a correlation of 0.97. Prior to the war, Russia relied heavily on imported high-tech products and inputs, despite efforts to substitute them with domestic production. The country's economy remains

dominated by resource intensive industries and mining. With the current sanctions limiting technology and financing, the prospects for import substitution are even more limited. Many medium and high tech industries have seen a sharp decrease in output. For instance, the production of trucks, TV receivers, and excavators declined by 40%, 44%, and 69%, respectively, in October 2022. As companies deplete their imported inventory and the need for imported machinery maintenance continues, the impact of sanctions will only increase. However, the limited share of these industries in Russia's total output minimizes their effect on the country's overall manufacturing production.

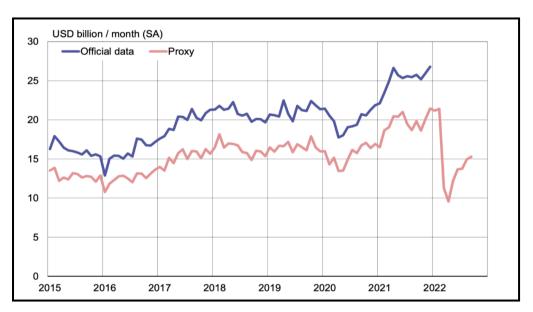


Figure 5: Russia's Goods Imports based on Official Data/Proxy

Constructed from Mirror Statistics

(Source: Macrobond, Eurostat and BOFIT, 2022)

(c) Export Oriented Sectors Effected. Sanctions imposed by several countries have led to restrictions and tariffs on imports from Russia, impacting several of the country's key export goods, such as crude oil, refined petroleum products, coal, gold, timber, and steel products. These restrictions, which have been modified with transition periods and other modifications, are aimed at providing time for the sanctioning countries and global markets to adjust and

mitigate the effects. For example, instead of a total ban on related services, a price ceiling on Russian oil shipments has been imposed. However, this approach also dilutes the impact of the sanctions on the Russian economy. Overall the impact of these import restrictions has already been visible on the Russian industry. For instance, the decline in output and heavy losses faced by Russian wood and steel producers, who have been unable to find alternative export markets with profitable prices (**Figure 6**) (Simola 2022b). However, Russia's oil industry has been relatively less affected, with the oil and gas GDP remaining unchanged in the second quarter of 2022, despite the contraction of the non-oil GDP by over 5% year-on-year, probably due to a reorientation of Russian oil to new export markets, most notably India and China (Simola 2022c). The recent restrictions on oil imports imposed by the EU, which is the largest buyer of Russian oil, are expected to lead to a decline in Russian oil production and export income. Also, simulation studies suggest that the cost of sanctions for Russia could escalate substantially if more countries join in.

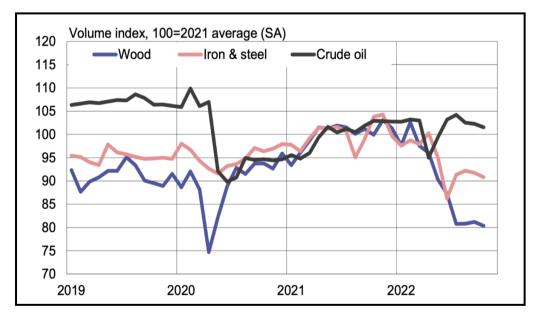


Figure 6: Seasonally Adjusted Change in Monthly Output of Selected

Russian Export-Oriented Industries

(Source: Macrobond and Rosstat, 2022)

(d) **Erosion of Russia's Long-term Growth Potential.** According to a recent report, Russia is experiencing a prolonged and painful recession rather than a sudden fall. The forecast predicts a 7-8% drop in Russian GDP in 2022-2023, similar to the declines seen in Russia's major economic crises in 1998 and 2008. However, unlike earlier crises where the Russian economy rebounded rapidly, the current outlook is pessimistic for years to come. Korhonen (2021) notes that prior to the war, Russia's potential growth was already relatively subdued, with most estimates hovering around 1.5% per year. The country's long term growth is hampered by unfavorable demographic trends, low investment rates, and low levels of productivity. The demographic structure has been further impacted by casualties, permanent injury, mobilization, and emigration caused by the war. Investment is hindered by high uncertainty and severely restricted access to foreign financing. Moreover, the increase in state involvement, emphasis on military industries, and lack of access to Western technology are further dragging down productivity. The IMF's World Economic Outlook forecasts for the next five years demonstrate how Russia's growth potential has diminished. By assuming that the fifth year forecast is indicative of potential growth, the IMF's predictions illustrate the impact of Russia's military aggression and the imposition of sanctions on its long-term growth since the illegal annexation of the Crimean peninsula in 2014. In the October 2013 World Economic Outlook, Russia's potential growth was estimated at 3.5% annually. However, by October 2022, it had fallen to just 0.7% annually (**Figure 7**). A comparison of the 2019 and 2021 forecasts indicates that the COVID-19 pandemic accounted for only around 0.25 percentage points of the forecasted decline. It

is important to note that the sanctions have been designed to primarily limit Russia's military capabilities and therefore, the direct impact on the average Russian citizen has been limited. However, the indirect impact of the war on the Russian population is substantial, as it is causing a decline in the standard of living for all citizens. The literature on this subject indicates that if a larger coalition of countries were to join in imposing sanctions on Russia, the economic consequences would be significantly greater. The impact of sanctions is expected to become more pronounced over time, exacerbating Russia's already challenging economic outlook. It is crucial to understand that while sanctions play a crucial role in restricting Russia's ability to continue the war, additional measures will be necessary to achieve a lasting resolution. The use of sanctions should be part of a larger, multi-faceted strategy that addresses the root causes of the conflict and promotes stability in the region.

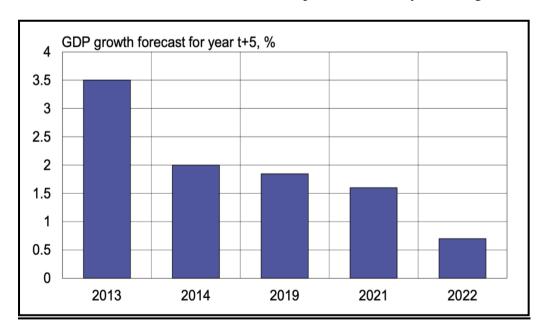


Figure 7: Russia's Long-Term Growth Estimate- IMF World Economic

Outlook Forecasts

(Source: IMF October WEO from respective years)

Evolving Nature of Warfare

War is essentially about power dynamics i.e. who possesses it, who lacks it and who can wield it effectively. However, the results of the war have taken many onlookers by surprise, as they contradict traditional beliefs about military and economic power. The most unexpected outcome has been Russia's inability to achieve its objectives despite its military superiority. In contrast, Ukrainian forces have not only held their ground but have even pushed back Russian military in certain areas. Three specific developments have played a significant role in leveling the playing field for Ukraine, as discussed below.

(a) **Influence of Non- State Actors.** The rise of non-state actors has had a major impact on the international arena, as these groups are capable of independently exercising their power. These actors are not only amplifying state power but also restricting state maneuverability. In the past, corporate involvement in conflict was mostly motivated by financial gains, such as increased sales during the Iraq war in 2003 or during World Wars I and II, or promoting peace to further business interests, as seen in Northern Ireland. However, in the Russia-Ukraine conflict, many multinational corporations acted primarily on political grounds, often at the expense of their financial well-being. The decision of nearly 1,000 companies to withdraw from Russia has strengthened the West's use of economic power, but it has also made it more difficult to use sanctions relief as a diplomatic tool by complicating its political leverage (Kavanagh, 2022). Furthermore, the advent of social media has enabled non-state groups to use their power in ways and at a pace that was not previously possible. People in Ukraine have become powerful influencers, providing real-time, unedited information, while those outside Ukraine have organized global relief efforts. For instance, within days of the conflict's outbreak, Airbnb leveraged its network to offer free housing to those fleeing Ukraine, and José Andrés' World Central Kitchen arrived on the front lines to distribute food.

- (b) Interdependence, Alliances and Trade Networks. Today, interdependence is more widespread than ever, linking countries in a web of military, economic, political, and ideological ties. The ongoing conflict in Ukraine is a prime example of how deeper and more interdependent relationships can both enable and restrict power. For instance, the US and NATO allies have leveraged their strong political, economic, and military relationships to impose sanctions and provide military aid. Meanwhile, Ukraine's ideological ties to NATO have allowed it to receive military and economic assistance, intelligence and infrastructure support, and international recognition, all of which have been critical to its success thus far. Russia attempted to insulate itself from sanctions prior to the invasion, but its connections to international financial markets left it vulnerable to Western sanctions. However, its central role in the oil and gas trade has provided it with an economic lifeline, limiting Western leverage. It remains to be seen who benefits more from relational power in the conflict, but relationships and interdependence are playing a significant and complex role in shaping state behavior. As such, nations should carefully consider the balance of their interdependent relationships and their level of self-sufficiency.
- (c) <u>Blurred lines between Hard and Soft Power</u>. The current conflict has seen the emergence of a new form of power that transcends the conventional distinction between hard power (derived from military

capabilities and economic wealth) and soft power (influence through norms and ideas). This form of power has been particularly significant in the Ukraine conflict, as it allows Ukraine to counter Russia's military advantages and triggers a broad Western response without requiring military intervention. The U.S. response to Russia's invasion has harnessed a combination of soft and hard power, exemplified by the use of sanctions. While sanctions are typically viewed as hard power, the withdrawal of corporations from Russia has amplified the economic impact of sanctions and condemned Russia's actions with the widely publicized exits of brands such as Starbucks and McDonald's. Additionally, the U.S. efforts to cut Russia off from currency markets leveraged both the economic wealth (hard power) and the credibility and reputation of the U.S. dollar (soft power). The decisions of sports leagues worldwide to ban Russian athletes and cancel competitions held in Russia have had a similar impact, combining economic penalties with social and cultural sanctions. These campaigns that blend hard and soft power have imposed significant costs on Russia and, although they do not involve direct military action, they pose the risk of escalation due to their multiple targets and audiences. Policymakers must exercise caution when employing such tools and consider incremental approaches to avoid escalation spirals. Overall three issues emerge from the study of the conflict i.e. the failure of deterrence, the power of asymmetric balancing and the utility of enabling narratives/ IW.

Efficacy of Sanctions

A year into the conflict in Ukraine, the ongoing shelling of Ukrainian cities by Russian forces continues to result in widespread destruction and an incalculable loss of life with no end in sight. The effectiveness of the current sanctions imposed on Russia including the freezing of its foreign reserves, trade embargo with Western nations, and expulsion from SWIFT is a subject of ongoing debate among social scientists. The biggest challenge in evaluating the effectiveness of sanctions is the absence of a counterfactual scenario. It is impossible to determine what would have happened in Ukraine if the sanctions had not been imposed on Russia. The fact that the conflict in Ukraine continues does not necessarily mean that the sanctions have been ineffective. In fact, one could argue that the sanctions, combined with the defense efforts of the Ukrainian people and the military support provided by Western countries, have been successful in preventing Russia's goal of turning Ukraine into a subservient satellite state. The ongoing recovery of Ruble has been achieved through severe measures like imposing high interest rates, limiting capital mobility for citizens, and mandating that corporations conduct transactions only in the local currency. Unfortunately, this achievement has come at a great cost to Russia. In reality, a stronger Ruble does not serve any practical purpose, as Russia's foreign trade is significantly restricted, and its debts and credits continue to be denominated in U.S. dollars. Moreover, Russia is prohibited from using U.S. dollars in global financial markets. The effectiveness of past sanctions against countries such as Cuba, Iran, and North Korea has also been a subject of debate. The fact that these countries still exist does not invalidate the significant impact that sanctions have had on their ability to operate on the global stage. Would Cuba have become a military threat to the U.S. without the sanctions? Would Iran and North Korea have developed more dangerous weapons in the absence of sanctions? These questions highlight the complex nature of evaluating the effectiveness of sanctions. Sanctions are designed to prevent negative outcomes, and if they are successful, we may not see their impact. Just because the effects of sanctions may be difficult to see, it does not mean that they should be ignored when evaluating their effectiveness. In conclusion, evaluating the success of sanctions is a complex and nuanced issue that requires a deep understanding of the historical, political, and economic factors at play (Pasquariello, 2022). Notwithstanding the challenge of gauging the efficacy, the following are the major effects (Singh, 2023):-

- (a) Global economic growth is expected to drop from 4.5% to 3 %. Global supply chain for commodities ranging from semi-conductors to toilet paper effected.
- (b) The economies of both Russia and Ukraine are affected with Russia spending over \$1 billion a day for operations totalling approximately \$250 billion, as on Jan 2023. Ukraine economy has contracted by one third and would need about \$600 billion to rebuild.
- (c) Being a large economy with immense natural resources Russian has been able to weather the storm in the short term. Demand and supply has ensures commodities and resources find their way to where they are required (e.g. purchase of oil by India/ china)
- (d) U.S. will gain from the conflict in short term, at the expense of European countries due to breakages of oil linkages and heavy expenditure on armaments to support the operations, with U.S. emerging ate the alternative market for the same.
- (e) In the Long term weaponisation of private sector entities by the U.S. may eventually threatens their trans-national credibility (e.g SWIFT and Dollar as universally acceptable currency).
- (f) China with its sizable domestic economy, manufacturing capabilities, linkages with Russia and potential weakening of U.S. dominated global

financial order is likely to gain. Developing counties of African, Asian and South America will face short term challenges.

On the face of it the current sanctions against Russia have not been effective enough in stopping the breakout of the conflict, but they can still be made stricter to increase their chances of success. However, several factors such as Realpolitik, lack of support from emerging countries, and Europe's reliance on Russian energy have prevented the implementation of further sanctions. Western Europe, in particular, still heavily relies on Russian gas and oil, and billions of dollars are paid to Russia every week to support its war efforts. Cutting off this dependence and using the SWIFT system to block payments could severely impact Russia's finances, but it would also come with high costs for the countries implementing these sanctions and further destabilize global energy markets. Despite this, the possibility of imposing such sanctions remains, especially if more war crimes by Russia are discovered. The recent EU's plan to phase out its consumption of Russian oil by 2023 is a significant step towards reducing reliance on Russian energy.

CASE STUDY 3: CHINA'S ECONOMIC WARFARE STRATEGY

Background

In 2001 China joined the World Trade Organization with the promise of boosting peace and prosperity at large. At the time, President Bill Clinton stated, "It's ironic that so many Americans are concerned about the impact of a strong China on the world in the 21st century." However, these concerns have since proven to be well-founded. Over the past two decades, the Chinese government has utilized its rapidly growing economy, now worth nearly \$18 trillion, as a weapon in an ongoing

economic conflict that has caused harm to numerous countries and communities across the globe, all while furthering China's national interests (Arkansas, 2021). In 2003, the Chinese Communist Party introduced the concept of "Three Warfares" which encompasses public opinion, psychological, and legal warfare. The use of economics is central to this strategy, as seen in the influence on public opinion or legal disputes. China's rise to power has been driven by its impressive economic growth over the past 30 years, giving it the economic muscle to assert its presence on the global stage. The country has effectively leveraged its increased economic power to shape geopolitics to its advantage. The following examples demonstrate how China has utilized its economic strength as a potent weapon in its strategy of unrestricted warfare.

Manifestation and Efficacy of China's Economic Warfare Strategy

(a) **Protecting Territorial Sovereignty.** China employed has economic warfare as a means of exerting pressure on Japan in the ongoing dispute over the Senkaku Islands chain. In 2010, after the captain of a Chinese fishing trawler was arrested following a collision with Japanese coast guard vessels, China imposed sanctions on the export of rare earth minerals and metals to Japan. These minerals are an essential component in the manufacture of electrical equipment, which is a significant export market for Japan to countries like the United States and Europe. The ban created a crisis for Japan, leading to the release of the imprisoned captain, as well as a new dimension in the conflict (Blackwill & Harris, 2017). The ban also had significant implications for Japanese industry, with companies like Hitachi and Toyota relocating their operations to China. The ban on rare earth materials can be seen as a form of economic coercion, as China leveraged a crisis to achieve three strategic objectives. Firstly, the release of the trawler captain was a highly emotive issue for China, and the ban successfully secured his release. Secondly, the ban sent a strong signal to Japan regarding China's stance on the sovereignty of the Senkaku Islands. Finally, the ban helped to consolidate China's market share in the global supply chain, making it a major player in the industry. The dispute escalated further when the Japanese government purchased a portion of the Senkaku Islands, leading to a more aggressive stance from China, with the implementation of trade sanctions and the continued ban on the export of rare earth minerals. These actions highlight the strategic importance of economic weapons in modern geopolitical conflicts, as nations attempt to assert their power and influence over their rivals.

(b) **Expanding Influence in South East Asia.** The geo-economic strategy of China in Southeast Asia is a multi-faceted approach aimed at increasing its influence in the region and achieving three key objectives. Firstly, China aims to challenge and check the alliances that the United States has established in the region. Secondly, the country intends to impose costs on any nation that acts in a manner that undermines its territorial and maritime claims. This is done to ensure that the region remains stable and its old friends, such as Cambodia, Laos, and Myanmar, remain supportive of China's policies. In the event of any opposition or representation against China's claims, such as the "nine dash line" in the South China Sea, China is likely to respond with economic coercion. For example, in 2012, when the Philippine navy attempted to arrest Chinese fishing trawlers near the disputed Scarborough Shoal, China banned the import of bananas and other fruits and vegetables from the Philippines, causing significant harm to local farmers. This was followed by a swift occupation of the shoal by China. The vulnerability of the Association of Southeast Asian Nations (ASEAN) nations to China's economic power increases due to their growing dependence on China as a trading partner. China remains the largest trading partner of ASEAN as a block and individually, it is the largest trading partner with most of the countries within the region ((Basu, 2019). The increasing dependency of ASEAN nations on China can be seen in the attached graphs (**Refer Figure 8**).

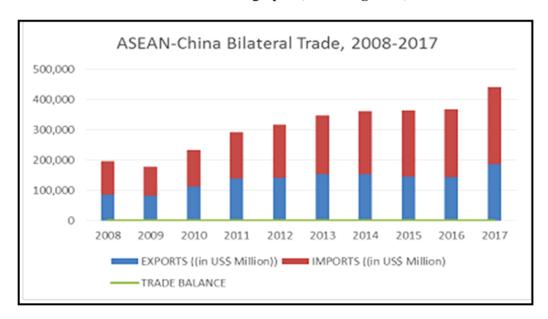


Figure 8: Increased Dependency of ASEAN Nations on China

(Source: Economic Warfare: The Most Effective Weapon in Chinese Strategy of Unrestricted War, Vivekananda International Foundation, 2019)

(c) **Protecting National Interest.** There is a growing body of evidence that suggests China has not hesitated in using economic coercion against nations that have taken actions perceived to be against Chinese national interests. One of the most sensitive issues has been the interaction with or hosting of the Dalai Lama. A study published in the Journal of International Economics in 2010 analyzed exports from 159 countries to China and concluded that countries whose leaders met the Dalai Lama experienced a

decline in trade with China, with exports falling from 8.1% to 16.9% (Andreas & Nils-Hendrik, 2013). In 2016, when Mongolia hosted the Dalai Lama, China responded with force by blocking the crucial trade route between the two nations and imposing additional tariffs. This demonstrates the extent to which China is willing to use economic leverage to enforce its national interests. Also, in 2016-17, the deployment of THAAD missiles by the U.S. in South Korea resulted in China imposing economic sanctions on South Korea. The U.S.-China Economic and Security Commission Report of 2017's Staff Research Report highlights that Chinese regulators implemented a ban on a broad range of Korean products, such as cosmetics, air purifiers and video games, exported to China. By the initial quarter of 2017, exports to consumers had decreased by 5.6%, and Korean carmakers like Hyundai and Kia saw a 52% reduction in sales in China. The tourism industry was also severely impacted, as 47% of foreign tourists visiting Korea were Chinese, resulting in a 66% decline in Chinese tourists to Korea (US-China Economic and Security Review Commission Report, 2017). In 2009, some Uighurs sought asylum in Cambodia after taking refuge there. Despite objections from the United Nations, Cambodia repatriated them to China to face prosecution in connection with violent protests in Xinjiang. Reports suggest that Cambodia yielded to pressure and threats from China, and was soon rewarded with grants and loans worth 1.2 billion US dollars from China. This highlights the extent to which China is willing to use economic incentives to achieve its national interests.

(d) <u>BRI the Great Chinese Dream or a Weapon of Debt Trap</u>

Diplomacy. The Belt and Road Initiative (BRI) is a manifestation of

China's economic diplomacy that seeks to target vulnerable nations through loans and place them in a debt trap. Formally adopted by President Xi during the 19th National Party Congress, the BRI was enshrined as part of the party's constitution as a resolution to achieve "shared growth through discussion and collaboration." However, the primary objective behind the BRI is to support China's export-based economy, which had plateaued in the early part of the second decade of the century. The Chinese government saw the expansion of trade to new frontiers as essential for the survival of the state and thus, the BRI is the outcome of a necessity and not just a grand vision of the "Chinese Dream" or an attempt to challenge US domination. The BRI program benefits both the Chinese government and the Chinese infrastructure conglomerates, constituting a win-win situation. China addresses its excess availability of dollars, which previously yielded insufficient returns, by constructing infrastructure in underdeveloped countries. China provides loans for infrastructure projects to these economically struggling nations, with Chinese companies being awarded contracts and Chinese labor being utilized. This not only generates employment but also increases China's strategic influence and captures new markets. However, the reality is that these countries may not be able to pay back the loan, and the terms of the loan are often made to appear too attractive to refuse. Over 60 developing countries today face a debt crisis due to over borrowing in the heady 2010s (Aiyar, 19 February 2023). Approximately 147 countries accounting for two-thirds of the world's population and 40 percent of global GDP have signed on to projects or indicated an interest in doing so (McBride et al, 2022). As per the Center of Global Development policy paper 121 March 2018, the contracts for BRI

projects are opaque and lack transparency, often not following international norms (Kher & Tran, 2019). There have been instances where countries have been lured into constructing infrastructure projects that they do not even need, such as the port at Hambantota in Sri Lanka. After completion, the Sri Lankan government was paying 90% of its revenue earned to service the debt it had taken to build the port, leading to it leasing the port to the Chinese for 99 years. Another example is Montenegro, which accepted the Chinese proposal to construct a super highway connecting the port of Bar on the Adriatic Sea to land-locked Serbia. After the first phase of construction, Montenegro is already under a debt of approximately one billion USD, with another 1.2 billion USD required for the remaining three phases. For Montenegro, with a population of just 620,000, even the payment of interest may not be feasible. A report by the World Bank estimated that there is a minimum requirement of 25,000 vehicles using the highway to justify its construction, but traffic on the busiest stretch is expected to not exceed 6,000 vehicles (Vasovic & Barkin, 2018). Montenegro's debt-to-GDP ratio has exceeded 80%, resulting in increased taxes and a temporary halt in public sector wage increases. Feasibility studies conducted by a French company, Louis Berger, for the Montenegrin government and another by a U.S. firm for the European Investment Bank, have yielded negative opinions regarding the project's prospects. However, a study funded by the Export-Import Bank of China deemed the project feasible, although the results were not released publicly. It's important to note that China Road and Bridge Corporation (CRBC) constructed the project's first phase using loans from the Export-Import Bank

of China, raising concerns about the entire process and China's business practices.

(e) Increasing Influence in Indian Ocean Region (IOR). The dependence of China on the Sea lanes of communication in the Indian Ocean Region (IOR) is a well-established fact. A significant portion of China's trade, approximately 80%, passes through the IOR, making it imperative for China to secure its interests in the region. To achieve this goal, China has employed various strategies and tactics to increase its influence in the IOR. In recent years, China has acquired, built, and operated ports in the region, thereby establishing a "string of pearls" strategy. China's strategy of establishing a string of pearls has garnered attention from scholars, academics, and strategists. However, what is even more crucial is how China has gone about gaining control over these ports. The port of Hambantota in Sri Lanka is a prime example of China's aggressive and predatory economic takeover. Other ports, including Kuntan in Malaysia, Kyauk Pyu deep-water port in Myanmar, Gwadar in Pakistan, and the potential port in Maldives, are all being funded and built by China. The Maldives is another country that is under heavy Chinese debt and is at risk of handing over the control of a strategic port to China. According to Reuters and Forbes, in 2018 itself, the Maldives already owed China 3.2 billion USD, which was more than 8000 USD per individual for such a small country (Mourdoukoutas, 2018). The debt to GDP ratio of the Maldives has surpassed 100%, putting it on the same path as Sri Lanka, which had to undergo a debt-swap agreement and hand over the Hambantota port to China. China has shown a keen interest in constructing a port in the Maldives, which could lead to a similar outcome.

(f) Encircling India with Infrastructure - Debt Trap Diplomacy.

China and India are two of the largest and fastest growing nations in Asia, both in terms of geography, economy, defence forces, and human resources. However, this growth and success has led to competition, rivalry, and conflict between the two nations, especially along their shared and disputed border. India considers China as its biggest strategic challenge, as China aims to slow down or restrict India's growing influence. One way China has done this is by using its economic power to strategically encircle India. The China-Pakistan Economic Corridor (CPEC) is a prime example of this. The CPEC connects Gwadar Port in Pakistan to the Karakoram Highway and is a flagship project of China's infrastructure trap at a cost of more than \$50 billion. According to a report, China made total commitments of \$34.3 billion towards development financing in Pakistan between 2000 and 2017, with at least \$27.8 billion being official commercial-like loans that had limited concessions. The report states that these loans from China to Pakistan are more expensive compared to those provided by the Organization for Economic Cooperation and Development's Development Assistance Committee (OECD-DAC) and other multilateral creditors. The average interest rate for Chinese loans to Pakistan is 3.76%, with a maturity period of 13.2 years and a grace period of 4.3 years. The BRI has resulted in lower- and middle-income countries being burdened with "hidden debts" totaling \$385 billion, according to new research (\$385bn of China's Belt and Road Lending Kept Undisclosed: Report, 2012). The failure of the ruling governments in Pakistan has led to the country paying over ₹26 billion in interest costs to China to repay a maturing debt in the fiscal year 2020-21(Pak Pays Over Rs 26 Billion Interest Cost to China to Repay Debt: Report, 2021). The ability of Pakistan to repay these loans is under severe skepticism, as the country was on the brink of a financial collapse before being rescued by Saudi Arabia and the United Arab Emirates. It's crucial to highlight that the repayment of CPEC loans has yet to commence. Pakistan has granted China operations of Gwadar Port for a 40-year period as security for the loans. Moreover, China is reportedly establishing a military base in Jiwani, situated just 80 km west of Gwadar. The CPEC, which links Gwadar to the Karakoram Highway, encircles India and offers China a strategic advantage. China benefits from access to Gwadar Port, a vital highway along India's border, and a subordinate state with diminished strategic autonomy, all of which provide China with a substantial long-term strategic edge over India. India should be concerned about the growing influence of China in neighboring countries like Nepal, Myanmar, Bangladesh, Sri Lanka, and Maldives. China has made substantial investments in these countries, primarily in the areas of infrastructure and energy which make up 83% of their total investments. Nepal, in particular, is at risk of falling into a debt trap with China, as it has become the largest foreign investor in the country. The amount of Chinese investment in Nepal had increased from 1.81 million USD in 2003 to a staggering 550 million USD in 2017-18, representing a 500% increase in just over a decade (The Growing Chinese Presence in Nepal, 2018). This gives China significant leverage over Nepal and has resulted in actions such as Nepal pulling out of a joint military exercise with India in 2018, at the insistence of China. Although of late Myanmar and Bangladesh have become more cautious with Chinese investment, China's presence and influence in these countries has still grown significantly in recent years.

Findings

China is renowned for its rich history of strategic thinking, with Sun Zu being one of its most famous figures. Sun Zu is the author of the renowned "Art of War", in which he views war as an extension of diplomacy. This means that war is simply a means of achieving diplomatic objectives through different means. The roots of this Chinese hybrid warfare approach can be traced back to Sun Tzu's classic work, "The Art of War." Sun Tzu famously stated, "The supreme excellence is not to win every battle, but to defeat the enemy without ever fighting." This philosophy reflects the Eastern belief that violence should be a last resort in achieving national goals. Over five thousand years later, this idea was echoed in the book "Unrestricted Warfare" written by two colonels in the People's Liberation Army of China, Qiao Liang and Wang Xiangsui. The book, which was published in 1999, emphasizes that the great masters of warfare in the 21st century will be those who effectively recombine various capabilities to achieve tactical, operational, and strategic objectives. The BRI, which aims to promote shared growth through discussion and collaboration, is a prime example of this. It reflects the Chinese strategy of achieving their national goals without resorting to violence. However, the "Shi" factor in the BRI, which refers to the perceived geopolitical and strategic advantages for China, has drawn scrutiny from other countries. In recent times, several countries like Malaysia, Bangladesh, and Myanmar have expressed reservations about accepting loans from China under the BRI and have either rejected or downsized certain projects. This highlights the evolving perception of the BRI and its implications for the region's geopolitical landscape. Overall we can conclude that the Chinese have aptly demonstrated their mastery in using economic instruments as a powerful and efficient tool in advancing their national interests with credible success.

OVERALL SUMMARY OF FINDINGS: CASE STUDIES

The effectiveness of economic interventions is highly dependent on various intangible factors, making it challenging to predict or measure. To fully grasp the potential of economic warfare instruments, we need to differentiate between efficacy/effectiveness and effect. All economic interventions will have some form of impact, whether it be economic, social or political. However, efficacy/effectiveness means that the intervention has achieved its intended goal in a desirable manner and magnitude, ultimately serving to defend or promote national interests. Based on analyzed case studies, the following key points can be drawn:-

- (a) The U.S. financial sanctions have been successful due to its centrality to global capital markets and the dominance of the dollar as the international trade currency, with no viable alternative.
- (b) With globalization and advancements in technology, relationships such as alliances and trade networks have become crucial factors in assessing a country's power, alongside traditional capability-based measures.
- (c) Targeted countries face increased economic, financial, political, and liquidity risks when subjected to coercive economic measures.
- (d) Policymakers sometimes overestimate the ability to control and regulate the economic statecraft tools such as sanctions.
- (e) Sanctions have become more targeted and innovative, with a focus on financial services as a means of exerting pressure on target countries.
- (f) Sanctioned economies experience a lack of investment, higher risk perception, more authoritarian regimes, lower quality of government, and heightened corruption as collateral damage. These sanctions may have

negative and significant impacts on the target country's socio-economic conditions and on popular support for the target regime.

- (g) Effective economic interventions must be combined with other forms of national power, such as military force, diplomacy, cyber capabilities, and intelligence activities. In recent conflicts, some of the most impactful forms of power have been a blend of hard and soft power, not relying solely on military or economic strength.
- (h) Economic warfare interventions serve as a deterrent by sending a clear message to regimes, individuals, and entities involved in supporting sanctioned targets that they are under observation and could face consequences if they continue their support. However, sanctions may not always immediately produce the desired change in behavior from the target country, group, or regime, as evidenced in the case of Iran.
- (j) Economic intervention by nations and international organizations to combat transnational threats posed by non-state actors, such as terrorism, narco-trafficking, transnational organized crime, human rights violations, and malicious cyber activities, have been effective in protecting national interests, particularly after 9/11.
- (k) To counteract the effects of economic interventions, nations, alliances, and private businesses are seeking to move away from US-based financial platforms and currency for international trade, to avoid US jurisdiction and sanctions compliance. The trend of gravitating towards de-globalization and de-risking is also gaining traction.
- (l) In an interconnected world, economic interventions have become more complex, and it is crucial to have a central agency to coordinate among the

various government departments and agencies involved in policy-making and enforcement roles. A comprehensive, whole-of-nation approach is necessary.

- (a) The task of determining the impact of economic measures on the desired outcome is a complex one for social scientists. One of the major challenges is the lack of a hypothetical comparison scenario, which makes it difficult to determine the effects of sanctions. For instance, in the Russia-Ukraine conflict, it is unclear what the outcome would have been if sanctions had not been imposed on Russia. Some may argue that the combination of sanctions, the bravery of the Ukrainian people, and support from Western nations, including military equipment, effectively deterred Russia's attempts to make Ukraine a subservient satellite state. This argument can be applied to past sanctions against countries such as Cuba, Iran, and North Korea. For example, it is uncertain whether Cuba would have posed a military threat to the U.S. or if Iran and North Korea would have developed more dangerous weapons without being subjected to these measures. However, this does not mean that all sanctions are equally effective. Sanctions are designed to prevent negative outcomes, and if they succeed in doing so, their impact may not be easily visible. Nevertheless, when evaluating the effectiveness of sanctions, it is important to consider the potential outcomes that may have been avoided.
- (d) China, with its strong economic prowess, has effectively utilized its economic warfare strategy to further its national interest. Leveraging the BRI as a tool of economic weapon, China has expanded its influence in South East Asia as also increased its presence in the Indian Ocean Region (IOR) by taking control of ports in strategic locations through economic coercion, effectively encircling India with infrastructure-debt trap diplomacy.

The outcomes stated above have ramifications for designing strategies that outline the optimal timing for deploying economic interventions and maximizing their impact. The theory of compellance dictates that for successful outcomes, a state must adjust the cost-benefit ratio of its target in a manner that it motivates the target to abandon its chosen path. The success and legitimacy of the chosen instrument hinge on enhancing the connection between the sanctioned country's valued interests and the means used to target those interests. In the constantly evolving world of politics and geo-economics, it is indeed a challenge for any economic intervention to remain effective, especially given the long gestation period in most cases.

CHAPTER 6

DATA ANALYSIS

Construct for Designing Questionnaire

A self administered questionnaires based on Google Forms was designed and circulated online for collecting primary data on the research topic "Efficacy of Economic Warfare in a Globalised World: An Assessment". A total of 20 closed ended questions with 14 based on Likert Scale and 06 based on Rank Order, formed part of the questionnaire. The questions were based on six main constructs to include Efficacy, Spectrums, Linkage, Strategy/Doctrine, Organization/ Structures and Capability Development, derived from the laid down research objectives. (**Refer Appendix A**)

Data Collection and Collation

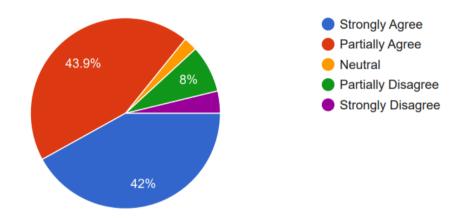
The questionnaire was circulated amongst senior Defence and Government officials, both retired and serving with more than 10-15 years of service, who have adequate knowledge, exposure and experience in the sphere of the research topic. In all a healthy 212 officers responded to the questionnaire and the number has been considered as the sample size. 'Strongly disagree' and 'disagree' have been clubbed under one category and similarly 'strongly agree' and 'agree' as one category to get a better perspective. Some of the important inferences are as listed below The Scale (Likert) and the colour code used to depict it is as follows:-

Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree
1	2	3	4	5

Q No. 1. Conventional wars are no longer the preferred means to defend/ promote National Interest between nations in the existing globalised scenario.

Answer No. 1

(a) Responses Received

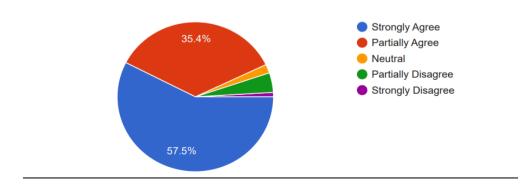


(b) Analysis of Responses 85.9% of the respondents were of the view that Conventional wars are no longer the preferred means to defend/ promote National Interest between nations in the existing globalised scenario, with only 11.8% disagreeing with the viewpoint.

Q No. 2. Economic Warfare Instruments have emerged as one of the predominant and effective means for promoting/defending National interests today due to globalization and interlinking of economies.

Answer No. 2

(a) Responses Received

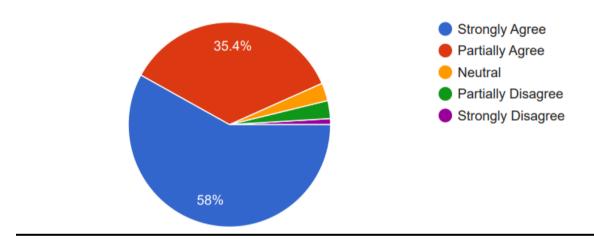


(b) <u>Analysis of Responses</u> 92.9% of the respondents were of the view that Economic Warfare Instruments have emerged as one of the predominant and effective means for promoting/defending National interests today due to globalization and interlinking of economies, with only 5.1% disagreeing with the viewpoint.

Q No. 3. During peace time Economic Warfare Interventions can be sustained below the threshold of a full fledged war to optimize payoffs.

Answer No. 3

(a) Responses Received

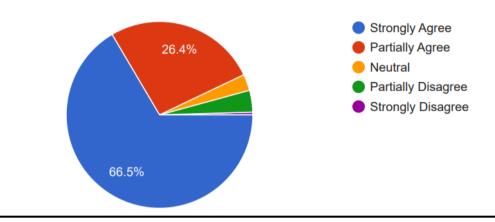


(b) <u>Analysis of Responses</u> 93.4% of the respondents were of the view that during peace time Economic Warfare Interventions can be sustained below the threshold of a full fledged war to optimize payoffs, with only 3.7% disagreeing with the viewpoint.

Q No. 4. There is a growing consensus among strategic thinkers that Economic Warfare Instruments alone cannot guarantee success in furtherance of National Interest and need to be complemented with hard power.

Answer No. 4

(a) Responses Received

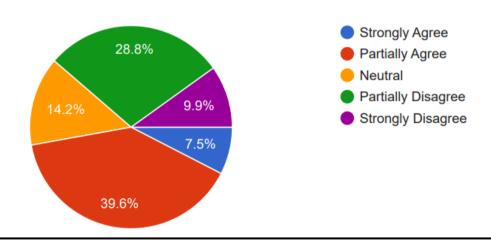


(b) <u>Analysis of Responses</u> 92.9% of the respondents were of the view that Economic Warfare Instruments alone cannot guarantee success in furtherance of National Interest and need to be complemented with hard power, with only 4.3% disagreeing with the viewpoint.

Q No. 5. Economic Warfare Interventions by NATO in the ongoing Ukraine-Russia War have been effective in promoting and defend their interests.

Answer No. 5

(a) Responses Received

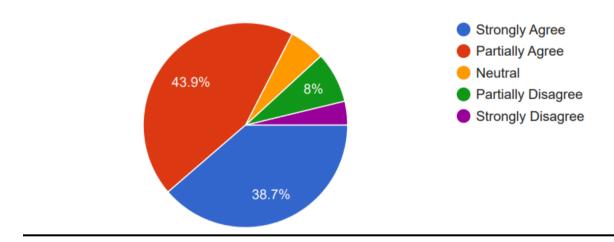


(b) Analysis of Responses Here the viewpoints were divided across the spectrum and no clear cut consensus emerged. Only 47.1% of the respondents were of the view that Economic Warfare Interventions by NATO in the ongoing Ukraine-Russia War have been effective in promoting and defend their interests. 14.2% were neutral and 38.7% were not in agreement with the viewpoint.

Q No. 6. China's strategy to use Economic Warfare Instruments to further National interests has been highly effective and successful (refer - Hambantota, Djibouti & Gwadar Ports, BRI/ OBOR etc).

Answer No. 6

(a) Responses Received

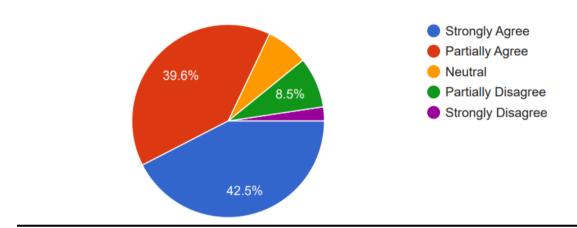


(b) <u>Analysis of Responses</u> 82.6% of the respondents were of the view that China's strategy to use Economic Warfare Instruments to further National interests has been highly effective and successful, with only 11.8 % disagreeing with the viewpoint.

Q No. 7. Instruments of Economic Warfare are relatively cost effective (Economic & Human cost) in achieving the desired results in the strategic domain as compared to conventional warfare.

Answer No. 7

(a) Responses Received

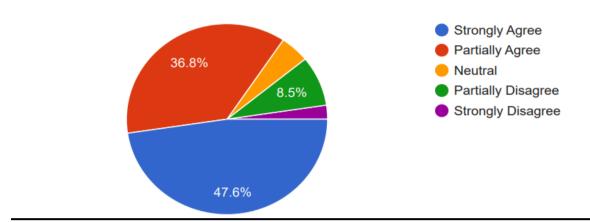


(b) <u>Analysis of Responses</u> 82.1% of the respondents were of the view that instruments of Economic Warfare are relatively cost effective (Economic & Human cost) in achieving the desired results in the strategic domain as compared to conventional warfare, with only 10.9 % disagreeing with the viewpoint.

Q No. 8. Traditionally India as a country has been fixated with the conventional approach to furthering National interest based primarily on kinetic war options/diplomacy. There is an urgent need to transcend from this conventional approach towards Economic warfare options.

Answer No. 8

(a) Responses Received

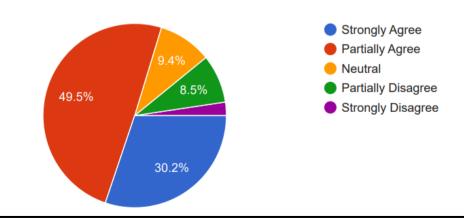


(b) <u>Analysis of Responses</u> 84.4% of the respondents were of the view that there is an urgent need for India to transcend from its conventional approach towards an Economic warfare options to furthering National interest, with only 10.9 % disagreeing with the viewpoint.

Q No. 9. Post Policy intervention to open up the economy in 1991, India has progressively attained the economic prowess to effectively leverage Economic warfare Instruments to achieve the desired results.

Answer No. 9

(a) Responses Received

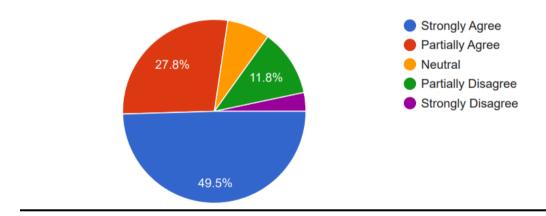


(b) <u>Analysis of Responses</u> 79.7% of the respondents were of the view that post policy intervention to open up the economy in 1991, India has progressively attained the economic prowess to effectively leverage Economic warfare Instruments to achieve the desired results, with only 10.9 % disagreeing with the viewpoint.

Q No. 10. The lack of a declared National Security Strategy by India has adversely effected our capability development and response matrix in dealing with new age security threats.

Answer No. 10

(a) Responses Received



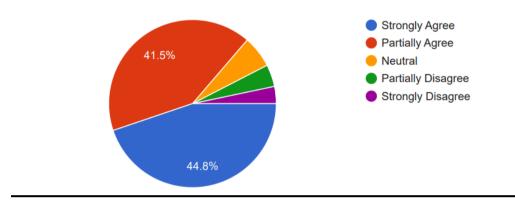
(b) <u>Analysis of Responses</u> 77.3% of the respondents were of the view that the lack of a declared National Security Strategy by India has adversely effected our capability development and response matrix in dealing with new age security threats, with only 15.1 % disagreeing with the viewpoint.

Q No. 11. The existing organization/ structure at the national level including various stakeholders, agencies and ministries in the Indian setup is sub optimally configured

to effectively mobilize/ incorporate all organs of national power to leverage economic warfare strategies.

Answer No. 11

(a) Responses Received

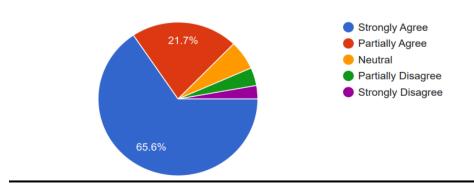


(b) <u>Analysis of Responses</u> 86.3% of the respondents were of the view that the existing organization/ structure at the national level including various stakeholders, agencies and ministries in the Indian setup is sub optimally configured to effectively mobilize/ incorporate all organs of national power to leverage economic warfare strategies, with only 7.5 % disagreeing with the viewpoint.

Q No. 12. Economic Warfare as a concept is inadequately incorporated/ integrated into Indian Armed Forces Warfare Doctrines and strategic thought process.

Answer No. 12

(a) Responses Received

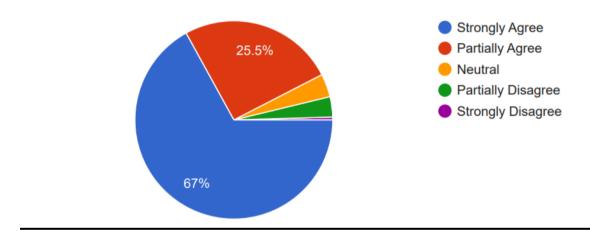


(b) Analysis of Responses 87.2% of the respondents were of the view that Economic Warfare as a concept is inadequately incorporated/ integrated into Indian Armed Forces Warfare Doctrines and strategic thought process, with only 6.6 % disagreeing with the viewpoint.

Q No. 13. Nations like China follow a "Whole of Nation" approach in their conduct of Hybrid Warfare. India also needs to adopt a similar model to exploit its economic prowess to further National Interests.

Answer No. 13

(a) Responses Received

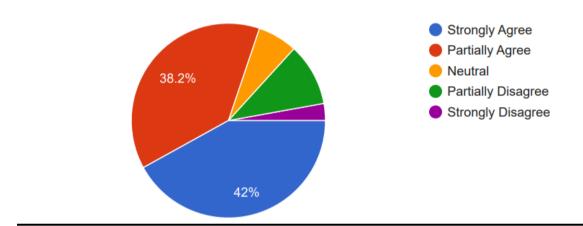


(b) Analysis of Responses 92.5% of the respondents were of the view that like China, India also needs to adopt a "Whole of Nation" approach in conduct of Hybrid to exploit its economic prowess to further National Interests, with only 3.8 % disagreeing with the viewpoint.

Q No. 14. Multilateral economic intervention by organizations such as UN, EU, NATO etc are often more powerful and effective than unilateral interventions because they combine the economic force of multiple countries.

Answer No. 14

(a) Responses Received



(b) <u>Analysis of Responses</u> 80.2% of the respondents were of the view that multilateral economic intervention by organizations such as UN, EU, NATO etc are often more powerful and effective than unilateral interventions because they combine the economic force of multiple countries, with 13.2 % disagreeing with the viewpoint and 6.6 % being neutral.

Q No. 15. Rank following aspects in terms of reasons for enhanced efficacy of economic warfare instruments in recent times. (Rank from 1 to 5, with 1 being the most important reason in your opinion).

- Economic and trade interdependence
- Technological advancement
- Economic cost of conventional war
- Human cost of conventional war

• Proliferation of social media

Answer No. 15 Analysis of Responses With a score of 74% 'Economic and Trade Interdependence' has been graded as the primary reason for enhanced efficacy of economic warfare instruments in recent times. 'Technological Advancement' with a score of 50% is in second place' and 'Economic Cost of Conventional War' in third place with a score of 46%. Proliferation of social media is in last place.

Q No. 16 The spectrum of Economic Warfare is vast. Rank in terms of likely efficacy the following economic warfare instruments (Rank from 1 to 7, with 1 being the most effective means in your opinion).

- Embargoes
- Blockades
- Tariff bigotry
- Subsidies & dumping
- Freezing of capital assets
- Debt trap
- Currency war

Answer No. 16 Analysis of Responses Embargo and blockades have been graded as the most effective instruments of economic warfare, closely followed by Debt trap and Freezing of capital assets. Currency war has been graded the least effective. Overall no particular instrument stands out, probably since efficacy would vary from situation to situation and we cannot use one size fits all approach.

Q No. 17 Which of the following countries have used Economic Warfare Interventions, post World War I era for furthering National interests in an effective manner? (Rank from 1 to 5, with 1 being the most important successful in your opinion)

- India
- U.S.
- Russia
- China
- U.K.

Answer No. 17 Analysis of Responses U.S. and China take the first and second positions hands down with India being graded the least as expected when it comes to leveraging Economic Warfare Interventions, post World War I era for furthering National interests in an effective manner.

Q No. 18 What has been the efficacy of Economic Warfare Interventions undertaken in response to below stated situations, in achieving the desired results? (Rank from 1 to 5, with 1 being the most important successful in your opinion).

- Iran (nuclear proliferation: 2002)
- Russia (territorial aggression of Crimean: 2014)
- Syria (civil war: 2004)
- North Korean (nuclear weapons program: 2003)
- Russia (territorial aggression of Ukraine: 2021)

Answer No. 18 Analysis of Responses In terms of efficacy of Economic Warfare Interventions undertaken in response to insuring situations, interventions in

Iran (nuclear proliferation: 2002) and Syria (civil war: 2004) have been graded as first and second. Balance are at par with Russia (territorial aggression of Ukraine: 2021) being the last. Possibly since the Russian- Ukraine conflict is still ongoing it may be premature to judge its efficacy.

Q No. 19 Which of the below listed types of hybrid warfare approaches are likely to be more complementary/ have linkages in making economic warfare effective (Rank from 1 to 6, with 01 being the most effective means in your opinion).

- Resource Warfare
- Information Warfare
- Legal Warfare
- Media Warfare
- Environmental Warfare
- Cyber Warfare

Answer No. 19 Analysis of Responses Cyber, Resource and Information have emerged as the most complimentary hybrid warfare tools which have strong linkages with economic warfare. Environmental warfare has been graded as the least complimentary.

Q No. 20 Rank following agencies in terms of their suitability to act as the nodal agency to coordinate all facets of Economic warfare strategy in Indian context. (Rank from 1 to 5, with 1 being the most ideal agency in your opinion).

- Ministry of Defence (MoD)
- Ministry of Home Affairs (MHA)
- Ministry of Finance (MoF)

- National Security Council headed by NSA under PMO
- Ministry of External affairs (MEA)

Answer No. 20 Analysis of Responses National Security Council headed by NSA under PMO has emerged as the clear choice followed by Ministry of External affairs and (MEA) Ministry of Finance (MoF), as the preferred nodal agencies to coordinate all facets of economic warfare in the Indian context.

Interviews with Subject Experts.

In addition to the questionnaire a number of formal and informal interactions were undertaken with subject experts in fields related to the research topic. The valuable inputs obtained through these interactions have been factored into the recommendations in appropriate form. Two formal interviews were conducted with the following subject experts and excerpts of the interview are attached as appendices:-

(a) <u>Brigadier Hemant Mahajan YSM (Retired)</u>. Brig Hemanh Mahajan,YSM is an MSc and M.Phil in Defence Studies. He was commissioned into Maratha Light Infantry and has served extensively in Counter Insurgency Operations in Insurgency and Terrorist prone areas of Jammu & Kashmir, Punjab and North East and has taken part in a number of operations undertaken by the Army since 1975. The officer is a prolific writer and his articles are regularly published in all leading news papers. He has published more than 4500 articles in last 13 years since retirement. The officer authors weekly column in Tarun Bharat, Weekly SAMNA, Pudhari and News Bharati. He is a visiting professor for many think tanks pan India and delivers lectures on subjects related to National Security. The officer heads the

Strategic Study Centre at Rashtriya Swatantra Veer Savarkar Smarak at Mumbai. He was the chair professor Swatantra Veer Savarkar chair for National Security at Pune university from 2018 – 2021. He has also had the destination of being the security advisor to government of Daman and Diu for 2 years from 2017 to 2019. Excerpts of his interview are attached as **Appendix B**.

(b) <u>Colonel Ajay Singh (Retired)</u>. Colonel Ajay Singh was commissioned into the Armoured Corps in December 1981. He commanded an Armoured Regiment, has been an instructor at three premier army training establishments and has tenanted important staff appointments at every level. He has authored four books including the highly acclaimed books "The Battles That Shaped Indian History" and more recently the "Russia- Ukraine War: The Conflict and Its Global Impact". He has to his credit over 200 plus published articles in various publications, social media sites and journals. He is also the CEO of a company dealing with IT and social media. Excerpts of his interview are attached as **Appendix C**.

Major Inferences Based on Data Analysis

Analysis of the data collated through the specially designed questionnaire, literature review and structured interviews with subject experts highlight interesting and relevant aspects related to our understanding of Efficacy of Economic Warfare in a Globalised World. Summary of Inputs under the six earmarked constructs are as summarised below:-

(a) <u>Efficacy</u>. Respondents are of the opinion that Conventional wars are no longer the preferred means to defend/ promote National Interest between nations and space for conventional wars between nations has

drastically reduced in the existing globalised scenario. Also, economic warfare instruments have emerged as one of the predominant and effective means for promoting/defending National interests today due to the current dynamics of economic and trade interdependence, cost effectiveness (economic & human cost) aided by technological advancement. In some cases, these instruments can lead to unintended consequences, such as harming domestic industries or disrupting international supply chains. Thus, it is imperative for countries to carefully consider the costs benefits analysis of using these instruments, as also their potential impact on their relationships with other nations and the global economy. It is important to note that this does not eliminate the possibility of a conventional conflict, as there are still political and ideological differences between nations that can lead to tensions and resultant violence.

• NATO has employed a range of economic warfare interventions in response to the ongoing conflict between Ukraine and Russia. While the impact and effectiveness of these interventions is a matter of debate, it is generally believed that they have had some success in achieving NATO's strategic objectives. For example, the sanctions and other measures have put pressure on the Russian economy, leading to a decline in GDP and currency value, and have made it more difficult for Russia to access international capital markets. However, it is important to note that these interventions have also had negative consequences, both for Russia and for the global economy as a whole. The sanctions have led to a decline in trade and investment, and have disrupted supply chains and financial markets.

Overall, the efficacy of economic warfare interventions in the ongoing Ukraine-Russia war is a complex issue, and the impact of these interventions is likely to depend on a range of factors, including the goals and strategies of the countries involved, the nature of the conflict, and the broader geopolitical context. Notwithstanding the above, as a general principle multilateral economic intervention by organizations such as UN, EU, NATO etc are likely to be more effective than unilateral interventions because they combine the economic force of multiple countries.

China has effectively leveraged its economic power and financial resources to gain influence and strategic advantage in regions of interest. It has made significant investments in infrastructure and development projects in countries around the world, providing funding and technical assistance in exchange for access to strategic assets, such as ports or natural resources. Additionally, China has been able to use its economic power to shape the global economic and political landscape to its advantage. For example, it has sought to promote the use of its currency, the Yuan, in international trade and investment, and has established a range of regional and global economic institutions to promote its interests. It is also important to note that China's economic warfare interventions have faced criticism and pushback from some countries, which have raised concerns about China's growing economic and political influence and the potential risks and negative consequences of its investments and projects. Overall, while China's economic warfare interventions have been successful in most cases,

they have also faced challenges and limitations, and their long term impact remains to be seen.

- (b) Spectrums. Impact and effectiveness of economic warfare instruments would depend on a wide range of factors, such as the specific goals of the countries using them, the nature of the relationship between those countries, and the global economic and political context. Some economic warfare tools may be more commonly used than others due to their perceived effectiveness in achieving certain goals. For example, tariffs and other trade barriers can be effective in protecting domestic industries and reducing competition, while currency manipulation can be used to gain a competitive advantage in international trade. However, it is important to note that the use of economic warfare tools can have negative consequences, both for the countries using them and for the global economy as a whole. For example, the use of subsidies and other trade barriers can distort markets and harm consumers, while currency manipulation can create uncertainty and instability in global financial markets.
- (c) <u>Linkage</u>. Hybrid warfare tools such Cyber, Resource and Information Warfare are complementary and have effective linkages in making economic warfare effective, if leveraged properly. Cyber-enabled economic warfare refers to a hostile strategy that employs cyber technology to launch attacks against a nation, intending to undermine its economy and consequently diminish its political and military influence. Many experts are of the view that the next war may be a Resource War over river water sharing, rare earth metals, maritime resources including Exclusive Economic Zone (EEZ) to name a few. While economic warfare has been in vogue for a long

time in some form, adversaries now have powerful asymmetric hybrid warfare tools with which to strike at economic foundation of adversaries. China and North Korea have been using this approach with good effect for some time. Thus, for optimal results an approach exploiting the complete spectrum of hybrid warfare is ideal and efficient.

(d) Strategy/ Doctrine. It emerges that economic warfare interventions do not always have to be accompanied by conventional warfare, and they can be used to pursue national interests during peacetime. Also, there is a growing consensus among strategic thinkers that economic warfare instruments alone cannot guarantee success and need to be complemented with hard power. This approach is generally referred to as "gray zone" or "hybrid" warfare, involves using a combination of military, economic, and political tactics to achieve strategic objectives. Gray zone economic warfare interventions can be effective in achieving national objectives while minimizing the risk of escalation to full-scale conflict. For example, countries may use economic sanctions, trade restrictions, or cyber attacks to disrupt their adversaries' economies and undermine their political stability. However, it is important to note that gray zone economic warfare interventions can also have unintended consequences, such as damaging the global economy, creating uncertainty in international trade and investment, and contributing to geopolitical tensions and thus should be used judiciously. A combination of economic and diplomatic measures may be more effective in achieving national objectives while minimizing the risk of escalation to full-scale conflict. Historically, India has tended to focus more on conventional approaches to furthering its national interests, including military power and diplomacy. However, in recent years, there has been growing recognition within India of the importance of economic warfare instruments in achieving national objectives, and there have been efforts to develop and expand India's capabilities in this area. One example of this is the development of India's "Act East" policy, which aims to expand economic ties and cooperation with countries in Southeast Asia and beyond, and to use economic diplomacy and engagement as a means of achieving strategic objectives. Additionally, India has sought to expand its presence and influence in the Indian Ocean region, in part by developing economic and infrastructure projects in countries such as Sri Lanka, Bangladesh, and Myanmar, and by seeking to leverage its economic and strategic partnerships to advance its interests. Overall, while India has traditionally focused more on conventional approaches to furthering its national interests, there is growing recognition of the importance of economic warfare instruments in today's global landscape, and India is seeking to expand and develop its capabilities in this area.

Organizations/ Structures. (e) India should establish clear and effective organizational structures to facilitate the implementation of its economic warfare strategy. This could involve realigning/ restructuring/ creating (if required) new government agencies or units focused on economic warfare, as well as fostering greater coordination and collaboration across existing agencies and departments. The decision about which organization/ agency should be entrusted with the responsibility of coordinating economic warfare strategy would depend on a range of factors, including the specific objectives of India's economic warfare efforts and the capabilities and resources of the relevant government agencies. Considering the intricacies of coordinating with a host of civil infrastructure and the resource involved which need to be exploited/ mobilised as part of the 'Whole of Nation' approach to effectively prosecute economic warfare, the NSC headed by NSA under the Prime Minister appears to be ideally configuration for the task and is strongly recommended as the nodal agency. In addition to the nodal agency a host of ministries/ organization such as MoF, MEA, MoH, MeitY and MoD et al, will have to pitch in with specific role within the overall gamut to synergize the latent potential.

(f) **Capability Development.** Post Policy intervention to open up the economy in 1991, India has progressively attained the economic prowess to effectively leverage Economic warfare Instruments to achieve the desired results. India should invest in building the necessary capabilities and tools to execute its economic warfare strategy effectively. This could include developing specialized units or agencies focused on economic warfare, as well as investing in areas such as economic intelligence, financial warfare and economic statecraft. To optimally incorporate and integrate economic warfare into Indian Armed Forces warfare doctrines, strategic thought process, and capability building, it will be important to foster a whole-of-government approach, building expertise and capabilities in specialized units, enhancing collaboration and coordination, building intelligence capabilities as also, strengthening strategic partnerships with like-minded countries. There is a felt need to have a clearly enunciated and thought through National Security Strategy to embark on a strategic long term vision for capability development and response matrix encompassing new age security threats.

Taking into consideration the analysis of the quantitative and qualitative inputs thus far it emerges that economic warfare interventions have been employed by nations even prior to the World War I era, however with the globalization and interlinking of economies their efficacy as instruments to further national interest has indeed got a fillip. They are more effective when used in consonance with other tools of Hybrid warfare including hard power and require a Whole of Nation approach.

CHAPTER 7

RECOMMENDED STRATEGY FOR LEVERAGING ECONOMIC WARFARE

"The Indian Way, especially from now on, would be that of a shaper or a decider, than merely an abstainer."

- S. Jayashankar, External Affairs Minister

The global strategic landscape is currently experiencing increasing polarization between major powers such as China, Russia, and the US. This polarization is primarily driven by political and economic factors, rather than ideological ones. Major powers are prioritizing their own national sovereignty over international cooperation, which challenges the structure of international relations established after World War II. Economic warfare is a significant component of this evolving narrative, requiring coordinated efforts among lead agencies at the highest level, accompanied by political will, strategic vision, and capability development. To be effective strategies and doctrines must be adapted to changing environmental realities and matched with tailored structures and corresponding capabilities to execute a grand strategy. To utilize its economic strength to advance its national interests, India needs a comprehensive and integrated approach. This approach should involve a combination of strategy, doctrine, capability building, and organizational structures, as outlined below:-

(a) <u>Strategy/Doctrine</u>. India should develop a clear and coherent strategy that is grounded in an understanding of its economic strengths and weaknesses, as well as the global economic and political landscape. The

strategy should be aligned with India's broader strategic and foreign policy objectives, and it should provide a framework for leveraging its economic prowess to further these objectives. Doctrines to compliment this strategy need to be enunciated.

- (b) <u>Capability Building</u>. India should invest in building the necessary capabilities to execute its economic strategy effectively. This could involve developing specialized units or agencies focused on economic warfare, as well as investing in areas such as economic intelligence and financial warfare. India needs to attain a position of economic power and self reliance where it can effectively use economic statecraft to safeguard and promote its national interests.
- (c) <u>Organizations/ Structures</u>. India should establish clear and effective organizational structures to facilitate the implementation of its economic warfare strategy under the overall umbrella of hybrid warfare. This could involve reconfiguring/ realigning existing structures/organizations, creating new government agencies/ organizations focused on economic warfare, and fostering greater coordination and collaboration across existing agencies and departments.

Overall, India's approach to leveraging its economic prowess should be guided by a clear and coherent strategy, supported by robust capabilities and effective organizational structures. This approach should be agile and adaptable to changing circumstances, and it should be underpinned by a deep understanding of the dynamics of the global geo-economic and geo-political landscape. Based on the inputs collated during the course of the research the specific recommendations under above stated broad categories are given below.

STRATEGY AND DOCTRINE

Existing Mechanism: National Security Structure

To effectively leverage economic warfare strategies and ensure that all available instruments of national power are synergized to achieve its strategic objectives, India needs to adopt a "Whole of Nation" approach. To get a better perspective, let us first understand the existing mechanism of the National Security Structure at various levels.

(a) The Three-tier National Security Structure. The National Security Council (NSC) of India advises the Prime Minister's Office on matters of national security and strategic interest. Established in 1998 by the Atal Bihari Vajpayee government, it replaced the Principal Secretary to the Prime Minister in overseeing these activities. The NSC has a three-tiered structure that includes the Strategic Policy Group (SPG), the National Security Advisory Board (NSAB), and the National Security Council Secretariat (NSCS). Recently, changes include the appointment of three Deputy National Security Advisors to independently oversee external and technical intelligence matters, diplomatic affairs, and internal security matters, along with the revival of the Military Advisor post. The SPG, now headed by the NSA, includes various ministries, the three service chiefs, the Reserve Bank of India (RBI), Space, Finance, Atomic Energy, Intelligence Chiefs, and the Chairman of the NITI Aayog. In 2018, the NSAB was reconstituted to have only four members, who work within the system and undertake long-term analysis to perspectives of national security. provide on issues Its recommendations are conveyed to the NSC for consideration. The NSAB has contributed to studies on current and long-term strategic issues and produced the Draft Nuclear Doctrine in 2001, the Strategic Defence Review in 2002, and the National Security Review in 2007.

(b) The Defence Planning Committee (DPC). The Defence Planning Committee (DPC), established by the Union Government in April 2018, is an integrated institutional mechanism that will lead the country's military and security strategy and guide defence equipment acquisitions. The NSA heads the committee, which will be a permanent body responsible for drafting the National Security Strategy, undertaking strategic defence reviews, and formulating international defence engagement strategies. The DPC consists of the Chairman of the Chiefs of Staff Committee, Service Chiefs, Defence Secretary, Foreign Secretary, and Secretary of Expenditure in the Finance Ministry. The inclusion of the Foreign Secretary and Expenditure Secretary as members of the DPC is intended to enhance coordination between various ministries on matters of national security. The committee will operate through four sub-committees dealing with Policy and Strategy, Defence Diplomacy, Plans and Capability Development, and Defence Manufacturing Eco-system. It will undertake external security risk assessments, define national defence and security priorities, and formulate the National Military Strategy, National Security Strategy, Strategic Defence Review, and doctrines. The DPC will also identify ways and means across ministries, obtain Cabinet Committee on Security (CCS) approval for capability development plans, and provide guidance for budgetary support. The DPC is also tasked with preparing a roadmap to establish a defence manufacturing eco-system, a strategy to boost defence exports, and prioritized capability building plans for the Armed Forces in line with overall priorities, strategies, and likely resource allocations. The committee will submit all its reports to the Defence Minister and will focus on cyber, space, special operations, and other areas of national security (GK Today, 19 February 2023). The scope of the DPC however needs to be widened to include hybrid warfare aspects given its significance.

Energizing the National Security Structure

Recommendations to energies the national Security Structure to prosecute hybrid warfare are as follows:-

(a) Promulgation of a National Security Strategy (NSS). In India, National Security is a subject listed under the Union List (7th Schedule) of the Constitution. It is a paradox that India, a growing regional power aspiring to be a global player, lacks a formal National Security Strategy (NSS), leading to ad hoc responses to security crises. A country's security and military policies should be driven by its national aims, interests, and objectives. The Indian NSS should address not only external military threats but also internal threats, non-traditional security threats, and threats to core values. It should recognize that countering external and internal threats requires political and diplomatic means in addition to hard power. The NSS should also strive to achieve national aspirations in domestic, regional, and global contexts, including nontraditional aspects of security such as economic, human, energy, and environmental security. Given the complexities of the current geo-economic world order, a declared Strategy and Doctrine is needed to address these threats optimally. The Union Government must articulate a NSS with political consensus, which all other policies related to foreign policy, economic policies, etc. can draw from. Another gap in India's security structure is the lack of a formal, coherent, and updated National Defense Policy that is integrated with National Security Policies. We could take a leaf out of the U.S., where each President is required by law to make public the National Security Doctrine his administration intends to follow. The Integrated Defense Staff (IDS) had drafted a NSS in 2007, but it was not approved by the CCS. Subsequently a draft NSS has also been put together by the National Security Council Secretariat (NSCS) in India, but it is still under review, and only some of its contents may be made public post-approval (Gokhale, 2028). A recommended NSS document should have the following mandatory elements:

- A working definition of national security and national security objectives;
- An appreciation of the emerging security environment taking into account the geopolitical and geo- economic changes in the world;
- An assessment of the national strengths and weaknesses of the country in dealing with the challenges;
- Identification of the military, economic, diplomatic capabilities/ structures needed to meet the emerging/ future challenges.
- Put in place a mechanism to ensure seamless coordination among different ministries/ departments of the government to effectively prosecute a 'Whole of Nation' approach leveraging all instruments of Hybrid Warfare.
- (b) <u>Develop a Hybrid Warfare Strategy</u>. While articulating our intent to undertake all-encompassing hybrid operations through the NSS document is necessary, it may not be sufficient. The operational aspects of such an undertaking need to be articulated in a specific 'Hybrid Warfare

Doctrine', which should be developed in detail and disseminated on a need-to-know basis. All aspects of hybrid warfare, including economic, cyber, space, and information warfare, need to be interwoven into a long-term plan with executive orders given to respective agencies. Currently, we only have an information warfare doctrine in the military domain, which includes Perception Management and Psychological Operations (Kulbhushan, 2018). The strategy would require collaboration among stakeholders across government, industry, and academia. India could also create a comprehensive plan for leveraging economic warfare interventions, derived from the Hybrid warfare doctrine, to further its national objectives.

Strategic Autonomy Versus Building Strong Alliances - A Fine (c) **Balance**. India's foreign policy since gaining independence from British rule in 1947 has been shaped by two doctrines: "Strategic Autonomy" and "Strategic Hedging." While these doctrines have been touted as defining India's approach to foreign relations, some experts argue that they are more indicative of India's unique historical experience and not a clear, long-term foreign policy vision. Instead, they have become static positions due to bureaucratic tendencies and aversion to change. To stay relevant in the rapidly changing global geopolitical landscape, India needs to reassess its engagement in alliances such as the Quad, Shanghai Cooperation Organization, G-20 etc especially in light of emerging alliances like AUKUS (United States, Australia, and the United Kingdom). China's aggressive expansion in the Indian Ocean region requires India to remain vigilant and take proactive measures to counter their hegemonic intentions. This may involve recalibrating its approach to alliances and collaborations to ensure that India's strategic interests are adequately protected. It is imperative for India to prioritize a futuristic, cost-benefit analysis approach to its foreign policy, keeping in mind the dynamic nature of global power dynamics ("Strategic Autonomy No Longer Serves India's Interests," 2021). While Strategic Autonomy and Strategic Hedging have served India well in the past, a more proactive and adaptive approach is required to ensure that India maintains its status as a rising global power.

- doctrines appear to primarily focus on mitigating our vulnerabilities in critical networks, organizations, cyber space, and defense communications, and degrading the enemy's ability to do the same. This can be classified as a "defensive" or, at best, an "offensive defensive" approach. However, the aspect of pre-emptive strike as part of an offensive approach is not addressed. The idea of attacking enemy networks and grids prior to war or without declaring war, or warning the adversary state or non-state actor, should be considered as part of our doctrinal approach, if necessary. Therefore, a shift towards pre-emption is recommended, where we act first as the first resort, shifting from a reactive to a proactive thought process.
- (e) <u>Defining Acts of War/ Establishing Rules of Engagement (RoE)</u>. As a sovereign nation, India must establish specific actions that would be considered acts of war in the hybrid domain, granting India the authority to respond accordingly in any domain, including NCW. Any action taken against critical infrastructure, such as a Computer Network Attack (CNA) on nuclear or power grids, or hacking of national banks, stock exchanges, railways, or airline systems should be regarded as an act of war. Clear ethical standards of

warfare must be defined and included in the doctrine to provide legitimacy and forewarn potential adversaries from engaging in any such activities.

CAPABILITY BUILDING

In order to make the most of economic warfare within the context of Hybrid warfare, we must focus on two key areas. Firstly, we need to ensure that our nation is sufficiently protected against potential economic interventions by our adversaries. Secondly, we need to establish capabilities, and structures to efficiently carry out both defensive and offensive economic warfare. Based on this premise, the following are proposed.

(a) To counter economic warfare instruments, it's **Self Reliance**. important to strive towards achieving self-reliance and gradually reduce dependence on other countries, especially those perceived as adversaries. This approach can help make the economy more resilient and dampen the impact of sanctions. The "Make in India" initiative launched in 2014 was a positive step in this direction. The "Atmanirbhar Bharat Abhiyaan" or Self-reliant India campaign, launched in 2020, is an extension of this initiative. The campaign has five pillars - Economy, Infrastructure, System, Vibrant Demography, and Demand, and focuses on cutting down import dependence by promoting local products and improving safety compliance and quality goods to gain global market share. The mission also involves several bold reforms such as Supply Chain Reforms for Agriculture, Rational Tax Systems, Simple & Clear Laws, Capable Human Resource, and Strong Financial System, which will help achieve self-reliance faster. It's important to note that self-reliance doesn't signify any exclusionary or isolationist strategies but rather involves creating a helping hand for the whole world. The Aatma Nirbhar Bharat campaign has already yielded short-term benefits, but there are also several long-term benefits to be realized. The campaign aims to support small and medium enterprises as well as the manufacturing sector, with the goal of growing the Indian economy to 5 trillion by 2025. However, some aspects of the program have the potential to hinder international trade and investment, such as increased tariffs, non-tariff restrictions on imports, and import substitution. Additionally, India's Intellectual Property enforcement regime, pharma sector regulations, drug price controls, and norms related to data localisation and governance pose challenges. Areas in which India can further improve its economic strategy are as follows:-

- <u>Develop a Long-term Strategy</u>. India needs a regional supply chain approach and a long-term location decision-making strategy for success.
- Promote Free and Fair Trade. India should attract investors based on its strengths rather than relying on tariffs to attract international businesses.
- <u>Support Innovators</u>. Focus on developing skills in Science, Technology, Engineering, and Mathematics (STEM), digital, creative and critical thinking to build leaders and workers who can innovate and solve problems.
- <u>Intellectual Property Policy</u>. It's essential for India to establish an intellectual property policy and enforcement system that is conducive to innovation.

- <u>Embrace Digital and Data</u>. India has the opportunity to integrate fully with other major democratic markets in digital and data services.
- <u>Put Sustainability at the Center</u>. India should integrate sustainability and human rights into its trade agreements and strategies.
- <u>Mobilize Finances</u>. India's high foreign reserves can be strategically used to finance stimulus needs, supplemented by privatisation, taxation, loans and international aid.
- (b) Roadmap for Self Reliance in Defence. The Russia - Ukraine conflict has highlighted the relevance of self reliance in the defence sector. India is one of the largest arms importers in the world, accounting for 11% of global arms sales. To become a global power, India must achieve self-reliance in defence equipment production, and the Aatmanirbhar Bharat Abhiyan is expected to aid in achieving this goal. We have already taken significant strides towards becoming self-sufficient in defence manufacturing by producing indigenous equipment such as Arjun Mk-1A Main Battle Tanks, Light Combat Aircraft (Tejas), Aircraft Carrier 'Vikrant', K-9 self-propelled artillery guns etc. Encouraging private sector participation in defence will create opportunities for strategic partnerships between foreign producers and Indian businesses. This will benefit both parties by strengthening production, upgrading equipment, and promoting indigenization and technology modernization. The government's acceptance of proposals worth billions of dollars under the Defence Acquisition Procedure (DAP- 2020) is expected to enhance local manufacturing. Additionally, the majority of the capital acquisitions made between 2018 and January 2022 were inked with Indian

suppliers. The Make in India movement will create opportunities for innovation, job creation, and skills integration. Favorable government policies are critical to achieving Aatmanirbharta, as India seeks to become a global defence manufacturing hub (Mehta & Dholakia, 2022, March 28). To further boost self-reliance in the defence sector, following key recommendations need to be considered:-

- Investing in Research and Development (R&D) in cutting-edge technologies such as space, cyber, and artificial intelligence to stay ahead of the curve.
- Focusing on dual-use technologies such as drones, semiconductors, global positioning satellites, and thermal imaging to optimize outputs and synergize efforts.
- Encouraging Foreign Direct Investment (FDI) to infuse funds into defence-related industries.
- Exploring the Public Private Partnership (PPP) model to enhance efficiency and accountability.
- Developing Defence Public Sector Undertakings (DPSUs) as centers of excellence and increasing accountability and financial prudence in their functioning.
- Initiating policy changes to encourage indigenous firms to enter into joint ventures to expedite technology transfer in niche areas.
- Simplifying defence procurement procedures to encourage smaller firms to venture into this field and infuse healthy competition.
- Establishing a robust supply chain management system to ensure continued sustenance in times of crisis or sanctions.

(c) **De-globalization**. According to some experts, de-globalization refers to a movement towards a less interconnected world that is characterized by powerful nation states, local solutions, and border controls rather than global institutions, treaties, and free movement (Economics of Deglobalisation, April 2021). Recent events such as Brexit, Trumpism, the Ukraine war, problems with supply chains, the global energy crisis, and the decline in foreign direct investment over the past decade have been cited as evidence of the world entering a period of de-globalization. As a result, international organizations have seen their reputations suffer, either being criticized as too powerful or too weak. For instance, the World Health Organization struggled to drive an efficient response to the COVID-19 pandemic due to uncooperative governments (Kornprobst, 2022). Similarly, the UN, which was founded after the Second World War to save "succeeding generations from the scourge of war," has been unable to come up with an adequate response to Russia's war against Ukraine. This has led to the organization being viewed as weak and deadlocked, and populist movements tend to ridicule the notion of belonging to an international community of nations. However, some experts argue that the question of globalization versus de-globalization is one of balance, and that a fine balance needs to be maintained. In the West today, unlike the 1990s, there is greater suspicion of globalized approaches, and the scales have tipped towards de-globalization. According to the Economics of De-globalisation report from April 2021, there are several drivers that are contributing to the shift towards de-globalisation. These include the rise of populist politics and protectionism, as well as a move towards bilateral and regional trade deals that has reduced the influence of the World Trade Organization. In the wake of the global financial crisis, there has been a resurgence of capital controls and managed floating exchange rates. Additionally, economic nationalism has contributed to conflicts regarding vaccine exports, regulated mergers and acquisitions, and technological competitions. Several companies have also transitioned away from extended global supply chains, with some opting for reshoring of manufacturing operations. The COVID-19 pandemic has had an immediate impact on this shift, with threats to supply chains and reductions in labour movement. Finally, de-globalisation is seen as a strategy to mitigate the effects of economic warfare instruments, boosted by lessons learned during the ongoing U.S.-China trade war and the Russia-Ukraine conflict (Economics of Deglobalisation, April 2021)

areas that must be addressed to mitigate vulnerabilities, such as over-reliance on Chinese exports in key sectors and dependence on Russia, U.S., and Israel for advanced cutting edge technology and defence equipment. In recent years, China has remained one of India's primary trade partners, although the trade balance is heavily skewed in favor of China. The latest data released by Chinese customs in 2022 shows that the trade imbalance exceeded the US\$100 billion mark for the first time. The sharp increase in trade is mainly due to the import of electronic goods, organic and inorganic chemicals, medicinal and pharmaceutical products, fertilizers, and other items from China. However, investment flows from China to India have slowed in the last two years due to India's revised FDI policy in response to border skirmishes. Overall, the trade imbalance reached an all-time high of US\$73.31 billion in FY 2022 and has

already surpassed US\$58.02 billion in the first eight months of FY 2023. (**Refer Table 6**) (Bhardwaj, 2023, January 13).

India China Trade Statistics FY 2018 – FY 2023 (April-November), (US\$ Billion)						
Year	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023 (April- November)
Exports from India to China	13.33	16.75	16.61	21.18	21.25	9.88
Imports from China to India	76.38	70.31	65.26	65.21	94.57	67.91
Total trade between India and China	89.71	87.07	81.87	86.39	115.83	77.80
Trade balance	-63.04	-53.56	-48.64	-44.02	-73.31	-58.02

Table 6: India-China in 2023: Bilateral Trade and Investment Prospects

(Source: India Briefing site ndia-briefing.com/news/india-china-bilateral-trade-and-investment-prospects-26894.html/)

(e) Changing the China Narrative. While India is undoubtedly dependent on China, it's important to note that China is also dependent on India. Despite bilateral imports from China accounting for only 3% of China's global exports, India was the 7th largest export destination for China in 2018. Bilateral imports from China to India, the UK, and the Netherlands were almost equal. Contrary to popular perception, China is not the most competitive exporter to India, making it feasible to address the issue of overreliance. In light of above aspect certain supporting key facts and suggested solutions are listed below (Lecture by Professor Sachin Chaturvedi Director General at the Research and Information System for Developing Countries on 'Atmanirbhar Bharat and India's Foreign Trade' at IIPA, 28 September 2022):-

- Out of 4044 items imported from China, 3326 products were found to be such where China was not the most competitive supplier in 2018.
- There are 327 imported products which are found to be critical for India to import from China. Only four sections (machinery, chemicals, base metals and automobiles) accounted for 77.7 per cent share of number of critically sensitive products and 85 per cent of import bill of sensitive products in 2018.
- India can find out other alternative suppliers for over 90 per cent of its total number of products which it imports from China.
- For import of critically sensitive products worth \$66.6 billion India can replace China by engaging other suppliers to the extent of more than \$10 billion in a year.
- In the first year, alternative suppliers can absorb over 16 per cent of India's critically sensitive imports from China. Such switching of source of imports can happen more intensively in the subsequent years.
- Domestic Products with large imports and also not being supported by alternative global suppliers, deserved to be produced domestically with the support of import substitution policy.
- Long-term strategic factors are to be considered while choosing major trade destinations and sectoral concentration of imports.
- India is dependent on China for imports, but China is also dependent on India as a major export destination and as a major contributor to its overall trade surplus which has been growing steadily

over the last two decades. In a situation where Chinese bilateral trade surplus is declining persistently in most of its major trade destinations, India plays an important role in building their FOREX reserves through generating incremental trade surplus, almost every year. India needs to develop much needed narration about its economic engagement with China.

(f) **De-risking Approach by Industry**. De-risking is a term used to describe the process of financial institutions severing business relationships with clients or groups of clients to avoid, rather than manage, risk. The risk in question pertains to customers or clients who pose a higher-than-average risk of Money Laundering or Terrorism Financing, or where processing transactions could result in a breach of sanctions regulation. De-risking can be driven by economic or regulatory concerns. Indian companies with international exposure could selectively adopt de-risking measures, particularly in relation to countries, organizations, or individuals that pose a high risk in terms of economic sanctions, such as Chinese companies or their shell companies or subsidiaries. It is also important to review debt exposure or companies ("De-Risking-United investments from suspicious States Department of State", 2016). The recent allegations of stock manipulation and accounting fraud against the Adani Group by the Hindenburg report is a pertinent example of how non-state actors can target the economy in novel ways. Although the veracity of the report is yet to be established, the economic damage has already been done. This highlights the vulnerabilities of an interconnected economic structure and the need for de-risking measures. To mitigate the risks associated with de-risking, it is important for financial institutions and their clients to work collaboratively to develop risk management strategies that balance the need for compliance with the need for financial inclusion. This may involve the adoption of new technologies or innovative business models that enable financial institutions to better access and manage risk while maintaining the provision of financial services to high-risk clients. It is also important to develop a strong regulatory framework that supports de-risking efforts while ensuring that financial institutions are not unduly penalized for their compliance efforts. Overall, de-risking is a critical component of the financial industry's risk management strategy. By adopting measures to reduce risk, financial institutions and their clients can protect themselves against the threat of financial interventions while supporting sustainable economic growth.

(g) Strengthen Information Operations (IO). Effective information operations are critical to the success of India's economic warfare efforts. "IO are described as the integrated employment of Electronic Warfare (EW), Computer Network Operations (CNO), Psychological Operations (PSYOP), Military Deception (MILDEC) and Operations Security (OPSEC), in concert with specified supporting and related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protecting our own". It encompasses "actions taken to affect adversary information and information systems while defending one's own information and information systems" ("Information Operations United States, Wikipedia," 2016). This could involve investing in capabilities such as intelligence gathering, social media analysis and propaganda operations.

- (h) Build Resilience and Contingency Planning. Economic warfare can have significant consequences for a country's economy and society. Therefore, India would need to build resilience and contingency planning into its economic warfare strategy to mitigate risks and respond effectively to any disruptions or challenges that may arise. This would require a multi-pronged approach that addresses various economic, political and social factors including diversify the economy, strengthen domestic production, build strategic reserves of essential commodities such as food, fuel and medical supplies to ensure that it can withstand any disruptions to global supply chains and strengthen trade relations with other countries and regional blocs, including those outside its traditional sphere of influence, enhance cyber security and foster social cohesion.
- (j) <u>Building Partnerships with Private Sector Entities</u>. The private sector can play a vital role in supporting economic warfare efforts. India could build stronger partnerships with private sector entities that can provide critical expertise and resources, such as IT firms, financial institutions, cyber security firms and intelligence providers.

ORGANIZATIONS/ STRUCTURES

The emergence of new globalised geo-economic world order complimented by technology necessitates the adoption of innovative methods for practicing statecraft to further national interests, which in turn requires the creation of new organizational structures. Therefore, it is essential for our Nation to establish new organizations or restructure existing ones, including those in the defense forces, to effectively utilize its potential. Certain suggestions are discussed in subsequent paragraphs.

Assumptions/ TOR

The following are the basic assumptions taken into account while arriving at the recommendations:-

- (a) Firstly we need to reiterate that economic warfare interventions come under the umbrella of Hybrid Warfare also referred to as grey zone warfare. All instruments of Hybrid warfare may not need to be activated at all times.
- (b) Due to security concerns some aspects of warfare need to be purely in the military domain. An interactive interface between civil and military agencies needs to be established for functional efficiency.
- (c) For achieving synergy within all agencies involved and optimize effort and effect we need to have an apex body with requisite constitutional authority to coordinate hybrid warfare.
- (d) The present set-up with the recently inducted changes is a step in the right direction, but we need to subsume all organisations with overlapping mandate into one organisation for better vision, accountability and economy of effort.
- (e) The apex control ideally should not be with any ministry since hybrid war efforts involve a number of ministries, the industry and certain non government organisations and thus it may not be possible for one ministry to achieve congruence in effort due to turf war/ bureaucratic hurdles and political overtones/ ideologies.

Nominating Nodal Agencies

No one organization in isolation can coordinate the complex landscape of economic warfare under the umbrella of hybrid warfare. Thus, the decision about which ministry/ organization should be entrusted with the responsibility of coordinating which specific aspect of economic warfare strategy will depend on a range of factors, including the capabilities and resources at the disposal of the relevant government agencies. A plausible model in Indian context is suggested below:-

- Advisor (NSA) under PMO. The NSC is the primary agency responsible for coordinating national security policy in India, and the NSA is the principal advisor to the Prime Minister on national security matters. As such, the NSC is well-positioned to take on a role of the nodal agency for the entire gamut of hybrid warfare including economic warfare. It needs to further have subdivisions to take care of different facets of hybrid warfare such as economic, cyber etc. The exact nomenclature and responsibilities have been discussed later in the chapter. Relevant inputs and support would be given by nominated ministries/ organizations to nodal agency is as listed.
- (b) <u>Ministry of Finance (MoF)</u>. The MoF is responsible for managing India's finances and economic policies, making it a natural choice for coordinating the fisical aspects of economic warfare.
- (c) <u>Ministry of Defence (MoD)</u>. The MoD is responsible for managing India's defence policy and operations, and could potentially take on a role in coordinating economic warfare efforts that are related to defence and security. The IDS headed by CDS could take on the mantel and drive tri-service synergy.

- (d) <u>Ministry of Home Affairs (MHA)</u>. The MHA is responsible for maintaining internal security in India, and could potentially take on a role in coordinating economic warfare efforts that are related to domestic security and mitigation aspects to build resilience.
- (e) <u>Ministry of External Affairs (MEA)</u>. The MEA is responsible for managing India's foreign policy, making it a potential choice for coordinating economic warfare efforts that are related to diplomatic and international relations including narrative building.
- (f) The National Technical Research Organisation (NTRO). The National Critical Information Infrastructure Protection Centre (NCIIPC) under NTRO is recommended to coordinate aspect of cyber warfare including with MoD. Cyber warfare is a key component of prosecuting economic warfre and thus there is a need for greater synergy here.

Apex Organisation: National Level

Considering the nuances, mandate and challenges of undertaking economic warfare as part of hybrid warfare the following apex organization is suggested at the national level:-

- (a) The NSA to be responsible for overall planning and policy aspects of hybrid operations in sync with an enunciated NSS and Hybrid Warfare Doctrine. NSA to be answerable to PMO and all policy decisions to be vetted by CCS.
- (b) An additional Deputy NSA (Strategy) to be instituted to coordinate and execute the mandate under the NSA. The other three Deputy NSAs who deal with External and technical intelligence matters, Internal security matters and Diplomatic affairs could pitch in or be reconfigured accordingly and reduced

to two with diplomatic affairs being merged with the new Deputy NSA (Strategy).

- (c) Adequate resources and expertise to be built into the system under NSA/ Deputy NSA with executive powers in matters related to hybrid operations to avoid bureaucratic hurdles and achieve a lean and responsive system. Accordingly the following to function under newly proposed Deputy NSA (Strategy):-
 - Separate Sub warfare divisions for orchestrating Economic, Water, Cyber, PM, Demographic, Sub National warfare et al, to be created and accordingly empowered/staffed.
 - Adequate representation from all concerned ministries such as MoD, MEA, Ministry of Information and Broadcasting (MIB), MHA, Ministry of Finance (MoF), Ministry of Water Resources, River Development & Ganga Rejuvenation, Ministry of Environment, Forest and Climate Change, Ministry of Petroleum and Natural Gas, Ministry of Power, Ministry of Finance, Ministry of Corporate Affairs Ministry of New and Renewable Energy and Ministry of Electronics and Information Technology (MeitY) at appropriate level needs to be incorporated into relevant Sub Warfare Divisions to coordinate and synchronize action in respective domains such as economic, climate and water warfare etc.
 - Computer Emergency Response Team India (CERT- In) (including NCCC) and NCIIPC to be merged into one entity under NTRO akin to UK's National Cyber Security Centre which would

function under new Deputy NSA (Strategy) as lead/nodal agency for all cyberspace operations.

- National Cyber Security Coordinator as chief advisor for cyberspace aspects could form part of NTRO and head National Cyber Security Centre.
- (d) A Sector-Specific Agency (SSA) to be earmarked for cyber security of all earmarked critical sectors to function in coordination through their permanent representative in National Cyber Security Centre/ NTRO.

Organization/ Structure: Military Domain

To optimally synergize military capabilities and structures with the National effort while prosecuting economic warfare as part of hybrid warfare the following organization is suggested:-

- (a) HQ IDS is ideally suited to be configured as the nodal agency for coordinating and executing all forms of hybrid warfare from military perspective under the proposed CDS.
- (b) DPC to be reconfigured. The policy, strategy and doctrine formulation mandate to be shifted to the SPG to be serviced by NSCS and staffed accordingly, instead of HQ IDS. The military domain part of DPC including capability building to remain under Headquarters IDS.
- (c) The newly formed Cyber and Space Agencies and Special Operations division to functional under HQ IDS under a separate Deputy Chief of IDS (Hybrid Operations). Both to be subsequently ungraded to Tri Services Commands under the Chief of Defence Staff (CDS). The newly created Defence Space Research Agency (DSRA) to providing R & D support to the Defence Space Agency (DSA).

- (d) The scope of the newly proposed IW Branch to function under new Deputy Chief of Army Staff (Strategy) could be enhances to a Tri Services Organisation and be placed under Deputy Chief of IDS (Hybrid Operations). Respective service IW Wings under an Additional Director General level officer to continue to function at service HQ level for coordination and implementation and work in sync with HQ IDS.
- (e) The Defence Intelligence Agency (DIA)/ Deputy Chief of IDS (intelligence) would need to work in close coordination with this proposed new Deputy Chief of IDS (Hybrid Operations) or ideally be merged with it since certain technical intelligence assets such as the Directorate of Signals Intelligence, Defence Information Warfare Agency (DIWA) which handles all elements of the information warfare and the Defence Image Processing and Analysis Centre (DIPAC) are presently under it.
- (f) A serving officer of the rank of Major General with designation of Chief Military Coordinator (Hybrid Operations) needs to be incorporated into the NSC under Deputy NSA (Strategy). He should be the interface for all military hybrid warfare related aspects and report/ coordinate with Deputy Chief of IDS (Hybrid Operations). This appointment should be in addition to the already existing post of a Military Advisor in the NSCS who is generally a retired defence person with a wider charter.
- (g) Adequate representation of DRDO and other related organization to be there under newly proposed Deputy Chief of IDS (Hybrid Operations).
- (h) Staffing down to minimum division level needs to be reviewed/ enhanced to coordinate the actions up to tactical level as and when required. Separate verticals with domain specialization and resources need to be created

under the Brigadier General Staff (Information Warfare) at Command Level for economic, EW, Media, PSYOPS and Cyber Warfare with commensurate representation down to Divisional level to coordinate and undertake IW effectively down to tactical level, if required.

Other Alternative Options

Another option is to make one of the ministries i.e. MoD, MHA or MeitY in order of preference as the nodal agency for hybrid operations and concentrate all relevant resources under it. This arrangement has the advantage of having legislative power and political mandate. However, turf war between ministries, bureaucratic procedures and slow reaction time may be some of the issues not in favour of this arrangement. Also, in may not be possible to dovetail the NSA and the domain expertise of NCS into the scheme of things. As for the military domain not too many options exist if we want to synergize the resources of all three services. All aspects need to be coordinated at HQ IDS with respective service Headquarters having a sub branch/ wing to disseminate and coordinate the overall design.

SCENARIO BUILDING FOR ECONOMIC WARFARE: INDIAN CONTEXT

There is no set piece way of executing hybrid warfare encompassing asymmetric warfare, NCW and unconventional warfare. One of the likely scenarios related to asymmetric warfare which could play out in Indian context and options available to counter the same has already been discussed in detail in chapter on asymmetric warfare. Unlike conventional warfare the process of implementing hybrid warfare needs to be put into motion much before the actual conflict i.e. during peace time by capability building, infiltration enemy systems/ organisations, planting bugs,

seeking/ creating vulnerabilities, diplomatic initiatives, policy decisions et al. As part of the grand strategy various facets of hybrid warfare ranging from economic to demographic warfare could be unleashed near simultaneously. The execution mechanism can be broken down into actions initiated during - peace time, pre conflict (when war eminent), conflict and post conflict phases referred to as Phase I, II, III and IV respectively during subsequent discussions. Phase IV (Post conflict phase) generally involves need based and relentless continuation of the actions initiated in the earlier phases to derive maximum mileage out of them and thus will not be discussed in detail individually. Also, in some cases the need to escalate to the 'conflict phase' may not arise with the adversary succumbing to effective NCW means and falling in line without dwelling into the realms of a conventional battle. Overall the phases are not mutually exclusive and would have overlaps. The Deputy NSA (Strategy) as part of NSC under NSA should be the overall controlling agency for all hybrid warfare activities. Various facets of hybrid warfare have been discussed in adequate detail in the previous chapters. However, for enhanced understanding of the broad mechanics of executing this new generation warfare's in various domain individually before we can employ them in-sync. One stand alone plausible offensive economic warfare domain specific mechanics for execution is enumerated in the succeeding paragraphs as part of scenario building:-

(a) <u>Concept</u>. Economic warfare involves leveraging economic prowess/ interdependence in the emerging geo-economic environment as a tool to target the economic fiber of adversary nation in sync with the grand strategy. The economic challenges/ vulnerabilities further substantiate the threats created through other hybrid means such as cyber/ Information/ resource/water

warfare and degrade a nation's ability to wage/ sustain a conventional war or retaliate via unconventional means.

- (b) <u>Desired End State</u>. To weaken the economy of the adversary to the extent that economic capitulation of the nation takes place rendering it incapable of retaliate/ fight in a coherent manner resulting in its defeat/ surrender, if possible even without engaging in a conventional battle.
- (c) <u>Capability Building Required</u>. A robust economy with ability to invest in, infiltrate or finance critical sectors such as energy, infrastructure, defence and Information and Communications Technology of the target nations, is a prerequisite.
- (d) <u>Timelines</u>. Initial efforts required to achieve economic prowess are a long drawn process which would require vision and sustained policy directives. Subsequently, since most of the arrangements would be in place even during peace time overtly or covertly, activation as per escalation matrix would be responsive enough though not immediate.
- (e) <u>Instruments</u>. Trade embargoes, boycotts, economic sanctions, tariff bigotry, freezing of capital assets, suspension of aid, prohibition of investment and other capital flows, infusion of counterfeit currency, money laundering, maritime piracy and commerce raiding operations etc. The 200 percent customs tax levied on Pakistan by India post Pulwama terror attack and more recently the ongoing US China trade/ tariff war are examples of this warfare.
- (f) Nodal Agency. NSC/ Economic Warfare Sub Division.
- (g) <u>Supporting Agencies</u>. MoF, MeitY, MoD/HQ IDS, MHA, MEA, CERT- In, RAW, IRS and any other specific ministry that may be required to provide skilled power and resources.

- (h) <u>Manifestation Matrix</u>. The phases which would generally roll out in a non graduated manner and not be strictly sequential are as follows:-
 - Phase I (Peace Time). Implementation of economic policies which lead to increased stakes in the world economy including standing in multinational alliances/ organizations (UN, ASEAN, Shanghai Cooperation Organization, Quadrilateral Security Dialogue/ Quad etc) in general and that of potential adversary nation/s in particular. Covertly put in place instruments/ mechanisms of economic warfare intervention to be activated on a need basis. These could include employing overt and covert/ indirect means, such as through interventions such as sanctions (tariffs, dept trap), plant ransomware attacks (critical sectors) and Trojan viruses (financial institutes) or through stakes in proxy/ shell companies, infusion of counterfeit currency etc, to develop ability to control/ influence the economic landscape and resultantly the economy per se of the target nation subsequently.
 - Phase II (Pre Conflict Hostilities Eminent). To enhance tempo of operations, actions on all fronts to be intensified especially those which directly affect the war waging capability of the target nation such as import embargo on military hardware, armament and ammunition by leveraging economic and diplomatic hold over supplier nations and/or its allies. Also, employing tool such as freezing of capital assets, currency destabilization operations and money laundering operations, domination of the littorals, EEZ and high seas by aggressive maritime patrolling by the Navy, Coast Guards and sea

militia. Maritime Piracy and Commerce Raiding Operations to be undertaken keeping the different levels of escalation insight.

• Phase III (Conflict). In addition to actions initiated under Phase I and II, undertake economic blockade and maritime blockade including dominating the Sea Lines of Communication (SLOCs) using Navy. Ensure the target nation does not receive any economic or military aid using own economic might. All covert mechanisms instituted to induce an economic meltdown to be activated. These could be in the form of an attack on financial institutes using cyberspace. Diplomatic relation within comity of nations can be utilised to substantiate the efficacy of all the actions.

It's important to acknowledge that domain-specific forms of warfare are unlikely to be executed in isolation, but will likely be part of a hybrid warfare strategy that utilizes multiple forms concurrently for optimal results. Additionally, in certain situations, one of the warfare domains may serve as the primary domain, with other domains playing supporting roles to varying degrees. For example, economic warfare may be the primary domain, with water, cyber, and perception management warfare being integrated to enhance its effectiveness. Similar scenarios can be developed for all other hybrid warfare domains. In particular, cyber warfare will likely play a central role in most warfare domains due to its pervasive nature in our technologically driven world. While the guiding principles are consistent across domains, specific considerations for each domain need to be incorporated. Moreover, for most domains to be effective and responsive during both pre-conflict and conflict phases, significant groundwork must be completed in terms of capability building and implementing

mechanisms during peacetime that can be activated rapidly according to the escalation ladder.

CONCLUSION

During the course of this research it has emerged beyond doubt that the days of traditional conventional warfare, as we have known and practiced over time are numbered. Due to the interplay between cutting edge technology and geo-economics, a new generation of warfare is evolving. Various nomenclatures have been designated to this form of warfare ranging from the universally acceptable and commonly used Hybrid Warfare to others such as Complete Warfare, Optimal Warfare, Non Linear Warfare, Unrestricted Warfare, Non Contact Warfare, Unconventional Warfare, Total Warfare, Grey Zone warfare et al. However, what is central to all these nomenclatures is that this new concepts of warfare encompasses and transcends across a wide spectrum and encompass all means at ones disposal.

Economic warfare refers to the use of economic means to weaken an opponent's ability to wage war, and it has been used in conjunction with conventional warfare throughout history. The efficacy of economic warfare in the context of conventional wars depends on various factors, including the economic resources of the belligerent parties, the nature of the conflict, and the strategies employed. One of the most significant ways in which economic warfare can be effective is by disrupting an opponent's supply lines and cutting off access to essential resources. For example, during World War II, the Allies launched a successful economic blockade against Germany, which significantly hampered the country's ability to sustain its war effort. Economic sanctions can also be a form of economic warfare, where countries use

their economic leverage to pressure an opponent or his allies into changing its behavior or policies.

According to Lambert (2017), "To have any hope of success, a strategy to weaponize critical economic infrastructure requires acknowledging the multiple stakeholders involved—foreign and domestic, inside and outside the government and gaining their cooperation. Its formulation demands direction from the highest political authority and the assumption of substantial political risk by elected officials even to seek cooperation from powerful constituencies, let alone to alienate them by actually implementing the strategy. The more aggressive the weaponization of the global economic infrastructure, the more severe the damage it will cause not only to its intended target but also to collateral stakeholders, including neutral nations, domestic business interests, and domestic consumers who vote." Further, to ensure that a strategy can withstand potential backlash or that the severity of any backlash is minimized, it is crucial to make a case to stakeholders beforehand. This involves demonstrating that the expenses of an alternative approach or lack of strategy would be significantly more severe, such as an extended war that claims millions of lives and raises the specter of revolution at home. Stakeholders that must be convinced include citizens, businesses, allies, friends, significant trading partners, and multinational financial institutions that play a crucial role in global stability.

Also, the effectiveness of sanctions can be limited, particularly if the targeted country has diversified its trade relationships or has a strong domestic economy, as it has manifests in the case of Russia-Ukraine conflict. Furthermore, the effectiveness of economic warfare in the context of conventional wars is often difficult to measure, and it can be challenging to isolate the impact of economic factors from other military and political factors. For instance, during the Gulf War, the economic sanctions

imposed on Iraq before the conflict had some effect on the country's military capabilities, but the overall outcome of the war was also influenced by other factors such as military strategy and tactics. Our definition of effectiveness of sanctions is predicated on the notion that sanctions in isolation generally cannot achieve the overall objective and must be used and evaluated along with other tools of national power, such as military force, diplomacy, cyber capabilities and intelligence activities. Furthermore, all criteria for effectiveness may not be present in every scenario. Challenges in determinations of effectiveness need not mean that sanctions have no negative economic or political effects on the target. As discussed, sanctions are almost never a costless policy tool; the question is whether on balance they are likely to do more good than harm. Overall, their effectiveness depends on a variety of factors, and it emerges that they should ideally be used in conjunction with other military and political strategies to be truly effective.

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Appendix A

(Refer Chapter 6, page 131)

QUESTIONNAIR: EFFICACY OF ECONOMIC WARFARE IN A

GLOBALISED WORLD: AN ASSESSMENT

Dear Respondent,

I, Rohit Mehrotra, am presently pursuing my M Phil (2022-23) from Panjab

University under the guidance of Dr Roma Mitra Debnath, from The Indian Institute

of Public Administration (IIPA), New Delhi. The research topic is "Efficacy of

Economic Warfare in a Globalised World: An Assessment".

The pace of globalization in recent times has resulted in growing interdependence of

the world's economies assisted by infusion of technology. Thus, there is a felt need to

study the efficacy of economic warfare instruments as strategic tools, for promoting

and defending national interests in a globalised world. The objectives of my research

are firstly, to identify the spectrum and linkages of economic warfare instruments for

furtherance of national interests. Secondly, to assess the efficacy of economic warfare

instruments for furtherance of national interests in the global context, post the World

War I era and thirdly, to suggest strategies and capabilities required to optimally

prosecute economic warfare as well as counter threats, in the Indian context.

I would request you to devote some of your valuable time to fill the questionnaire and

share your esteemed views on the subject. I assure you that all basic data privacy

norms will be adhered to. Clarifications, if any may be sought on telephone (Mobile

Number:7030766772).

Warm Regards

Rohit Mehrotra

Section A: Profile of the Respondent

<u>Name</u> -

Please indicate your Service/ Cadre

- Army
- Navy
- Air Force
- PMF/CAPF
- All India/ Central Civil Services
- Others

Please indicate your service bracket

- Less than 10 years
- 10 to 15 years
- 15 to 20 years
- 20 to 25 years
- More than 25 years

Section B: Questionnaire

The questions are based on six main constructs i.e. Efficacy, Spectrums, Linkages, Strategy/Doctrine, Organization/ Structures and Capability Development in context of Economic Warfare with the aim of extracting specific inputs from the sample population.

Questions

Q No. 1. Conventional wars are no longer the preferred means to defend/ promote National Interest between nations in the existing globalised scenario.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 2. Economic Warfare Instruments have emerged as one of the predominant and effective means for promoting/defending National interests today due to globalization and interlinking of economies.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 3. During peace time Economic Warfare Interventions can be sustained below the threshold of a full fledged war to optimize payoffs.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 4. There is a growing consensus among strategic thinkers that Economic Warfare Instruments alone cannot guarantee success in furtherance of National Interest and need to be complemented with hard power.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 5. Economic Warfare Interventions by NATO in the ongoing Ukraine-Russia War have been effective in promoting and defend their interests.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 6. China's strategy to use Economic Warfare Instruments to further National interests has been highly effective and successful (refer - Hambantota, Djibouti & Gwadar Ports, BRI/ OBOR etc).

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 7. Instruments of Economic Warfare are relatively cost effective (Economic & Human cost) in achieving the desired results in the strategic domain as compared to conventional warfare.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 8. Traditionally India as a country has been fixated with the conventional approach to furthering National interest based primarily on kinetic war options/diplomacy. There is an urgent need to transcend from this conventional approach towards Economic warfare options.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No.9. Post Policy intervention to open up the economy in 1991, India has progressively attained the economic prowess to effectively leverage Economic warfare Instruments to achieve the desired results.

- Strongly Agree
- Partially Agree

- Neutral
- Partially Disagree
- Strongly Disagree

Q No.10. The lack of a declared National Security Strategy by India has adversely effected our capability development and response matrix in dealing with new age security threats.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No. 11. The existing organization/ structure at the national level including various stakeholders, agencies and ministries in the Indian setup is sub optimally configured to effectively mobilize/ incorporate all organs of national power to leverage economic warfare strategies.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No.12. Economic Warfare as a concept is inadequately incorporated/ integrated into Indian Armed Forces Warfare Doctrines and strategic thought process.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No.13. Nations like China follow a "Whole of Nation" approach in their conduct of Hybrid Warfare. India also needs to adopt a similar model to exploit its economic prowess to further National Interests.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No.14. Multilateral economic intervention by organizations such as UN, EU, NATO etc are often more powerful and effective than unilateral interventions because they combine the economic force of multiple countries.

- Strongly Agree
- Partially Agree
- Neutral
- Partially Disagree
- Strongly Disagree

Q No.15. Rank following aspects in terms of reasons for enhanced efficacy of economic warfare instruments in recent times. (Rank from 1 to 5, with 1 being the most important reason in your opinion).

- Economic and trade interdependence
- Technological advancement
- Economic cost of conventional war
- Human cost of conventional war
- Proliferation of social media

Q No. 16. The spectrum of Economic Warfare is vast. Rank in terms of likely efficacy the following economic warfare instruments (Rank from 1 to 7, with 1 being the most effective means in your opinion).

- Embargoes
- Blockades
- Tariff bigotry

- Subsidies & dumping
- Freezing of capital assets
- Debt trap
- Currency war

Q No. 17. Which of the following countries have used Economic Warfare Interventions, post World War I era for furthering National interests in an effective manner? (Rank from 1 to 5, with 1 being the most important successful in your opinion)

- India
- U.S.
- Russia
- China
- U.K.

Q No. 18. What has been the efficacy of Economic Warfare Interventions undertaken in response to below stated situations, in achieving the desired results? (Rank from 1 to 5, with 1 being the most important successful in your opinion).

- Iran (nuclear proliferation: 2002)
- Russia (territorial aggression of Crimean: 2014)
- Syria (civil war: 2004)
- North Koren (nuclear weapons program: 2003)
- Russia (territorial aggression of Ukraine: 2021)

Q No. 19. Which of the below listed types of hybrid warfare approaches are likely to be more complementary/ have linkages in making economic warfare effective (Rank from 1 to 6, with 01 being the most effective means in your opinion).

- Resource Warfare
- Information Warfare
- Legal Warfare
- Media Warfare
- Environmental Warfare
- Cyber Warfare

Q No. 20. Rank following agencies in terms of their suitability to act as the nodal agency to coordinate all facets of Economic warfare strategy in Indian context. (Rank from 1 to 5, with 1 being the most ideal agency in your opinion).

- Ministry of Defence (MoD)
- Ministry of Home Affairs (MHA)
- Ministry of Finance (MoF)
- National Security Council headed by NSA under PMO
- Ministry of External affairs (MEA)

Appendix B

(Refer Chapter 6, page 146)

EXCERPTS OF INTERVIEW WITH BRIGADIER H MAHAJAN (RETD)

Q No. 1. Has the space for conventional wars between nations drastically reduced in the current global scenario of economic and trade interdependence? What in your opinion are the reasons for the same?

Ans No. 1. The space for conventional wars between nations has reduced to some extent due to increased economic and trade interdependence. The reasons for this include the recognition that war can have negative economic consequences, the development of international institutions and norms that discourage aggression, and the increased interconnectedness of the global economy, which creates incentives for peaceful cooperation. However, it is important to note that this does not eliminate the possibility of conflict, as there are still political and ideological differences between nations that can lead to tensions and even violence.

Q No. 2. Do you agree that Economic Warfare Instruments such as embargos, boycotts, tariff bigotry etc have emerged as predominant and effective means for promoting and defending National interests today due to globalization and interlinking of economies?

Ans No. 2. While economic warfare instruments such as embargos, boycotts and tariffs can be effective in promoting and defending national interests, their impact and effectiveness can vary depending on the specific circumstances and goals of the countries using them. In some cases, these instruments can lead to unintended consequences, such as harming domestic industries or disrupting international supply chains. Additionally, the use of economic warfare instruments can also have negative consequences for the global economy as a whole, which can undermine the long-term interests of individual nations. That being said, economic interdependence and globalization have created new opportunities for countries to use economic warfare instruments to achieve their goals. In some cases, these instruments may be more

effective than military force or other traditional forms of diplomacy. However, it is important for countries to carefully consider the costs and benefits of using these instruments, as well as their potential impact on their relationships with other nations and the global economy.

Q No. 3. The spectrum of Economic Warfare is vast ranging from the traditional tools such as Embargoes, blockades, subsidies/ dumping at one end to the more contemporary tools including tariff bigotry, debt trap and currency wars. Which of these are likely to be more effective in the current global scenario and reasons for the same?

Ans No. 3. It is difficult to say which economic warfare tools are more effective in the current global scenario, as their impact and effectiveness can depend on a wide range of factors, such as the specific goals of the countries using them, the nature of the relationship between those countries, and the global economic and political context. That being said, some economic warfare tools may be more commonly used than others due to their perceived effectiveness in achieving certain goals. For example, tariffs and other trade barriers can be effective in protecting domestic industries and reducing competition, while currency manipulation can be used to gain a competitive advantage in international trade. However, it is important to note that the use of economic warfare tools can have negative consequences, both for the countries using them and for the global economy as a whole. For example, the use of subsidies and other trade barriers can distort markets and harm consumers, while currency manipulation can create uncertainty and instability in global financial markets. Overall, the effectiveness of economic warfare tools will depend on a variety of factors, and countries should carefully consider the potential costs and benefits of using these tools in pursuit of their national interests.

Q No. 4. There is a school of thought that propagates than 'Economic warfare Interventions do not always have to be concert with conventional warfare and can be sustained below the threshold of a full-fledged war to optimize payoffs during peace time'. Your views on the same are solicited.

Ans No. 4. It is true that economic warfare interventions do not always have to be accompanied by conventional warfare, and they can be used to pursue national interests during peacetime. This approach to economic warfare, which is sometimes referred to as "gray zone" or "hybrid" warfare, involves using a combination of military, economic, and political tactics to achieve strategic objectives. Gray zone economic warfare interventions can be effective in achieving national objectives while minimizing the risk of escalation to full-scale conflict. For example, countries may use economic sanctions, trade restrictions, or cyber attacks to disrupt their adversaries' economies and undermine their political stability. However, it is important to note that gray zone economic warfare interventions can also have unintended consequences, such as damaging the global economy, creating uncertainty in international trade and investment, and contributing to geopolitical tensions. Additionally, these interventions can also lead to a "race to the bottom" in which countries engage in tit-for-tat economic measures that ultimately harm all parties involved. Therefore, while gray zone economic warfare interventions can be a useful tool in pursuit of national interests, they should be used judiciously and with a clear understanding of the potential costs and benefits.

Q No. 5. There is a growing consensus among strategic thinkers that Economic Warfare Instruments alone cannot guarantee success in furtherance of National Interest and need to be complemented with hard power. What are your views on this aspect?

Ans No. 5. While economic warfare instruments can be an important tool in pursuit of national interests, it is true that they may not always be sufficient on their own and may need to be complemented with hard power. This is because economic measures such as sanctions or trade restrictions may not always achieve the desired outcome, and countries may need to resort to military force or other forms of coercion to achieve their goals. However, it is also important to note that the use of hard power can have significant costs and risks, both for the countries using it and for the global community. The use of military force can lead to loss of life, damage to infrastructure, and long-term political and economic instability, and can also harm international relations and cooperation. Therefore, while economic warfare instruments may not always be sufficient on their own, countries should carefully consider the potential

costs and risks of using hard power before resorting to it. In many cases, a combination of economic and diplomatic measures may be more effective in achieving national objectives while minimizing the risk of escalation to full-scale conflict.

Q No. 6. What in your view has been the efficacy of economic warfare Interventions instituted by NATO in the ongoing Ukraine-Russia War in promoting and defend their national interest and primary reasons for the same?

Ans No.6. NATO has employed a range of economic warfare interventions in response to the ongoing conflict between Ukraine and Russia. These interventions include economic sanctions, asset freezes, and travel bans targeting individuals and entities associated with the Russian government. While the impact and effectiveness of these interventions is a matter of debate, it is generally believed that they have had some success in achieving NATO's strategic objectives. For example, the sanctions and other measures have put pressure on the Russian economy, leading to a decline in GDP and currency value, and have made it more difficult for Russia to access international capital markets. However, it is important to note that the economic warfare interventions have also had negative consequences, both for Russia and for the global economy as a whole. The sanctions have led to a decline in trade and investment, and have disrupted supply chains and financial markets. Overall, the efficacy of economic warfare interventions in the ongoing Ukraine-Russia war is a complex issue, and the impact of these interventions is likely to depend on a range of factors, including the goals and strategies of the countries involved, the nature of the conflict, and the broader geopolitical context.

Q No. 7. China's has been known to employ Economic Warfare Instruments to further national interests in various instances for example in Hambantota, Djibouti & Gwadar Ports, BRI/ OBOR etc to name few. Do you agree with this thought process? If yes, what are the reasons for China's success in implementing this strategy?

Ans No. 7. Yes, it is true that China has employed economic warfare instruments to further its national interests in various instances, including in the development of ports such as Hambantota, Djibouti, and Gwadar, as well as in its Belt and Road

Initiative (BRI)/ One Belt One Road (OBOR). One reason for China's success in implementing this strategy is its ability to leverage its economic power and financial resources to gain influence and strategic advantage in regions of interest. China has made significant investments in infrastructure and development projects in countries around the world, often providing funding and technical assistance in exchange for access to strategic assets such as ports or natural resources. Additionally, China has been able to use its economic power to shape the global economic and political landscape to its advantage. For example, it has sought to promote the use of its currency, the yuan, in international trade and investment, and has established a range of regional and global economic institutions to promote its interests. However, it is also important to note that China's economic warfare interventions have faced criticism and pushback from some countries, which have raised concerns about China's growing economic and political influence and the potential risks and negative consequences of its investments and projects. Therefore, while China's economic warfare interventions have been successful in some cases, they have also faced challenges and limitations, and their long-term impact remains to be seen

Q No. 8. Would you agree that traditionally India has been fixated with the conventional approach to furthering National interest based primarily on kinetic war options/ diplomacy and there is felt need to transcend from this conventional approach towards Economic warfare options?

Ans No. 8. It is true that historically, India has tended to focus more on conventional approaches to furthering its national interests, including military power and diplomacy. However, in recent years, there has been growing recognition within India of the importance of economic warfare instruments in achieving national objectives, and there have been efforts to develop and expand India's capabilities in this area. One example of this is the development of India's "Act East" policy, which aims to expand economic ties and cooperation with countries in Southeast Asia and beyond, and to use economic diplomacy and engagement as a means of achieving strategic objectives. Additionally, India has sought to expand its presence and influence in the Indian Ocean region, in part by developing economic and infrastructure projects in countries such as Sri Lanka, Bangladesh, and Myanmar, and by seeking to leverage its economic and strategic partnerships to advance its interests. Overall, while India has

traditionally focused more on conventional approaches to furthering its national interests, there is growing recognition of the importance of economic warfare instruments in today's global landscape, and India is seeking to expand and develop its capabilities in this area.

Q No. 9. What in your view point should be India's approach in leveraging its economic prowess for furtherance of its national interest in terms of strategy, capability building and organizational structures?

Ans No. 9. In my view, India should adopt a comprehensive and integrated approach to leverage its economic prowess for the furtherance of its national interests. This approach should involve a combination of strategy, capability building, and organizational structures, as follows:-

- (a) <u>Strategy</u>. India should develop a clear and coherent strategy for leveraging its economic power and resources to achieve its national objectives. This strategy should be grounded in a deep understanding of India's economic strengths and weaknesses, as well as the global economic and political landscape, and should be aligned with India's broader strategic and foreign policy objectives.
- (b) <u>Capability Building</u>. India should invest in building the necessary capabilities and tools to execute its economic warfare strategy effectively. This could include developing specialized units or agencies focused on economic warfare, as well as investing in areas such as economic intelligence, financial warfare, and economic statecraft.
- (c) <u>Organizational Structures</u>. India should establish clear and effective organizational structures to facilitate the implementation of its economic warfare strategy. This could involve creating new government agencies or units focused on economic warfare, as well as fostering greater coordination and collaboration across existing agencies and departments.

- (d) Overall, India's approach to leveraging its economic prowess for the furtherance of its national interests should be guided by a clear and coherent strategy, supported by robust capabilities and effective organizational structures. This approach should be agile and adaptable to changing circumstances, and should be underpinned by a deep understanding of India's strengths and weaknesses in the global economic and political landscape.
- Q No.10. How can economic warfare as a concept be optimally incorporated/integrated into Indian Armed Forces Warfare Doctrines, strategic thought process and capability building to compliment the national effort?

Ans No. 10. To optimally incorporate and integrate economic warfare into Indian Armed Forces warfare doctrines, strategic thought process, and capability building, I would suggest the following steps:-

- (a) <u>Incorporate Economic Warfare into the National Security</u>

 <u>Strategy</u>. Economic warfare should be recognized as a key component of India's national security strategy and should be integrated into the country's overall defense doctrine.
- (b) <u>Develop Specialized Units or Agencies</u>. The creation of specialized units or agencies within the Indian Armed Forces, focused specifically on economic warfare, could help to build the necessary capabilities and expertise to execute such operations effectively.
- (c) <u>Foster Greater Collaboration and Coordination</u>. Economic warfare operations often require collaboration across multiple government agencies and departments. The Indian Armed Forces can play a key role in fostering greater coordination and collaboration between these different entities to optimize the effectiveness of economic warfare interventions.
- (d) <u>Build intelligence Capabilities</u>. Economic intelligence is critical for the success of economic warfare interventions. India should invest in developing its intelligence capabilities to better understand the economic

strengths and weaknesses of its adversaries and identify vulnerabilities that can be exploited.

(e) <u>Strengthen Partnerships with like-minded Countries</u>. India should work to build partnerships and alliances with other like-minded countries that share similar interests and values. This could help to amplify the impact of economic warfare interventions and provide greater leverage in the global economic landscape.

Overall, to optimally incorporate and integrate economic warfare into Indian Armed Forces warfare doctrines, strategic thought process, and capability building, it will be important to foster a whole-of-government approach, building expertise and capabilities in specialized units, enhancing collaboration and coordination, building intelligence capabilities, and strengthening partnerships with like-minded countries

Q No. 11. Do you agree that existing organization/ structure at the national level including various stakeholders, agencies and ministries in the Indian setup are sub optimally configured to effectively mobilize/ incorporate all organs of national power to leverage economic warfare strategies? What in your opinion should be India's approach to offset this void?

Ans No. 11. There may be some validity to the argument that the existing organization and structure at the national level in India may not be optimally configured to effectively mobilize and incorporate all organs of national power to leverage economic warfare strategies. However, it is important to note that economic warfare is a complex and multifaceted domain that requires the coordination and collaboration of a wide range of stakeholders and agencies across multiple sectors. To address this potential void, India could take a number of steps, including:-

(a) Establishing a Centralized Body to Oversee Economic Warfare Operations. This could involve creating a dedicated agency or task force that is responsible for coordinating and executing economic warfare interventions across different domains, such as economic sanctions, trade policy, and financial measures.

- (b) <u>Strengthening Interagency Coordination</u>. Greater collaboration and coordination among the different stakeholders, agencies, and ministries involved in economic warfare will be critical for ensuring that India is able to leverage all of its available instruments of national power effectively.
- (c) <u>Developing Specialized Training and Education Programs</u>. India could invest in specialized training and education programs that focus on economic warfare strategies and capabilities. This could include developing specialized courses and programs for military and civilian personnel, as well as supporting research and development in the field of economic warfare.
- (d) <u>Building Partnerships with Private Sector Entities</u>. The private sector can play an important role in supporting economic warfare efforts. India could work to build stronger partnerships with private sector entities that can provide critical expertise and resources, such as financial institutions, cyber security firms, and intelligence providers.

Overall, to effectively leverage economic warfare strategies, India will need to take a comprehensive, whole-of-government approach that involves building specialized capabilities, fostering greater collaboration and coordination, and building partnerships with a wide range of stakeholders, including the private sector.

Q No.12. Nations like China follow a "Whole of Nation" approach in their conduct of Hybrid Warfare. Do you agree that India also needs to adopt a similar model to exploit its economic prowess? What should be India's approach towards this endeavour?

Ans No. 12. There may be merit in adopting a "Whole of Nation" approach in India's conduct of economic warfare, as this could help to ensure that all of the country's available instruments of national power are being leveraged effectively to achieve its strategic objectives. To adopt a "Whole of Nation" approach to economic warfare, India could take a number of steps, including:-

(a) <u>Establishing a National Economic Warfare Strategy</u>. This could involve creating a comprehensive plan for leveraging economic warfare

strategies to achieve India's national objectives. The strategy would need to be developed in close collaboration with stakeholders across government, industry, and academia.

- (b) <u>Building Specialized Economic Warfare Capabilities</u>. India could invest in building specialized capabilities that are specifically tailored to economic warfare, including developing expertise in areas such as financial sanctions, trade policy, and cyber operations.
- (c) <u>Fostering Greater Collaboration and Coordination</u>. A "Whole of Nation" approach to economic warfare will require close collaboration and coordination among all stakeholders, including government agencies, the private sector, and academic institutions. India could work to build stronger partnerships and information-sharing mechanisms among these different groups.
- (d) <u>Strengthening Information Operations</u>. Effective information operations will be critical to the success of India's economic warfare efforts. This could involve investing in capabilities such as intelligence gathering, social media analysis, and propaganda operations.
- (e) <u>Building Resilience and Contingency Planning</u>. Economic warfare can have significant consequences for a country's economy and society. India will need to build resilience and contingency planning into its economic warfare strategy to mitigate the risks and ensure that it can respond effectively to any disruptions or challenges that may arise.

Overall, adopting a "Whole of Nation" approach to economic warfare will require significant investments in specialized capabilities, as well as greater collaboration and coordination among stakeholders across government, industry, and academia. By taking these steps, India may be better positioned to leverage its economic prowess to achieve its strategic objectives

Q No. 13. Is there a need to have a nodal agency to coordinate all facets of Economic warfare strategy in Indian context? If yes, which Ministry or organization should be

entrusted with this responsibility out of the following - MoD, MHA, MoF, NSC headed by NSA under PMO, MEA or any other as recommended?

- Ans No. 13. The need for a nodal agency to coordinate all facets of economic warfare strategy in India will depend on the country's specific circumstances, including the current organization of its government and the nature of its economic warfare capabilities. That being said, if India were to establish a nodal agency, there are several potential organizations that could be considered for this role, including:-
 - (a) <u>National Security Council (NSC) Headed by National Security</u>
 <u>Advisor (NSA) under PMO</u>. The NSC is the primary agency responsible for coordinating national security policy in India, and the NSA is the principal advisor to the Prime Minister on national security matters. As such, the NSC could be well-positioned to take on a coordinating role for economic warfare.
 - (b) <u>Ministry of Finance (MoF)</u>. The MoF is responsible for managing India's finances and economic policies, making it a natural choice for coordinating economic warfare efforts.
 - (c) <u>Ministry of Defence (MoD)</u>. The MoD is responsible for managing India's defence policy and operations, and could potentially take on a role in coordinating economic warfare efforts that are related to defence and security.
 - (d) <u>Ministry of Home Affairs (MHA)</u>. The MHA is responsible for maintaining internal security in India, and could potentially take on a role in coordinating economic warfare efforts that are related to domestic security.
 - (e) <u>Ministry of External Affairs (MEA)</u>. The MEA is responsible for managing India's foreign policy, making it a potential choice for coordinating economic warfare efforts that are related to international relations.

Ultimately, the decision about which organization should be entrusted with the responsibility of coordinating economic warfare strategy will depend on a range of factors, including the specific objectives of India's economic warfare efforts and the capabilities and resources of the relevant government agencies.

Q No. 14. In the overall context do you agree that economic warfare instruments possess the required efficacy to further national interests in today's global environment?

Ans No. 14 Economic warfare instruments can be effective tools for furthering national interests in today's global environment, particularly in light of the increasing interdependence of economies around the world. Economic sanctions, embargoes, and other economic tools can be used to put pressure on other countries to change their behavior, whether it be in relation to their human rights record, support for terrorist organizations, or other activities deemed harmful to national interests. However, economic warfare instruments are not a panacea and are not always effective. In some cases, they can cause unintended consequences, such as harming innocent civilians or damaging relations with key allies. Moreover, other countries may seek to retaliate in kind, leading to a broader escalation of economic conflict. Overall, the efficacy of economic warfare instruments in furthering national interests will depend on a range of factors, including the nature of the objectives being pursued, the countries and actors involved, and the broader geopolitical context. As with any tool of statecraft, economic warfare instruments should be used judiciously and in conjunction with other elements of national power to achieve desired outcomes.

Appendix C
(Refer Chapter 6, page 146)

EXCERPTS OF INTERVIEW WITH COLONEL AJAY SINGH (RETD)

Q No. 1. Has the space for conventional wars between nations drastically reduced in the current global scenario of economic and trade interdependence? What in your opinion are the reasons for the same?

Ans No. 1. Yes. But the Ukraine War has shown that irrespective of economics, a long-drawn conventional war between nations is very much on the cards. Also in the India China stand-off our trade has actually increased while the stand-off continues. It shows that economics and power politics go together, but just economic interdependence is not a guarantee that there would be no conflict.

Q No. 2. Do you agree that Economic Warfare Instruments such as embargos, boycotts, tariff bigotry etc have emerged as predominant and effective means for promoting and defending National interests today due to globalization and interlinking of economies?

Ans No. 2. Not really. It depends on who is the target. Sanctions, embargoes etc have made no difference to the UKRAINE WAR, and have had no effect on Iran (less on the lives of ordinary citizens). Economic tools must be applied in conjunction with other instruments of power.

Q No. 3. The spectrum of Economic Warfare is vast ranging from the traditional tools such as Embargoes, blockades, subsidies/ dumping at one end to the more contemporary tools including tariff bigotry, debt trap and currency wars. Which if these are likely to be more effective in the current global scenario and reasons for the same?

Ans No. 3. They will have to be applied in different ways at different times. China uses debt traps to ensure nations like Lanka, Pakistan and East African states. USA has used currency to ensure the dominance of the dollar by linking all oil sales to it,

for the better part of the last century. India was sanctioned after our nuclear tests and it only made us more self-reliant. USA and China have been engaged in a economic war over tariffs for the past three years. None of these actions have changed the thought process of the target nation. Different instruments should thus be applied at different times to squeeze the target nation.

Q No. 5. There is a school of thought that propagates than 'Economic warfare Interventions do not always have to be concert with conventional warfare and can be sustained below the threshold of a full-fledged war to optimize payoffs during peace time'. Your views on the same are solicited.

Ans No. 5. Economic leverage like the one we apply over Nepal, Sri Lanka and Bangladesh does help in ensuring our security interests are not compromised. China too uses economic warfare effectively to extend its hegemony. It can be done gradually over a period of time so as to ensure dependence of the target nation, and get it to fall in line w/o resorting to violence.

Q No. 6. There is a growing consensus among strategic thinkers that Economic Warfare Instruments alone cannot guarantee success in furtherance of National Interest and need to be complemented with hard power. What are your views on this aspect?

Ans No. 6. Absolutely. Economic Warfare is just one part of the arsenal. It will be of no use unless all other weapons i.e. diplomacy, political power, military power, information and psychological warfare are all used together. All this should be backed up by hard military power.

Q No. 7. What in your view has been the efficacy of economic warfare Interventions instituted by NATO in the ongoing Ukraine-Russia War in promoting and defend their national interest and primary reasons for the same?

Ans No. 7. The war has shown that sanctions and other tools applied to a large country like Russia are virtually useless, since it is not possible to enforce it. India, China and other nations continued doing business with Russia, as did many European

countries. The sanctions applied by USA were illegal and ham-handed and could not be enforced. Thus, the Russian economy had a minor blip, but recovered soon enough, contracting only marginally. In fact, it were the other European nations whose economies suffered, rather than Russia.

Q No. 8. China's has been known to employ Economic Warfare Instruments to further national interests in various instances for example in Hambantota, Djibouti & Gwadar Ports, BRI/ OBOR etc to name few. Do you agree with this thought process? If yes, what are the reasons for China's success in implementing this strategy?

Ans No. 8. Yes. It is a good model and India too is replicating it, by developing the Colombo port in Sri Lanka, carrying out infrastructure development projects in Bangladesh, Sri, Lanka, Nepal, Afghanistan and Iran (Chahbahar). This is a low cost strategy that indebts the nation to you, and allows you to arm-twist them later. China also uses its own firms, own labour and resources to make these projects, thus ensuring that all the gains go to its own companies and the target nation does little but make the payment (often at exorbitant interest rates)

Q No. 9. Would you agree that traditionally India has been fixated with the conventional approach to furthering National interest based primarily on kinetic war options/ diplomacy and there is felt need to transcend from this conventional approach towards Economic warfare options?

Ans No. 9. I think we are already shifting to using economic tools of leverage. We could not do so earlier because our economy was not strong enough to sustain it. Now with a sound economic base, we can prosecute it more effectively.

Q No.10. What in your view point should be India's approach in leveraging its economic prowess for furtherance of its national interest in terms of strategy, capability building and organizational structures?

Ans No. 10. We should have a policy wherein all regional nations are linked economically to India by using a free system of movement and tariffs through India. This will strengthen the economy of the region, but keep them dependent on India.

Similarly, instead of giving aid and charity to other nation, it should be done in the form of soft loans, so that we have the added leverage to demand it back, should the target nation act against our interests.

Q No.11. How can economic warfare as a concept be optimally incorporated/integrated into Indian Armed Forces Warfare Doctrines, strategic thought process and capability building to compliment the national effort?

Ans No. 11. The Armed Forces cannot use Economic Warfare on a national level. At best they can use it as part of their 'winning hearts and minds' doctrines, but this will be at the lower levels. They can however identify target nations and organisations that can be targeted by economic means. (i.e terrorist organisations whose bank accounts can be frozen).

Q No. 12. Do you agree that existing organization/ structure at the national level including various stakeholders, agencies and ministries in the Indian setup are sub optimally configured to effectively mobilize/ incorporate all organs of national power to leverage economic warfare strategies? What in your opinion should be India's approach to offset this void?

Ans No. 12. Yes. Not just in Economic warfare, but all other domains including intelligence, cyber warfare and others. To have a coherent strategy, incorporating all elements of warfare, a doctrine should be prepared by the NSA in conjunction with the CDS, that will identify the actions to be taken by each agency, at every level.

Q No.13. Nations like China follow a "Whole of Nation" approach in their conduct of Hybrid Warfare. Do you agree that India also needs to adopt a similar model to exploit its economic prowess? What should be India's approach towards this endeavour?

Ans No. 13. Yes. Refer answer 12 above.

Q No. 14. Is there a need to have a nodal agency to coordinate all facets of Economic warfare strategy in Indian context? If yes, which Ministry or organization should be

entrusted with this responsibility out of the following - MoD, MHA, MoF, NSC headed by NSA under PMO, MEA or any other as recommended?

Ans No. 14. Yes. The NSA along with the CDS would be the ideal nodal agency which should be made responsible for it. All other agencies should provide inputs to it.

Q No. 15. In the overall context do you agree that economic warfare instruments possess the required efficacy to further national interests in today's global environment?

Ans No. 15.	Yes. A strategy to	leverage them need	ds to be put in plac	ce.