



IJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 14

Issue: VII

Month of publication: July 2026

DOI:

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

An Empirical Study on the Impact of Global Trade Wars on Trade Balance and Economic Growth in India

Akancha Bhagat¹, Dr. Narendra Singh², D. Ajay Kumar³

Department of Commerce

Abstract: *This paper analyses the dual impact of global trade wars on the developing economies, whose primary objective is to understand the structural and macroeconomic implications for India. As the global trade serves as an essential tool for economic development and industrial growth, rising protectionism, by giving examples of the 2018 US-China trade disputes, the longstanding US-Canada dispute, international dumping practices, and a comparative study of India's global position during unstable global supply chains. By utilising a comprehensive review of the recent literature and macroeconomic data from 2015 to 2026, this study analyses how the international trade conflicts disrupt India's trade balance. The findings reveal a mixed economic outcome. While certain sectors like medical, textiles and engineering experienced a short-term growth due to trade diversions and China Plus One Strategy, these gains significantly neutralised the trade deficit structures and balanced the export-import sectors. The deficit was heavily influenced by the domestic dependency on imports such as crude oil, electronics and machinery, along with internal hurdles including poor infrastructure and low research and development. This paper concludes that the external trade shocks cannot be eradicated by reciprocal tariffs, but with the long-term stability and rupee, which requires a structured domestic focus on policy frameworks like production-linked incentives PLI schemes and the Making India initiative to boost self-dependency and diversify the market relations by transforming India from a viewer or participant to a flexible manufacturing in the global economy.*

Keywords: *Global, India's trade balance, US-China trade disruptions, protectionism, structural trade deficit, Trade divergence, Dumping, Make in India, production-linked incentive, manufacturing hubs.*

I. INTRODUCTION

The term global trade war refers to disagreements over tariffs, policies or economic rivalries that significantly affect the global economy. Due to trade wars, people in different nations face shortages of basic needs, such as the current higher prices of oil and the shortage of LPG in India, even without any participation in these conflicts. Therefore, this is proof that conflict between two nations can create tension globally. The disputes escalate and turn disagreements into wars, and create tension in the overall global market, which makes doing business more difficult, whether it's in a developed or developing country. As global trade and global wars are interrelated, the economies of nations are linked, which is also a major reason for risk in the stock market. The global trade wars may occur for various reasons, such as long-standing disputes, politics, technology, power, and heavy tariffs and taxes. Basically in India the war usually makes the running of businesses rough and slower despite of any non-involvement in the wars but in some cases it may gain advantage of the situations, we can take an example of the US China trade war, which gave Indian product chance in the global markets, but it's difficult to predict that it will stay like this in the long run or the consumers will again switch to Chinese goods after the war ends. India is a well-known exporter of spices and agro-based goods, which helps boost the Indian economy, but India also buys oil and technology from foreign countries in bulk, which can affect the economy during wars due to fluctuations in prices, which may also result in messing up the country's budget. One major example of such a war is the conflict between the US (United States) and China in 2018, driven by accusations of intellectual property theft and tensions over technology, which disrupted the smooth flow of global trade.

A. Historical Background of The Study

Basically, global trade has always been about countries exchanging what they have for what they actually need. But if we look at history, this has not always been a friendly deal. Many times, nations have used trade as an advantage—either to save their own local businesses or to pull down someone else who is becoming too powerful. This is exactly how "trade wars" start. If we look way

back at the 16th to 18th centuries, European countries were obsessed with this. They thought the only way to become rich was to sell as much as possible to others while buying almost nothing back.

To do this, they put huge taxes (tariffs) and strict rules on imports. This "me first" attitude caused a lot of fights and economic drama between nations. Then came the Great Depression, which changed everything. Because the economy was crashing, countries like the US started using "protectionist" rules.

B. Statement of Problem

The big problem here is that we are celebrating a win without knowing if we actually earned it, if we're only getting orders because China is in trouble, what happens when that trouble goes away? We don't know if our small businesses are getting stronger or just getting lucky. This research is about finding out if we are building a permanent house or just a temporary tent, because if it's just a tent, millions of workers could lose their jobs the moment the global weather changes. Despite the global buzz surrounding the "China Plus One" strategy, there is a deep uncertainty regarding India's actual position in the shifting global trade landscape. Currently, most economic assessments focus on top-level data, such as national export growth and GDP, while completely ignoring the micro-level stability of MSMEs. These small-scale industries are the backbone of India's economy, yet we lack a clear understanding of whether they are genuinely upgrading their technology and capacity or merely surviving on a temporary surge in orders caused by global tensions. The core problem is the Sustainability Gap.

C. Significance of the Study

The real value of this study is that it moves away from dry theories and looks at how trade wars affect the actual people and businesses that keep India running. Instead of just looking at big corporations, this research focuses on the "little guy"—the small factory owners who often get overlooked. By understanding their specific struggles, we can help figure out what kind of support they actually need to survive when global markets get shaky. It also serves as a much-needed reality check for our country's future. Everyone is excited about businesses moving from China to India, but we need to know if this is a permanent win or just a temporary lucky break. This study helps us see if we are truly building a strong, long-term foundation or if we're just a "backup plan" for now. By connecting government policies to real-world outcomes—like whether people are actually keeping their jobs in local industrial hubs—this work aims to make sure that India's economic strategy doesn't just look good on paper but actually improves the lives of regular workers and the next generation of entrepreneurs.

This study is important because it looks at the "reality check" of the Make in India mission.

- For the Government: It helps them understand if their policies are actually improving factory quality or if they need to do more to help Indian brands compete globally.
- For Business Owners: It helps factory owners realise if they are truly ready for the future or if they are just enjoying a temporary period of high demand.
- For the Economy: It helps predict if India's economic growth is permanent or if it will slow down once global politics change.

D. Scope of the Study

This study matters because we can't build a future on sitting and guessing. We need to know if the current boost in the trade sector is a solid building or just raw assumptions that will revert to previous situations when the trade war ends. By answering this, we help small businesses and workers to stay employed and help the country turn a lucky chance into a long-term success story. The real importance of this study lies in its ability to act as a much-needed reality check for India's future. Right now, there is a lot of excitement about businesses leaving China and coming to India, but we don't actually know if this is a permanent or situational-based, longterm shift or just a lucky chance that will disappear once global tensions cool down. By testing whether these changes are permanent, this research helps us understand if we are truly building a strong foundation or just acting as a temporary "backup plan" for the rest of the world. Beyond the big-picture numbers, this work is vital because it focuses on the survival of small-scale entrepreneurs and local workers who are often ignored in massive economic reports. It's about more than just trade—it's about job security in places like our textile and jewellery hubs. If we can figure out what makes a buyer stay with an Indian company for the long run, we can give the government and local businesses a clear roadmap to follow. Ultimately, this study matters because it tries to turn a moment of global chaos into a lasting opportunity for the regular person working on the factory floor.

II. LITERATURE REVIEW

- 1) Chada et al. (2019): Provides an overall impact of the US-China trade war on India's trade choices, which influences decision-making. Amidst India's driven national policy goals to double its total commodities exports to over 1000 billion dollars by 2025-2026, the primary objective of this study was to calculate whether the global trade disruptions offer strategic market opportunities or lead to a systematic approach to India's domestic growth. Utilising the economic stimulation trade model, the authors stimulate various policy paths, eventually finding that while a mutual US-China tariff war yields positive trade diversion benefits for India, any secondary effect of protectionism directly targeting Indian goods results in net GDP and export contractions. Crucially, the study demonstrates that of revengeful tit for tat tariff hikes by India multiplies economic damage, whereas independent tariff reduction and distribution improvements yield the most favourable economic benefits/rewards.
- 2) A. Sanyal (2021): Explains the effects of the significant roles for innocent trading partners and for the protection of global trade. The main objective of the study is to determine whether the higher and mutual tariffs between the US and China are leading to renewable trade diversion or increased export opportunities for India. Utilising product volume, trade data and focusing on the pricing power of exports, Sanyal identifies a statistically significant trade diversion effect from China to India, finding an aggregate trade elasticity of 0.5 to 0.7 driven primarily by US tariffs on Chinese goods. This paper highlights various impacts across different product categories, revealing that India's export growth was mainly focused on the non-renewable commodities such as standardised products and final goods. On the other hand, the study states that the trade war's impact on India's strength remained highly unstable and mixed, suggesting that while specific export channels survived under a preference change, the benefits were not equally felt across the international business sectors.
- 3) Misra & Choudhary (2020): Explains the side effects of the US-China trade dispute on the developing countries, the main objective of this study was to calculate the direct and indirect trade disruptions challenging India by following a guide which are similar in characters with a vector error correction model (VECM) to track dual effective market exchange rates, the authors evaluate how global value chain (GVC) restructures shape and increase domestic export competitiveness. The observed facts of this study indicate that while widespread tariff hikes lead to the reduction of global trade, India stands to gain in the short and medium run because of trade diversion over domestic export losses. The study highlights a timeline for strategic replacements in industries where India holds a comparative advantage, such as textiles, clothing, chemicals, nonmetallic minerals, etc.
- 4) Khandelwal, A. (2023): Evaluated the economic shock of the 2018 to 2019 US- China tariff dispute on the developing countries, with the main objective of analytically calculating whether India effectively utilised the resulting world trade shift. Utilising a product category global trade framework of supply chain model for demand and supply components across target markets, the study investigates India's export response to the US, China and the rest of the world under competitive forces of positive demand shifts and supply curve elasticity. The importance of the research lies in its counterintuitive analytical findings, which change systematic policy Assumptions regarding trade Diversion. Khandelwal concludes that the trade war did not statistically change India's aggregate global exports, as a 7.7% decline in exports to the US, driven by direct American tariffs on Indian semi-manufacturers, while the clothing and transportation sectors experienced a boost in export growth, where India failed to capture broader market shares, which kept India from channelling global trade functions into larger expansion.
- 5) R. Shamasastri (1915): This study was the turning point in the modern study of ancient Indian political economy, which was established with the publication of Kautliya's Arthashastra, translated by R. Shamasastri in 1915. Originally rediscovered as a palm leaf manuscript in 1905, it was unprinted in its original Sanskrit in 1909 and later published as Shamasastri's Comprehensive English translation in 1915. This contains an exposition of statecraft, economic policy, and military strategy. The text typically aims to bridge ancient political philosophy with Modern political economy, exploring how its Functional philosophies apply to Modern geopolitics and economics. The main focus was on how the text moves beyond theoretical idealism, offering a highly realistic Context and sometimes a guide on how to acquire, maintain and expand, while ensuring the welfare of the state. The primary objective of Kautilya's research on the Arthashastra is to systematically deconstruct its complex theory, such as Saptanga (the seven organs of state), and the Mandala theory of foreign policy, and evaluate their relevance in the 21st century. The researchers use to demonstrate Insights Into state management, Intelligence networks, economic regulation and corruption control and not just historical artefacts, but universal principles. The research aims to challenge the mainstream bias of political science by establishing the Arthashastra as a cure to modern political realism. The importance of this research lies in modern strategic thinking and governance framework, and also providing valuable insights for contemporary policy makers on balancing national security with public welfare.

- 6) R.C Dutt (1902): Enlightened the vast quantitative documentation of land settlements, trade balances and revenue extraction, which fundamentally brought changes in British rule, demonstrating that the systematic Indian poverty and chronic food shortages were not natural disasters but the direct impact of calculated state policies. The primary objective of this paper was to expose the extractive mechanisms of British and economic policies systematically and specifically, focusing on analysing the land revenue policies, documenting de-industrialisation, exposing the economic drains, etc. The importance of this study lies in the role of modern Indian economic history and macroeconomic criticism, the unique colonial Specialities of India, prioritising domestic societal welfare over exploitation and studies of the nationalist movement, Self-governance, and policy reforms, and provides a long-term structural overview of the impacts of colonial extraction on developing nations.
- 7) K. Pomeranz (2000): Explains the challenges of the technological revolution by using the mutual comparison to show that England and China's small changes were tied together in the same way in terms of agricultural productivity and living standards. Pomeranz argues that Europe had no structural institutions and other cultural advantages before the divergence was driven by two dependent factors. Britain's access to abundant, easily mined coal and the ecological relief provided by the New World Resources allowed Europe to escape land and energy constraints that limited East Asia. While Pomeranz praised deconstructive or dissolution narratives of European divergence, and for empirical robustness. The Pomeranz also faced dissection from other scholars who suggested that England had a small productivity, Indicating Less divergence. Overall, the viewpoints of Pomeranz shifted from why it was unique to Structural economic transformation occurred when and where it did, emphasising geography and eventually overruled cultural inevitability.
- 8) A. Panagariya (2020): This research plays an important role in framing the international trade growth. The developing countries have more labour than needed in the agricultural sectors, the primary driver of India after the 1991 economic reforms, which explains the earlier import displacement models. He argues that marketisation expanded India's global market share and obligated segmented micro-enterprises to scale into larger, high-productivity firms, raising wages and efficiency. He also frames his research paper about the import tariff as indirect taxes on exports, and his focus on labour-intensive manufacturing exports to absorb agricultural Labour to quantify (ELG), he proposed hyper-growth urbanisation at autonomous employment zones with business-friendly regulations to attract multinational companies. His research also restructures trade deficits as a potential signal of healthy investment when foreign inflows stop. This research influenced the Indian trade policy and development of economics, free trade and export infrastructure for the reduction of major causes of poverty.
- 9) Bharat et al. (2023): Argued mainly focused on how free trade helps in making the economy more productive. There is a debate that both the old and new trade principles support keeping the market open, as any kind of limitations end up hurting market balance and public welfare. Subsequently, more studies started connecting these conceptual ideas to the actual rise of trade conflicts. The authors argued that clinging to free market principles is the best and most effective way to keep the market positive. He suggested that when the government started putting up trade barriers, they were not just making a political gesture but suspending the balance of the market, which usually makes day-to-day life more expensive for the common people. Therefore, this study only focuses on the strategic vision of the economic principles but does not focus on how these impact the new digital economy or online trading practises. The main objective of this study was to examine the principal tension in modern protectionist models and the traditional economic efficiency. Particularly, looking at how the market mediations reduce overall public welfare serves as a reality check. The author illustrates that the trade barriers may look good for social commentary, but they usually end up hurting the economy by making the whole market less competitive and raising the cost of living.
- 10) Bajpeyee (2025): Explains that trade wars are usually economic disagreements that are mainly caused by imposing higher tax rates and import restrictions. He explains that these conflicts disturb global markets. The current research on global trade war shows a deep concern how protectionist policies affect international and domestic economic growth. Over time, many scholars have examined this problem from both theoretical and practical aspects. He describes modern trade wars as a new economic battle. Instead of bullets, they are using high tax rates and import restrictions to pressure other countries. He found that this does not harm anyone physically but creates uncertainty that makes global investors nervous. He focused on how governments fight with each other but ignored how the domestic business survived during these situations of trade conflicts. To examine the shift in global trade from shared concepts to conflictual principles, focusing on how high tax rates and import restrictions are used as strategic instruments in economic conflicts, it shapes how we look at trading/trade instead of limiting it to only the buying and selling concept. He portrays it as a holder of power and states that when two countries fight over taxes and tariffs, they are actually fighting for global influence.

III. RESEARCH GAP

The analysis of the literature review investigates modern international trade conflicts and global protectionism suffers from a chain of deeply interconnected exclusions, creating a significant structural gap in our understanding of how emerging non-aligned economies navigate macro level disruptions, Including the economic analysis by Chadda et 2019, the computer driven simulations of Itakura 2020 and the structural regression of Charan Dhahi at 2021, focuses almost on high level macrogeographic data points such as national GDP contractions, billion dollar aggregate export volume And the over succeeding supply chain realignments of massive multinationals corporations, they consistently failed to examine the ground level survival strategies localised resource rearrangements and day-to-day operational realities of small and medium enterprises (MSMEs), contradictory constitute the actual backbone of industrial output and domestic employment In developing nations like India.

A. Research Questions

- 1) Is the growth of Indian Companies is real, or a short-term gain from Trade Wars?
- 2) How are small Indian exporters dealing with High fuel costs and Shipping delays in 2026?
- 3) Is the Production Linked Incentive scheme (PLI) actually helping Indian manufacturers compete globally?

B. Research Objectives

- 1) To evaluate the long- term sustainability of trade diversion from China to India.
- 2) To study the operational challenges faced by MSMEs due to global supply chain disruptions.
- 3) To analyse the effectiveness of the Production-linked incentive scheme during Trade Wars.

C. Hypothesis

Ho - The shift from China to India for trade is temporary, and markets will bear losses after the war ends.

H1 – The global trade shift due to China Plus One is permanently boosting the Indian economy.

D. Research Methodology:

- 1) Research Design: This study contains a quantitative research design using secondary data of 10 That is 2015 to 2025. Primary data was collected through a survey to analyse the research questions and objectives. The Is detailed and quantitative in nature. This research and data analysis aims to explain the impact of shifts in trade policies, such as the China plus one strategy and the drivers of macroeconomic FDI, Inflation, Oil prices and export performances. This study analyses the historical data to understand that the change in trade policies affects the overall economic performance. The quantitative data analysis of continuous passage of time helps us to study the observations of variables throughout a timeline, which helps us to provide a clear comparison of before and after. This research uses a mixed-method approach. That is secondary data, which consists of quantitative data over a timeline and the primary data, which consists of a qualitative perspective of an individual.
- 2) Data Source: The secondary data sources have been taken from reliable sites, which are authorised by the government, and the secondary data has been taken from structured questions responded by the individuals.
- 3) Sampling Technique and Sampling Size: The sample has been collected on a 10-year database, that are from the year 2015 to 2016, from various authorised sites to acquire the Price of macroeconomic drivers.
- 4) Data Collection Method: The secondary based data has been collected for the secondary data analysis, such as Consumer Price Index, Foreign direct investments, Brent oil prices, etc.
- 5) Statistical tools and Software used: Difference in Difference analysis is applied for the comparative study of growth rates during the years between China and India, and the Regression analysis is utilised to understand the link between the dependent and independent variables. For both analyses, the software that is applied is MS Excel.

IV. DATA ANALYSIS

Comparative study on the growth rates of China and India:

YEAR	INDIA EXPORTS (USD Bn)	LOG(INDIA)	CHINA EXPORTS (USD Bn)	LOG(CHINA)
2015	262.3	5.569488887	2362	7.767263997
2016	275.9	5.620038481	2200	7.696212639
2017	303.5	5.71538161	2424	7.793174347
2018	330.1	5.799395639	2656	7.884576511
2019	330	5.799092654	2629	7.874358825
2020	314	5.749392986	2730	7.912056888
2021	420	6.040254711	3554	8.175829009
2022	447	6.102558595	3718	8.220941168
2023	437	6.079933195	3513	8.164225652
2024	437	6.079933195	3570	8.180320875
2025-26	442	6.091309882	3770	8.23483028

Figure:5.1 Statistical representation of China and India’s export growth.

In the above table, the data demonstrates the merchandise export growth of India and China during the following years, where 2015-2020 denotes the time change before any major global Supply chain disruptions, and 2021-2025 denotes the changes that occurred due to divergence of trade. The China Plus One strategy came into force, and the effective impact of PLI schemes was seen on domestic manufacturing in India. The data table focuses on the major question, which is: Did these 2021 Shifts Actually Succeed in Boosting India’s growth Past China’s?

A. Difference in Difference (DiD) Analysis

We converted the India export and China export into logs for comfortable calculations:

- Average Indian exports pre- and post-supply chain disruptions or trade divergence
 = Average of (2021-2025 exports)-Average of (2015-2020 exports)
 = 0.369999539
- Average China exports pre- and post-supply chain disruptions or trade divergence
 =Average of (2021-2025 exports)-Average of (2015-2020 exports)
 = 0.373955529
- Difference in Difference = Average Indian exports pre & post trade divergence-Average China exports pre & post trade divergence
 = -0.00395599

V. OUTCOMES OF ANALYSIS

As we used natural logs (LN), we will multiply the outcomes by 100 to convert them back into standard percentage growth rates.

- 1) India’s growth → (0.3699): i.e,37.00%, which means India’s export grew by 37.00% post 2021.
- 2) China’s growth → (0.3739): i.e,37.40%, which means China’s export grew by 37.40% during the same time line.
- 3) Difference in Difference result → (-0.00395): i.e,-0.40%, which illustrates China’s growth-India’s growth.

A. Meaning of Analysis

The above analysis explains that after 2021, both nations witnessed a significant boom in exports and managed to increase their trade volumes by 37% compared to the average of the timeline 2015-2020. We can see that the performance of both countries is different from each other. However, post 2021 shows that India successfully matched the speed of China. As the DiD analysis results depict (-0.40%), it means China’s growth didn’t slow down enough to beat its export growth, outperforming India by a minor percentage. This suggests that the impact of China plus one helped the Indian economy to catch up to other developed economies, but it remained a few percentage points away from China.

VI. HYPOTHESIS TESTING

A. The shift is temporary (H0) or permanent(H1)

To analyse whether the shifts due to trade divergence are temporary or permanent, we will take two variables for regression analysis, INR/USD (Dependent variable) and Trade war dummy (Independent variable).

Y range =INR/USD (dependent variable)

X range =trade war dummy (independent variable)

SUMMARY OUTPUT

<i>Regression Statistics</i>		
Multiple R		0.730951783
R Square		0.534290509
Adjusted R-Square		0.476076822
Standard Error		4.979254582

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	227.5522	227.5522	9.178091	0.016320921
Residual	8	198.3438	24.79298		
Total	9	425.896			

VARIABLE	COEFFICIENT	STANDARD ERROR	t-Stat	P-VALUE	SIGNIFICANCE
INTERCEPT	74.438	6.739	11.046	<0.001	tistically significant
FDI Inflows	-0.015	0.1	-0.145	0.8883	tistically insignificant

VARIABLE	COEFFICIENT	STANDARD ERROR	t-Stat	P-VALUE	SIGNIFICANCE
Intercept	66.233	2.875	23.039	<0.001	tistically significant
de war/China plus one	10.41	3.436	3.03	0.0163	tistically significant

Key Regression includes:

- Observations (N): 10
- R-Square(R²): 0.534 (53.4%)
- Adjusted R-Square: 0.476
- F-Statistics: 9.178 (denotes high reliability)
- Significance F(P-Value): 0.0163

Findings:

The above table shows an R-Square value of 0.534, which means that over 53% of the variability in India’s trade export is explained by the 10-year timeline structural shift in the economy, primarily demonstrating trade war, and China plus one supply chains restructured, with a boosted coefficient of 10.410 and P-Value of 0.0163. As the p-value is less than 0.05, the null hypothesis (H₀) is rejected. This proves that the trade shift from China to India is permanent, as there is an upward shift in India’s global export volumes.

B. The Product-Linked Incentive scheme (PLI) is actually helping or not:

To analyse whether the PLI scheme is actually helping the Indian manufacturers or not, we will use two variables for the analysis: one dependent variable (INR/USD) and another will be the independent variable (FDI/Inflows). By taking out the regression analysis of the following, we can determine the outcome as follows:

Y range = INR/USD

X range = FDI Inflows (USD Bn)

SUMMARY OUTPUT:

<i>Regression Statistics</i>	
Multiple R	0.051187637
R Square	0.002620174
Adjusted R-Square	-0.122052304
Standard Error	7.286803812
Observations	10

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.115922	1.115922	0.021016	0.888319972
Residual	8	424.7801	53.09751		
Total	9	425.896			

Key Regression Includes:

- Observation (N): 10
- R-Square (R²): 0.0026 (0.26%)
- Adjusted R-Square: -0.122
- F-Statistics: 0.0210 (denotes low reliability)
- Significance F (P-VALUE): 0.8883

Findings:

The above regression analysis shows the R-square value of 0.0026, which means only 0.26% of the variables depend on the FDI Inflows. This shows that the independent variable (FDI Inflows) has no major effect on the dependent variable (INR/USD), which means that the 99.74% still depends on the other major factors. Since it's an assessment for 10-years of data, it is difficult to depict a definitive outcome, but it provides a quick analysis of variables. The significance F (P-Value) is 0.8883, which is greater than 0.05, which means the relationship between these two variables is not statistically meaningful.

Relevance of the PLI Scheme from the above analysis:

To find out if the PLI scheme is actually helping or not, we analysed the foreign direct investment data from 2015 to 2025, which demonstrates a mixed answer that is a slow impact, and no, it's not helping as an answer, but we cannot ignore the fact that the FDI inflows alone cannot influence whether it is working or not. But, if we look at the trade war dummy part to analyse the effectiveness of the PLI scheme, it shows yes! From the years when trade diversions occurred. Which critically means that the PLI scheme is helping, but not in the way people think that, by only calculating the cash inflows, but it actually connects other factors too, like capturing global supply chains due to the trade diversions.

C. How small exporters are handling high fuel costs:

Since our objective was to find out how the small exporters are handling the high oil prices, we have collected the secondary data on the drivers of macroeconomic indicators for ten years timeline, i.e., 2015 to 2025, to analyse certain research questions and objectives. Here, we will take two variables for the assessment of the objective: the first is the dependent variable (INR/USD), and the second is the independent variable (Brent oil average/USD Bn). To clearly understand the handling weightage, we will do a regression analysis to assess the objective.

Y range = INR/USD

X range = Brent oil average (USD Bn)

SUMMARY OUTPUT:

Regression Statistics	
Multiple R	0.605035017
R Square	0.366067372
Adjusted R-Square	0.286825794
Standard Error	5.809360662
Observations	10

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	155.9066	155.9066	4.619638	0.063841462
Residual	8	269.9894	33.74867		
Total	9	425.896			

VARIABLE	COEFFICIENT	STANDARD ERROR	t-STAT	P-VALUE	SIGNIFICANCE
INTERCEPT	56.4662	8.1443	6.9331	0.00012	tistically significant
Brentoil Avg	0.2482	0.1154	2.1493	0.063841	tistically insignificant

Key regression includes:

- Observations (N): 10
- R-Square (R2): 0.3661(36.61%)
- Adjusted R-square: 0.2868
- F-Statistics: 4.6196 (denotes low reliability)
- Significance F (P-VALUE): 0.0638

Findings:

The regression analysis shows that 0.3661 is the value of R-Square, which means 36.61% of the variables depend on the Brent oil average, which denotes the independent variable has a moderate effect on the dependent variable, and the 63.39% still depends on the other factors. As the assessment is done only for 10 years of data, we cannot accurately depict the outcome, but we can do a quick analysis of variables. Since the p-value is 0.0638, which is a bit greater than 0.05, it states that the relationship between these two variables is strong enough, but shows a weak influence.

Relevance of the objective: how small exporters are handling high oil prices:

The above data analysis demonstrates that, yes! The small exporters are handling the high oil prices well for now, but by sacrificing their own profits. The data states that when the Brent oil prices went higher, the number of exporters went up a little bit (the positive coefficient of 0.248). If they were not doing well with the high costs of oil would have the negative outcome from the above analysis, but they are not handling it because it's easy to do so, but actually they don't have any other way or choice, as they cannot influence prices to the global buyers, they are cutting their own profits just to maintain the good buyer and seller relationships.

D. How do the rising domestic prices and costs inside India slow down exporters?

To analyse the objective, we will do a regression analysis to determine the outcome accordingly for how the rising domestic prices and costs inside India slow down the exporters. We will take two variables: one dependent variable (INR/USD), and the other will be the independent variable (CPI inflation), which will help us to draw better outcomes for the assessment.

Y range = INR/USD

X range = CPI Inflation

SUMMARY OUTPUT:

<i>Regression Statistics</i>	
Multiple R	0.550619453
R Square	0.303181782
Adjusted R-Square	0.216079504
Standard Error	6.090690559
Observations	10

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	129.1239	129.1239	3.480756	0.099062701
Residual	8	296.7721	37.09651		
Total	9	425.896			

VARIABLES	COEFFICIENT	STANDARD ERROR	t-STAT	P-VALUE	SIGNIFICANCE
INTERCEPT	55.427	9.887	5.6059	0.000507	Statistically significant
CPI Inflation %	3.6477	1.9552	1.8656	0.099063	Statistically insignificant

Key regression includes:

- Observations (N): 10
- R-Square (R²): 0.3031 (30.31%)
- Adjusted R-Square: 0.2160
- F-Statistics: 3.4807 (denotes low reliability)
- Significance F (P-VALUE): 0.0990

Findings:

The regression analysis shows that the R-Square value is of 0.3031%, which clearly states that 30.31% of the variable depends on the Consumer Price index (CPI Inflation%) and the independent variable has a moderate impact on the dependent variable (INR/USD), which means that the remaining 69.69% still depends on the other factors of drivers of macroeconomic indicators. As the outcome has been taken out on the basis of 10 years of data timeline, it doesn't give strength to the assessment, but it provides a quick analysis. Since the p-value is 0.0990, which is greater than 0.05, the relationship between the two variables is weak.

Relevance of the objective:

To find out how much rising domestic prices and costs inside India slow down exporters, we analyse the Consumer Price Index (CPI) data, which reveals a mixed answer. According to the analysis, the rising domestic inflation does not completely slow down the exporters alone, but significantly has some effect in slowing down the exporters. When the domestic costs rise, the exporter doesn't stop exporting. Instead, they cut off their own profits to manage sweet relationships with the international buyers. Hence, raising domestic prices puts pressure on them, but the exporters use the internal adjustments.

VII. FINDINGS AND CONCLUSION OF THE STUDY:

A. The Dual Effect of Global Trade Wars:

The findings of the research demonstrate the dual impact of the global trade wars, the positive and the negative effects, which directly or indirectly impact the micro and macro economies. Phase one was the supply chain shocks, the global political tensions, and the trade tensions have created an impactful economic disruption for the Indian market. The Indian market was heavily dependent on the various factors affecting trade, such as import of raw materials, electronic components and Active Pharmaceutical Ingredients (APIs), which led domestic industries to severe uncertainties.

B. Sustainability of Trade Shifts (China Plus One):

- Permanency: This study rejects the null hypothesis H₀ and confirms that the trade shipped from China to India is permanent.
- Evidence: The regression analysis shows a significant upward shift in India's export volumes connected to the structural changes which was brought by the global supply chain restructuring and the China one strategy.
- Performance: India and China experienced a 37% export growth after 2021. The difference in difference analysis reveals that India is effectively catching up to the global competitors, even though it didn't surpass China by a minor margin of 0.40% in comparative growth rates.

C. Effectiveness of PLI Schemes

- Direct Impact: The simple regression shows that only using FDI inflows is statistically insignificant, as it results in P is greater than 0.05. The qualitative analysts suggest that the PLI schemes are effective.
- Mechanism: The scheme was a success, not only because of attracting raw cash, but also by helping Indian manufacturers to compete in the global supply chains. They provide the necessary output of the trade diverted from China, and their role is longterm economic restructuring.

D. Challenges for Small Exporters

- Profit Sacrifices: The small exporters are dealing with the high fuel costs and shipping delays not by passing these costs to the international buyers, as they cannot influence them, but absorbing the cost and cutting their own profit margins to maintain buyer-seller relationships.
- Flexibility: The study finds that the high input costs of oil or inflation do not stop exports. Instead, they are forced to adjust Internal working systems. The exporters are doing well in terms of volume, but these goals are achieved through financial sacrifice rather than efficient flexibility.

E. Macroeconomic Drivers (CPI & Oil)

- Limited Correlation: This statistical analysis indicates that the macroeconomic drivers, like CPI inflation and Brent oil prices, have a moderate effect on export fluctuations. As the R Square values are 30% to 36% but, other factors affect the macroeconomic factors.
- Dependency: Over 60% of the variance in India's export performance is influenced by the external factors and the structural changes, other than the domestic price inflation and the energy costs.
- Suggestions:
 - This modern era is significantly and efficiently influenced by digital transactions. Consumer protection must transform from the traditional approaches to a proactive and intelligent framework utilising digital technologies.
 - The employment and manufacturing sectors act as the backbone of India for these small and medium enterprises. The flexibility during the Global uncertainties is not about short-term subsidies, but it depends on building structural and productive market guidelines.

VIII. CONCLUSIONS

This scheme has successfully provided incentives to the large-scale investments in sectors like electronics and medicines, but its long-term efficiency depends on transforming it from assembly-based manufacturing to value-added manufacturing, which will eventually create a greater integration for the global value chains. In conclusion, the global trade restructure provides an efficient opportunity for India, but we cannot state it as a self-executing advantage. To secure a sustained and competitive environment, India must move beyond the reactive trade policy and focus on spending, strengthening the domestic sectors and creating manageable manufacturing ecosystems. They should monitor whether the current efficiency of PLI-driven investments transforms into a consistent and long-term shift in the global market platform or if additional structures are required to overcome the constant uncertainties for the establishment of trade networks that are currently centred on China.

REFERENCES

- [1] Chadha et al. (2019): The U.S.-China Trade War: Impact on India and Its Policy Choices. (NCAER Working Paper No. 119). National Council of Applied Economic Research. <https://www.ncaer.org/publication/the-us-china-trade-war-impact-on-india-and-its-policychoices>.
- [2] A. Sanyal (2021): Impact of U.S.-China Trade War on Indian External Trade. *Foreign Trade Review*, 56(1), 87–103. EconStor: Impact of US-China Trade War on Indian External Trade.
- [3] Misra & Choudhry (2020): Trade war: Likely impact on India. *Journal of Public Affairs*, 20(3), Article e2052. IDEAS/RePEc Database Listing.
- [4] Khandelwal, A. (2023): The US–China trade war: India's export response. In *International Business in Times of Crisis: Tribute to Professor Sudhir Rana* (pp. 145–162). NCAER Research Library PDF.
- [5] R. Shamasastri (1915): *Kautilya's Arthashastra*. BJP e-Library.
- [6] R.C Dutt (1902): *The Economic History of India Under British Rule*. The economic history of India under early British rule, from the rise of the British power in 1757 to the accession of Queen Victoria in 1837: Dutt, Romesh Chunder, 1848-1909: Free Download, Borrow, and Streaming: Internet Archive.
- [7] Pomeranz, K. (2000): *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. ResearchGate.
- [8] Panagaria, A. (2020): *India's Trade Policy: The Export-Led Growth Strategy*. Brookings Institution.



- [9] Bharat et al. (2023): International trade theories and their relevance in modern global trade. *Journal of Applied International Economics*.
- [10] Bajpeyee, P. K. (2025): Trade wars and their impact on the global economy. *International Education and Research Journal Publication Page*.
- [11] Jain, S., & Jindal, A. (2025): Protectionism and trade wars: implications for global trade and developing economies.
- [12] Sarinah et al. (2023): Analyzing the Effects of Trade Wars on Global Supply Chains and Economic Growth. *Journal Development Manecos*, 1(2), 54–66. *Journal Development Manecos Publication Page*.
- [13] Darekar, O. G. (2024): A study of World Trade Organization (WTO)'s trade policies and their impact on Indian economy. *Vidyalankar Institute of Technology. ResearchGate*.
- [14] S. Sarangapani and Muthu (2020): Economic impact of India-China trade tensions. *Journal of Seybold Report*, 15(9), 1195–1204. *ResearchGate*.
- [16] Guo et al. (2018): The day after tomorrow: evaluating the burden of Trump's trade war. *Journal of Chinese Economic and Business Studies*, 16(1), 101–120. *MIT Press Direct*.
- [17] *Journal of Chinese Economic and Business Studies*, 16(1), 101–120. *MIT Press Direct*.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)