"Impact of India-China trade war after Galwan Valley faceoff on Pune's Small Manufacturing Sector."

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ABSTRACT

Trade Wars have the long back history but since 2018 the trade war between US China and in 2020 India China have brought severe changes to the small manufacturers from the Indian continent as India is the last largest market globally. The impact of trade was not only affect the large players of market but it escalates to the roots of small industries and eventually to the end consumers.

This research was conducted to understand the factors on which the trade wars have a great impact and to justify the related reasons. This paper also studies the final reasons of impact as the year 2020 was also the year of pandemic situation. The research can be further modified to the larger geographical regions and the results will fluctuate according to the domestic requirements and balance of trade.

Keywords: Trade War, small manufacturers, pandemic situation, balance of trade

1. INTRODUCTION:

India-China trade has grassroots in long back and both the countries have been in relation from 2nd century B.C. till now. The major history of both country's contemplates the trade relations from Silk route till 14th century A.D. till now and not only in textile but almost in every sector.

India in 2000 helped China to successfully enter the world trade and from that point India China trade relations boomed as the neighbouring countries. Being the neighbours both countries have a Line of Actual Control with a peace and tranquillity treaty dated back in 1993. Recent faceoffs between soldiers of both the country's on the LAC gave rise to the boycott sentiment in India. According to this the Government under the Prime Minister Narendra Modi applied a ban on 59 different applications and increased the rules and regulations for multiple product imports from China. This move by the Government of India has been a key factor in increasing the gap of trade between both the countries.

The trade war between both the countries have impacted the Indian market as the import export ratio between both countries is wide that India almost imports thrice the exports to China. The raw materials that are used in manufacturing of goods and products in India have higher share of raw material from China. The basic impact of

this trade war was on the small sector as this sector i.e., unorganized sector where higher number of manufacturers approach Chinese market for the raw material as to enjoy the lower priced materials as compared to other markets.

2. RESEARCH PROBLEM:

After the Trade War Indian MSME sector have highly opposed the step of the Government as it was the most affected sector due to their reliability on the Chinese raw material as the procedure of protectionism was about to start due to this step but since the high reliability on each other both countries still in the trade relation despite the clashes on the Line of Actual Control.

3. RESEARCH OBJECTIVE:

Impact of India-China trade war after Galwan Valley faceoff on Pune's Small Manufacturing Sector in the following factors:

1) Availability of Resources & Raw materials.
2) Change in trade policies
3) Increasing demand for domestic goods.
4) Increase in costs.
5) Support from Government.
6) Finished Goods & Products Prices.

4. LITERATURE REVIEW:

In the late 1980's John A. C. Conybeare echoed that "Trade wars are a category of intense international conflict where states interact, bargain, and retaliate primarily over economic objectives directly related to the traded goods or service sectors of their economies, and where the means used are restrictions on the free flow of goods and services". By Oxford University Press it was cited that "Such conflicts have been a feature of international relations from ancient through modern times. Despite this fact there have been few attempts to systematically analyse the dynamics of trade wars in a coherent theoretical structure."**(Greenaway & Conybeare, 1988)**

In the economic debates of WTO meetings, it was concluded and cited by Richard B. Freeman that "The rules governing trade and capital flows have been at the centre of controversy as globalization has proceeded. One reason is the belief that trade, and capital flows have massive effects on the labour market either positive, per the claims of international financial institutions and free trade enthusiasts, or negative, per the ubiquitous protestors at WTO, IMF, and World Bank meetings demanding global labour standards." Richard also found out in his study that "Changes in trade policy have had modest impacts on labour market" also he noticed after studying that "aspects of globalization- immigration, capital flows, and technology transfer n have greater impacts, with volatile capital flows creating great risk for the well-being of workers."**(Freeman, 2004)**

Joe Thomas aggregated "the state of India–China economic relations with a specific focus on trade at the borders. It explicates the potential for economic activity at the border regions to generate self-sustaining and/or externally linked local development for both countries." After examining the history of both regions Joe rectified that "geographical contiguity is yet to be transformed into opportunity along the India-China border, a practice

consistent both with the history of these regions as well as with the blueprints being drawn up for the future of these regions."(**Karackattu, 2013**)

The author Reena Tanwar sought out that "India and China the fastest growing countries, have emphatically made their presence felt in the rapidly globalizing world economy. Both the countries are among the major countries in the global population as both the nations contribute 37% of the world's population and 6.4% of the value of world output and income at current prices and exchange rates. Rapid economic growth, large foreign direct investments (FDI) and growing trade along with the whole world are some of the peculiar characteristics of both the countries of development." She also mentioned that both the countries being economically on same grounds and issues but had different political background. She also mentioned the methods used for economic improvements being different for both the countries.(**Reena, 2018**)

While studying about the US-China tare war Dan steinbock mentioned that "Recent globalization peaked between China's accession to the WTO in 2001 and the global financial crisis in 2008. After the crisis, China and large emerging economies fuelled the international economy, which was thus spared from a global depression." (**Steinbock, 2018**)

Alessandro Barattieri, Matteo Cacciatore & Fabio Ghironi in their article Protectionism and the Business Cycle cited that "the dynamic effects of temporary trade barriers estimate from country level show that protectionism acts as a supply shock, causing output to fall and inflation to rise in the short run." About the protectionism they quote "protectionism has at best a small positive effect on the trade balance. Building a small open economy model with firm heterogeneity, endogenous selection into trade, and nominal rigidity to study the channels through which protectionism affects aggregate fluctuations."(**Barattieri et al., 2018**)

In the paper Pavanam Thomas found out "attempts to explain major trends of bilateral trade, its composition through calculating trade dependency index and examining rate of import penetration." He also mentioned that "The various policy measures from the Smithian trade to the present trade theories is analysed for a perceptible trade policy and measures for Indo-China trade. The study also analyses the implications and prospects of trade between the two countries. The study is not confined to the bilateral trade between India and china but also the impact of their trade on the world economy."(**Thomas, 2020**)

In an article on trade war: likely impact on India Rekha Mishra & Sonam Choudhry cited that "The global financial crisis triggered the built up of domestic pressure in some countries to introduce protectionist measures against imports. The present discussion regarding the 'trade war' and 'de-globalisation' intensified after both the US and China escalated the tariff rates on imports originating in the US and China." The Studied "the potential economic effects of the substantial tariff hikes by these two major economies on Brazil, Russia, India, China and South Africa, particularly for India." The examined the "potential impact on India's exports, that is, both direct and indirect losses as well as benefits arising due to the trade war using the economic model based on the trend in trade flows, similarity index and supply chain networks using World Input-Output tables."(**Mishra & Choudhry, 2020**)

In an article Dr. Sarangpani mentioned that "India has considerable potential for reducing its trade deficit with China, as we can see from Made-in-China products sold on the Indian market. Most of them are low- and mid-

range products. India can make these things itself. The value tune to the cores of rupees is loss for both counties; it will create far reaching impact in Indian business environment." In this paper Dr. Sarangpani highlighted "the possible causes and consequences of trade war between to Asian giants and suggest how to promote regional growth prospects for speedy development."**(Sarangapani et al., 2020)**

In a research article Mr. Brandon quoted that "in an effort to thwart China's economic practices and boost the US economy, President Trump's administration levied tariffs on Chinese imports shortly after taking office, moving US foreign economic policy from liberalism, practiced for decades, to protectionism." He mentioned in his research about the nationalism and protectionism that from the conceptual insights from the nationalism literature, he explored the nationalist roots of the trade war from both the US and Chinese perspectives as like the nationalism trend rising in Indian territory after the Government change. He also said that "The USA administration's plan to achieve energy autonomy, decrease reliance on foreign resources, and reinvigorate the manufacturing sector has led to protectionist policies, the othering of China, and hence the trade war."**(Boylan et al., 2021)**

5. RESEARCH HYPOTHESIS:

Hypothesis 1

H_0 : There is no significant relationship between Pune's Small Manufacturing Sector and the availability of resources & raw material.

H_1 : There is a significant relationship between Pune's Small Manufacturing Sector and the availability of resources & raw material.

Hypothesis 2

H_0 : There is no significant impact on Pune's Small Manufacturing Sector due to change in trade policies.

H_2 : There is a significant impact on Pune's Small Manufacturing Sector due to change in trade policies.

Hypothesis 3

H_0 : There is no significant impact on the demand for the domestic goods of small manufacturers after the trade war.

H_3 : There is a significant impact on the demand for the domestic goods of small manufacturers after the trade war.

Hypothesis 4

H_0 : There is no significant impact of increase in cost of raw material on Pune's small manufacturing sector.

H_4 : There is a significant impact of increase in cost of raw material on Pune's small manufacturing sector.

Hypothesis 5

H_0 : There is no significant relationship in support from Government & Pune's small manufacturing sector.

H_5 : There is a significant relationship in support from Government & Pune's small manufacturing sector.

Hypothesis 6

H_0 : There is no significant impact of rise in prices of finished goods on Pune's small manufacturing sector.

H$_6$: There is significant impact of rise in prices of finished goods on Pune's small manufacturing sector.

6. RESEARCH METHODOLOGY:

This research study involved responses from 78 Manufacturing Industry respondents from Pune City. This research was basically done on the small manufacturing enterprises in the Pune district under which a questionnaire survey was undertaken. This research was restricted to the manufacturing sector under the MSME's, and service sector was not the part of research.

This research is based on descriptive research design, and I used probability sampling method for collecting data according to the filter as applied manufacturing units.

Research method: -   Quantitative

Research design: -   Descriptive research

Area of research: -   Small Industry Manufacturers

Sample size: -   78 respondents

Statistical tool: -   SPSS

7. DATA ANALYSIS, INTERPRETATION, AND HYPOTHESIS TESTING:

Part A: Descriptive Analysis

	N	Mean	Std. Deviation	Variance
Firm	78	1.85	.560	.314
Raw material from China	78	1.62	.490	.240
Logistics and shipments for trade with China	78	2.27	1.101	1.212
Percentage of raw material is used from China [Before Trade War]	78	1.95	1.018	1.036
Percentage of raw material is used from China [After Trade War]	78	1.40	.762	.580
Impact due to changes in trade policies.	78	3.47	1.214	1.473
Increase in demand for your firm's products.	78	3.44	1.146	1.314
Relevance of rise in the cost of raw materials.	78	3.68	1.294	1.675
Impacted by [Quality of Output]	78	2.56	1.234	1.522
Impacted by [Quantity of Output]	78	2.62	1.142	1.305
Impacted by [Production Cost of Firm]	78	3.23	1.289	1.660
Impacted by [Revenue of Firm]	78	3.29	1.330	1.769
Increase in prices of finished goods. (Yes/No)	78	1.19	.397	.157
How much increase in prices of finished goods?	78	2.96	1.663	2.765
Usefulness of Indian Government movements	78	3.53	1.246	1.551
Important for the firm [International Cooperation Scheme]	78	2.92	1.204	1.449
Important for the firm [Procurement & Marketing Support Scheme]	78	3.05	1.318	1.738
Important for the firm [National Manufacturing Competitiveness Programme]	78	3.29	1.229	1.509
Importance of [Cost of Raw Material]	78	3.37	1.406	1.977
Importance of [Change in Trade Policy]	78	3.21	1.273	1.620
Importance of [Increase in demand of Domestic Products]	78	3.10	1.234	1.522
Importance of [Government Support to Industries]	78	3.44	1.383	1.911
India-China Trade War	78	.59	.495	.245
Covid Pandemic	78	.73	.446	.199
Government Movements	78	.49	.503	.253
Valid N (listwise)	78			

Table 4.1: Descriptive Analysis of Individual Questions

Part B: -

❖ **Hypothesis 1: -**

H_0 **:** There is no significant relationship between Pune's Small Manufacturing Sector and the availability of resources & raw material.

H_1 **:** There is a significant relationship between Pune's Small Manufacturing Sector and the availability of resources & raw material.

Firm Type * logistics and shipments for trade with China * Raw material from China Crosstabulation

Raw material from China			logistics and shipments for trade with China				
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Total	Firm Type	Micro	9	2	5	3	0
		Small	16	12	17	7	0
		Medium	1	3	2	0	1
	Total		26	17	24	10	1

Table 4.2: Firm * Availability of logistics & Shipments for trade * Availability of raw material

Chi-Square Tests

Raw material from China		Value	df	Asymptotic Significance (2-sided)
Total	Pearson Chi-Square	15.942[a]	8	.043
	Likelihood Ratio	11.543	8	.173
	Linear-by-Linear Association	.934	1	.334
	N of Valid Cases	78		

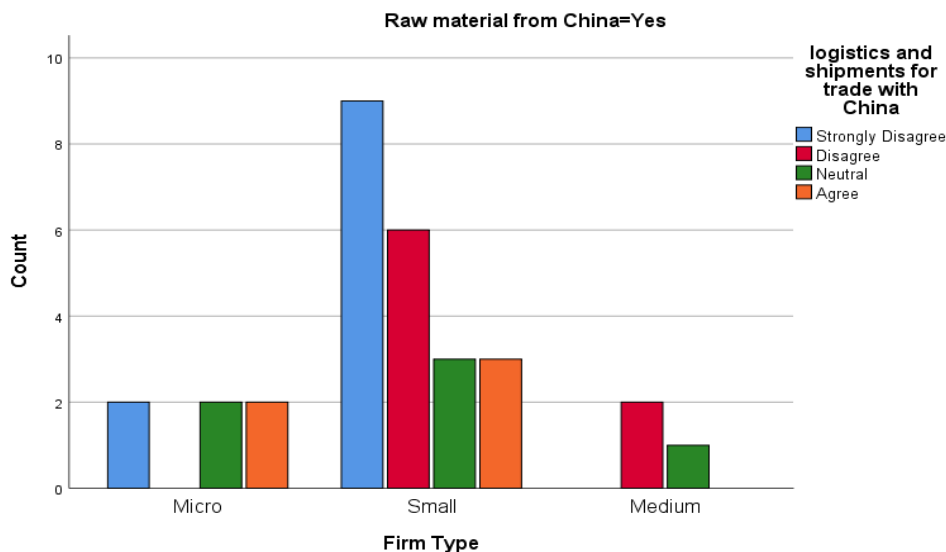Table 4.3: Chi-square Test for availability of raw material from China

Chart 4.1: Availability of raw material*Firm Type

Interpretation: -

Here in table 4.3, we have a critical value more than 3.841 and significance of Pearson Chi-square of 0.043 < 0.05 (Nominal).

From the Chart 4.1 we can have an idea about high number of importers of raw material are facing problems related to logistics and shipment.

So, we reject the null hypothesis and accept the alternate hypothesis that "There is a significant relationship between Pune's Small Manufacturing Sector and the availability of resources & raw material."

❖ **Hypothesis 2 :-**

H_0 : There is no significant impact on Pune's Small Manufacturing Sector due to change in trade policies.
H_2 : There is a significant impact on Pune's Small Manufacturing Sector due to change in trade policies.

		Impact due to changes in trade policies.				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Firm Type	Micro	4	1	4	6	4
	Small	5	4	13	22	8
	Medium	0	0	2	2	3
Total		9	5	19	30	15

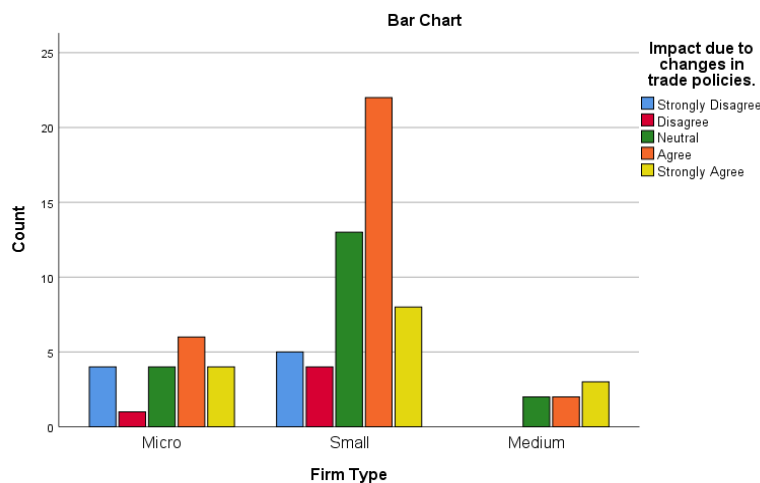Table 4.4: Firm* Impact due to change in Trade policies.

Chart 4.2: Firm*Impact due to change in trade policies

Interpretation: -

From above chart 4.2 we can see the impact given by 22 small manufacturers is agreed and 8 respondents have strongly agreed.

Also, from table 4.4 see the agreed responses of respondents are higher.

Almost 45 responses are in the agree and strongly agree selections.

So, we must accept the alternate hypothesis that "There is a significant impact on Pune's Small Manufacturing Sector due to change in trade policies."

❖ **Hypothesis 3 :-**

H_0 : There is no significant impact on the demand for the domestic goods of small manufacturers after the trade war.

H_3 : There is a significant impact on the demand for the domestic goods of small manufacturers after the trade war.

		Increase in demand for your firm's products.				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Firm Type	Micro	4	3	4	3	5
	Small	1	6	24	12	9
	Medium	0	0	0	4	3
Total		5	9	28	19	17

Table 4.5: Firm Type* Increase in demand of firm's products

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.525[a]	8	.009
Likelihood Ratio	21.496	8	.006
Linear-by-Linear Association	5.515	1	.019
N of Valid Cases	78		

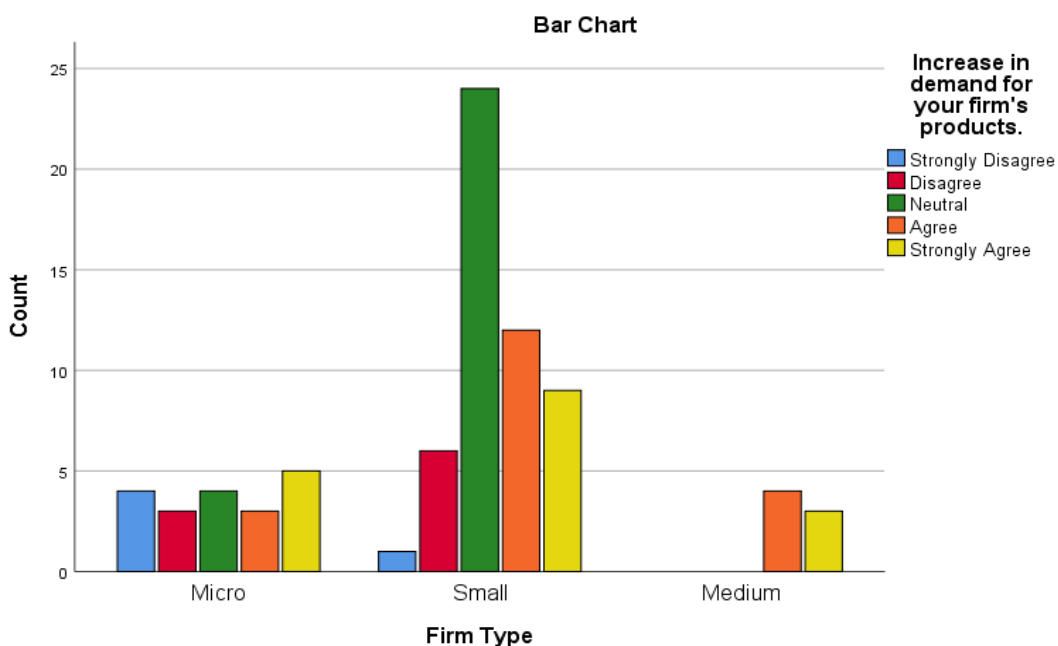Table 4.6: Chi-Square Test for Increase in demand of products

Chart 4.3: Firm Type* Increase in demand of firm's products

Interpretation: -

The result of these test is shown in table 4.6, Significance value is 0.009 which is less than nominal p (0.05) From table 4.5 it is clearly identified that total agreeable responses beyond neutral are more compared to disagreement. Also, in chart 4.3 the graphical representation allows to understand the responses of agree and strongly agree are more compared to disagree and strongly disagree.

So, we must accept the alternate hypothesis that "There is a significant impact on the demand for the domestic goods of small manufacturers after the trade war."

❖ **Hypothesis 4 :-**

H_0 : There is no significant impact of increase in cost of raw material on Pune's small manufacturing sector.
H_4 : There is a significant impact of increase in cost of raw material on Pune's small manufacturing sector.

		Relevance of rise in the cost of raw materials.				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Firm Type	Micro	4	2	4	5	4
	Small	3	4	10	18	17
	Medium	1	0	1	0	5
Total		8	6	15	23	26

Table 4.7: Cross Tabulation of Raw material % used Before and after Trade War

ANOVA[a,b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.369	1	1.369	14.599	.000[c]
	Residual	4.689	50	.094		
	Total	6.058	51			

Table 4.8: ANOVA table for the impact of increase in cost of raw material w.r.t. small firms
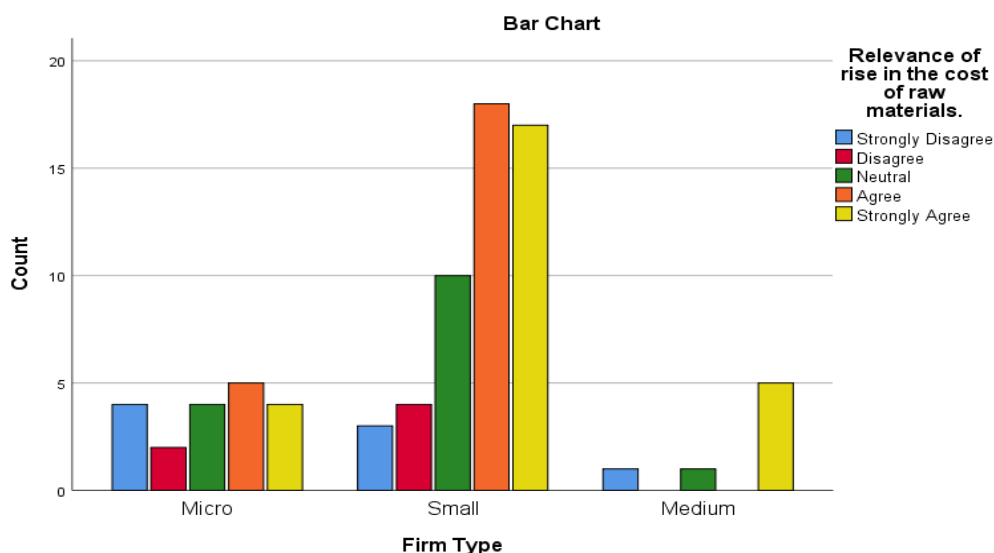

Chart 4.4: Relevance of the rise in cost with respect to firms with the trade war.

Interpretation: -

Here in table 4.8, we get to see there is significant relationship between the raw material used from China before and after Trade War.Also, ANOVA test is statistically significant as $0.000 < 0.05$ From Chart 4.4 we can conclude the relevance of the trade war and rise in cost of raw materials. So, we reject null hypothesis, and accept the alternate hypothesis that "There is a significant impact of increase in cost of raw material on Pune's small manufacturing sector."

❖ **Hypothesis 5 :-**

H_0 **:** There is no significant relationship in support from Government & Pune's small manufacturing sector.
H_5 **:** There is a significant relationship in support from Government & Pune's small manufacturing sector.

		Importance of [Government Support to Industries]				
		Not Important	Slightly Important	Moderately Important	Important	Very Important
Firm Type	Micro	2	5	4	7	1
	Small	6	7	7	15	17
	Medium	2	0	1	0	4
Total		10	12	12	22	22

Table 4.9: Firm * Importance of Government Support to Industries

Correlations			
		Usefulness of Indian Government movements	Importance of [Government Support to Industries]
Usefulness of Indian Government movements	Pearson Correlation	1	.371**
	Sig. (2-tailed)		.001
	N	78	78
Importance of [Government Support to Industries]	Pearson Correlation	.371**	1
	Sig. (2-tailed)	.001	
	N	78	78

Table 4.10: Correlation of Indian Government Movements with the importance of government support to small firms
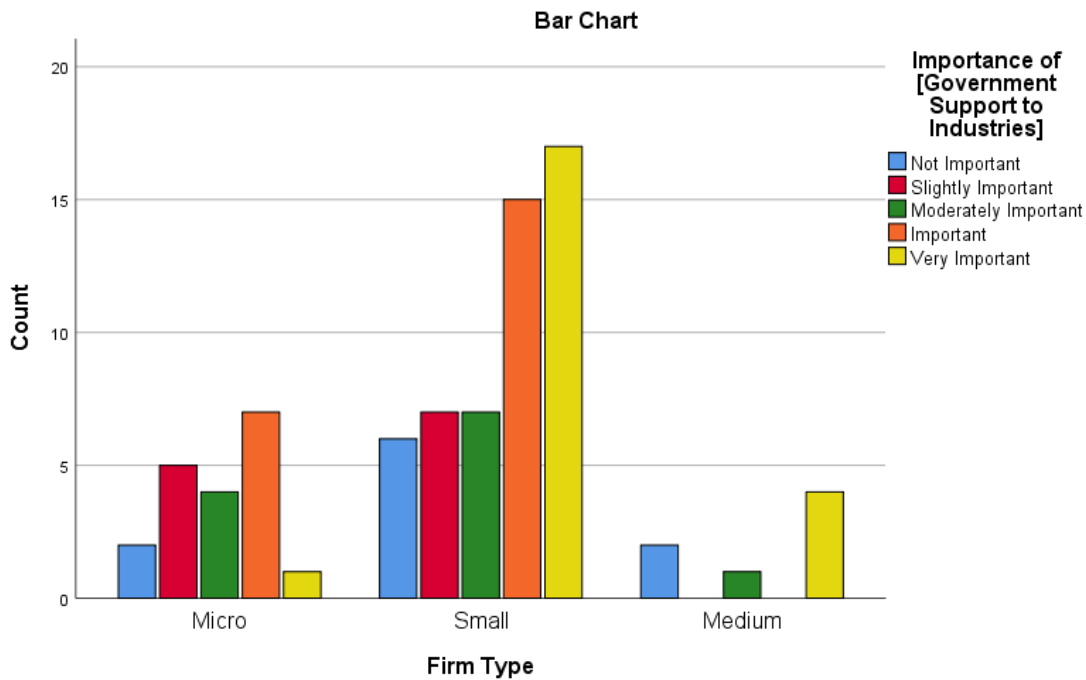
Chart 4.5: Firm * Importance of government support to firms

Interpretation: -

The result of these test is shown in table 4.1 Significance is 0.001 so the results are statistically significant in this relation.

From the chart 4.5, we can conclude that the small firms are giving high importance to the support of government. So, we must accept the alternate hypothesis that "There is a significant relationship in support from Government & Pune's small manufacturing sector."

❖ **Hypothesis 6 :-**

H_0 : There is no significant impact of rise in prices of finished goods on Pune's small manufacturing sector.
H_6 : There is significant impact of rise in prices of finished goods on Pune's small manufacturing sector.

Impacted by [Revenue of Firm] * Increase in prices of finished goods. (Yes/No) Crosstabulation				
Count				
		Increase in prices of finished goods. (Yes/No)		Total
		Yes	No	
Impacted by [Revenue of Firm]	Very Low	7	4	11
	Below Average	9	0	9
	Average	14	8	22
	Above Average	15	3	18
	Very High	18	0	18
Total		63	15	78

Table 4.11: Impact on revenue of firm * Increase in prices of finished goods

Correlations		India-China Trade War	Increase in prices of finished goods. (Yes/No)
India-China Trade War	Pearson Correlation	1	-.254[*]
	Sig. (2-tailed)		.025
	N	78	78
Increase in prices of finished goods. (Yes/No)	Pearson Correlation	-.254[*]	1
	Sig. (2-tailed)	.025	
	N	78	78

Table 4.12: Correlation between India-China Trade War & Increases in prices of finished goods.

Interpretation: -

The result of these test is shown in table 4.12. that there is a statistical significance between both factors as 0.025 < 0.05.

So, we reject null hypothesis and accept the alternate hypothesis that "There is a significant impact of rise in prices of finished goods on Pune's small manufacturing sector."

8. FINDINGS:

- Overall, this study conducted a survey with 15 questions, twelve of which were multiple-choice and six of which were Likert scale questions.

- In addition, when constructing the questionnaire, six hypotheses were formulated.

- In the research we found out that there is a relationship between the Pune's Small manufacturing sector and the availability of raw material from China. It is to be noted that we have response of having no availability of raw material from China after India-China Trade War.

- From the analysis we also get to know that there is no impact of changed trade policies as well as Increase in demand for your firms products on Pune's Small Manufacturing sector.

- From cross tabulation and correlation we can say that a high no of firms reduced the use of raw material from China about 20 %. It can be state that Pune's Small Manufacturers started reducing use of Chinese raw material after India China Trade War.

- About the help from Government and its support out of 52 small firms 42 firms responded above neutral and agree so it can be found that Government help is required for Pune's Small Manufacturing Sector.

- From the crosstabulations and correlations about the increase in finished goods prices and the India-China Trade War we can find out that highest number of small firms increased their finished goods prices about 10-20%.

- Also we find that the firms are hampered due to rise in prices of raw materials from China and as compared to Chinese raw material other country raw materials cost higher in comparison.

9.   RECOMMENDATIONS:

- The Small Manufacturing sectors are not hampered by the changes in trade policies directly.

- There are various policies made for small manufacturers only which are needed to be studied precisely.

- This also gives us the crux about how small industries are disconnected from the Government policies which are announced

- Due to lack of knowledge and proper infrastructure policies and supportive measures by Government are not enjoyed by various small Manufacturers.

10. CONCLUSION:

- We can conclude that the small manufacturing sectors mainly depend upon the availability of Chinese resources and raw material for getting economic reasons.

- The small manufacturers also get impacted heavily due to the increasing costs of raw materials as Government of India has increased restrictions on various Chinese imports as well as purchasing raw material from other countries like Korea or Japan are costly as compared to China.

- The small manufacturers are least impacted by the changed trade policies as well as Government support also is not directly related to the small manufacturers. At the same time support from Government is a crucial part for these small manufacturers as it encourages them for investments and also in improvising their manufacturing abilities.

- The Small Manufacturing sector gets changes according to the increased demand for domestic products as well as by increased costs of raw material as well as increases their finished goods and products prices.

- Small sector is volatile whenever there are changes in the above factors and so there is still a high scope in helping them through Government Initiatives.

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❖ REFERENCES: -

1.   Barattieri, A., Cacciatore, M., & Ghironi, F. (2018). Protectionism and the Business Cycle. National Bureau of Economic Research. https://doi.org/10.3386/w24353

2.   Boylan, B. M., McBeath, J., & Wang, B. (2021). US–China Relations: Nationalism, the Trade War, and COVID-19. Fudan Journal of the Humanities and Social Sciences, 14(1), 23–40. https://doi.org/10.1007/s40647-020-00302-6

3.   Freeman, R. B. (2004). Trade wars: The exaggerated impact of trade in economic debate. World Economy, 27(1). https://doi.org/10.1111/j.1467-9701.2004.00585.x

4.   Greenaway, D., & Conybeare, J. A. C. (1988). Trade Wars: The Theory and Practice of International Commercial Rivalry. The Economic Journal, 98(392), 895. https://doi.org/10.2307/2233948

5.   Karackattu, J. T. (2013). India-China Trade at the Borders: Challenges and opportunities. Journal of Contemporary China, 22(82). https://doi.org/10.1080/10670564.2013.766387

6.   Misra, R., & Choudhry, S. (2020). Trade War: Likely Impact on India. Foreign Trade Review, 55(1), 93–118. https://doi.org/10.1177/0015732519886793

7.   Reena. (2018). Trade Relation between India and China. Asian Journal of Research in Business Economics and Management, 8(1), 112. https://doi.org/10.5958/2249-7307.2018.00010.5

8.   Sarangapani, S., Studies, B., & College, I. (2020). 58 . ECONOMIC IMPACT OF INDIA-CHINA. 4(327), 2020.

9.   Steinbock, D. (2018). U.S.-China trade war and its global impacts. China Quarterly of International Strategic Studies, 4(4), 515–542. https://doi.org/10.1142/S2377740018500318

10.   Thomas, P. (2020). Indo - China Trade Relationship: Trend, Structure and Composition 1. 8(7), 66–73.