ANALYSIS OF BILATERAL TRADE RELATION BETWEEN PAKISTAN AND CHINA: AN APPLICATION OF TRADE INTENSITY INDEX APPROACH

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ABSRACT

This research paper is an attempt to measure the potential of bilateral trade between Pakistan and China from the period 2008 to 2012. For this purpose the author has applied a statistical technique called trade intensity index. The demand of Pakistani products being exported in China has been increasing during 2008 to 2012. On the other hand, this research paper concludes a gradual growth of import intensity of China for its old alley Pakistan. Thus, this study finds trade intensity index is much more than would be expected on the basis of their importance in the world trade.

Keywords: Bilateral trade, trade intensity approach

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Introduction:

A friendly relationship based on trade, economic and technological cooperation with China has been one of the best foreign policies of Pakistan. As a new born country with lots sacrifices Pakistan had been experiencing a stop go potential economy since 1960's. So the bilateral trade between China and Pakistan held in 1963 proved eraser to remove "stop" from the term "stop go economy). China is the third largest trading partner of Pakistan. Both countries have newly signed free trade agreement (FTA) that speeded up the military and technological transactions among them. Free trade agreement (FTA) ensures the bilateral trade relationship between Pakistan and China dominating the global economy. This research paper is an attempt to measure the strength of bilateral trading relationship between these countries. For this purpose the author has applied several statistical indices such as trade intensity index. Trade intensity index has been calculated for the period from 2008 to 2012. Bilateral trade relationship between Pakistan and China has been described in terms of intensity index which helps to identify how intensively the countries are trading with each other. Thus, this study found that trade index is much more than would be expected on the basis of their importance in the world trade. Hence the author of this research paper has taken interest to analyze the bilateral trade intensity between these two countries.

A Historic Analysis on Bilateral Trade between Pakistan – China:

As a new born country along with lots of hardships and sacrifices Pakistan made its own way of living in the world. And hence for the first time and best ever friendship of Pakistan and China came into being when Pakistan recognized the people's republic of China in 1950. With a formal diplomatic relation Pakistan and China established economic and bilateral trade relationship at Bandung Conference in 1955. The bilateral trade and economic relations between Pakistan and China got further strength when Pakistan voted a bill concerning the restoration of China's legitimate rights in the United Nations (UN). Sino-Pak relations caught further pace when India got the cost of culmination its relation with China in1962 war. It provided more opportunities for Pakistan and China to come closer in economic and trade cooperation. In 1963 Pakistan and China went on further in their relationship by signing free trade agreement (FTA) and an agreement on border relation and the construction of road that links Pakistan and China by the

Xinjian-Uygur autonomous regions with northern areas of Pakistan. The relationship between Pakistan and China continues and still having a great strategic importance today.

Methodology:

The data used in this research paper have been collected from UN COMTRADE statistics database from 2008 to 2012. The technique used in this research paper is known as trade intensity index which is developed by K. Kojima. The trade intensity index is used to determine the bilateral trade relationship between two countries. If the ratio of trade index is greater (1>) than would be expected on the basis of their importance in the world trade then it is considered that the bilateral trade relation between these countries is much stronger and both countries' trade is going beyond their economic potential. If the ratio of trade index is smaller (<1) than would be expected on the basis of their importance in the world trade then it is considered that these two countries have more economic potential to enhance their bilateral trade relation.

The value of Trade intensity index ranges from 0 to 1 (0 to 100 when multiplied with 100). If the value is 0, it implies no trade relationship between partner countries. If the value is 1 indicates high trade relations. If the value is more than 0 but less than 1, it implies the trade between countries has more potential to improve. If import intensity index is more (or less) than 100, it indicates that one country is importing more (or less) from other country than might be expected from that country's share in total world trade. In export too, if the value is 0 it implies export link between these two countries is negligible and if the value is nearer to 100 that indicates that performance is significant and if it exceeds 100 it indicates that one country exports more to the other country than might be expected from that country's share in world trade.

The limitation of the study is that the trade intensity indices have limited application for measuring bilateral potential trade between nations.

Mathematical Definition:

The Export intensity index between Pakistan with respect to China (XII_{pct}) is shown as follows:

$$XII_{pct}= [X_{pc} / X_p] / [M_c / (M_w - M_p)] * 100.. (1)$$

Where:

XII_{pct} = Export intensity index of trade of Pakistan with China:

X_{pc} = Exports of Pakistan to China.

X_p= Total Exports of Pakistan.

M_c = Total Imports of China.

M_w = Total World Imports.

M_p = Total Imports of Pakistan.

t = 2008 to 2012.

Import intensity index (MII_{pct}) can also be measured in the similar way:

MII_{pct}= $[M_{pc} / M_p] / [X_c / (X_w - X_p)]$ * 100.. (2)

Where:

MII_{pct} = Import intensity index of trade of Pakistan with China:

M_{pc} = Imports of Pakistan from China.

M_p = Total Imports of Pakistan.

X_c= Total Exports of China.

X_w = Total World Exports.

X_p = Total Exports of Pakistan.

t = 2008 to 2012.

The Export Intensity index between China with respect to Pakistan (XII_{cpt}) is shown as follows:

XII_{cpt} = [Xji / Xj] / [Mi / (Mw- Mj)] * 100...(3)

Where:

XII_{cpt} = Export intensity index of trade China with Pakistan.

X_{cp} = Exports of China to Pakistan.

X_c = Total Exports of China.

M_p = Total Imports of Pakistan.

M_w = Total World imports.

M_c = Total Imports of China.

t = 2008 to 2012.

Import intensity index (MII_{cpt}) can also be measured in the similar way:

$$MII_{cpt} = [M_{cp} / M_c] / [X_p / (X_w - X_c)] * 100 .... (4)$$

Where:

MII_{cpt} = Import intensity index of trade of China with Pakistan.

M_{cp} = Imports of China to Pakistan.

M_c = Total Imports of China.

X_p = Total Exports of Pakistan.

X_w = Total World Exports.

X_c = Total Exports of China.

t = 2008 to 2012.

In this analysis, if the intensities between two countries are more then 100, the author believes that the two countries have gained much trade potential between them. Bilateral trade relationships between Pakistan and China, which is described in terms of import and export intensity indices, helps to identify how intensively the countries are trading with each other.

Table 1: Trade Intensity Index between Pakistan And China

Year	XII_{pct}	MII_{pct}	XII_{cpt}	MII_{cpt}
2008	0.51	1.25	1.18	0.46
2009	0.71	1.23	1.14	0.63
2010	0.72	1.32	1.21	0.65
2011	0.68	1.40	1.27	0.61
2012	1.15	1.37	1.24	1.01

Source: Author's Estimation

XII_{pct} = Pakistan's Export Intensity Index with respect to China; MII_{pct} = Pakistan's Import Intensity Index with respect to China; XII_{cpt} = China's Export Index with respect to Pakistan; MII_{cpt} = China's Import Intensity Index with respect to Pakistan; p = Pakistan; c =China; t= 2008 to 2012.

Result and Conclusion of The Study:

The trends of both export and import intensities Pakistan and China are shown in Table 1. Pakistan's export intensity with respect to China has increased significantly over the years, which may be seen from the fact that export index of Pakistan to China has increased from 51 during 2008 to 115 during 2012. One can conclude that demands of the items being exported in China has been increasing during 2008 to 2012. Such a tremendous improvement in Pakistan's trade relation with China can never be seen since 1970's. That period has been a stop-go growth experience for Pakistan. Therefore it was a big challenge for Pakistan to get away from this vicious circle of stop-go economic potential in term terms of its products and market. This research paper shows how China's dynamic and potentially large export markets provided opportunities that resolved Pakistan's critical export history.

In the import front for Pakistan from China during 2008 to 2012 this research paper shows how 1963 born trade relative China emerged as the second largest source of import for Pakistan. The continues growth of import (123 in 2009, 132 in 2010, 140 in 2011) intensity of China for its old alley Pakistan is the response of signing free trade of agreement (FTA). Although the global

financial crisis hurt trading activities of different nations however it is commendable the trade relations between Pakistan and China wouldn't be affected by this.

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Table 2: Biletral Trade Relationship between Pakistan and China (Unit: Million US Dollar)

Year	Pakistan's Export to China	China's Import from World	Pakistan's Export to World	Pakistan's Import from China	China's Export to World	Pakistan's Import from World	World Export	World Import
2008	727	1131620	20323	4738	1428660	42327	15970882	16222152
2009	998	1004170	17523	3780	1201790	31648	12383260	12484949
2010	1436	1396200	21410	5248	1578270	37783	15075181	15166974
2011	1679	1742850	25383	6471	1899180	43955	18013288	18086740
2012	2620	1817780	22807	6688	2048940	42920	18013778	18139613

Source: UN COMTRADE statistics

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