

Impact of Belt and Road Initiative (BRI) on China and South Asia Trade Integration



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ABSTRACT: Belt and Road Initiative (BRI) is one of the noteworthy initiatives of the Chinese government. It has been intended to interface neighboring 65 nations to enhance inter-regional international trade. This research focused on China and South Asia international trade under BRI framework. South Asian nations share pretty much the equivalent social and social foundation. From the South Asian Association of Regional Cooperation (SAARC) the initiative for trade connectivity has started in this sub-region. Later several trade agreements came into force. In this present research, researchers uncovered present trade integration with China and South Asian countries. To estimate results we have applied gravity model equation. Estimated results support that BRI has a positive and significant impact on trade Integration among China and South Asia. The significance level of P-value falls below 1%. For data analysis, several databases have been utilized likewise, UN-Comtrade, World Bank, World Integrated Trade Solution (WITS), etc. Data analysis part has done with the application of Stata.

KEYWORDS: Belt and Road Initiative (BRI), China, South Asia, Gravity Model Equation, Trade Integration

INTRODUCTION

Belt and Road Initiative takes its inspiration from its ancient Silk Road Trading Route (Kynge, 2016) aiming to create an alliance of regional leadership with neighboring countries (Chung, 2018). It accounts for roughly 32 percent of global GDP, 39 percent Global merchandise trade, and 63 percent of the world's population. The initiative is referred to as the Silk Road Economic Belt (SREB) and the twenty-first Century Maritime Silk Road (MSR), which is a geopolitical initiative put forth by Chinese President Xi Jinping (Kohli, 2018). It shares three economic corridors including Bangladesh-China-India-Myanmar (BCIM), China Pakistan Economic Corridor (CPEC) and Trans Himalayan Economic Corridor with South Asian countries (Bangladesh, Bhutan, India, The Maldives, Nepal, Pakistan, Sri Lanka, and Afghanistan). These countries established regions first regional cooperation association SAARC (South Asian Association of Regional Cooperation) in 1985 as a flagship initiative to encourage regional economic cooperation. China is among one of the observer countries of SAARC. This country is investing in developing ports in Sri Lanka, Bangladesh, Pakistan, and Myanmar to regenerate the comparative advantages of this region. Afghanistan is considered as a doorway for South Asian countries for accessing the oil and gas of the Central Asian Republic like Tajikistan, Turkmenistan, and Uzbekistan. In addition to this, China has also increased its relationship with Sri Lanka, prior few years; China is giving infrastructural assistance to Sri Lanka which in turn has given the exploration block in the manner basin to China for exploration (Kumar, 2006). Moreover, investment to build the China-Nepal border is another initiative of the Chinese government. This policy will encourage bilateral power trade with South Asia and Nepal also. By and large, China has been successful in enhancing economic ties with South Asian countries, in a bid to increase the market size for its products and access to raw materials (Roy & Chkraborty, 2000). Prior research on Belt and Road Initiative revealed that this encouraged the agricultural trade between China and Central Asia by 8.8% (Jialiang, 2017). Due to low transportation cost, the adjoining 65 nations will be benefited. For example, particular research on EU countries, researchers showed that a 10% reduction in railway, air and maritime costs increases trade by 2%, 5.5%, and 1.1% respectively. Finally, transportation costs are found to be statistically significant in fostering international trade (Herrero & Xu, 2016). The present study estimated the recent impact of Belt and Road Initiative on the bilateral and multilateral relationship among South Asian countries and China.

CONCEPTUAL FRAMEWORK

Trade Integration is a process by which the firms and economics of separate states merge in a longer entity. In this research, the researcher found the economic integration among South Asian countries and China. Some specific theories are related to this current research. David Ricardo has demonstrated two concepts specialization and comparative advantage. In his book, Principles of Political Economy and Taxation he described the gains from trade as well. Besides, two countries having absolute advantage of that

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product will gain in trade by producing textiles and clothing product but at the end, the country with the comparative advantage will gain in trade by producing this product (Peter Navarro, 2019). Paul Krugman (1991) emphasized that the effects of cooperation will diverge proximity, market size, geographical and political unity. Several researchers estimated the proximity of trade with China and South Asian countries. All of them summarized that there is an upward trend in international trade with these regions. Bacchetta et al. (2016) mentioned some specific methods to estimate impacts of regional trade agreements likewise, Regional trade intensity of trade, trade complementarity, Real Effective Exchange Rate, and Terms of Trade. According to the estimation of Malik & Rather, (2015), trade intensity with South Asian neighboring countries (Bangladesh, Bhutan, Pakistan, Sri Lanka, and Nepal) and China. They considered nine years of data from 2005 to 2013. To do this they employed the trade intensity index. They summarized with the conclusion that with all of the South Asian countries there is an increasing trend of trade intensity. The in-depth analysis of (Chein-Peng, 2018) revealed that Belt and Road Initiative has a double-sided impact on bilateral trade with China and South Asian Countries (Bangladesh, Maldives India, Sri Lanka, and Pakistan). Major projects are shown in this research. In most of the countries namely Bangladesh, Pakistan, Sri Lanka infrastructure development is the main concentration. Rebuilding ports, establishing more power industries are common to major projects under BRI. In Maldives tourism has been focused by the project. All of the countries have a large benefit forecast from this project. But they have also concerning issues regarding national defense issue. Another issue is the rival relationship between China and India. Scholars are divided into two sides. One side welcomed this initiative as a beneficiary step for rejuvenating China and South Asia relationship. Another part of the scholars mentioned otherwise (Chein-Peng, 2018). The present research has been done by conceptualizing above researches. In addition, it will be a different study from others due to the quantitative analysis and data analysis of the gravity model equation.

METHODOLOGY

The present research has followed the quantitative methodology. Bilateral among South Asian countries and China have been collected from UNcomtrade database. The present researcher used data from 2000-2017. To estimate results researcher used trade data from 2000-2017. Gravity model equation has been applied to estimate the effects of BRI on China and South Asia trade integration. Ma Jiliang and Balezentis, Tomas (2017) used a gravity model to find out trade relationship between China and Central Asia by using the following model.

$$\ln Trade_{ijt} = \alpha_0 + \alpha_1 \ln GDP_{it} + \alpha_2 \ln GDP_{jt} + \alpha_3 \ln Pop_{it} + \alpha_4 \ln Pop_{jt} + \alpha_5 Distance_{ij} + \alpha_6 FTA_{ijt} + \alpha_7 Belt_{ijt} + \alpha_8 Gov_{it} + \alpha_9 Gov_{jt} + \varepsilon_{ijt}$$

Where $Trade_{ijt}$ is taken from the UN Comtrade database, GDP_{it} and GDP_{jt} are the levels of nominal Gross Domestic Product (GDP) in countries i and j in the period t . GDP is a proxy of economy size of the observed country and represents, Pop_{it} and Pop_{jt} are the populations of countries i and j in the period t . In the literature, FTA_{ijt} is the amount of regional free trade area (FTA) agreements that these countries, Gov_{it} is the governance indicator that reflects the regulatory quality of governance and the control of corruption in country i . The data are from Worldwide Governance Indicators.

VARIABLE SPECIFICATION AND DATA COLLECTION

Table 1: Variable sources

Variable identification	Variable sources	Databases
Export and Import with South Asian Countries and China	Jiliang, Ma & Tomas, Balezentis (2017)	UNcomtrade
Gross Domestic Product		World Bank dataset
Governance Indicator		The data are from Worldwide Governance Indicators (WGI) database
FTA		Asia Regional Integration Center (aric.adb.org)
Distance		CEPII database

Source: Author

ESTIMATED RESULTS AND DATA ANALYSIS

In this present study, researcher used a panel dataset of 16 countries including China, South Asia (Bangladesh, India, Pakistan, Srilanka; on the basis of availability of data), China's top 9 trading partners (Hongkong, Japan, Korea, Republic of, Vietnam, Thailand, Malaysia, Indonesia, United States, Russian Federation) in 2015 (WITS), South Asia's top three partners (China, United States, United Kingdom) covering 18 years period dating 2000-2017. In this study, we have applied the gravity model analysis. Various variables are incorporated into this model. Firstly we did the Hausman test and got p-value 0.9547. So we can not reject the null hypothesis and applied the random effects GLS regression analysis in this present study.

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Table 2: BRI initiative in trade with China and South Asia

Variables	GLS	Fixed effects ijt
	Tradeijt	Tradeijt
Popit	206.909	275.175
	(7.12)***	(4.56)***
Popjt	-47.078	-849.128
	(1.36)	(6.56)**
Govit	0.881	3.473
	(0.25)*	(0.88)*
Govjt	0.290	12.466
	(0.07)*	(2.55)**
Beltit	361.590	304.525
	(5.40)***	(3.84)***
FTAit	108.045	77.366
	(3.96)***	(3.06)***
dist	-374.687	-10,487.979
	(3.51)***	(6.53)***
Constant	-4,140.891	-99,291.224
	(4.16)***	(6.56)***
Observations	377	377
Number of group(reporter partner)	21	21
Hausman test p-value	0.9547	0.9547

*significant at 10%, ** significant at 5%; *** significant at 1%

Source: Data calculation by author

We attempted here to estimate the impact of BRI initiation on trade with China and South Asia. From table 2 we can see that this variable has a positive and significant impact on trade. According to Yang & Martinez-Zarzoso (2014) GDP is a proxy of the economy size of the observed country and represents the consumption and demand levels within a country. On the other hand, he again mentioned in compliance with the view of Anderson (2003) that population can be regarded as a proxy of the size of the domestic market and may imply an inverse relationship with the trade. However, a large population in the importing country can also be considered as a source of diversified demand of import goods and therefore it implies a direct relationship to trade flows. From our results, we have also got that population has an arbitrary impact on bilateral trade with South Asia and China. South Asia is an important importer country of China so the positive and significant impact of Popit comply with literature that large domestic size influence bilateral trade. On the other hand, the partner countries population has an inverse impact on trade. Ma (2018) also found that population may impact inversely on bilateral trade.

FTAit is the amount of regional free trade area Agreements that these countries signed. Egger (2010) argued that joining FTA or signing the Preferential Trade Agreement has a positive impact on trade. From our empirical results, we have also got that FTAit has a positive and significant impact on trade. Country-level governance capacity is assumed to have a positive effect on trade as referred by Yeats (1999) and Wouters (2009). We choose the control of corruption from World Governance Indicators (WGI). Both Govit and Govjt have a positive impact on trade but reporter's countries governance issues are not very significant. In some cases because of the low level of Governance can be the reason of low trade.

Biliang, Qingjie & Jiao (2019) mentioned that in some cases bilateral trade agreements may not work properly is the partner or reporter country has a low level of governance. According to Ma (2017) and Anderson (2003) distance between countries could be estimated as the proxy of transportation cost moreover it should have an inverse relationship with the trade. From table 2 dist represents the distance variable. In this row, we can see that this variable has a negative and significant impact on trade. And also governance indicators also have a positive impact. If control of corruption is high in South Asian countries then trade among South Asia and China could be negatively influenced. Distance could be considered as the transaction cost of trade between countries. If one country is far from another than the transaction cost will be more and it will inversely effect on the international trade. Our estimation also says that distance has an inverse relation with trade.

RECOMMENDATION AND CONCLUSION

From the World Integrated Trade Solutions (WITS) database we can say that still some south Asian countries and China has huge trade deficits. Export of China is very high then imports from South Asia. Some controversies pointed to Chinese Silk Road initiative very harmful because of acquiring a huge amount of lands for building economic zones. In consequence, those economic zones will

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be operated and owned by the Chinese government. Sometimes these issues could be also liberalized by local employment generation and joint ownership. The Maldives has a very high-quality airport and port. Both of them are building with the finance of the Chinese government. But they claimed that sometimes they need to host free landing and takeoff. And sometimes they do not need to use these infrastructures. India and China have some rivalries in terms of a strategic relationship. But both countries could use their comparative advantages to make communication effective.

Data revealed that after the initiation of the One Belt One Road Initiative trade among South Asia and China has increased in the significant amount. In this year's China has become South Asia's topmost trading partner in terms of imports. Mostly they import textiles and clothing, intermediate goods, consumer goods, etc. Some countries reduced trade deficits with China but some did not. Bangladesh-China bilateral relationship is going good so far and the trade deficit reduced. But India-China, Maldives-China trade deficits increased a lot recently. Finally, we can say that Chinese Belt and Road Initiative have a significant impact on trade relationship with China and South Asia. Beyond this, South Asia can also get strategic access to other sub-regions to continue its own international trade. In conclusion, we can say that After the Belt and Road Initiative several developments are being financed by the Chinese Government in South Asian countries. These infrastructural developments are encouraging this sub-region to engage in international trade with China.

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