

# RAPID AND PHASED TRADE LIBERALISATION PATHWAYS TO ECONOMIC GROWTH: EVIDENCE FROM CHINA AND INDIA

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**Abstract** *This paper investigates the hypothesis that there is an association between increased levels of trade liberalisation and economic growth through a comparative analysis of two giant emerging economies of the world – India and China. For this purpose the paper examines trends in GDP growth and various trade openness measures via empirical analysis of time-series data of the last 43 years, based on eight key indicators to compare the experiences of the two countries. These indicate that rapid and gradual trade liberalisation of both the countries, coupled with supporting economic, institutional, and infrastructural reforms, and advancement in technology led to the linking of these giants with the global markets, which has significantly contributed towards their economic growth, thereby supporting the phenomena that there is a significant positive relationship between liberalisation and economic growth. While China was seen to be experiencing growth, India was also on the right track. Indicators of both liberalisation and growth reveal that both the countries enhanced their economy significantly as they embraced international trade through trade reforms and economic liberalisation.*

**Keywords:** *Trade Liberalisation, Economic Growth, India, China*

## INTRODUCTION

The positive effects of international trade (IT) on economic growth (EG) were first pointed out by Smith (1776). The classic period treated ‘international trade’ and ‘economic growth’ as two inseparable branches of economics; it was believed that international trade has a positive effect on the economic growth. However, during the ‘neoclassic period’, these two theories were believed to be independent. After the 1960s, this changed and the developments in the international trade theory, and the works of Romer (1986) and Lucas (1988) have helped us understand the relation between trade and growth much better. As a result, many countries reduced trade barriers and opened up their markets, consequently leading to significant growth in economic growth (Bose et al., 2017). India and China – the two new powerhouse of world economy have drawn increasing attention from economists and trade experts as far as investigations of the links between liberalisation and growth are concerned (Cheng et al., 2021). Due to their immense market, and the availability of abundant, diversified resources, these two countries pose all kinds of trade opportunities for the global investors (Bose, 2012a).

However, historically, doing business with and in India and China is not the easiest thing to do. This was primarily

because of trade protectionism and also bureaucratic and administrative burdens. During the 1960s and 1970s, it was evident from the policy of India and China that they were adopting import substitution strategy (Choia & Kim, 2014). This was done for developing their own industrial base, and as a result, both the countries were desalinated from world trade. International trade policies of these two big nations were typically characterised by high tariff and other quantitative barriers (Choia & Kim, 2014 and Sahoo, 2013). Such restrictions were not helping their cause (Uddin et al., 2014; Bose & Mannan, 2015) at all and they experienced very low economic growth, and resource mobilisation and exploitation difficulties. While economists continued to place strong emphasis on FDI for development, India and China significantly failed to attract FDI as a result of their trade policy; they missed the opportunity of securing an advantage from knowledge and technology diffusion from the West (Sahoo, 2013).

Since then a number of events took place across the planet. Political and economic crisis took place; resource scarcity has been more drastic; environmental protection has become more focal; Europe and the US faced a major economic recession; and concern for security is more intense than ever before (Shujaat, 2014; Bose & Nasira, 2016; Bose & Bristy, 2017; Selvarajah et al., 2018). This scenario triggered the trade liberalisation process, which was in fact long overdue.

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While China started her liberalisation process in late 1970s, India did it in the late 1980s (Bandara & McGillivray, 1998). There was also an important contrast in the liberalisation procedure of the two countries. In the initial period of the reform process, India was mainly concerned with internal deregulation; on the other hand, China focused more on external liberalisation. Most importantly, over the years, China was looking for rapid liberalisation, while India opted for a phased liberalisation (Bose 2012a, Bose et al., 2019; Dickel et al., 2019).

India's economic growth rate ranked second among the world's large economies, after China, for several years (Bose et al., 2017). Nevertheless, in current times, India and China are both marching ahead. What is the reason behind the continuance of this phenomenon? Is trade liberalisation playing a significant role in the economic growth of these two nations? Or are there several other sub-factors supporting this phenomenon? Further, we studied the impact of the two different approaches of trade liberalisation of the two countries. We have tried to answer this question through empirical analysis of time-series data, as there have been many controversies on using the econometric methods to compare these two giant emerging economies, and as there already exists a number of papers published in this area which have analysed data through econometric methods; what seems to be ignored is the rational discussions, which this paper hopes to meet.

The comparison of economic parameters between India and China reveals that rapid trade reforms, speed of reforms, stringent implementation of policy, and political governance are the reasons for better economic performance in China. However, India has been catching up quickly in the last 8 to 10 years. In addition, this study evaluated the impact of exports and imports expansion on the economic growth of India and China.

## LITERATURE REVIEW

### Relationship between Trade Liberalisation and Economic Growth

There are numerous comparative studies on export promotion and import substitution, which show the positive relationship between trade liberalisation and economic growth (Little et al., 1970; Balassa, 1977; Krueger, 1983; Corden, 1987; Michaely et al., 1991; IMF, 1995; World Bank, 1995; Sachs & Warner, 1995). It is argued that countries with intensified liberalisation of trade and deregulation of markets have achieved higher economic growth. The hypothesis of the positive relationship between trade liberalisation and openness, and economic growth has extensively been

tested in recent times. Both recent and previous studies on endogenous growth theories have put in effort in linking trade, liberalisation, FDI, and long-term economic growth (Romer, 1990; Rivera-Batiz & Romer 1991; Grossman & Helpman, 1990, 1991; Barro & Sala-I-Martin, 1997; Ben-David & Loewy, 1995, 1998, 2000; and Coe et al., 1997).

Trade liberalisation also spurs the spillover effect. Over the years, it has been found that predominantly the least developed and developing countries were adopting trade protection, whereas industrialised and developed countries preferred trade liberalisation (Yin & Hamori, 2012; Bose & Uddin, 2013). Therefore, knowledge and technology diffusion was difficult; and economic growth was not accelerated. However, this scenario can be altered with trade liberalisation, as it can open the barriers and can make the spillover effect take place among the opposite sections of the planet (De Long et al., 1991). The relationship between trade liberalisation and economic growth has been linked with some moderating variables in this scenario – FDI, technology transfer, knowledge transfer, and R&D sharing. There is a cyclical relationship that exists in the context. Trade liberalisation ensures that all those moderating variables result in economic growth and development (Ben-David and Loewy, 1995, 1998; Bose & Bristy, 2017).

Highlighting on that fact, several previous studies (Romer, 1990; Rivera-Batiz & Romer, 1991; Grossman & Helpman, 1990, 1991; Ben-David & Loewy, 1995, 1998, 2000; Coe & Helpman, 1995; Coe et al., 1997; Padoan, 1996) investigated the impact of knowledge diffusion from one country to another through trade, which in turn contributed towards economic growth. The transmission of technology is another important issue that plays a key role in the multi-dimensional relationship among trade liberalisation, FDI, trade dispersion, and ultimate contribution towards economic growth (Bose & Uddin, 2014).

Overall, growth models are articulating the fact that lowering trade barriers will speed up the rate of economic growth and development in the long-run by (1) allowing developing nations to absorb the technology developed in advanced nations at a faster rate than those with a lower degree of openness, (2) increasing the benefits that flow from R&D, (3) leading to larger economies of scale in production, (4) reducing price distortions and leading to a more efficient use of domestic resources across sectors, (5) encouraging greater specialisation and efficiency in production and use of intermediate inputs, and (6) leading to a more rapid introduction of new goods and services (Dollar, 1992 and Yadav, 2014).

During 1990s and early 2000, a lot of studies (Dollar, 1992; Wacziarg, 1998; Frankel & Romer, 1999; Dollar & Kaaray, 2001; and Bhagwati, 1988) provided empirical evidence of

the positive relationship between trade liberalisation and economic growth. Dollar (1992) carried out empirical study on 95 developing countries and detected a strong positive correlation between outward orientation and GDP growth. Wacziarg (1998) examined the links between trade policy and economic growth using data from a panel of 57 countries from 1979-89, and suggested that trade openness has a strong positive impact on economic growth. Identically, Frankel and Romer (1999) used cross-country regressions and outlined that trade liberalisation has a quantitatively large, significant, and robust positive effect on income and growth. The study by Dollar and Kraay (2001), which is very popular in this field, has described that there is a positive relationship among trade liberalisation, growth, and poverty reduction. In addition, they concluded that one-third of the developing countries of the world, described as “rapid globalisers”, have performed extremely well in terms of income growth and poverty reduction over the past two decades or so.

Apart from those, Frankel and Romer (1999) investigated the relationship between trade openness and economic growth, and found a significant positive relationship. Ekanayake (1999) carried out research on eight Asian developing countries. He used cointegration and error correction model, and finally showed that there is a strong causal, long-run relationship between export growth and economic growth. This is primarily because trade openness results in favourable expansion of exports, and if that is backed by proper competitive and market-oriented policy, then economic growth is possible for the host nations.

The findings of Santos-Paulio (2002) also supported the notion and showed that trade liberalisation (reduction in tariffs) has a strong positive impact on imports growth. Onafowora and Owoye (1998) studied 12 sub-Saharan countries to find out the impact of export, investment, and trade policies of economic growth. The study utilised the vector error correction model (VECM) and concluded that outward-oriented trade policy is essential for long-term sustainable economic growth, expansion, and diversity.

Using panel data of 36 Korean industries during 1966 to 1988, Kim (2000) showed that trade liberalisation had profoundly surged completion, productivity, and scale efficiencies. Parikh and Shibata (2004) found contrasting results in Asian, Latin American, and African countries. Their results showed that while trade liberalisation accelerates real per capita income level in Asian and Latin American countries, it decreased the income in African countries. Yadav (2014) utilised data from 77 countries, during the period 2004 to 2007, using the gravity model. This study was carried out to investigate the four dimensions of impact of trade facilitation. The four dimensions were physical infrastructure, information and communication technology,

business environment, and border efficiency.

The outcome of the study represented the fact that the impact of importers’ gross trade facilitation measure is stronger for promoting parts and components than for final finished goods. The spillover effect of the FDI on the domestic firms is robust, and thus enhances their capacity of operation (Bose et al., 2021). Using a large panel data set for a period of eight years, Lin et al. (2009) found that spillover effect of FDI on Chinese firms is robust and widespread. The research work of Harrison et al. (2013) have identified that reform results in productivity increment, but not because of market share reallocation, but due to the learning impact of FDI that resulted from such liberalisation.

Exposure to trade influences productivity; further increase in such exposure in the form of trade liberalisation will lead to the creation and making of more productive firms (Melitz, 2003). Jefferson and Ouyang (2014) investigated a lot of papers with diversified data set and methods to identify the gaps and discrepancies in the findings of the impact of spillover effects of FDI, and suggested a common guideline and framework. Using the Indonesian census data for a period of 11 long years, Amiti and Konings (2007) identified that if tariffs are reduced for intermediate goods and services, the productivity of final goods and services productions are increased significantly. In addition, if import tariffs are reduced, then that induced higher competition and performances. Bustos (2011) identified that reduction in tariffs accelerates investment in technology, and by that process, export performance also is improved significantly. Reduction in tariff resulted in increment, by increasing the firm’s access to fresh input variables; this increases their product scopes (Goldberg et al., 2010a). Hu and Jefferson (2002) carried out research on Chinese electronic and textile industries to uncover the impact of FDI acceleration on the performance of domestic firms. They have identified a positive relationship, yet the result is not symmetrical across the two sectors. Khandelwal and Topalova, (2011) identified that in India, trade reform, particularly in the form of changing tariffs, increased productivity for the domestic firms. Trade reforms are negatively correlated with product dropping in India (Goldberg et al., 2010b). Developing countries never gain from hard intervention in trade (Harrison & Rodríguez-Clare, 2009). Reductions in both input and output tariffs affect the productivity of Chinese firms (Yu, 2014; Bose et al., 2018).

However, there are conflicting results in terms of the impact of trade liberalisation on economic growth across different countries. Shujjat (2014) outlined that there is a significant positive relationship of selected macroeconomic variables with economic growth, except trade liberalisation, for the least developed countries. His study on least developed countries



had showed that trade liberalisation deteriorates economic growth. In a study on Brazil and India, Daumal (2013) found contrasting results. Whereas trade liberalisation reduced the internal regional inequalities in Brazil, it increased inequalities in India. Greenway et al. (1997) carried out empirical study on 74 developing countries. Using dummy variables in the model, he detected mixed responses. He concluded that on average, trade liberalisation seems to be associated with deterioration in economic growth. Rodriguez and Rodrik (2001) have criticised the methodology of those studies in using the measures of openness or measures of trade barriers, and the findings showing a strong positive correlation between openness and growth. They pointed out that these measures of trade barriers are often correlated with other sources of poor economic performance, and that there is little evidence that lowering tariff and non-tariff barriers to trade have a strong correlation with economic growth. Hasan et al. (2012) analysed the impact of trade liberalisation on the unemployment level (state and industry) in India. The findings showed a significant positive relationship between trade liberalisation and industry-level unemployment. The state-level analysis, however, showed a significant negative impact on unemployment. Yanikkaya (2002) argued that trade liberalisation does not have a simple and straightforward relationship with economic growth. Overall, we can summarise that a majority of the previous studies have identified a significant relation between trade liberalisation and economic growth, but each one of them relate it to more than one factor of trade.

### Trade Liberalisation Policies of India and China

China and India typically preferred and adopted rapid and gradual liberalisation process over the last 40 years, respectively (Srinivasan, 2001 and Bose et al., 2017). Prior to the economic reforms, both India and China were adopting typical command economic system, which was found to be inefficient for fostering fast and vast economic growth. It can be said that the liberalisation process in China was not initiated until 1978 when the big nation eventually commenced the economic reforms; this took place in five stages (Enrico & Signorelli, 2013).

Reform in one of the most important agricultural sectors was carried out during the period 1978 to 1984, and as a result, production and productivity in this primary sector were increased significantly. A major step in Chinese trade liberalisation process happened during 1978-1980 when the central government installed four special economic zones, mainly directed towards attracting a lot of FDI in the country. The second stage of liberalisation consisted of price and wage liberalisation, which took place during the period 1985-1988. This is the period when China initiated the open-

door policy, and according to many economists, from this time onwards the integration of Chinese economy with the world economy actually took place. Through the open-door policy, fiscal incentives were provided to foreign firms in the four special economic zones for attracting more FDI (De Long et al., 1991; Bandara & McGillivray, 1998; Yin & Hamori, 2012; and Bose, 2012b).

The initial success of establishing the special economic zones motivated China to set up 14 more similar zones. During the third (1988 to 1991) and fourth period (1992 to 1997), the majority of the economic reforms were adopted. The period after 1997, particularly after 2001, with China's admission to the WTO, until 2008 (before the 2009 world recession) was characterised by a growing openness of the Chinese economy (Yin & Hamori, 2012; Enrico & Signorelli, 2013). During this period of extensive openness, China experienced an unprecedented economic growth. Enrico and Signorelli (2013) argued that this Chinese economic "miracle" is usually attributed to the increasing degree of trade openness, especially exports, while the liberalisation of imports has been more gradual. In addition, huge FDI inflows, mainly attracted by cheap labour costs, had probably engendered spillover effects and contributed to transformation of the production specialisation model. The impact of trade liberalisation was evident from the fact that the ratio of dependence on foreign trade was only 13.7% in the 1970s, while it jumped to 70.8 per cent in 2010 (Yin & Hamori, 2012).

In contrast, the liberalisation process of India was slow in nature and vastly different from that of China. While China started its liberalisation in the 1970s, India did that in the 1980s, predominantly in the areas of non-competitive imports. During 1986-1990, India started to provide some export incentives; however, it retracted from that after a few years as the policy was tightened again (Lal and Rajapathirana, 1987 and Yin & Hamori, 2012). It can be said that major liberalisation in India actually started during the new government in 1991. During 1991-97, the liberalisation process took place with several sequential important activities, including scrapping the import licensing system for a wide range of industrial inputs, moving towards a unified exchange system, lifting of quantitative restrictions on imports of non-consumer goods, and reducing tariffs in stages with maximum rate. In spite of the versatile liberalisation acts, India still maintained persisting rigidities and remained among the most protected countries in the world (Bandara & McGillivray, 1998; Dev, 2000; World Bank, 2004; and Singhanian & Gupta, 2011). Again, the liberalisation process had lost momentum after 1997 and became consistent only in the year 2002. During that period, a number of important steps were taken to ensure that the liberalisation process got the maximum boost from the policy makers. Those

steps included announcing a medium-term export strategy, declaring and setting a five-year Export and Import (EXIM) Policy aimed at removing all quantitative restrictions on exports except for a few sensitive items, encouraging FDI in all manufacturing industries, and making the approval process simple and transparent (Bandara & McGillivray, 1998; Yin & Hamori, 2012; and Yadav, 2012).

Major steps towards liberalising the economic system of India includes moving from QRs to tariff and reduction in QRs, reducing the tariff rates and tariff ranges, reforming export policy, and adjusting exchange rates. The first significant effort to reduce the quantitative restrictions (QR) was taken by India in the year 1991 (Bandara & McGillivray, 1998; Yin & Hamori, 2012; and Yadav, 2012). Reforms in that period removed most but not all QRs from manufactured intermediate goods, machinery, and equipment. India's QRs declined from more than 90 per cent in 1987 to no more than 50 per cent in 1993. Tariff lines subject to QRs in India declined from 80.7 per cent in 1987 to 62.6 per cent in 1992. Tariff line import policy was first announced in 1996, with a level of 61 per cent tariff lines being freed to import in the same year. By 1998, it fell to 29.2 per cent. India also abolished licensing requirements for about one-third of the consumer goods by 1997. It had decreased the tariff lines subject to QRs to 95 per cent. The remaining QRs are still being maintained on about 5 per cent of tariff lines. India began reducing tariffs in 1991 (Bandara & McGillivray, 1998; Singhanian & Gupta, 2011; Yin & Hamori, 2012; and Yadav, 2012).

Average tariffs fell between 1990 and 1992 from 128 per cent to 94 per cent. Further, large cuts were made in 1992, to 71 per cent, and to 40.2 per cent in 1998. After 1997/98, for reasons discussed earlier, the decline in tariffs was reversed. On average, tariffs increased by about 5 percentage points in 1998/99, and remained above the 1997/98 levels until the first stage of the new reduction programme, which started in 2002/03 (World Bank, 2004; Singhanian & Gupta, 2011; and Yin & Hamori, 2012). During 1980s and 1990s, India took measures for liberalising exports and imports. Between 1990 and 1993, the number of controlled export items fell from 439 to 215. In 1998, those numbers actually increase a bit, following some acts which were against trade liberalisation. During 2002, restrictions on manufactured exports were virtually removed (Bandara & McGillivray, 1998; Singhanian & Gupta, 2011; Yin & Hamori, 2012; and Yadav, 2012). However, over half of the remaining controls were on agricultural exports, and many of these were significant impediments. On the other hand, a duty exemption scheme

and a duty drawback scheme encouraged exports. In addition, India also acted for exchange rate reform to complement trade liberalisation procedures. Exchange rate policy reform was undertaken in mid-1980s to achieve the goal of making the Rupee fully convertible. In 1991, it had eventually a very large devaluation (20% against the US dollar), which helped spur recorded and unrecorded informal regional exports. In 1993, the dual exchange market, which existed since 1992, was unified, and the Rupee was allowed to float. Then, the Rupee became freely convertible to current account transactions (Singhanian & Gupta, 2011; Ghosh & Bose, 2012; Yin & Hamori, 2012; and Sharma, 2014).

A comparative analysis of the trade liberalisation process adopted by China and India reveals a few interesting events. While India joined WTO in 1995, China did it in 2001. However, over the years, the biggest and significant difference between the scenario of Indian and Chinese economy was the issue of trade imbalance. The biggest concern for India, in comparison to China, was its huge amount of trade deficit. China was able to bring trade surplus due to the rapid development process and restructuring of tariff in international business (Alamgir 1999; World Bank, 2004; Yin & Hamori, 2012; and Sharma, 2014). Tariffs are considered to be one of the most influential factors behind the scenarios. India was still considered to be a relatively closed economy until current times, because of its higher tariff rate. It was a remarkable 84 per cent in 1990 and only reduced to 14 per cent in 2009. However, it is still higher than China, which is at 9.68 per cent (Alamgir 1999; World Bank, 2004; Yin & Hamori, 2012; and Sharma, 2014). The remarkable economic growth of China is mainly attributed to its success in attracting FDI. In recent times, India has been able to catch up with China to a great extent, but still it is far behind. For getting results similar to that of China, India needs to attract more FDI (Alamgir, 1999). "The gradual and partly different institutional change and reform policies that occurred in China and India in the last three decades produced a significant increase in the openness to international relations of the two economies" (Alamgir, 1999; Yin & Hamori, 2012; Bose, 2016). Due to the long recession period and recovery of world economy in recent times, and slimmer and blank prospects for the immediate future, both China and India need to rebalance growth from exports towards domestic demand. China is already trying to sustain private consumption (Yin & Hamori, 2012 and Sharma, 2014). China has developed a strong manufacturing sector; India's growth has been largely in services. This issue is an important distinction between the growth paths of the two countries and an important point in its comparison.

## METHODOLOGY

We have conducted our study on China and India. The reasons behind selecting these two countries are numerous. These are the two most promising and well performing economies of the world. Apart from that, both China and India are growing very rapidly; the volume of the two economies are among the top ten, globally. In addition, these are the two countries which were traditionally very restricting as far as trade liberalisation was concerned. However, they started to liberalise their economy. As a result, these two countries are among the best options to investigate the impact of trade liberalisation on economic growth. Trade liberalisation and the economic growth of India and China have been analysed with the utilisation of eight key indicators. Those indicators are GDP growth rate, import orientation ratio, import penetration ratio, export orientation ratio, ratio of trade share, inflation rate, collected tariff ratio, and trends of real effective exchange rate. In order to analyse the impact of trade liberalisation, a “before and after” approach was utilised during the period 1976-2019. While all the eight indicators show the trend in economic growth, some of the indicators such as import and export orientation, import penetration, trade share to GDP, and collected tariff ratios (CTR) are help in measuring the degree of trade liberalisation. Therefore, two issues will be addressed simultaneously: how have the economic variables responded to the trade reforms in terms of their performances, and how open are these countries to international trade. The data from the World Bank data bank were used, as these are considered one of the most reliable and accurate, and also less biased sources.

## ANALYSIS

### Impact of Trade Liberalisation on Economic Performance in India and China

#### Real GDP Growth

Both India and China have experienced significant surge in GDP (Table 1) over the last 43 years, while China was sometimes marginally ahead of India during that tenure. Ten years’ average of the two countries’ GDP since 1976 reveals that the rate was always on the increasing side. For India, the rate was over 3 per cent for the first 10 years, and it increased to over 5 per cent during the next 10 years. The figure was even more impressive during the next 20 years. While the average growth rate during the 1990s and early 2000s is close to 6 per cent, it boosted to over 7.5 per cent during the next 10 to 12 years. The picture of China is a bit better than that of India. The GDP growth rate of China was over 8 per

cent during 1976-1980 and over 9 per cent during the next 10 years. The rate stayed at over 10 per cent during the next 20 years, at a steady pace. The steady GDP growth experienced by these two countries can be considered an important economic achievement. The GDP growth rate of these two countries is remarkable, to say the least, especially in comparison with other developing and developed countries. The relatively higher output growth in India and China was partly because of preliminary steps towards economic liberalisation, a decline in population growth, and a rise in savings (Pigato et al., 1997). This reasoning can be easily supported by the outcome of the GDP growth rate (Table 1). Since the liberalisation, which was started in 1978 in China and a few years later in India, both the countries were able to obtain consistent rise in the GDP figure. The case remained the same even during the worldwide economic recession during the late 2000s. China got initial advantages when the country initiated the liberalisation, and the benefit was multiplied in later years as it started contributing to diversified sectors, including FDI, employment, surge in production and domestic income, and increase in tax revenue. The benefits of economic and structural liberalisation also resulted in economic structural shift and industrialisation. Both China and India were able to move significantly from agricultural economy to industrialised economy. In recent years, this scenario improved more as China competently reformed its agricultural systems by bringing innovation and automation, and linking industrial productions with agricultural productions (Muqtada & Basu, 1997).

**Table 1: Average GDP Growth Rates (%) in India and China, 1976-2019**

Real GDP Growth Rate				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	3.273242	5.159382	5.77864	7.55962
China	8.294798	9.204461	10.32098	10.19808

Source: Based on World Bank Data (2020).

#### Trends in Import Orientation Ratio

Import orientation ratio is the ratio of aggregate import to total output or GDP of a country. This is an important measure of both economic growth and trade liberalisation. It indicates economic growth trend, as import demand is a function of investment and GDP. If a country is performing well and its inhabitants are earning sound money, then this ratio should increase along with surge in income demand for foreign-made better quality goods. Simultaneously, the import penetration ratio theoretically should rise if a country is adopting trade liberalisation, as trade liberalisation is equivalent to reducing import sanctions and bars.



Historically, both China and India were never friendly countries for imported goods. There were always barriers to imports. However, this scenario changed since 1990s as the two big nations were adopting trade liberalisation. For India, the ratio was only 5.8 per cent in 1976, while today it is over 25 per cent (Table 2). This clearly indicates the impact of trade liberalisation on import and economic performances. A closer look at the time-series data of India for import penetration ratio reveals that the country is gradually moving towards opening the import sectors as the ratio is consistently on the increasing side. It was 5.8 per cent during the first 10 years, and surged to 7.7 per cent during 1981-1991, and close to 12 per cent in the next 10 years. In the last 10 years, it improved even more and the figure reached an average of 25 per cent. This clearly reveals the trade liberalisation practice in the import sector in India. For China, the current import penetration ratio is more than 27 per cent (Table 2). Like India, it was also always on the increasing side during the past 30 years. During the second phase, it was close to 11 per cent and improved drastically to reach more than 18 per cent in the third ten-year phase. The import penetration ratio of both India and China portrays one simple yet striking fact. That is, by incorporating and practicing trade liberalisation gradually over the past 43 years, both the countries are remarkably successful in making connections with the US and Europe in international trade. Along with that, they are also gaining an advantage from local regions and trading with smaller, yet largely populated neighboring economies. This trade enables them to integrate with international business, thus strengthening their local economy. The import penetration ratio clearly stands in support of that notion.

**Table 2: Average Import Orientation (% of GDP) in India and China, 1976-2019**

Ratio of Real Imports to Real GDP				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	5.839687	7.72768	11.94698	25.0156
China	-	10.92765	18.41185	27.36058

Source: Based on World Bank Data (2020).

### Trends in Import Penetration Ratio

The import penetration ratio is an even better indicator of both economic growth and trade liberalisation. This is simply because it measures the ratio of imports to domestic consumption. Import penetration ratio is the ratio of aggregate imports to aggregate consumption [imports / (output + imports – exports)]. It is always considered a more reliable indicator, since it reveals the retractions on consumption goods. Trade liberalisation opens the economy and facilitates entry of foreign consumer goods into the

domestic market. Therefore, the consumption of imported goods in a country and percentage of imported goods as a fraction of total consumption is always an important indicator for growth, development, standard of living, consumer ethnocentrism, and trade openness. Since both India and China adopted trade liberalisation, and gradual liberalisation in particular, both the countries should experience gradual surge in the import penetration ratio. The outcome of this study reveals that they are experiencing such growth and openness as a result of adopting and practicing liberalisation. For India, the ratio was only 5.8 per cent during the first ten-year period, while it was well over 23 per cent during the last 10 years. This huge change was clearly due to trade liberalisation, and has gradually increased during the past 40 years. It was 7.6 per cent for the second ten-year period and increased to 11.8 per cent during the next 10 years. The picture of China also revealed an identical outcome. The import penetration ratio for China was 10.9 per cent during the second phase, increased to 18.8 per cent and 28.7 per cent during the next 10 and last 10 years, respectively (Table 3).

**Table 3: Average Import Penetration (% of Total Consumption) in India and China, 1976-2019**

Real Import Penetration Ratio				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	5.792769	7.607441	11.82701	23.99533
China	-	10.90989	18.8125	28.7334

Source: Based on World Bank Data (2020).

### Trends in Export Orientation Ratio

The export orientation ratio, as measured by the ratio of merchandise exports to GDP, is considered a useful measure of degree of openness, as well as the extent of the international integration of the goods market of the economy. In the context of increasing import growth in India and China after major trade reforms in the 1990s, export growth is essential to finance imports, as well as for balanced integration in the world market, that is, balanced and sustainable expansion in both imports and exports (Pigato et al., 1997). Improving exports is always a major goal in every step of trade reform. While imports show the strength of the economy as demand of foreign goods increases, export reveals the capabilities of an economy and its factors of production, to produce better quality goods, which are accepted by consumers of foreign countries with different tastes and cultures. Increasing export figures are always welcomed by every economy, as it boosts the foreign reserve and also increases the employment and income figure. Thus, both India and China were expecting a boost in the export sector as a result of the

trade liberalisation, and they did obtain impressive figures. During the four ten-year phases, the export orientation ratio of India was somewhere around 5, 6, 11, and 21 per cent, respectively. For China, data for the first period was not available; the remaining three phases were at 11, 20, and a whopping 32 per cent, respectively (Table 4). The two most important numbers here are 21 per cent for India and 32 per cent for China, which are the latest two figures. These two numbers clearly indicate the impact of trade liberalisation on export performance of India and China. While China is a bit ahead, India is not far behind, especially in the last 5 or 6 years. Although other important supporting factors acted significantly in the relationship between liberalisation and growth in export, the major player, in this case, is export. Those factors, which contributed towards increase in export other than trade liberalisation, are domestic infrastructure, FDI, employment, production surge, institutional and bureaucratic reform, supporting industries, industrial policies reform, and so on.

**Table 4: Average Export Orientation Ratio (% of GDP) in India and China, 1976-2019**

Ratio of Real Export to Real GDP				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	5.221018	6.137339	10.96906	21.02922
China	-	10.86808	20.48761	31.96172

Source: Based on World Bank Data (2020).

### Trends in the Ratio of Trade Share

The ratio of trade share, also known as the dependency ratio and measured by the ratio of exports plus imports to GDP, is a widely used traditional measure of the degree of openness and the extent of international integration of the goods markets of the economy. Ratio of trade share is an important indicator as it shows the involvement of a country in international business corresponding to its gross output in a given period. Higher ratio of trade share simply indicates an economy is participating more actively. On the other hand, low ratio of trade share is synonymous with old-aged close economic systems, when countries seldom went beyond their domestic territory for mitigating domestic demand. In modern times, both domestic demand for foreign goods and foreign demand for domestic goods are increasing, and thus, participation in international business is key for economic growth, integration, and development. The bottom line is that higher ratio of trade share is equivalent to trade liberalisation, participation in the global business fraternity, and economic growth and development. The trade share ratio of both India and China signifies the merit of the above discussion. In the last few years, the ratio of trade share for India was over

46 per cent, and for China it was close to 60 per cent. This simply indicates the increasing global dominance of the two countries in international trade covering export and import business. However, it was not so before trade liberalisation. During the first ten years, the ratio of trade share for India was merely 13 per cent and the figure marginally increased to 14 per cent in the next period. The scenario altered drastically when India took steps towards trade liberalisation. The result was obvious from the figure of the following 10 years, when the ratio rose to over 22 per cent. It continued to increase, and the current rate is close to 50 per cent. The scenario is almost identical in China. During the second phase, it was close to 22 per cent, rose almost double (near 40 per cent) the following year, and currently, it is close to 60 per cent (Table 5). These data clearly indicate the impact of trade liberalisation on the global business integration of India and China, and also their conversion from close to more open and liberal economies.

**Table 5: Average Ratio of Trade Share (% of GDP) in India and China, 1976-2019**

Ratio of Trade Share				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	11.06071	13.86502	22.91603	46.04482
China	-	21.79573	38.89946	59.3223

Source: Based on World Bank Data (2020).

### Trends in Collected Tariff Ratio

Average nominal tariffs can be measured as the average import tariff collection rate, calculated as the ratio of import duties collected to the value of imports. This ratio is regarded as a useful indicator of the effects of tariffs, since it measures the extent to which, on average, tariffs increase the cost of imported goods to importers. However, this indicator does have problems. In most circumstances, it systematically understates the protection that the tariff system provides to domestic production. Since the usual tariff structures consist of a range of tariffs from low to high, imports of high-tariff products are reduced more than low-tariff products, and therefore have a lower import weight, on average, in the import-weighted average collection rate. Despite these problems, duty collection rates provide more detailed information on tariff structures and trends (World Bank, 1995). In India, the rate was the highest among all countries in the region in 1974, with a period average of 28.8 per cent, until 1979; they peaked to an extremely high level of 53 per cent in 1987, came down slowly for some years, up to 1990, and then fell rapidly from 1992 throughout the decade, along with the pre-announced reductions that were part of India's 1991/92 reforms. India's average tariff collection rate



reached its highest, at around 47 per cent, in the latter half of the 1980s, and then declined sharply to 31.6 per cent during the former half of the 1990, and further to 21.5 per cent on average in the latter half of the 1990s. The drop in 2001 was probably due to the removal of the 10% customs duty surcharge. The rate was at 17.5 per cent in 2005 and sharply declined to 10 per cent in 2008. However, the rate slightly increased to about 12 per cent in 2009. For China, the tariff ratio was 39.71 per cent in 1991, and it continued to decrease gradually and consistently over the last 22 years. In 2013, the tariff ratio was only 7.9 per cent. The average tariff ratio for China during 1992-2002 was more than 22 per cent, while it declined by more 100 per cent during 2003-2013 (Table 6). In that period, the ratio was only 8.8 per cent. This picture of gradual decline of tariff rate for both the countries indicates their gradual trade reform and liberalization, as reducing tariff rates clearly indicate a flexible attitude towards import.

**Table 6: Average Tariff Collection Ratio (% of Total Imports) in India and China, 1976-2019**

Import Duties				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	-	81.56	37.41	16.8625
China	-	-	23.72667	8.821111

Source: Based on World Bank Data (2020).

### Trends in Real Effective Exchange Rates

The most important change for India during the 1980s and 1990s, and until 2001, was the continuing and eventually large devaluation of the Indian Rupee from 1985 to 1992. In India, the REER was at a low level during the first half of the 1980s, reflecting the appreciation of the Indian Rupee. From 1985, the REER began to slowly appreciate as a result of continuous devaluation of the Indian Rupee, reflecting a strengthening balance of payments driven by growing manufactured exports, the rapid expansion of services (such as software) exports, and capital inflow. A large devaluation of the Indian Rupee in 1991 brought about an acceleration of the REER trend, which continued until 2001 with some fluctuations. Total real devaluation since the mid-1980s until 2001 was well over 100 per cent. Such devaluation continued till 2004, but afterwards it appreciated slightly till 2011 and increased a bit in 2012. The average movement of the REER for India over the last 30 years depicted an interesting picture. The index was calculated with the holding year 2000 as base (= 100). The figure showed that during the second phase, the index was 136 and dropped down sharply in the following phase to 96. However, it increased to 106 during the current period. For China, the case is identical to that of India. The average index during the second phase was 173, but sharply declined during the following period, when

the index was 97. Like India, the index of REER rose again to 107 during the last ten years (Table 7). Such devaluation during early 1990s in both India and China was taken typically with trade liberalisation.

**Table 7: Trends in Real Effective Exchange Rates in India and China, 1976-2019**

Trends in Real Effective Exchange Rates				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	-	173.9037	94.97993	107.347
China	-	136.5151	96.48313	106.0328

Source: Based on World Bank Data (2020).

### Trends in Inflation Rate

Trends in the inflation rate, measured by the CPI, is another indicator of macroeconomic stabilisation, whether as part of trade liberalisation or as the accompanying policy. Many economies in the process of liberalisation find themselves in serious internal or external macroeconomic imbalance. A double-digit, or even triple-digit, inflation is one indicator of such an imbalance. The inflation rate in India is quite interesting, and sometimes the trend is a bit eccentric as well. The country experienced its highest inflation rate during the year 1977, when it was an unbelievable 24 per cent. In 1978, it was also high, at 16 per cent; it was caused mainly due to the food crisis in the country. However, India bounced back; the inflation rate declined eventually by 7.6 per cent. The trend was on the rise till 1981, primarily because of budget deficit. From 1985, there were continuous devaluations in India, which led to an increase in the inflation rates. When massive reforms were carried out with a large devaluation in 1991, the inflation rate peaked at more than 13 per cent in the same year, and then gradually came down to a single digit, until 1997. In 1998, it climbed to 13.8 per cent, followed by a continuous declining trend to less than 5 per cent in 2000 and 2001. It stayed like that till 2005, but continued to rise from 2006. The UPA government was pressurised and faced stiff criticism as inflation rate continued to rise and reached 11 per cent in 2010. After that it dropped down by a small margin in 2011, but increased again in 2012 and 2013. The average rate (Table 8) of inflation in China was totally different from that of India. Remarkably, China managed to keep its inflation rate well under control. While most of the countries in the world experienced significant rise in the price level of consumer goods, especially of food items, China's inflation rate actually decreased in the last few years. The average inflation rate in China was close to 10 per cent during 1981-1991; it dropped down to 6.5 per cent during 1992-2002, and the average in 2003-2013 was remarkably close to 3 per cent only. This indicated continuous decline in the inflation rate.

The available data of the inflation rate in China since 1987 indicates that initially, during 1987, it was 7 per cent. The rate increased significantly during the next two years when it was at 18 to 19 per cent. However, it diminished to 3 per cent in the following two years. Interestingly, the inflation reached 24 per cent in 1994, but gradually declined from that and reached a remarkable 7 per cent in 2002. Sometimes, the rate increased and sometimes it decreased over the next 11 years, but was never more than 4 per cent. In 2013, the inflation rate was only 2.63 per cent. This indicates China's capability in holding the inflation rate well within control.

**Table 8: Average Inflation Rate (% , in Terms of Consumer Prices) in India and China, 1976-2019**

Inflation Rates				
Countries	1976-1986	1987-1997	1998-2008	2008-2019
India	7.884502	9.069699	7.701341	7.694038
China	-	10.17827	6.468033	2.931393

Source: Based on World Bank Data (2020).

## FINDINGS

This paper examines the links between trade liberalisation and economic growth, with a view to comparing the experiences of India and China. Both countries have liberalised their economies over the past several decades, and both have experienced (to varying degrees) surges in growth. The paper examines trends in GDP growth and various trade openness measures over the past 43 years to compare the experiences of the two countries. The authors conclude that trade liberalisation and the accompanying reforms led to strong economic growth. The paper establishes that along a variety of measures, such as export and import orientation and trade share, China and India are becoming more linked with global markets; it is reasonable to posit that this would not have been possible without trade liberalisation. However, the authors want to clarify that correlation between trade liberalisation and growth in these two countries does not establish a causal relationship between them. As the paper points out, trade liberalisation in both countries occurred in the context of a variety of other changes: in the case of China and India, the creation of special economic zones, FDI liberalisation, and a general move towards a more capitalist system; in the case of India, FDI liberalisation, industrial de-regulation, and exchange rate deregulation, among other policy changes (Bose et al., 2016).

## CONCLUSION

Trade liberalisation and economic growth have been two of the most highly discussed and debated issues of modern

integration among multiple variables and multidimensional relationship between international trade and economic development (Bose & Bristy, 2016; Bose & Roy, 2017). This article investigated the link between these two important variables and compared the two most important economies in the world: India and China. Empirical evidence from secondary time-series data for the period 1976 to 2019 reveals that there is a relationship between trade liberalisation and economic growth. Evidences from both India and China, based on eight important indicators of both liberalisation and growth, portrays that these two countries have incorporated gradual trade reform and liberalisation, and along with that they experienced remarkable growth in their economic outset. While some regular and popular indicators of development, like GDP growth rate, expose continuous surge in economic growth for both the countries, other indicators, like import penetration, orientation ratio, and export orientation ratios indicate a gradual degree of liberalisation along with global integration in trade, coupled with economic development; they are becoming more linked with global markets in both India and China. Some other important factors, like inflation rate and real effective exchange rate, also reveal interesting outcome. Both India and China continuously devalued their currency, coupled with economic liberalisation. However, this research concludes that trade liberalisation occurred in the context of variety of other changes as stated above in the paper, and concludes that overall, gradual liberalisation coupled with supporting economic, institutional, and infrastructural reforms have helped both India and China foster their economies and keep growing.

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