

## China Trade Evolution from the 20<sup>th</sup> to the 21<sup>st</sup> Centuries

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### ABSTRACT:

Although a country's economy is grasped through the acknowledgment of its factors of production and economic system; however, these occasionally deter it. These resources are segregated into the country's three sectors: the primary sector (agriculture and raw materials), the secondary sector (manufacturing); and the tertiary sector (services). These sectors work together and interact in markets forming what is known as trade. Trade is the way by which merchandise is swapped inside a country or among countries either in wholesale or retail markets.

To shed the light on China's trade and development, data has been collected from the World Bank and Trading Economics indicators. Entries that have been studied included the balance of trade, exports, imports, FDI net inflow, and FDI net outflow. Results have shown that trade is affected by the above in various levels; however, almost all entries have had a good correlation with each other except for (FDI net inflow – FDI net outflow) entry. Furthermore, data has shown that there existed setbacks during this trade evolution; which has been mainly due to international economic conditions and recently COVID 19; as well as other internal ones such as development, policies, level of exports and imports, and FDI involvement.

Hence, based on the above, several actions need to be implemented. These include better control processes that need to set by the state (policies, and trade incentives), update trade data continuously; and equal distribution of growth and development among the different provinces; in terms of equality, capacity building, and human capital development.

**Keywords:** *China, Trade, Balance of trade, Exports, Imports, Foreign Direct Investment, Policies*

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### INTRODUCTION

To understand the economy of a country it is imperative to know the resources i.e. factors of production and the economic system of that country; these resources although they play a key role in the development of the economy; they sometimes hinder it (Li and Wenli, 2014).

A country's economy can be separated into different sectors; the primary sector which involve the use of primary resources including agriculture, mining, and production of elementary goods. The secondary sector also known as the manufacturing sector manufactures goods from manufacturing, processing, and construction. The tertiary sector or the service sector provides services to the population and businesses,

comprising retail and wholesale, transportation and distribution, entertainment, restaurants, clerical services, media, tourism, insurance, banking, healthcare, and law (Sen, 1983). As such, the availability of all these products in the three sectors necessitates a way by which these products are to be sold, purchased, or swapped; hence, the practice of trading has emerged.

Trade is the practice of purchasing, vending, or swapping of products either in wholesale or retail markets inside a country or among countries. Trade evolved from barter actions; to precious metals exchange; and later into highly complex systems of exchange of goods and services using a medium of exchange. Examples

of such a medium include money, credit, paper money and non-physical money (Dollar and Kraay, 2004). Trade occurs either within states/countries (nationally) or among states/countries (internationally); since in trade, states/countries possess a comparative advantage in the production of certain products over other states/countries with which they are trading (Munim and Schramm, 2018). This has been asserted by Jiang (2014), who states that due to the alteration in the configuration of China's comparative advantage, and its economic structure stability. Results indicate that specialization in primary goods has been declining and are being replaced by an increase specialization in manufactured ones (Jiang, 2014).

According to Dollar and Kraay (2004), a major factor that has made China attain fast development is openness to international trade. To the authors, the economies that has more openness has shown higher economic accomplishment. This has been clearly apparent in a group of countries such as China, India as well as other countries in Asia, than the highly developed rich states (Dollar and Kraay, 2004).

The year 1978 has witnessed the introduction of China's policy reform and exposure to international markets; since then, China has soared major steps in growth in modern economic history. From 1992 to 2007, the fundamental aspect in China's 7.6% yearly increase in output/labor in the manufacturing and services sectors, has been due to total factor productivity (TFP). In addition, this increase in the output/labor percentage value, has been accompanied by important economic alterations. These alterations have allowed private businesses to operate more freely and with limited barriers to market entry (Chadwick, 2016). Moreover, in China this upsurge in local productivity has led to reducing inequality on the national level; and has increased the overall welfare level on the international level as well (Jiang, 2014).

China's economic development has been progressing in an outstanding manner with a 9.6% average yearly growth from 1979 to 2016 (Feng and Guangdong, 2018). Furthermore, from 1978 to 2017, the gross domestic product (GDP) has soared from 367.87 billion Renminbi (RMB) to 827.12 billion RMB (i.e. 223.8% increase); and the GDP/capita from 385 RMB to 59,660 RMB

(i.e. 154% increase) for the same period respectively (Shangfeng et al., 2020). Hence, China has shifted to a mixed economy involving the private and state sectors; rather than a state-run one (Chadwick, 2016).

### Literature Review

China's economic output by the year 2010 has exceeded that of Japan and has ranked second after the United States (World Bank, 2018).

For the last thirty years China has experienced gigantic modifications in its economy. Nonetheless, China must take important actions to maintain this exceptional economic advancement. China earlier success has been based on its inhabitant's number in terms of cheap labor; as well as, on industry and infrastructure that are old and outdated. This dependence has led to extreme use of resources and environmental damage that is no more sustainable. Hence, China's is at a crossroad where its prospective development depends on strategies that attracts its citizens residing abroad to come back and work in China (Wang and Bao, 2015). Furthermore, Jiang (2014) research has found associations between pollution emission, output growth, and openness to foreign trade and FDI. Results has shown that openness to foreign trade and FDI has a positive effect on the environment. Hence, to get the best out of foreign trade and FDI, policymakers need to abolish trade barriers on environmental technology, goods, and services. Additionally, foreign trade and FDI escalate the manner by which factors of production are distributed; by removing barriers to the movement of resources throughout the various sectors; specifically, with respect to the shifts of labor from the agricultural to the manufacturing sector (Jiang, 2014).

Based on that, the Chinese government has introduced several plans to transform the country, from an unskilled labor-intensive nation to a skilled one by the year 2020. Examples of such plans are the Beijing Haiju and the Jiangsu Seagull Programs; as well as the Guangdong Zhujiang Talent Plan (Wang and Bao, 2015).

China's land use has changed significantly following the introduction of new reform policies; as well as the change of governmental milieu towards trade (Lin and Ho, 2003). According to Wei (2001), land use in China has altered dramatically because of trade,

globalization, and decentralization. This alteration has made land in China not only a factor of production; but also, a device to induce economic development (Wei, 2001).

He et al. (2014), has stated that between 2004-2008 land uses in China has shifted significantly from agricultural land to urban, industrial and transportation usage. Furthermore, correlation analysis has indicated that there is a resilient relationship between land use change and absolute GDP enlargement. Additionally, data analysis has shown that industrial land extension directly encourages EG. Henceforth, Land has been acting as a motivator for economic development by attracting foreign and infrastructure (He et al., 2014). This ultimately will lead to trade enhancement.

However, this process faces several obstacles that have been discussed by Water (1991). According to Waters there is a huge difference between the Chinese and the Western management approach. The Western management style is individualistic, categorical, democratic, and segmented system; while, the Chinese management system is centralized, nondemocratic, and with no clear communication procedure (Water, 1991).

Shangfeng et al. (2020), state that factors of production distribution are not the only topic that affects a nation's economic organization; there exists other items that needs to be investigated, such as the macroscopic exhibition of influential alterations and technological advancement (Shangfeng et al., 2020). According to Kuznet (1973) whenever factors of production distribution varies among diverse industries to attain economic growth (EG). This ultimately will endorse productivity and fast-track EG, i.e. variations in industrial structure pushes EG (Kuznets, 1973). Hence, using industrial structure to analyse the potential for EG has become a research concept (Haraguchi et al., 2017). Furthermore, it has been substantiated that from 1980 and on, the share of labor income has decreased globally and persistently (Karabarbounis and Neiman, 2014). This has been asserted by Luo and Zhang (2009) and Bai and Qian (2009); who have reported a decrease in China's overall labor income share by 63.54% (1996-2003) from the impact (Luo and Zhang, 2009); as well as, 61.31% (1995-2003) from the

effect (Bai and Qian, 2009) of industrial structuring respectively.

However, there exists limitations on the theory of industrial structural change. By 2004 China's labor income ratio has reached its lowest value; after which it started to increase. This occurred even though the industrial sector structure has changed. Hence, the concept of industrial structure change does not justify this opposite behaviour. This ascertains that there exist other factors that affects the changes on factor income distribution, and labor income share in China's EG (Wang and Yuan, 2018).

Furthermore, it is recognized that long-term EG is dependent on technological advancement, i.e. total factor productivity (TFP) growth (Hsieh and Klenow, 2010). TFP practices has led to different results between developed and developing countries in terms of structural changes. This difference is primarily due to the labor share in the economy that theoretically needs to stay relatively unaffected; and this stability occurs in developed countries (Fu, 2017). According to Peneder (2003), results on a study that have been done on 28 OECD countries; has shown that structural changes have had both positive and negative outcomes on productivity (Peneder, 2003). In contrast, this aspect i.e. labor share is unstable in developing countries; because the economic structure is being upgraded (Fu, 2014). In China, it has been found that during the period extending from 1978 to 2017, the mean contribution to GDP coming from capital, labor, technological progress, and factor structure change has been 67.01%, 10.38%, 23.08%, and 0.47%, respectively. These results show that effort needs to be done on enhancing the factor structure change. This enhancement will progress both TFP growth and development of China's economy. Hence, structural changes on OECD countries have slight effect impact on the productivity. On the contrary, these structural effects lead to a quite high impact on labor productivity and TFP growth (Shangfeng et al., 2020). Consequently, the optimum economic structure of an economy; is the one in which the various levels of development vary (Lin & Liu, 2003; Shangfeng et al., 2020).

Song et al. (2011) have conducted a study to clarify China's speedy economic growth and foreign assets attainment following the 1992

China's restructuring. Results revealed that both aspects have led to TFP development (Song et al., 2011). In 2016 Chadwick, carried on a research to determine how much TFP has been affected by the economic reforms that have been enforced on the industrial and services sectors in China. Hence, Chadwick (2016) elaborated on Song et al. work by adding more perceptions on China's TFP forces at work. The perceptions include the effect of the private sector exhibited by increasing wages. This increase in wages has led to the continuous withdrawal of the unfruitful government industries in favor of those of the private sector. Furthermore, it has led to the redistribution of available resources in the direction of more productive industries and hence increases TFP. In addition, having the presumption that equal capacity distribution exists in both the government and the private sectors; Chadwick model produces TFP variations emerging from financial frictions (Chadwick, 2016). Similar results have been attained by Hale and Long (2013); who deliberate that financial frictions are overcome by the private sector through the effective management of the working capital on hand and entrepreneur accessibility to both national and international trade (Hale and Long, 2013).

Furthermore, Wang and Bao (2015) recommend that China imposes strategies to lure Chinese professionals in social sciences, humanities, IT, pharmacy, engineering, and biology to return to China. These strategies need to tempt citizens abroad to come back to China and open their own business. Based on the interviews that has been done with those professionals/entrepreneurs; it has been found that those professionals are interested in having several services available prior attempting to return to China. Such services include adequate healthcare and insurance plans, job arrangements for spouses, faster residence certificates, new projects with related funds, better governmental policies, and resource allocation for entrepreneurs (Wang and Bao, 2015).

According to Chadwick (2016), because of the reforms done by the Chinese government; entrepreneurs have been capable to apply their abilities in the various business sectors. Moreover, the redistribution of factors of production to the private sector has led to an upsurge in TFP. Hence, the elimination of the

different barriers hindering entrepreneur activities improvement; will consequently lead to TFP enhancement (Chadwick, 2016).

Regional economic agglomeration (REA) and the corresponding spatial spillover effects (SSE) have been under study by many researchers. Yet, there is a limited number of research that have been done on the effect of the latter on China's economy and EG. Researchers presume that REA enhances EG. Fan and Scott (2003) upon using industrial agglomeration surveys have found a positive correlation between REA and EG (Fan and Scott, 2003). Furthermore, He et al. (2007), have conducted a study on the geographical agglomeration of China's manufacturing industry; their findings disclose that REA has a positive influence on EG and SSE (He et al., 2007).

SSE represents the externalities resulting from REA. Upon the introduction of REA in China, it has resulted in the partial abolishment of the market fragmentation. This market fragmentation that has been present when planned economy has been practiced. In addition, it has resulted in the speeding up of factors of production distribution mechanisms, better resource availability and market openness. Hence, all the previously mentioned aspects have led to the enhancement of knowledge, industrial, and SSE among the different provinces (Pan, 2012). Over and above, the implementation of the opening policies that has been done by the Chinese government, has led to the exposure to new technologies and management practices. This exposure has resulted in enhancing EG in China's coastal areas in the early stage of reform (Feng and Guangdong, 2018). This is clearly stated in the results attained by Jiang (2014); where it has been found that foreign trade and FDI, has a direct effect on fostering knowledge through education and facilitating human capital movement to promote growth in a developing country (Jiang, 2014).

According to Ying (2003), there exists an SSE between the main and marginal zones in China (Ying, 2003). This has been asserted by Brun et al. (2002); who have found that SSE occurs among the different regions in China extending from coastal to inland ones (Brun et al., 2002). Furthermore, Groeneweld et al. (2008) research revealed that there is a subsistent SSE among the six major economic regions of China; as well as

different SSE percentages occurring between the different regions (Groeneweld et al., 2008).

## **RESEARCH METHOD**

To shed the light on China's trade and development, data has been collected from the World Bank (WB) and Trading Economics (TE) indicators. Data that has been collected from the World Bank indicators included China GDP (current US\$), Trade (% of GDP), China Trade (% of GDP in current US\$), China GDP - China Trade (current US\$), China Foreign direct investment (FDI), net inflows (BoP, current US\$), China Foreign direct investment, net outflows (BoP, current US\$), China FDI inflow - FDI outflow (BoP, current US\$), China Exports of goods and services (current US\$), China Imports of goods and services (current US\$) and China Export minus China Imports (current US\$). The data that has been collected from the WB included observation extending from 1960 to 2019; except for the FDI data which started from 1979 for FDI inflow and 1982 for FDI outflow (Table 1).

Trading economic indicators data on the other hand, included China Balance of Trade, China Exports, China Exports by Category, China Exports by Country, China Exports by Continent, China Imports, China Imports by Category, China Imports by Country, China Imports by Continent, China Foreign Direct Investment. The data that has been collected from the TE included observation extending from 1981 to 2020.

Moreover, to attain the objectives of this study, the WB data has been analyzed statistically to view the variation and correlation among the different entries that have been collected. Analysis done has included, count, variance, standard deviation, minimum, maximum, range, median and correlation among all entries. Finally, data attained from the above sample has been exhibited into graphical representation; to be able to interpret it.

## **RESULTS AND DISCUSSION**

Based on the data that has been collected for China from the WB (Table 1) and TE; the following has been observed:

### **China Balance of Trade China GDP (Current US\$)**

a) China GDP has been consistent in value from 1960 until the late 1970s with minor variations; when it started to increase based on the reform policies that has been set during and following that period. The minimum GDP that has been attained was in 1962 (US\$#47,209,359,006#) vs. maximum value that has been achieved in 2019 (US\$#14,342,902,842,916#) (Figure 1, 2), (Table 1).

b) China GDP vs. almost all other entries has been found to be correlated ranging from 0.787 to 0.987; where the increase in one entry will lead to the increase of the other. Only one entry has been the exception (China FDI inflow - FDI outflow (BoP, current US\$)); whose value is 0.503 (Figure 7), (Table 2).

### **China Trade (% of GDP in Current US\$)**

a) Similar trends have been witnessed for China Trade (% of GDP in current US\$), where the minimum value that has been recorded was in 1962 (US\$#3,286,213,340#) vs. the maximum trade value that has been recorded in 2018 (US\$#5,204,476,705,312#); which has been slightly higher than that of 2019 (US\$#5,117,560,282,919#) (Figure 3, 4), (Table 1). The difference between 2019 and 2018, most probably has been the result of the COVID19 epidemic start late in 2019 in China (US\$#(86,916,422,393)#) or 1.7% decrease (Table 1).

b) China Trade (% of GDP in current US\$) had a similar path to GDP; however, China trade has witnessed two setbacks during its evolution. The first has taken place from 2008 to 2009 and the second from 2014 to 2016. The 2008-2009 draw back has been mainly due to the world financial crisis; while the second, it has been mostly due to the China's political milieu and reform planning, international political situation, and exports to the USA (Figure 3), (Table 1).

c) China Trade (% of GDP in current US\$), has showed a similar trend to GDP; with China FDI inflow - FDI outflow (BoP, current US\$) correlation value of 0.641. As for the remaining entries, the correlation values have ranged from 0.856 to 1.000 (Figure 7), (Table 2).

Table 1: China Trade Indicators (1960-2019)

| Year     | CHINA                    |                  |  |  |  |   |  |  |                                       |   |
|----------|--------------------------|------------------|--|--|--|---|--|--|---------------------------------------|---|
|          | China GDP (current US\$) | Trade (% of GDP) | China Trade (% of GDP in current US\$) | China GDP - China Trade (current US\$) | China Foreign direct investment, net inflows (BoP, current US\$) | China Foreign direct investment, net outflows (BoP, current US\$) | China FDI inflow - FDI outflow (BoP, current US\$) | China Exports of goods and services (current US\$) | China Imports of goods (current US\$) | China Export minus Imports (current US\$) |
| 1960     | 59,716,467,625           | 8.73             | 5,215,695,832                          | 54,500,771,793                         |  |   |  | 2,571,289,301                                      | 2,644,406,532                         | (73,117,231)                              |
| 1961     | 50,056,868,958           | 7.36             | 3,684,296,044                          | 46,372,572,914                         |  |   |  | 1,937,606,629                                      | 1,746,689,414                         | 190,917,215                               |
| 1962     | 47,209,359,006           | 6.96             | 3,286,213,340                          | 43,923,145,666                         |  |   |  | 1,913,234,219                                      | 1,372,979,121                         | 540,255,098                               |
| 1963     | 50,706,799,903           | 6.87             | 3,481,192,623                          | 47,225,607,279                         |  |   |  | 2,031,034,203                                      | 1,450,158,421                         | 580,875,782                               |
| 1964     | 59,708,343,489           | 6.63             | 3,960,516,695                          | 55,747,826,793                         |  |   |  | 2,250,385,896                                      | 1,710,130,799                         | 540,255,098                               |
| 1965     | 70,436,266,147           | 6.83             | 4,809,488,992                          | 65,626,777,155                         |  |   |  | 2,563,165,164                                      | 2,246,323,828                         | 316,841,336                               |
| 1966     | 76,720,285,970           | 6.73             | 5,162,888,943                          | 71,557,397,027                         |  |   |  | 2,680,965,147                                      | 2,481,923,796                         | 199,041,352                               |
| 1967     | 72,881,631,327           | 6.25             | 4,557,640,751                          | 68,323,990,576                         |  |   |  | 2,388,496,222                                      | 2,169,144,528                         | 219,351,694                               |
| 1968     | 70,846,535,056           | 6.22             | 4,407,344,220                          | 66,439,190,836                         |  |   |  | 2,339,751,401                                      | 2,067,592,818                         | 272,158,583                               |
| 1969     | 79,705,906,247           | 5.45             | 4,346,413,194                          | 75,359,493,054                         |  |   |  | 2,429,116,906                                      | 1,917,296,287                         | 511,820,619                               |
| 1970     | 92,602,973,434           | 4.95             | 4,586,075,230                          | 88,016,898,205                         |  |   |  | 2,307,254,854                                      | 2,278,820,375                         | 28,434,479                                |
| 1971     | 99,800,958,648           | 4.92             | 4,911,040,702                          | 94,889,917,946                         |  |   |  | 2,782,516,858                                      | 2,128,523,844                         | 653,993,013                               |
| 1972     | 113,687,586,299          | 5.76             | 6,543,138,390                          | 107,144,447,909                        |  |   |  | 3,692,485,858                                      | 2,850,652,532                         | 841,833,326                               |
| 1973     | 138,544,284,709          | 8.00             | 11,083,743,842                         | 127,460,540,867                        |  |   |  | 5,876,143,561                                      | 5,207,600,281                         | 668,543,279                               |
| 1974     | 144,182,133,388          | 10.33            | 14,899,041,403                         | 129,283,091,984                        |  |   |  | 7,107,893,127                                      | 7,791,148,277                         | (683,255,150)                             |
| 1975     | 163,431,551,780          | 9.55             | 15,614,582,213                         | 147,816,969,567                        |  |   |  | 7,688,998,817                                      | 7,925,583,396                         | (236,584,579)                             |
| 1976     | 153,940,455,342          | 8.84             | 13,603,585,042                         | 140,336,870,300                        |  |   |  | 6,943,442,876                                      | 6,660,142,165                         | 283,300,711                               |
| 1977     | 174,938,098,827          | 8.38             | 14,667,886,748                         | 160,270,212,079                        |  |   |  | 7,519,646,894                                      | 7,148,239,854                         | 371,407,041                               |
| 1978     | 149,540,752,829          | 9.65             | 14,430,894,309                         | 135,109,858,520                        |  |   |  | 6,813,008,130                                      | 7,617,886,179                         | (804,878,049)                             |
| 1979     | 178,280,594,413          | 11.09            | 19,765,217,391                         | 158,515,377,022                        | 80,000.00  |   | 80,000.00  | 9,204,347,826                                      | 10,560,869,565                        | (1,356,521,739)                           |
| 1980     | 191,149,211,575          | 12.42            | 23,750,000,000                         | 167,399,211,575                        | 57,000,000.00  |   | 57,000,000.00                                      | 11,300,000,000                                     | 12,600,000,000                        | (1,300,000,000)                           |
| 1981     | 195,866,382,433          | 14.90            | 29,178,571,429                         | 166,687,811,004                        | 265,000,000.00   |   | 265,000,000.00                                     | 14,587,301,587                                     | 14,591,269,841                        | (3,968,254)                               |
| 1982     | 205,089,699,859          | 19.69            | 40,388,249,590                         | 164,701,450,268                        | 430,000,000.00   | 44,000,000.00   | 386,000,000.00                                     | 22,600,124,795                                     | 17,788,124,795                        | 4,812,000,000                             |
| 1983     | 230,686,747,153          | 17.92            | 41,341,608,899                         | 189,345,138,255                        | 636,000,000.00   | 93,000,000.00   | 543,000,000.00                                     | 21,956,304,449                                     | 19,385,304,449                        | 2,571,000,000                             |
| 1984     | 259,946,510,957          | 19.03            | 49,474,610,162                         | 210,471,900,795                        | 1,258,000,000.00   | 134,000,000.00  | 1,124,000,000.00                                   | 24,764,305,081                                     | 24,710,305,081                        | 54,000,000                                |
| 1985     | 300,488,028,133          | 20.71            | 64,103,806,548                         | 245,384,221,585                        | 1,659,000,000.00   | 629,000,000.00  | 1,030,000,000.00                                   | 25,801,403,274                                     | 38,302,403,274                        | (12,501,000,000)                          |
| 1986     | 300,758,100,107          | 19.88            | 59,795,161,381                         | 240,962,938,726                        | 1,875,000,000.00   | 450,000,000.00  | 1,425,000,000.00                                   | 26,202,580,690                                     | 33,592,580,690                        | (7,390,000,000)                           |
| 1987     | 272,972,974,765          | 24.86            | 67,854,707,820                         | 205,118,266,945                        | 2,314,000,000.00   | 645,000,000.00  | 1,669,000,000.00                                   | 34,072,853,910                                     | 33,781,853,910                        | 291,000,000                               |
| 1988     | 312,353,631,208          | 30.06            | 93,908,402,660                         | 218,445,228,548                        | 3,194,000,000.00   | 850,000,000.00  | 2,344,000,000.00                                   | 44,923,701,330                                     | 49,984,701,330                        | (4,061,000,000)                           |
| 1989     | 347,768,051,312          | 25.11            | 87,309,586,980                         | 260,458,464,332                        | 3,393,000,000.00   | 780,000,000.00  | 2,613,000,000.00                                   | 41,190,793,490                                     | 46,118,793,490                        | (4,928,000,000)                           |
| 1990     | 360,857,912,566          | 24.27            | 87,591,517,840                         | 273,266,394,726                        | 3,487,000,000.00   | 830,000,000.00  | 2,657,000,000.00                                   | 49,129,758,920                                     | 38,461,758,920                        | 10,668,000,000                            |
| 1991     | 383,373,318,084          | 25.95            | 99,484,318,340                         | 283,889,999,744                        | 4,366,000,000.00   | 913,000,000.00  | 3,453,000,000.00                                   | 55,542,659,170                                     | 43,941,659,170                        | 11,601,000,000                            |
| 1992     | 426,915,712,711          | 30.15            | 128,696,800,258                        | 298,218,912,453                        | 11,156,000,000.00  | 4,000,000,000.00  | 7,156,000,000.00                                   | 66,847,400,129                                     | 61,849,400,129                        | 4,998,000,000                             |
| 1993     | 444,731,282,437          | 36.06            | 160,352,657,500                        | 284,378,624,937                        | 27,515,000,000.00  | 4,400,000,000.00  | 23,115,000,000.00                                  | 74,280,328,750                                     | 86,072,328,750                        | (11,792,000,000)                          |
| 1994     | 564,324,670,006          | 35.77            | 201,857,890,396                        | 362,466,779,610                        | 33,787,000,000.00  | 2,000,000,000.00  | 31,787,000,000.00                                  | 104,607,445,198                                    | 104,607,445,198                       | 7,357,000,000                             |
| 1995     | 734,547,898,121          | 34.27            | 251,759,652,000                        | 482,788,246,121                        | 35,849,200,000.00  | 2,000,000,000.00  | 33,849,200,000.00                                  | 131,858,826,000                                    | 119,900,826,000                       | 11,958,000,000                            |
| 1996     | 863,746,717,504          | 33.81            | 292,073,754,000                        | 571,672,963,504                        | 40,180,000,000.00  | 2,114,000,000.00  | 38,066,000,000.00                                  | 154,811,877,000                                    | 137,261,877,000                       | 17,550,000,000                            |
| 1997     | 961,603,952,952          | 34.53            | 332,070,860,000                        | 629,533,092,952                        | 45,439,000,000.00  | 3,765,000,000.00  | 41,674,000,000.00                                  | 187,447,000,000                                    | 144,623,820,000                       | 42,823,220,000                            |
| 1998     | 1,029,043,097,554        | 32.42            | 333,664,098,872                        | 695,378,998,682                        | 45,644,000,000.00  | 4,527,000,000.00  | 41,117,000,000.00                                  | 188,750,394,176                                    | 144,913,704,696                       | 43,836,689,480                            |
| 1999     | 1,093,997,267,271        | 33.52            | 366,757,843,903                        | 727,239,423,368                        | 41,014,000,000.00  | 4,036,000,000.00  | 36,978,000,000.00                                  | 198,699,399,635                                    | 168,058,444,268                       | 30,640,955,367                            |
| 2000     | 1,211,346,869,605        | 39.41            | 477,398,327,895                        | 733,948,541,710                        | 42,095,300,000.00  | 4,612,000,000.00  | 37,483,300,000.00                                  | 253,092,089,337                                    | 224,306,238,158                       | 28,785,851,179                            |
| 2001     | 1,339,395,718,865        | 38.53            | 516,033,800,734                        | 823,361,918,132                        | 47,053,000,000.00  | 9,696,000,000.00  | 37,357,000,000.00                                  | 272,060,010,516                                    | 242,973,790,218                       | 29,086,220,298                            |
| 2002     | 1,470,550,015,082        | 42.75            | 628,621,950,583                        | 841,928,064,499                        | 53,073,618,897.40  | 6,284,049,718.62  | 46,789,569,178.78                                  | 333,002,310,923                                    | 295,619,639,659                       | 37,382,671,264                            |
| 2003     | 1,660,287,965,663        | 51.80            | 860,095,378,497                        | 800,192,587,166                        | 57,900,937,467.39  | 8,456,083,723.56  | 49,444,853,743.82                                  | 447,958,253,782                                    | 412,137,124,715                       | 35,821,129,066                            |
| 2004     | 1,955,347,004,963        | 59.51            | 1,163,539,485,709                      | 791,807,519,254                        | 68,117,272,181.22  | 7,972,601,713.71  | 60,144,670,467.51                                  | 607,356,934,125                                    | 556,382,551,585                       | 51,174,382,540                            |
| 2005     | 2,285,965,892,361        | 62.21            | 1,422,051,213,277                      | 863,914,679,084                        | 104,108,693,867.09   | 13,729,566,302.86   | 90,379,127,564.22                                  | 773,339,005,937                                    | 648,712,507,880                       | 124,626,479,517                           |
| 2006     | 2,752,131,773,355        | 64.48            | 1,774,543,851,020                      | 977,587,922,335                        | 124,082,035,618.51   | 23,932,198,467.54   | 100,149,837,150.97                                 | 991,731,387,761                                    | 782,812,463,260                       | 208,918,924,501                           |
| 2007     | 3,550,342,425,238        | 62.19            | 2,208,077,563,098                      | 1,342,264,862,140                      | 156,249,335,203.20   | 17,154,799,701.59   | 139,094,535,501.61                                 | 1,258,056,795,941                                  | 950,020,767,157                       | 308,036,028,783                           |
| 2008     | 4,594,306,848,763        | 57.61            | 2,646,905,032,725                      | 1,947,401,816,038                      | 171,534,650,311.57   | 56,742,276,629.70   | 114,792,373,681.87                                 | 1,497,868,782,940                                  | 1,149,036,249,786                     | 348,832,533,154                           |
| 2009     | 5,101,702,432,883        | 45.18            | 2,305,197,920,673                      | 2,796,504,512,211                      | 131,057,052,869.50   | 43,889,985,500.00   | 87,167,067,369.50                                  | 1,262,664,161,020                                  | 1,042,533,759,653                     | 220,130,401,367                           |
| 2010     | 6,087,164,527,421        | 50.72            | 3,087,231,629,694                      | 2,999,932,897,727                      | 243,703,434,558.18   | 57,953,599,366.36   | 185,749,835,191.82                                 | 1,654,815,752,521                                  | 1,432,415,877,174                     | 222,399,875,347                           |
| 2011     | 7,551,500,425,598        | 50.74            | 3,831,699,472,861                      | 3,719,800,952,737                      | 280,072,219,149.94   | 48,420,641,059.65   | 231,651,578,090.29                                 | 2,006,296,851,391                                  | 1,825,402,621,469                     | 180,894,229,922                           |
| 2012     | 8,532,230,724,142        | 48.27            | 4,118,296,017,409                      | 4,413,934,706,733                      | 241,213,868,161.42   | 64,963,386,524.00   | 176,250,481,637.42                                 | 2,175,080,625,680                                  | 1,943,215,391,729                     | 231,865,233,950                           |
| 2013     | 9,570,405,758,740        | 46.74            | 4,473,626,635,071                      | 5,096,779,123,669                      | 290,928,431,467.00   | 72,970,879,683.31   | 217,957,551,783.69                                 | 2,354,248,580,552                                  | 2,119,378,054,519                     | 234,870,526,034                           |
| 2014     | 10,475,682,846,632       | 44.91            | 4,704,128,038,186                      | 5,771,554,808,446                      | 268,097,181,064.34   | 123,129,554,305.76  | 144,967,626,758.58                                 | 2,462,839,435,097                                  | 2,147,560,803,089                     | 221,550,832,008                           |
| 2015     | 11,061,552,790,044       | 39.46            | 4,365,350,038,550                      | 6,696,202,751,494                      | 242,489,331,627.40   | 174,390,681,862.62  | 68,098,649,764.78                                  | 2,362,092,880,958                                  | 2,003,257,157,593                     | 358,835,723,365                           |
| 2016     | 11,233,277,146,512       | 36.89            | 4,144,451,665,453                      | 7,088,825,481,060                      | 174,749,584,584.05   | 216,424,460,753.58  | (41,674,876,169.52)                                | 2,199,967,569,433                                  | 1,944,484,096,019                     | 255,483,473,414                           |
| 2017     | 12,310,408,652,424       | 37.63            | 4,632,704,126,052                      | 7,677,704,526,372                      | 166,083,755,721.65   | 138,292,767,802.14  | 27,790,987,919.51                                  | 2,424,199,911,705                                  | 2,208,504,214,346                     | 215,695,697,359                           |
| 2018     | 13,894,817,110,036       | 37.46            | 5,204,476,705,312                      | 8,690,340,404,724                      | 235,365,050,036.34   | 143,026,576,683.86  | 92,338,473,352.48                                  | 2,655,591,916,228                                  | 2,548,884,789,084                     | 106,707,127,145                           |
| 2019     | 14,342,902,842,916       | 35.68            | 5,117,560,282,919                      | 9,225,342,559,997                      | 155,815,344,616.66   | 97,703,443,776.92   | 58,111,900,839.74                                  | 2,641,273,365,374                                  | 2,476,286,917,546                     | 164,986,447,828                           |
| Count    | 60                       | 60               | 60                                     | 60                                     | 41   | 38  | 41   | 60   | 60                                    | 60  |
| Variance | 1.533E+25                | 3.159E+02        | 2.649E+24                              | 5.433E+24                              | 8.862E+21  | 3.015E+21   | 4.089E+21  | 7.360E+23  | 5.939E+23                             | 1.040E+22                                 |
| Average  | 2,375,291,313,191        | 27               | 1,010,940,335,503                      | 1,364,350,977,687                      | 86,763,618,961   | 35,840,935,620  | 53,545,190,825                                     | 536,599,198,376                                    | 474,341,137,127                       | 62,258,061,249                            |
| St. Dev  | 3,914,750,210,964        | 18               | 1,627,672,976,668                      | 2,330,838,549,123                      | 94,138,947,955   | 54,908,652,498  | 63,945,016,290                                     | 857,888,250,414                                    | 770,309,945,417                       | 101,965,839,211                           |
| Minimum  | 47,209,359,006           | 5                | 3,286,213,340                          | 43,923,145,666                         | 80,000   | 44,000,000  | (41,674,876,170)                                   | 1  |                                       |   |

**Table 2: Correlation among China Trade Indicators (1960-2019)**

| <b>Correlation</b>  | China GDP (current US\$) | China Trade (% of GDP in current US\$) | China GDP - China Trade (current US\$) | China Foreign direct investment, net inflows (BoP, current US\$) | China Foreign direct investment, net outflows (BoP, current US\$) | China FDI inflow - FDI outflow (BoP, current US\$) | China Exports of goods and services (current US\$) | China Imports of goods and services (current US\$) | China Export minus Imports (current US\$) |
|---|--------------------------|--|--|--|---|--|--|--|---|
| China GDP (current US\$)  | <b>1.000</b>             |  |  |  |   |  |  |  |   |
| China Trade (% of GDP in current US\$)                            | 0.984                    | <b>1.000</b>                           |  |  |   |  |  |  |   |
| China GDP - China Trade (current US\$)                            | 0.992                    | 0.955                                  | <b>1.000</b>                           |  |   |  |  |  |   |
| China Foreign direct investment, net inflows (BoP, current US\$)  | 0.864                    | 0.937                                  | 0.795                                  | <b>1.000</b>   |   |  |  |  |   |
| China Foreign direct investment, net outflows (BoP, current US\$) | 0.913                    | 0.875                                  | 0.919                                  | 0.749  | <b>1.000</b>  |  |  |  |   |
| China FDI inflow - FDI outflow (BoP, current US\$)                | <b>0.503</b>             | <b>0.641</b>                           | <b>0.397</b>                           | 0.836  | <b>0.245</b>  | <b>1.000</b>                                       |  |  |   |
| China Exports of goods and services (current US\$)                | 0.980                    | 1.000                                  | 0.949                                  | 0.942  | 0.875   | <b>0.649</b>                                       | <b>1.000</b>                                       |  |   |
| China Imports of goods and services (current US\$)                | 0.987                    | 0.999                                  | 0.960                                  | 0.930  | 0.875   | <b>0.632</b>                                       | 0.998  | <b>1.000</b>                                       |   |
| China Export minus Imports (current US\$)                         | 0.787                    | 0.856                                  | 0.724                                  | 0.866  | 0.717   | <b>0.665</b>                                       | 0.872  | 0.838  | <b>1.000</b>                              |

Source: World Bank, 2020

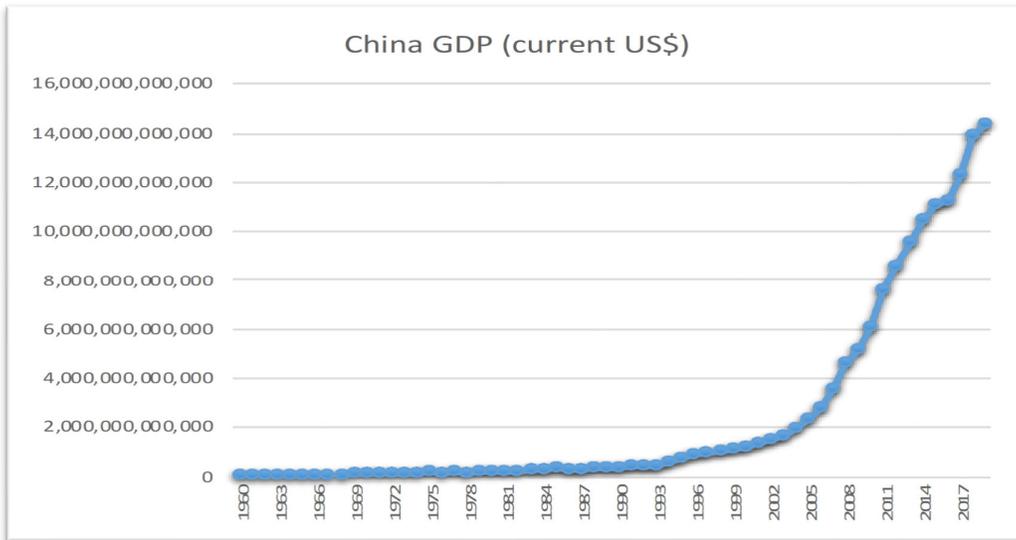


Figure 1: China GDP (current US\$) (Data Source: World Bank 2020)

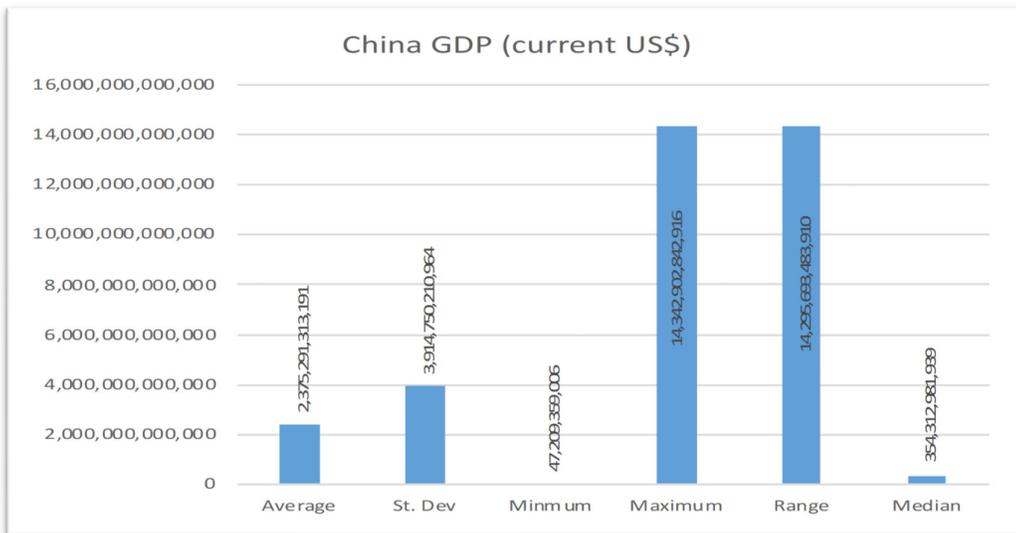


Figure 2: China GDP (current US\$) Descriptive Statistics (Data Source: World Bank 2020)

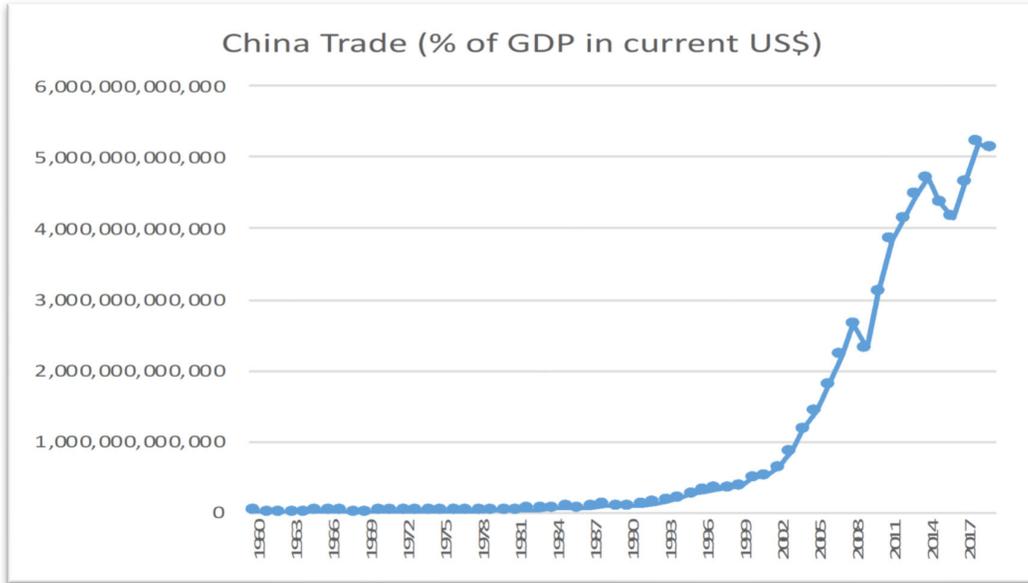


Figure 3: China Trade (% of GDP in current US\$) (Data Source: World Bank 2020)

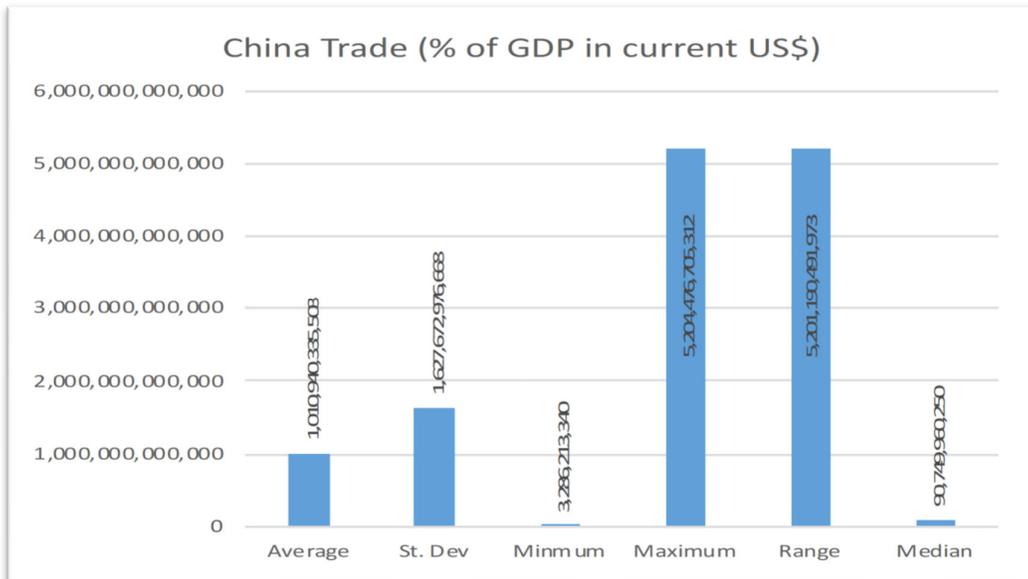


Figure 4: China Trade (% of GDP in current US\$) Descriptive Statistics (Data Source: World Bank 2020)

**China GDP – China Trade (% of GDP in Current US\$)**

a) Represents all items making up China GDP other than trade. Results has shown a similar trend to that witnessed with China GDP, where the minimum value that has been recorded was in 1962 (US\$#43,923,145,666#) vs. the maximum trade value that has been recorded in 2019 (US\$#9,225,342,559,997#) (Figure 5, 6), (Table 1).

b) China GDP - China Trade (current US\$) has exhibited the same results as the previous two entries. However, it has shown a much lower correlation value to China FDI inflow - FDI outflow (BoP, current US\$) (0.397). This 0.397 value is the second lowest value attained among all correlation values. As for the correlation with the remaining entries values have ranged from 0.724 to 0.960 (Figure 7), (Table 2).

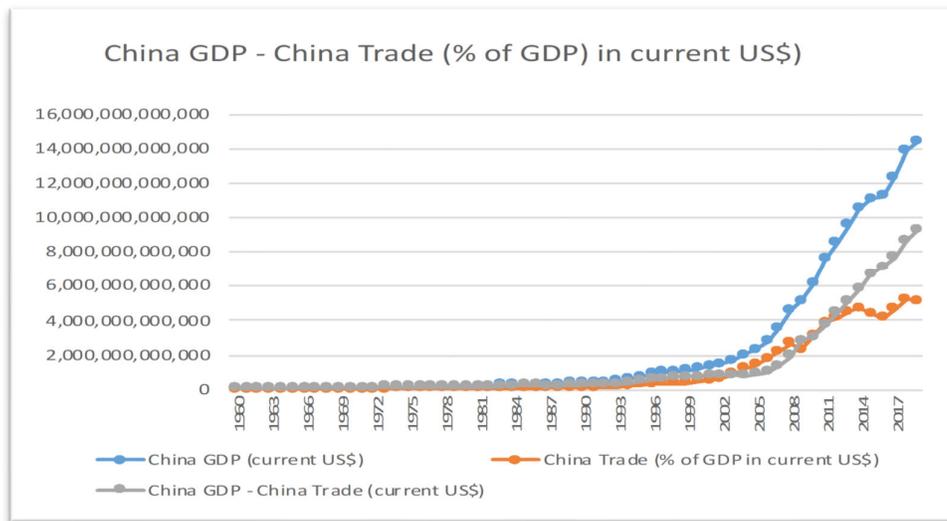


Figure 5: China GDP - China Trade (% of GDP in current US\$) (Data Source: World Bank 2020)

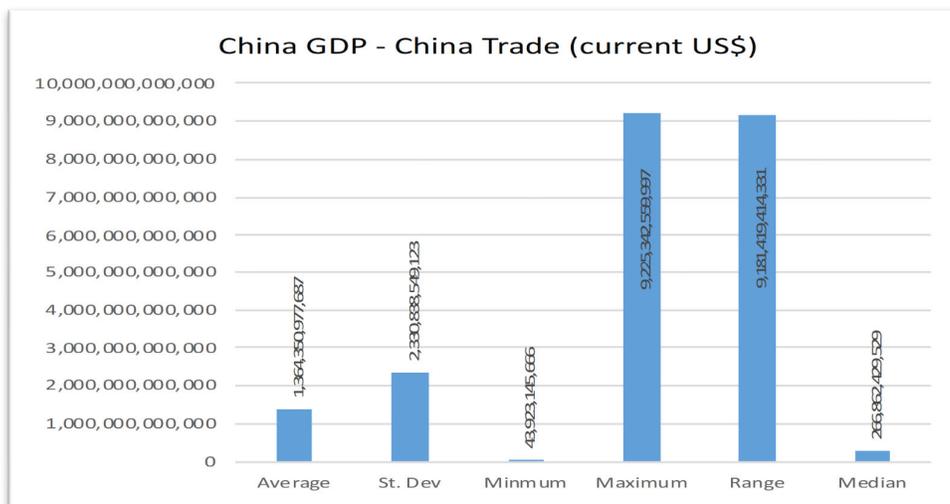


Figure 6: China GDP - China Trade (% of GDP in current US\$) Descriptive Statistics (Data Source: World Bank 2020)

**China Balance of Trade (BOT) 1981-2020 Data**

- a) China BOT has been increasing over the years. The average value of China’s BOT from 1981 to 2020 has been found to be US\$#10.823# billion. The maximum value that has been attained was US\$#63.033# billion vs. a minimum of US\$#-32.002# billion in May 2020 and February 2012, respectively. The drop in the BOT in February 2012 has been mainly due to the decrease in exports to Europe during that month, the slow recovery of the USA economy, and the two weeks holiday shut down by the Chinese producers starting from the third week of January. Nevertheless, values show that trade with China is progressing on yearly basis (Figure 8), (Table 3).
- b) October 2020 has witnessed an increase in the value of trade in China by US\$#46# billion over what has been recorded for the same period in 2019 (US\$#42.3# billion to US\$#58.44# billion). This increase has been due to the upsurge of exports by 11.4% and the increase of imports by 4.7%. This relationship between exports and imports vs. BOT is fortified in table 2 showing the high correlation values between China Trade (% of GDP in current US\$) vs. exports and imports (Table 2) (Trading Economics, 2020).

with minor variations; when it started to increase based on the reform policies that has been set during and following that period. The minimum export value that has been attained was in 1962 (US\$#1,913,234,219#) vs. maximum value that has been achieved in 2018 (US\$#2,655,591,916,228#) (Figure 9, 10), (Table 1). The maximum value has been slightly higher than that of 2019 (US\$#2,641,273,365,374#). Again, as stated previously, this difference between 2019 and 2018, most probably has been the result of the COVID19 epidemic (US\$#(14,318,550,855)#) or 0.54% decrease. Furthermore, this same effect can be witnessed in other study entries including imports, China FDI inflow and China FDI outflow; as well as China FDI inflow – China FDI outflow entry (Table 1).

b) China exports had a similar trend to that of China Trade (% of GDP in current US\$) with respect to setbacks. The first has taken place from 2008 to 2009 and the second from 2014 to 2016. The 2008-2009 draw back has been mainly due to the world financial crisis; while the second, it has been mostly due to the China’s political milieu and reform planning, international political situation, and exports to the USA (Figure 9), (Table 1). Moreover, the same trend has been viewed for China imports for the same periods (Figure 15).

c) China exports vs. almost all other entries has been found to be correlated ranging from 0.872 to 1.000; where the increase in one entry will lead to the increase of the other. Only one entry has been the exception (China FDI inflow - FDI outflow (BoP, current US\$)); whose value is 0.649 (Figure 7), (Table 2).

**CHINA EXPORTS**

**China Exports**

- a) China exports like that of GDP has been consistent in value from 1960 until the late 1970s

**Table 3: China Balance of Trade**

| October 2020 | Highest | Lowest  | Dates       | Unit        | Frequency |
|--------------|---------|---------|-------------|-------------|-----------|
| 58.443       | 63.033  | -320.02 | 1981 - 2020 | USD Billion | Monthly   |

Source: Trading Economics 2020, General Administration of Customs

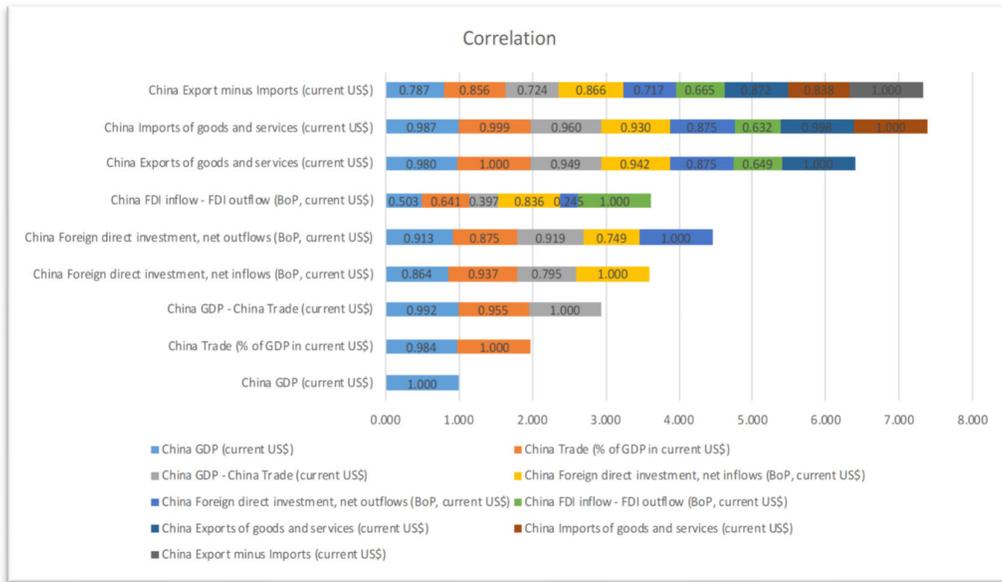


Figure 7: Correlation among China Indicators (Data Source: World Bank 2020)

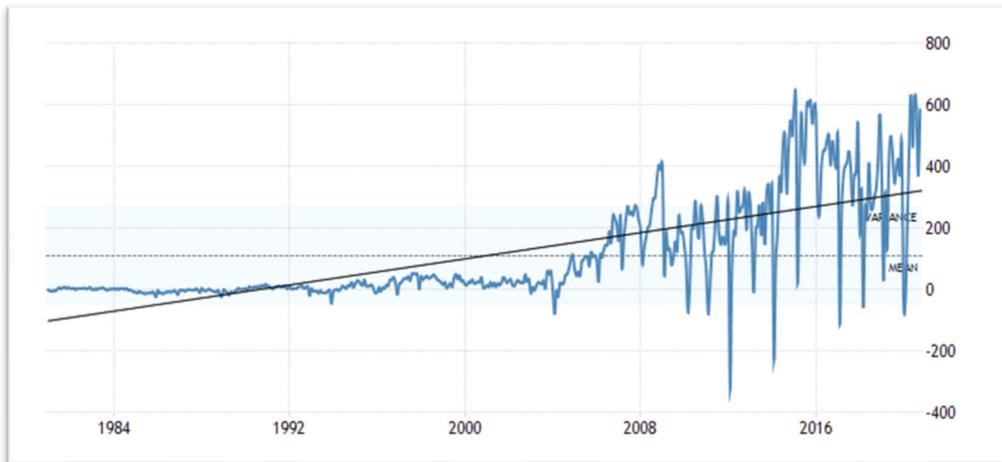


Figure 8: China Balance of Trade Statistics and Trend Line (HML US\$) (Data Source: Trading Economics 2020, General Administration of Customs)

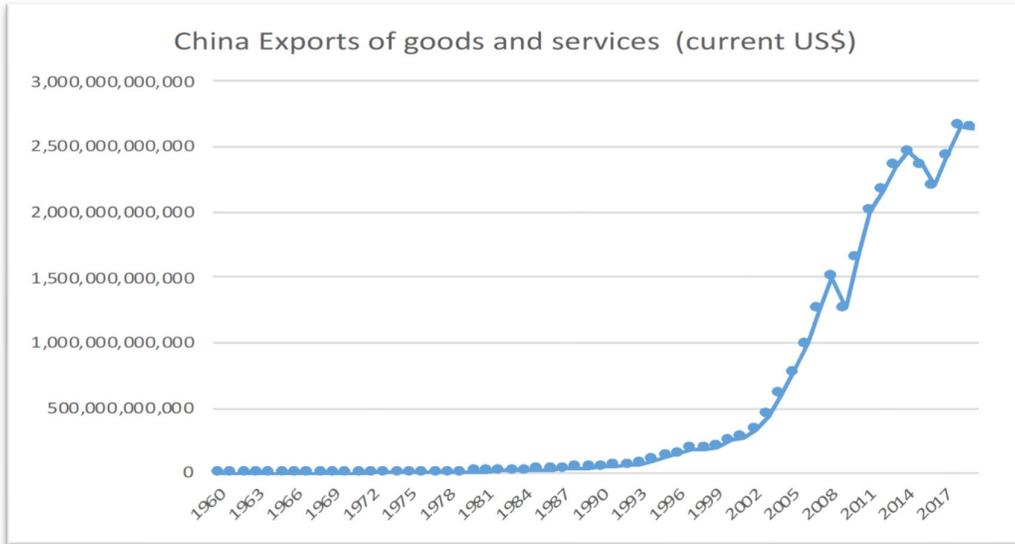


Figure 9: China Exports of Goods and Services (Data Source: World Bank 2020)

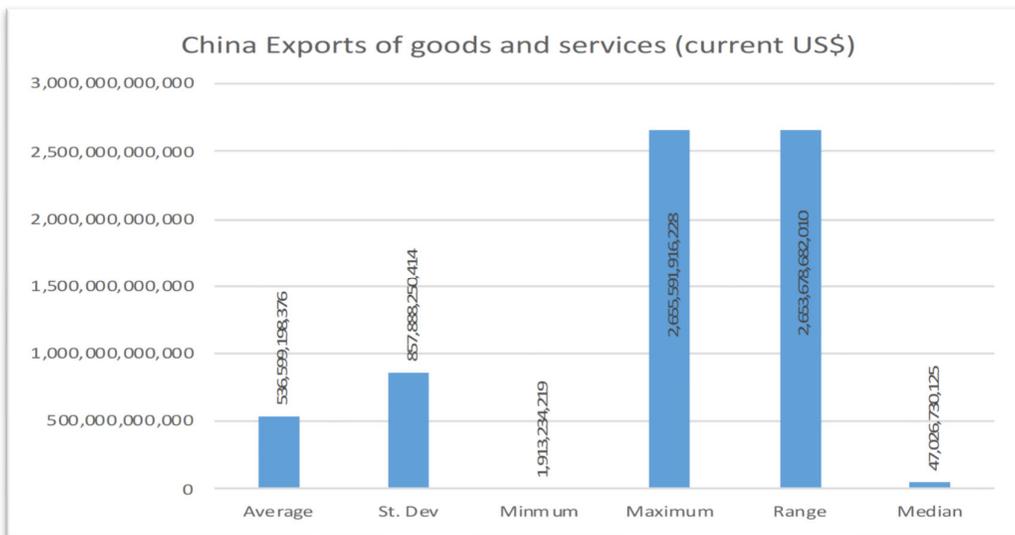


Figure 10: China Exports Descriptive Statistics (Data Source: World Bank 2020)

**China Exports Trading Economics 1981-2020 Data**

a) Similar to BOT, China exports has been increasing on yearly basis. The average value of China’s exports from 1981 to 2020 has been found to be US\$#68.932# billion. The maximum value that has been attained was US\$#239.758# billion vs. a minimum of US\$#1.250# billion in September 2020 and February 1983 respectively (Figure 11), (Table 4).

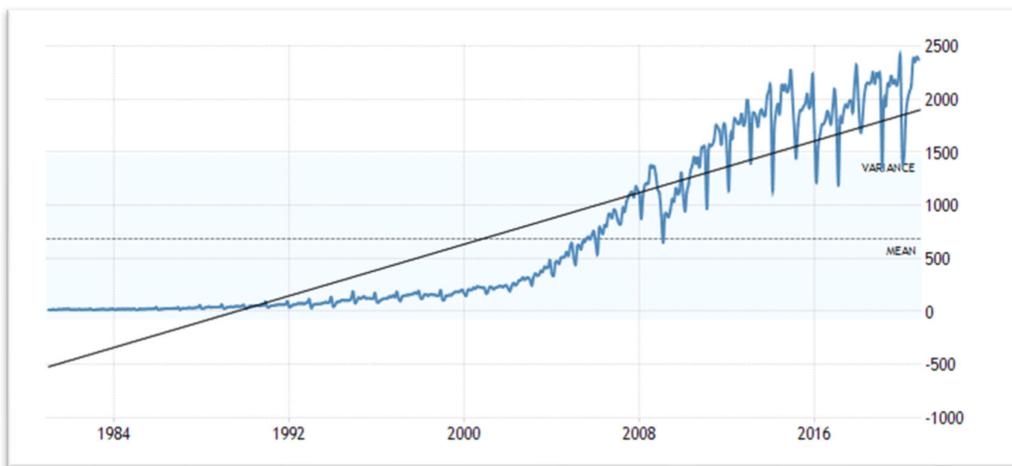
b) October 2020 has witnessed an increase in the value of exports from China by 11.4% US\$#237.18# billion over what has been recorded for the same period in 2019. This increase in exports has been mainly due to the increased demand on medical goods and electronic merchandises following COVID19 outbreak; as well as the global decrease of manufacturing capability in other industrial states (Table 4) (Trading Economics, 2020).

c) China Exports by Category, the highest percentage of exports that has been recorded in 2018 was for electric and electronic equipment, followed by machinery, nuclear reactors, and boilers. This is since China is highly involved in manufacturing due to several reasons; most important of which is the availability of resources and cheap labor (Figure 12). However, this

tendency has changed after COVID19 outbreak. As stated above, in October 2020 exports of medical supplies and equipment jumped to the top followed by electronic merchandises (Trading Economics, 2020). This shows the ability and the versatility of the Chinese industrial economy to adapt to the new market demand on hand.

d) China Export by Country, the highest percentage of exports to the other countries that has been recorded in 2018 was for the United States of America, followed by Hong Kong and Japan. However, if all European countries (EU) percentages are added, EU will come second after the USA (Figure 13). Nonetheless, USA retained its place in 2020; according to Trading Economic (2020), China in October 2020 has attained a US\$#31.37# billion trade surplus with the USA; as compared to US\$#30.75# billion in September 2020 (Trading Economic, 2020).

e) China Export by Continent, the highest percentage of exports to the different continents that has been recorded in 2018 was for Asia, followed by Americas, Europe, Africa, and Oceania (Figure 14). The same order is expected to continue since the key issue here is the geographical area of each continent (Trading Economic, 2020).



**Figure 11: China Exports Statistics and Trend Line (Data Source: Trading Economics 2020, General Administration of Customs)**



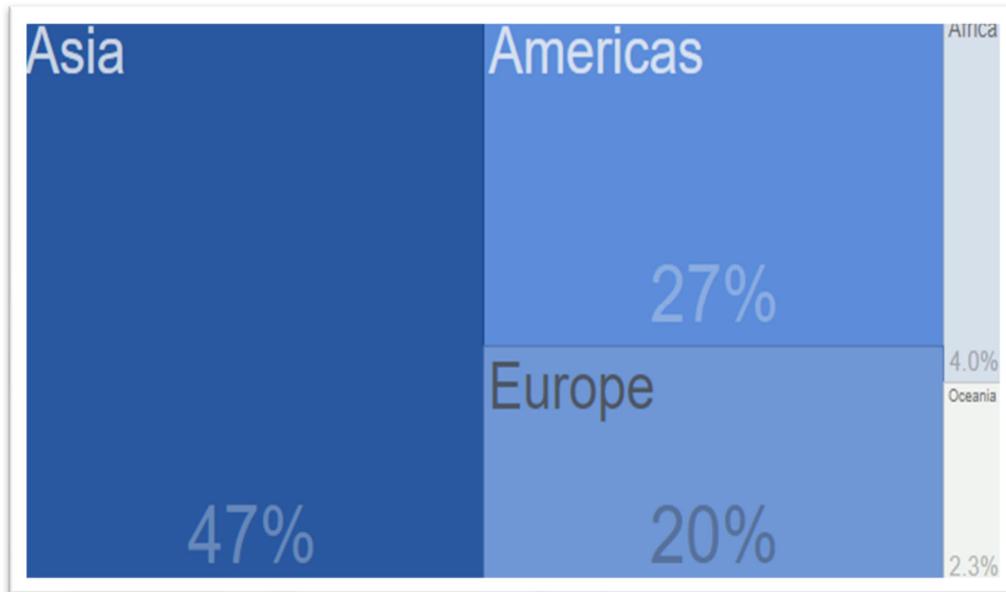


Figure 14: China Exports Percentage by Continent (Data Source: Trading Economics 2020, United Nations COMTRADE database on international trade 2018)

## CHINA IMPORTS

### China Imports

a) China imports like that of GDP has been consistent in value from 1960 until the late 1970s with minor variations; when it started to increase based on the reform policies that has been set during and following that period. The minimum imports value that has been attained was in 1962 (US\$#1,372,979,121#) vs. maximum value that has been achieved in 2018 (US\$#2,548,884,789,084#) (Figure 15, 16), (Table 1). The maximum value has been slightly higher than that of 2019 (US\$#2,476,286,917,546#). This variation in results between 2019 and 2018, most probably has been the result of the COVID19 epidemic (US\$#(72,597,871,538)#) or 2.93% decrease (Table 1).

b) China imports, as stated previously had a similar trend to that of China Trade (% of GDP in current US\$) with respect to setbacks in 2008-2009 and 2014-2016 (Figure 15), (Table 1).

c) China imports vs. almost all other entries has been found to be correlated ranging from 0.875 to 0.999; where the increase in one entry will lead to the increase of the other. Only one

entry has been the exception (China FDI inflow - FDI outflow (BoP, current US\$)); whose value is 0.632 (Figure 7), (Table 2).

### China Imports Trading Economics 1981-2020 Data

a) Similar to BOT and China exports, China imports has been increasing on yearly basis. The average value of China's imports from 1981 to 2020 has been found to be US\$#57.756# billion. The maximum value that has been attained was US\$#202.759# billion vs. a minimum of US\$#1.388# billion in September 2020 and

February 1983 respectively (Figure 17), (Table 5).

b) October 2020 has witnessed an increase in the value of imports to China by 4.7% US\$#178.74# billion over what has been recorded for the same period in 2019. This increase in imports has been mainly due to the increased demand on raw materials such as copper, copper products, iron and soyabean; and the decrease in demand on imports of crude oil following COVID19 outbreak (Table 5) (Trading Economics, 2020).

c) China Imports by Category, the highest percentage of imports that has been recorded in 2018 was for electric and electronic equipment, followed by mineral fuels, oils and distillation products, then machinery, nuclear reactors, and boilers (Figure 18). However, this tendency has changed after COVID19 outbreak. As stated above, in October 2020 imports of raw materials specifically metals upsurged and that of crude oil decreased (Trading Economics, 2020).

d) China Import by Country, the highest percentage of imports from other countries that has been recorded in 2018 was from South Korea

and Japan due to their proximity to China and then the USA. However, if all European countries (EU) percentages are added, EU will come first before South Korea (Figure 19) (Trading Economic, 2020).

e) China Import by Continent, the highest percentage of imports from the different continents that has been recorded in 2018 was for Asia, followed by Europe, Americas, Oceania, and Africa (Figure 20). The same order is expected to continue since the key issue here is the industrial and geographical capability of each continent (Trading Economic, 2020).

**Table 4: China Exports**

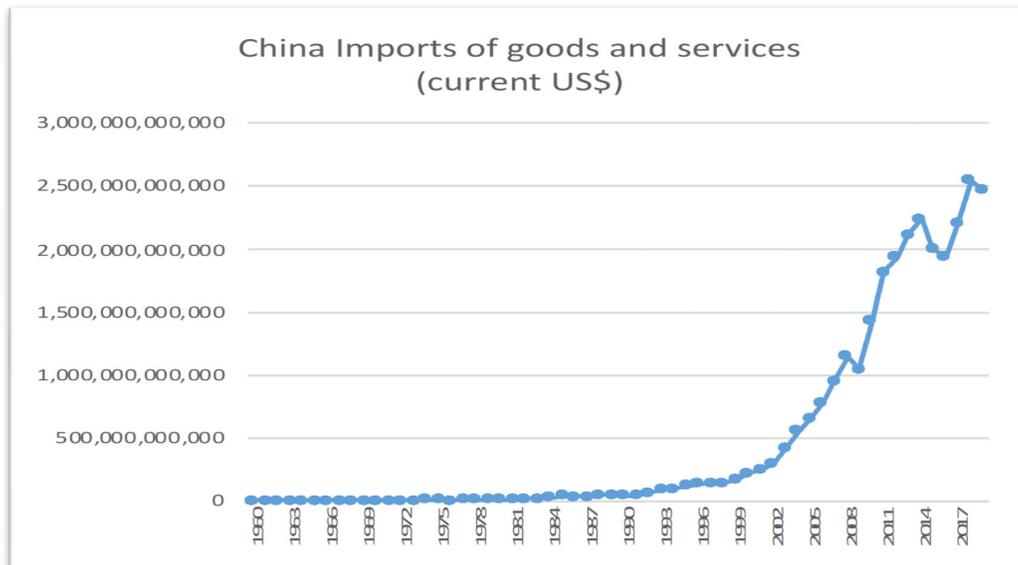
| October 2020 | Highest | Lowest | Dates       | Unit        | Frequency |
|--------------|---------|--------|-------------|-------------|-----------|
| 237.183      | 239.758 | 1.250  | 1981 - 2020 | USD Billion | Monthly   |

Source: Trading Economics 2020, General Administration of Customs

**Table 5: China Import**

| October 2020 | Highest | Lowest | Dates       | Unit        | Frequency |
|--------------|---------|--------|-------------|-------------|-----------|
| 178.739      | 202.759 | 1.388  | 1981 - 2020 | USD Billion | Monthly   |

Source: Trading Economics 2020, General Administration of Customs



**Figure 15: China Imports of Goods and Services (Data Source: World Bank 2020)**

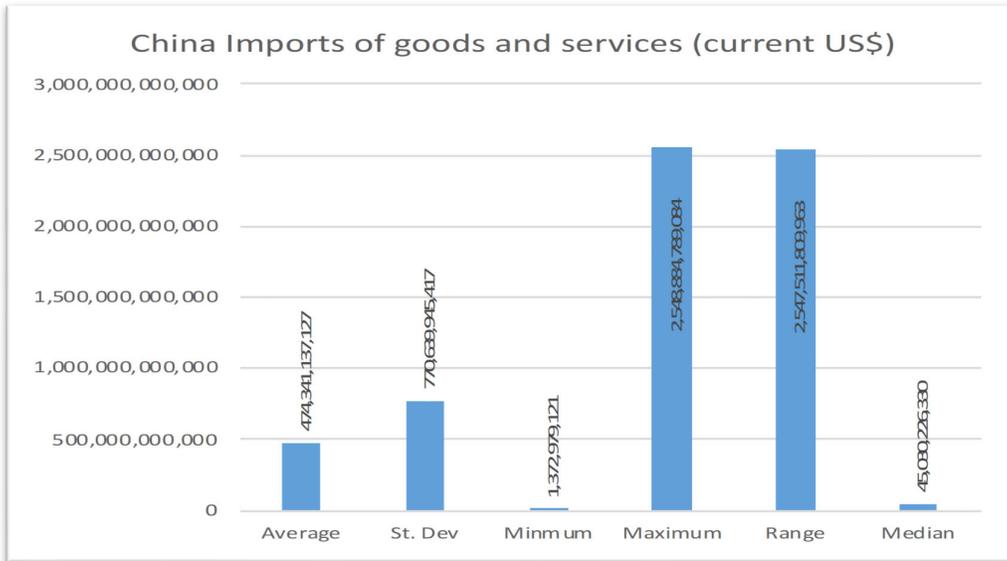


Figure 16: China Imports Descriptive Statistics (Data Source: World Bank 2020)

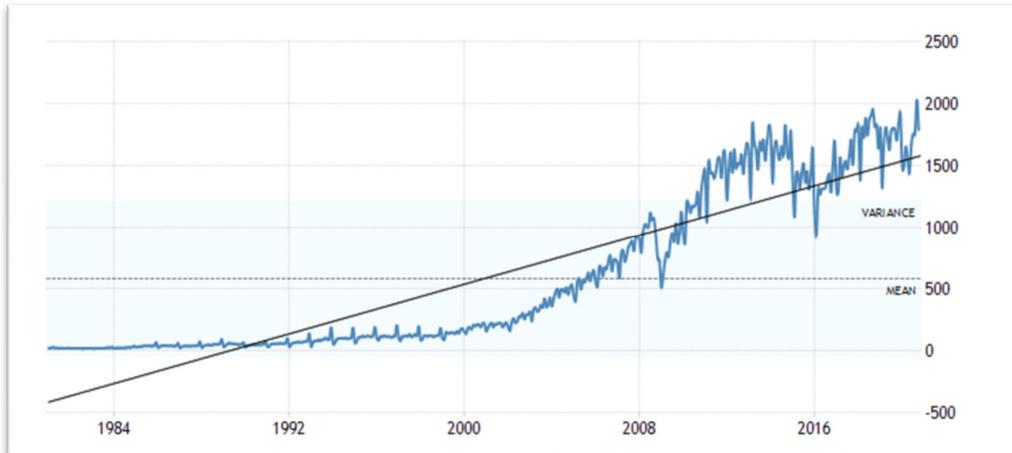


Figure 17: China Imports Statistics and Trend Line (Data Source: Trading Economics 2020, General Administration of Customs)

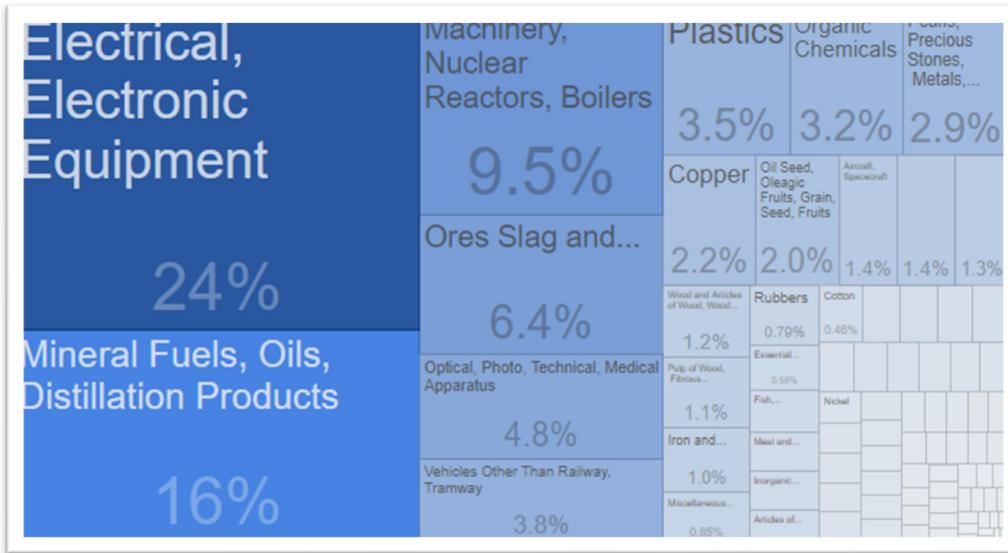
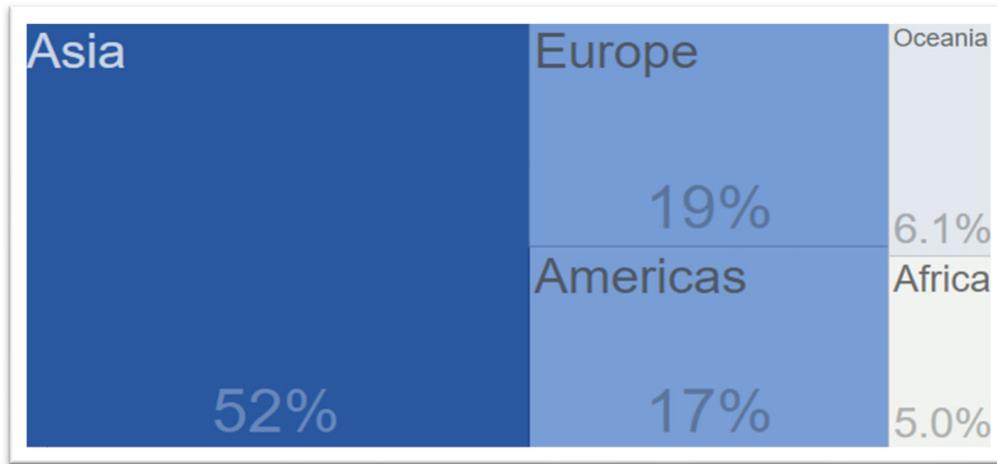


Figure 18: China Imports Percentage by Category (Data Source: Trading Economics 2020, United Nations COMTRADE database on international trade 2018)



Figure 19: China Imports Percentage by Country (Data Source: Trading Economics 2020, United Nations COMTRADE database on international trade 2018)



**Figure 20: China Imports Percentage by Continent (Data Source: Trading Economics 2020, United Nations COMTRADE database on international trade 2018)**

**China Exports - China Imports (Current US\$)**

a) China exports - China imports entry represents the difference between exports and imports for the period extending from 1960 until the 2019. In this entry the minimum and maximum values are different to that reported for exports and imports alone. The minimum value that has been attained was in 1985 (US\$#(12,501,000,000)#) indicating a greater value of imports over exports. As for the maximum value that has been achieved in 2015 even with the setback China was passing through during that period (US\$# 358,835,723,365#) indicating a greater value for exports over imports (Figure 21, 22), (Table 1).

b) China exports vs. almost all other entries has been found to be moderately correlated ranging from 0.717 to 0.872; where the increase in one entry will lead to the increase of the other. Only one entry has been the exception (China FDI inflow - FDI outflow (BoP, current US\$)); whose value is 0.665 (Figure 7), (Table 2).

c) The decrease in the percentage of exports and imports from year 2018 to 2019 has been counterparted by an increase of (exports-imports) value by (US\$#58,279,320,683#) or 35.32 percent indicating an in build of stock product. The main reason behind this again is mainly due to the COVID19 outbreak late 2019 (Table 1).

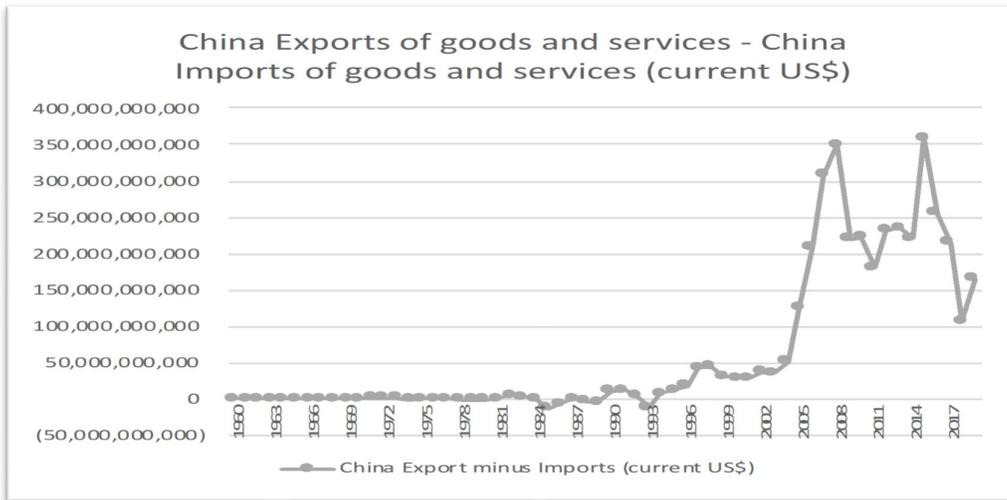


Figure 21: China Export - China Imports (% of GDP in current US\$) (Data Source: World Bank 2020)

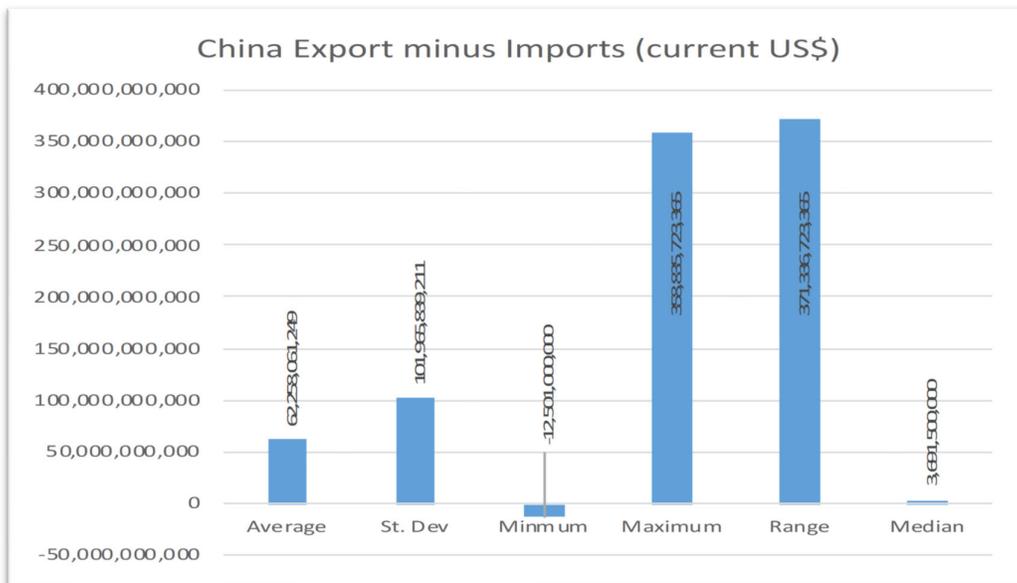


Figure 22: China Export - China Imports (% of GDP in current US\$) Descriptive Statistics (Data Source: World Bank 2020)

**CHINA FOREIGN DIRECT INVESTMENT**  
**China Foreign Direct Investment, Net Inflows**

a) Based on World Bank data, China FDI, net inflow has been first recorded in 1979 and has been consistently increasing ever since with minor fluctuation. The minimum FDI net inflow that has been attained was in 1979 (US\$#80,000.00#) vs. maximum value that has been achieved in 2013 (US\$#290,928,431,467.00#) (Figure 23, 24), (Table 1). However, the difference between 2019 (US\$#155,815,344,616.66#) and 2018 (US\$#235,365,050,036.34#) values has been quite high. This difference (2019 vs. 2018), most definitely has been the result of the COVID19 epidemic (US\$#(79,549,705,420)#) or 51.05% decrease (Table 1).

b) China FDI net inflow has mainly suffered two setbacks in 2008-2009 and 2014-2016 other than that of 2019; reasons for these setbacks are like the previous entries discussed (Figure 23), (Table 1).

c) China FD net inflows vs. all other entries has been found to be correlated ranging from 0.749 to 0.942; where the increase in one entry will lead to the increase of the other (Figure 7), (Table 2).

**China Foreign Direct Investment, Net Outflows**

a) Based on World Bank data, China FDI, net outflow has been first recorded in 1982 and has been consistently increasing ever since with minor fluctuation. The minimum FDI net outflow that has been attained was in 1982 (US\$#44,000,000.00#) which is approximately 10.2% of the value of FDI net inflow for that year. On the other hand, the maximum value that has been achieved in 2016 (US\$#216,424,460,

753.58#) (Figure 25, 26), (Table 1). However, the difference between 2019 (US\$#97,703,443,776.92#) and 2018 (US\$#143,026,576,683.86#) values has been quite high. This difference (2019 vs. 2018), most definitely has been the result of the COVID19 epidemic (US\$#(45,323,132,907)#) or 46.39% decrease; but this decrease is lower than that of FDI net inflow (Table 1).

b) China FDI net outflow has mainly suffered two setbacks in 2008-2009 and 2016-2017 other than that of 2019; reasons for these setbacks are like the previous entries discussed (Figure 25), (Table 1).

c) China FD net outflows vs. almost all other entries has been found to be correlated ranging from 0.717 to 0.919; where the increase in one entry will lead to the increase of the other. Only one entry has been the exception (China FDI inflow - FDI outflow (BoP, current US\$)); whose value is 0.245. This value is the lowest among all correlation values registered, indicating very low correlation between the two entries (Figure 7), (Table 2).

**China Foreign Direct Investment Trading Economics 1981-2020 Data**

a) The average value of China’s FDI from 1997 to 2020 has been found to be US\$#46.156# billion. The maximum value that has been attained was US\$#136.71# billion vs. a minimum of US\$#1.832# billion in December 2019 and January 2000. Nevertheless, values show that FDI into China is growing (Figure 27), (Table 6).

b) FDI into China has increased by 5.2% from January until end of August 2020; furthermore, FDI value in September soared by 25.1% (Trading Economics, 2020).

**Table 6: China Foreign Direct Investment**

| October 2020 | Highest | Lowest | Dates       | Unit        | Frequency |
|--------------|---------|--------|-------------|-------------|-----------|
| 103.260      | 136.710 | 1.832  | 1997 - 2020 | USD Billion | Monthly   |

Source: Trading Economics 2020, Ministry of Commerce of the People’s Republic of China

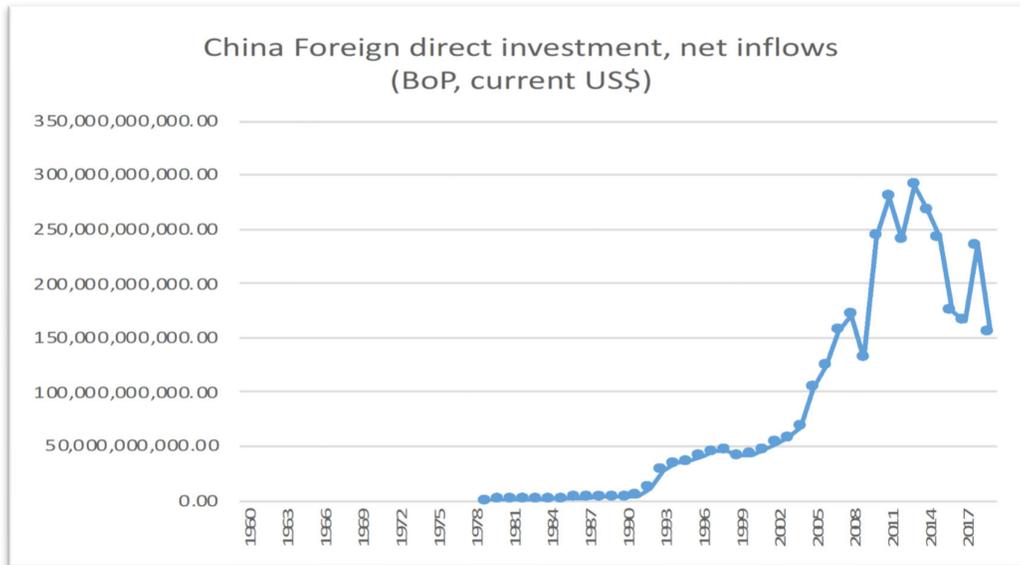


Figure 23: China Foreign Direct Investment, Net Inflows (BoP, current US\$) (Data Source: World Bank 2020)

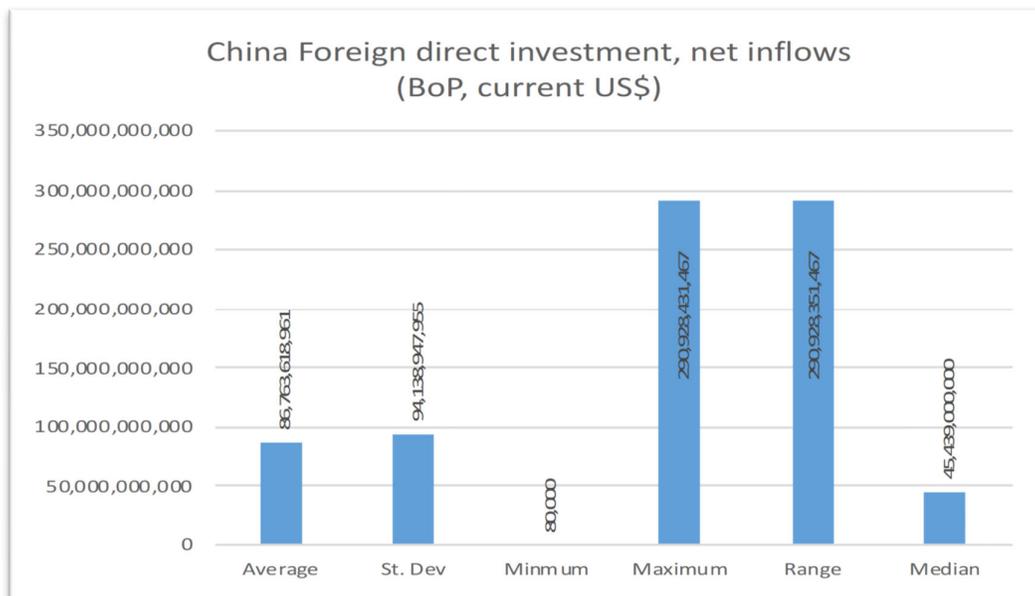


Figure 24: China Foreign Direct Investment, Net Inflows (BoP, current US\$) Descriptive Statistics (Data Source: World Bank 2020)

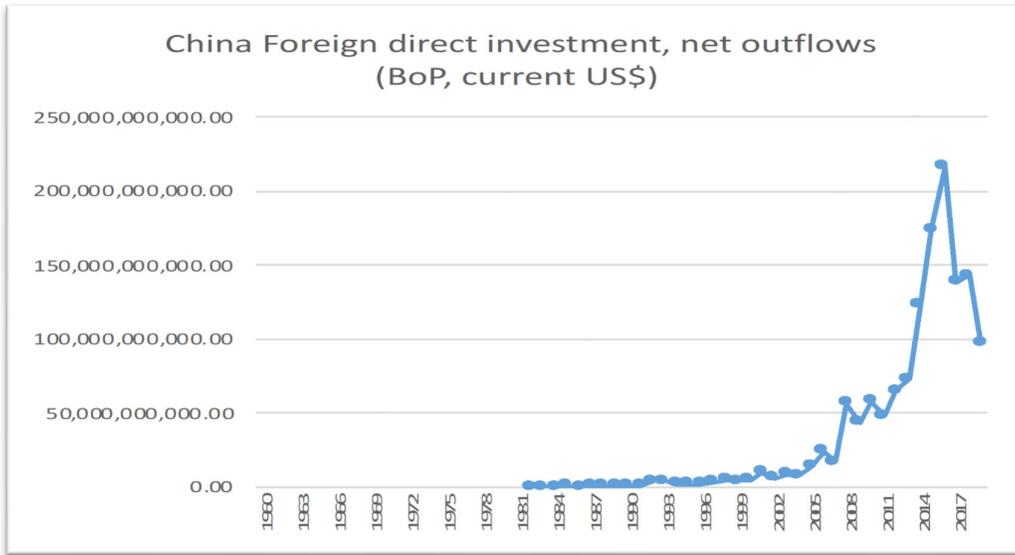


Figure 25: China Foreign Direct Investment, Net Outflows (BoP, current US\$) (Data Source: World Bank 2020)

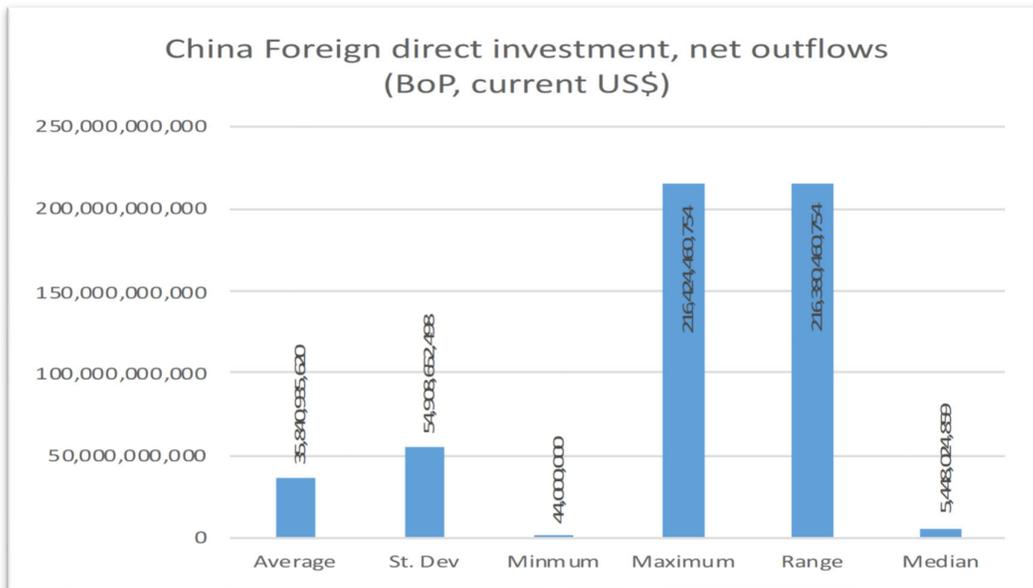
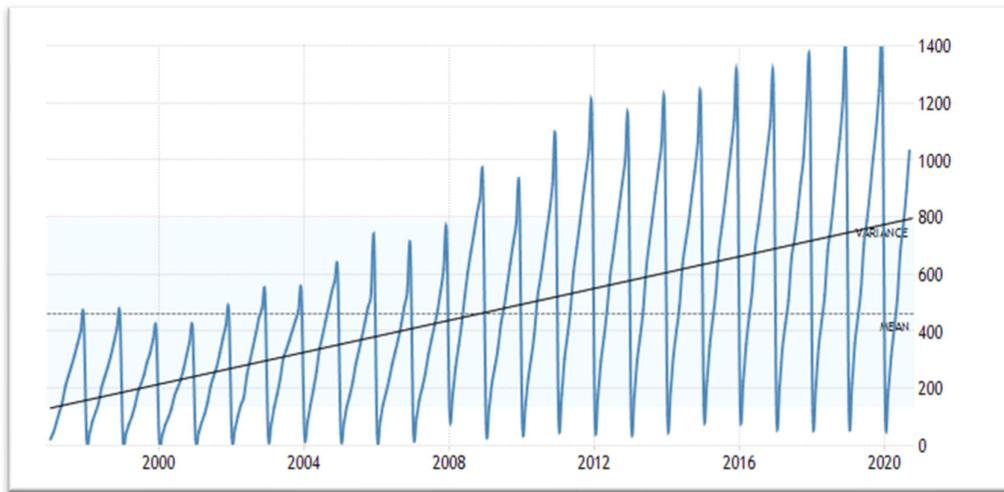


Figure 26: China Foreign Direct Investment, Net Outflows (BoP, current US\$) Descriptive Statistics (Data Source: World Bank 2020)



**Figure 27: China Foreign Direct Investment Statistics and Trend Line (Data Source: Trading Economics 2020, Ministry of Commerce of the People's Republic of China)**

#### **China FDI, Net Inflows - China FDI, Net Outflows**

a) China FDI net inflow - China FDI net outflow entry represents the difference between FDI inflow and FDI outflows for the period extending from 1979 until the 2019. In this entry the minimum and maximum values are different to that reported for FDI net inflow and FDI net outflow alone. The minimum value that has been attained was in 2016 (US\$(41,674,876,169.52)#) indicating a greater value of FDI net outflow over FDI net inflow. As for the maximum value that has been achieved in 2011 (US\$(231,651,578,090.29)#) indicating a greater value

for FDI net inflow over FDI net outflow (Figure 28, 29), (Table 1).

b) China FDI net inflow - China FDI net outflow vs. almost all other entries has shown the lowest correlation values ranging from 0.245 to 0.665. Only one entry has been the exception (China FDI inflow (BoP, current US\$)); whose value is 0.836 (Figure 7), (Table 2).

c) The decrease in the percentage of China FDI net inflow - China FDI net outflow from year 2018 to 2019 has been (US\$(34,226,572,513)#) or 58.90%; which can be attributed to the COVID19 outbreak late 2019 (Table 1).

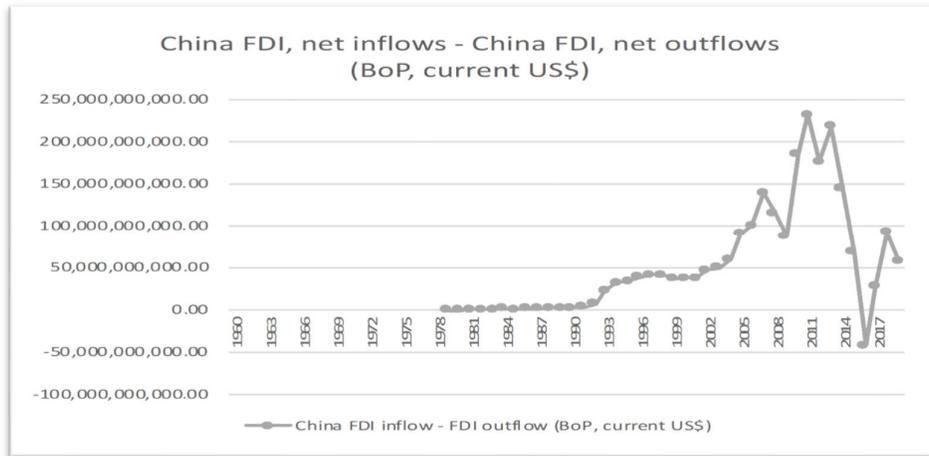


Figure 28: China FDI Inflow - China FDI Outflow (BoP, current US\$) (Data Source: World Bank 2020)

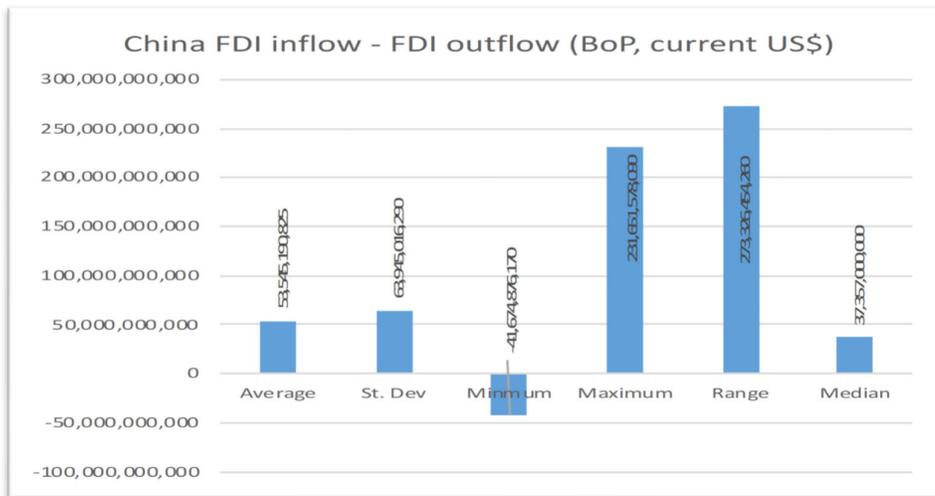


Figure 29: China FDI Inflow - China FDI Outflow (BoP, current US\$) Descriptive Statistics (Data Source: World Bank 2020)

**CONCLUSION AND RECOMMENDATIONS**

Trade as stated earlier is a process by which products are exchanged inside a country or among countries either in wholesale or retail markets (Dollar and Kraay, 2004). In this study, China’s trade has been studied in terms of BOT, exports, and imports, FDI net inflow and FDI net outflow. Results has shown that trade is affected by the above in various levels; however, almost all

entries have had good correlation with each other except for (FDI net inflow – FDI net outflow) entry. Furthermore, data has shown that there existed setbacks during this trade evolution; which has been mainly due to international economic conditions and recently COVID 19; as well as other internal ones such as development, policies, level of exports and imports and FDI involvement.

Hence, the dilemma of all nations through history is how to sustain these markets, and how to control them (North and Weingast, 1989). According to Cheng (2019), this control process can be done through the application of the Dual Intergovernmental Transformation for Market Development (DITMD) model. This model is based on three fundamental factors:

a) Crafting a moderately resilient government that has minimal interference in the market.

b) Decentralizing the state supporting utilities which improve state positioning to maintain local and international markets.

c) Centralizing the mediating tasks of the state to reduce market transaction costs.

The advantage of this model is that it can be applied to various nations who are transferring towards capital economy; however, its disadvantages is that it cannot be applied to states who already have a developed market economy. Furthermore, DITMD model is feeble in clarifying economic enactments in states that do not exhibit a multi-level governance configuration (Cheng, 2019).

Furthermore, due to the unequal distribution of growth and development in China, which may be due to the imbalanced provincial growth of TFP and production factors. As well as the significant discrepancies that have emerged in per capita income across various provinces in the last 20-30 years (Jiang, 2014); further research need to be done on the externalities of spatial agglomeration and spillover effects (Feng and Guangdong, 2018). This is needed to explore new schemes towards improving trade whether nationally or internationally. However, to apply such schemes/strategies and develop them into policies; certain aspects require to be taken into consideration. These include, and as mentioned above, the degree of control put by the state; especially with respect to inequality to be in within the same spirit of the Sustainable Development Goals (SDGs) (Goal # 10). Second, technology development and progress, which will reduce costs of trade transactions. Third, to reduce trade barriers to the extent of eliminating them; thus, improve market accessibility and hence enhance trade. Forth, to promote human capital development; since in China human capital is still weak; and it is well known that

human capital induces TFP, economic growth and FDI inflows leading to higher trade levels (Jiang, 2014; Feng and Guangdong, 2018). In addition, international trade is a method by which China trade can develop. This is done through the importation of goods and services that will evolve the current Chinese trade management and knowledge, which will ultimately lead to improve productivity and spillover effect (Jiang, 2014).

Finally, with the current COVID 19 situations; state economies must reside to new and divergent methods to revitalize the economic milieu. Hence, to perform such actions, several actions need to be executed. Examples of such actions include and not limited to; first, working on community's capacity building; so as to be able to better comprehend the COVID19 mode of action; thus, modifying the work procedures and policies accordingly. Second, collect data that will create better understanding of the way the COVID19 is affecting resources, which affects the economy as a whole. Third, reduce trade barriers, to be able to improve export/import and FDI schemes. Forth, motivate the working force to develop; consequently, leading to increasing production and reducing economic losses; and finally, to maintain research at optimum levels to be able to overcome COVID19 pandemic effect (FAO, 2020).

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