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# An analysis of China's economic reform using the Neo-classical model of International Trade

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he international trade of goods and services is not a modern concept. As early as the 14<sup>th</sup> century there is historical evidence of well-established trade routes bringing goods such as silk, leather, and furs from one country into another region of the world. In the 16<sup>th</sup> and 17<sup>th</sup> century the spice trade encouraged the improvement of production techniques and transportation systems, thereby allowing international trade between the European countries and Southeast Asian countries to flourish. The economic, political, and social significance of international trade has been theorized and disputed throughout history (with particular fervor in the industrial age). The benefits of international trade have been the major drivers of growth throughout history, and in no small part, led to the three Hegemonic powers of modern-day history, the Dutch (United Provinces) (1590-1650), Great Britain (1815-1871) and of course, the United States (1945-?). Without international trade these countries would not have been able to (among other things) accumulate the wealth or acquire the efficiency in production techniques that allowed them to dominate the world economy.

# AN ANALYSIS OF CHINA'S ECONOMIC REFORM USING THE NEO-CLASSICAL MODEL OF INTERNATIONAL TRADE



China, like most countries, has had a chaotic past, with long periods of economic isolation and instability. In this paper I will endeavor to interpret the momentous changes regarding China's economic transformation that occurred in the decades following Mao Zedong's death. More specifically, the overarching goal of this paper is to delve into the conceptual foundation for understanding international trade as an engine of economic growth and prosperity. To accomplish this goal I will first analyze China's economy before, during and after its movement from a centrally planned and closed (from the international world) economy towards economic liberalization (approximately 1978 – 1993). I will then compare the results, utilizing various economic indicators such as the increase in Gross Domestic Product, decrease in poverty, and increase in factor productivity to demonstrate a few of the benefits of international trade. In the latter part of the paper I will also discuss China's accession to the WTO (World Trade Organization) and argue that in order to obtain long term economic growth and stability it is essential to have an organization, like the WTO, that monitors and provides regulations and order to the global economic sphere. The paper concludes with the predicted growth patterns of China in the near future, as well as economic concerns that will need to be addressed if China is to maintain its status as one of the emerging global economic powerhouses.

# The Momentum for Reform

Before we begin our discussion on the benefits derived from international trade it is important to understand the impetus for reform in China. China has had several economic transformations that have been implemented through a series of phased reforms that can be traced back to Deng Xiaoping's "Open Policies" (kaifang zhengce) in 1978. The motivation behind such a dramatic change in policy was largely economic, that is to say, the recognition that opening China's borders to the international sphere would aid in the government's desires to further the rapid industrialization of the country. External forces such as multinational corporations, foreign governments, and international organizations can provide significant pressure for a country to reform. Too often, the literature surrounding globalization describes external influences to liberalize and engage in trade as instruments of control or coercion. In these discussions the question asked is: are state actors, intergovernmental organizations, or non-state actors – for example, multinational corporations, the World Bank, and foreign investors respectively – able to use coercive power to impose their preferences for economic policy or institutional reform on China or other developing nations?

It is well known that corporations and western governments (particularly the United States and the EU) were quite eager for China to integrate itself into the world economy. However, how much influence do these nations have? Is international trade something that is forced on a country, or is it something that a country can decide to engage in because it realizes the benefits from international trade? Or is it a combination of the influence of

<sup>&</sup>lt;sup>1</sup> Pearson (1999), p. 165

<sup>&</sup>lt;sup>2</sup> Moore (2002), p. 42



these two factors? A study providing an overview of China's integration into the international sphere, conducted by Margaret Pearson (Dartmouth College) pointed out that many fundamental policy decisions concerning China's economic reforms and trade liberalization polices have not been made under concerted foreign pressure on explicit economic issues, let alone as the result of foreign control. Furthermore, Pearson stated most policy changes during the 1980's and 1990's "were made readily and at the initiative of Chinese policymakers, who seemed convinced of their benefits." Indeed during the late 1970's (the beginning years of reform) China began to interact with other countries through the medium of foreign officials. This was one of their first in-depth look at the operation systems in place in other non-communists countries. Perhaps the exposure to different (and more efficient) systems was the catalyst that sparked a desire for economic reform.

While international forces play a central role in encouraging countries to embrace open trade policies, nonetheless there is always extensive leeway for the domestic government to respond to environmental pressures (i.e. the leaders of China ultimately choose which polices to embrace and which ones to forego). Thus the move towards economic liberalization and the opening of China's borders was initiated to realize greater economic growth and prosperity for the nation and not solely because of exertion of force by the exogenous international players.

#### China's transition to a Market based Economy

In the pre-reform era, China was, to say the least, an unimportant participant in the global trade platform. China's foreign trade system was a complete state monopoly controlled by the Ministry of Foreign Trade (MOFT), which conducted trade through mediums like the product-specific national foreign trade corporations on a mandatory trade plan.<sup>4</sup> In 1977 for instance, China's total trade volume was \$14.8 billion, which accounted for only 0.6% of total world trade. Furthermore, in 1978 the total volume of its foreign trade, or the sum of the values of its exports and imports, amounted to only 7 percent of its national income.<sup>5</sup>

With the introduction of more liberalized trading policies promoted by Deng Xiaoping in the late 1970's, the centralized trading administration was de-emphasized and a market based mechanism was promoted. The adoption of a market-oriented economic system led not only to the increased productivity of capital and labor, but also to a desire to open China to the outside world. The increase in productivity led to a rapid improvement in China's industrial efficiency and significantly increased the competitiveness of China in the international sphere.

<sup>&</sup>lt;sup>3</sup> Pearson (1991), p. 213

<sup>&</sup>lt;sup>4</sup> Fung (2002), p. 5

<sup>&</sup>lt;sup>5</sup> Chow (2002), p. 53



Table 1 China's Foreign Merchandise Trade

Trade Volume (US \$ billion)					Index 1978 = 100		
Year	Total	Exports	Imports	Balance	Total	Exports	Imports
1978	20.7	9.8	10.9	-1.1	100	100	100
1979	29.4	13.7	15.7	-2	142	140	144
1980	38.1	18.1	20	-1.9	184	185	183
1981	44	22	22	0	213	224	202
1982	41.6	22.3	19.3	3	201	228	177
1983	43.6	22.2	21.4	0.8	211	227	196
1984	53.5	26.1	27.4	-1.3	258	266	251
1985	69.7	27.4	42.3	-14.9	337	280	388
1986	73.8	30.9	42.9	-12	357	315	394
1987	82.7	39.4	43.2	-3.8	400	402	396
1988	102.8	47.5	55.3	-7.8	497	485	507
1989	111.7	52.5	59.1	-6.6	540	536	542
1990	115.4	62.1	53.4	8.7	557	634	490
1991	135.7	71.9	63.8	8.1	656	734	585
1992	165.6	85	80.6	4.4	800	867	739
1993	195.8	91.8	104	-12.2	946	937	954
1994	236.7	121	115.7	5.3	1143	1235	1061
1995	280.9	148.8	132.1	16.7	1357	1518	1212
1996	289.9	151	138.8	12.2	1400	1541	1274
1997	325.2	182.8	142.4	40.4	1571	1865	1306
1998	323.9	183.7	140.2	43.5	1565	1875	1287
1999	360.6	194.9	165.7	29.2	1742	1989	1520
2000	473.3	249.2	225.1	24.1	2287	2543	2065
2001	509.8	226.2	243.6	22.5	2463	2716	2234

Note: The figures are in US \$ billion. Exports are valued on an f.o.b basis, imports on a c.i.f. basis.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> China's Customs Statistics Monthly (1978-2001)



According to a World Bank study China was the least open of 120 countries studied for the period between 1975 and 1979.<sup>7</sup> During these years there were severe restrictions on import licensing and all import users were subject to a series of administrative measures and a complicated application process. This policy not only decreased the amount of import users (predominantly different sectors of the government) but it also incorporated a prolonged approval process that delayed (or terminated) international business. These restrictions coupled with high tariffs on protected products were only a part of the isolationist policies that were in place for much of the 20<sup>th</sup> century. In contrast, by the early 1990's China already ranked in the top third of all countries in terms of trade openness. Indeed, China's opening has been among the world's most rapid over the last two decades.<sup>8</sup>

# **China's Great Economic Transformation**

It is important to understand the extensive economic restructuring that took place in China that ultimately allowed it to compete internationally. The uniqueness of China's reform program was that it did not consist of a comprehensive outlined program of macroeconomic transformation that would allow an almost instant transition from a centrally planned structure to a free trade system. Rather it was based on gradual, incremental and somewhat experimental changes that Deng Xiaoping, during the reform years, characterized as "crossing the river by feeling the stones". The reform was christened the "dual-track" approach, which implied creation of a mixture of plan and market-economy systems. This type of approach entailed the maintenance of the old planned-economy path and creation of a new market-oriented path.

The first step in this process was to give state enterprises some autonomy in production decisions rather than simply forcing them to meet production targets under a system of central planning. This is when we first begin to see the break-away from the completely state-controlled economy to a market based economy. The next step was providing these firms with financial independence (albeit very limited, but independence nonetheless). This would take the form of minimal profit accumulation that would be kept by the firm (after taxes) instead of previous mandates that all the revenue was transferred to the government. The third step was to reform the price system (traditionally regulated by the government) that gradually allowed prices to be determined by market forces. There was however a two-tiered price system that was introduced to allocate scarce resources formerly under the control of central planning. Under this system, the government continued to distribute the scarce resources to designated users at an official, below-market price. The final step was

<sup>&</sup>lt;sup>7</sup> Fung (2002), p. 6

<sup>&</sup>lt;sup>8</sup> Moore (2002), p. 2

<sup>&</sup>lt;sup>9</sup> Das (2008), p. 7

<sup>&</sup>lt;sup>10</sup> Chow (2002), p 47

<sup>&</sup>lt;sup>11</sup> Ibid, p. 48



to reorganize China's foreign policy to include the opening up of China's borders to foreign direct investment and international trade. Below I will discuss in more detail the major areas of reform.

# **Agricultural Sector Reform**

The agricultural sector was the first area to be affected by the reforms in the late 1970's. Throughout the early and middle part of the 20th century, China's agricultural sector was racked with inefficiencies stemming from the commune system. Under this system farm workers had no real incentive to exert themselves because there was no reward for their labors. As a result of the failings of the current system, Chinese officials understood that a new strategy for agricultural development needed to be implemented. The reorganization of this sector entailed the assignment of each farming household to a piece of land in which they were responsible for delivering a given quantity of a specified product, the remainder of which they were allowed to keep for individual consumption or sale in the market. This system called "the responsibility system" has the basic characteristics of private farming in the market economy in which each household leases a piece of land and pays a fixed rent in the form of an output quota. <sup>12</sup> After 1978, rural markets began to reopen and farmers were allowed to raise pigs, chickens, and ducks and other livestock apart from their agricultural yields. This was strictly prohibited during the Cultural Revolution a decade earlier, which deemed these activities as capitalist and therefore taboo. China's farm economy in essence returned to the private economy which had existed in the early 1950's before the organization of cooperatives and the establishment of the communes.<sup>13</sup> During this transition period rural per capita income almost tripled from 134 yuan (about \$45 USD at this time) to 355 yuan (about \$118 USD) between 1978 and 1984. 14 Additionally, with the agricultural reform underway there was a substantial push for investments in land and water management to include development and utilization of seeds that produced higher yields and more efficient harvesting, both aiding in China's agricultural exports becoming more competitive.

#### **Reform of State-owned Enterprises (Public Sector)**

Reform of the public sector is a critical component in the structural adjustment programs that emerged in China. The main difference between reform of state-owned industrial enterprises and reform of Chinese agriculture is that privatization was not adopted for state-owned enterprises (at least in the early years). This reluctance towards privatization stemmed from the unwilling attitude of government bureaucrats who did not want to give up the power and vested interests by allowing the state enterprises to function

<sup>&</sup>lt;sup>12</sup> Chow (2002), p. 48

<sup>13</sup> Ibid

<sup>14</sup> Woetzel (1989), p. 83

<sup>15</sup> Chow (2002), p. 49



independent of government influence. The public reason given was that unlike small farms that are relatively self-sufficient, large industrial enterprises are dependent on factors outside their control, and thus will need the assistance (or control) of the government.

Prior to the reform, the central government exerted strict controls over the economy, all enterprises were publicly (state) owned and managed, and all staff deployed according to the political interests of the state. This resulted in a very poor allotment of resources. Furthermore, enterprises were required to remit profits to the central government, and worker's salaries were determined by the state. Managers in this system had no authority over what was produced, in what quantities, and what prices the goods were to be sold (all decisions were made by the state). A natural consequence of such a system is inefficiencies in production that lead to stagnation of industrial production (innovation and research and development is not emphasized) and the shortage (or excess) of goods. After observing the limited success of the state enterprises there was a desire and a push to overhaul the entire economic system, acknowledging the fact that Chinese corporations in their current state had no chance in competing internationally. The Twelfth Central Committee of the Chinese Communist Party adopted a major decision on October 20, 1984 on economic reform consisting of seven major elements:

- I. They resolved to give individual state enterprises autonomy in decisions regarding production, supply, marketing, pricing, investment, and personnel to function as profit-seeking economic units
- II. The reduction of the scope of central planning, except in the case of certain major products and change the method from mandatory to guidance planning
- III. The allowance of prices of more products to be determined by the forces of demand and supply rather than central control
- IV. To develop a macroeconomic control mechanism through the use of taxes, interest rates, and monetary policy under an improved banking and financial system
- V. To establish various forms of economic responsibility systems within individual enterprises to promote efficiency; and to institute differential wage rates to compensate for different kinds of work and levels of productivity
- VI. To foster the development of individual and collective enterprises and supplements to state enterprises
- VII. To expand foreign trade and investment and promote technological exchanges with foreign countries<sup>17</sup>

Another very important measure that was adopted in reforming the state-owned enterprises in the early 1990's was to publicly list these corporations in both domestic and foreign

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<sup>&</sup>lt;sup>16</sup> Reform of State-owned enterprises <a href="http://www.china-labour.org.hk/en/node/100153">http://www.china-labour.org.hk/en/node/100153</a>

<sup>17</sup> Ibid



stock exchanges. This measure intended to turn formerly state-owned enterprises into modern shareholding companies and improve their efficiency in production and management techniques.<sup>18</sup> This emergence of both private and public shareholders in the state-owned enterprises, and the trading of stocks in domestic and international platforms made the public sector management more sensitive to commercial profitability and efficiency in production. This change in the central planning system to an increased market oriented public sector provided an engine of growth and industrialization, and transformed the inefficient corporations that under the centrally planned structure had minimal chance of competing internationally, to corporations that would provide significant influence to the global economy in the 21<sup>st</sup> century.

# **Price Reform**

A major objective of the 1984 economic reform was to gradually deemphasize the administratively determined price system, and allow prices to be determined by market forces. Without market-determined prices the state enterprises do not receive correct signals to do their economic calculations in the choice of inputs and the planning of outputs. <sup>19</sup> Furthermore, many state enterprises that received government subsidies in the form of lower input prices were in reality operating at a loss, and without these subsides they would have to discontinue operation. This system perpetuated stagnation and inefficient techniques within public companies.

Price reform started in the way known as "dual-track" mechanism, that is, prices were freed up at the margin while planned prices were maintained for certain goods and industrial inputs frozen for a designated period of time (This is another demonstration of an incremental/gradual reform process). The incremental implementation of price reform was to ensure the welfare of consumers as well as certain domestic corporations who were subsidized under the old system were not negatively affected. As time progressed, government administered prices were gradually altered to reflect market prices. As a result, true domestic market prices for most goods were established as early as the late-1980's.<sup>20</sup> The planned track was largely phased out in the early 1990's and by 1993 more than 90 percent of prices (in terms of industrial output values) were determined by market forces rather than by the government.<sup>21</sup>

#### **Financial Sector Reform**

As China moved steadily away from the mechanisms of central planning into a modern market economy, a central banking system had to be established. In 1983 the People's Bank was nominally transformed into a central bank and specialized banks such as

<sup>&</sup>lt;sup>18</sup> Wang "State-owned Enterprise Reform and Corporate Governance of China"

<sup>&</sup>lt;sup>19</sup> Brant (2008), p. 16

<sup>&</sup>lt;sup>20</sup> Qian (2000)

<sup>&</sup>lt;sup>21</sup> Qian (2000)



the Industrial and Commercial Bank of China, Agricultural Bank of China, and the People's Construction Bank of China, were established and given some autonomy in the extension of credit in the early 1980's (the same way that state industrial enterprises were given autonomy in making production decisions).<sup>22</sup> The banking system was also gradually opened to private divisions (in a limited capacity) which increased competition and fostered improved supervision and management systems within the nationalized banking system. These reforms allowed growth in the financial sector that was supplemented not only with the foreign capital stemming from increased exports, but also with the growth in stock markets, particularly in Shanghai. Interest rate regulation from the Chinese government has also been reduced; however it is still over-regulated and is an area in need for further reform. Although the stock markets, interest rates and the value of the yuan are still heavily regulated by the government, the reforms in the financial sector has boosted China's financial prowess to one of the premier in the world.

# **Foreign Trade and Investment**

During the late 1970's early 1980's China's foreign trade policy saw a drastic reversal from a self-sufficient and strictly regulated economy to a relatively open economy that realized extreme trade expansion. According to Chow, as of 1980 China had established trade relations with more than 170 countries and regions and had signed bilateral government trade agreements or protocols with more than 80 of them.<sup>23</sup>

Foreign investment, which was the second major component of Deng's open door policy, was promoted in select regions in China. Foreign investors were allowed to set up factories in China to take advantage of the inexpensive and skilled labor and pay them at market-determined wage rates different from the rates prevailing in other parts of China.<sup>24</sup> In order to promote FDI (Foreign Direct Investment), major changes were introduced, including special tax incentives, a liberalization of controls on foreign-invested enterprises, the expansion of sectors and regions into which foreign capital was allowed, efforts to protect intellectual property, and the relaxation of requirements for Chinese ownership and managerial control. Foreign investment increased from an annual rate of less than US \$1 billion in 1978 to nearly US \$30 billion in 1998.<sup>25</sup> Indeed as depicted in Table 2 there has been a steady increase in FDI.

<sup>&</sup>lt;sup>22</sup> Chow (2002), p. 52

<sup>&</sup>lt;sup>23</sup> Ibid, p. 293

<sup>&</sup>lt;sup>24</sup> Ibid, p. 53

<sup>&</sup>lt;sup>25</sup> Ibid



Table 2: Foreign Direct Investment in China, 1979-1997

Year	Number of Projects Pledged (\$ U.S. billion)	Value of Projects Pledged (\$U.S. billion)	Value of Projects Utilized (\$U.S. billion)	Utilized Value as % of Pledged
1979-	92	1 -1		2004
82	2	4.61	1.77	38%
1983	47	1.73	0.92	53%
1903		1./3	0.92	35%
1984	1,85	2.65	1.42	54%
	3,07			
1985	3	5.93	1.96	33%
	1,49			
1986	8	2.83	2.25	80%
	2,23			
1987	3	3.71	2.65	71%
1988	5,94	5.30	3.74	71%
1900		3.30	3.74	/ 1 70
1989	5,77	5.60	3.77	67%
	7,27			
1990	3	6.60	3.41	52%
1991	12,978	11.98	4.37	36%
1992	48,764	58.12	11.00	19%
1993	83,000	111.44	27.52	25%
1994	47,490	81.41	33.79	42%
1995	37,126	90.30	37.70	42%
1996	23,556	73.28	24.56	34%
1997	21,046	51.57	42.28	87%

Source: MOFTEC, Zhongguo Duiwai Jingji Maoyi Nianjian [Yearbooks of China's foreign economic trade] (various years); "Investment Data," *China Business Review* 23, No. 3 (May-June 1996): 40.



The many benefits of FDI include the economic development of the regions where these projects are established. Indeed a study conducted by DeGregorio (1992) concluded that FDI is three times more efficient in contributing to economic growth than domestic investment, because it provides huge amounts of external finance to fuel economic development.<sup>26</sup> Foreign investment and trade has enabled the low-cost and high-quality labor in China to produce goods to be sold at higher prices in the world market, thus increasing the compensation to Chinese labor. Furthermore, it has also enabled the import of technology and high-quality capital goods for use in production in China, as well as highquality consumer goods. The availability of high-quality capital goods improves productivity while the availability of high-quality consumer goods not only increases consumer welfare directly; it also acts as an important competitive force in the Chinese consumer market and stimulates improvement of the quality of domestically manufactured products.<sup>27</sup> With the increasing influence of international firms, domestic firms were not able to maintain their stagnate business strategies. There was a large emphasis on research and development as well as efforts by domestic firms to become more flexible. This enabled them to generate dynamic responses to the perpetual mutations of global competition. Finally FDI in China stimulated the development of human capital resources, through increased training in the operation of a particular industry, as well as the increased incentives to obtain a higher education.

#### **Neo-classical model of International Trade**

One of the major effects of China's numerous reforms is that a market oriented system could be more readily integrated into (as well as have the ability to compete in) the world economy, and thus realize the benefits of international trade. One of the underling arguments of the Neo-classical economic philosophy is that underdevelopment within the economy results from poor resource allocation due to excessive government intervention. This was a major problem with China's economy before its economic transformation. Indeed, the aforementioned sections represent China's movement from a centrally planned economy to a market based economy (though there is still a long way to go before it is a 'true' market based economy). These reforms paved the way for China to emerge as one of the premier players in the international sphere.

The Neo-classical theorem of international trade was initiated by Adam Smith and modified or explained by a myriad of other economists, a notable few being David Ricardo and Paul Samuelson. For the purposes of this analysis I will utilize Samuelson's model of 'The Gains from International Trade'. This theorem states that a country in a clearly defined sense is better off entering into international trade, than if it was restricted to autarky. Although it cannot be demonstrated that every individual of a country is made better off by the introduction of trade, it can be shown that through trade every individual

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<sup>&</sup>lt;sup>26</sup> DeGregorio (1992)

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could (by resort to lump-sum taxes, subsidies, and redistribution) be made better off (or at the very least not worse off economically).<sup>28</sup>

The application of this model requires various assumptions to include:

- 1. A single economy consisting of one or more individuals enjoying a certain unchanging amount of technological knowledge (this relates the output of each commodity to the amount of inputs devoted to its production)
- 2. Any number of commodities is assumed; there may also be any number of inputs or productive services
- 3. Differentiation of the factors of production (relative prices of commodities (price ratios) international differ from the relative prices of commodities domestically)
- 4. Free trade policies (i.e. the free trade of goods without tariffs, quotas or other Non-tariff barrier)
- 5. Only goods are exchanged (i.e. no factor of production movement)
- 6. Perfect competition i.e. no increasing returns all production functions show constant returns with respect to proportional changes of all factors

Source: Murray C. Kemp "The Gain from International Trade"<sup>29</sup>

Some of these assumptions such as free trade policies and perfect competition are rarely seen in today's economy and play little or no role in the understanding or explanation of economic truths. Nonetheless, given the other assumptions, particularly the assumption that the price ratios (of the production of one good to another) differ abroad from the home market, then there exists an incentive to trade and subsequently a benefit to the country in the form of increased welfare.

Simplistically speaking if a country (China) can produce good X more efficiently than another country (US), and the US can produce good Y more efficiently than China, then the two countries can engage in a mutually beneficial trade by exporting the most efficient good and importing the latter. With the introduction of trade, both countries will have the ability to consume at a higher level (at a lower cost), and thus realize higher utility then they would have been able to reach without trade. The foreign trade sector plays an important and multifaceted role in China's economic development. Countries are able to trade with China and benefit from cheaper and more varieties of imported consumer goods, raw materials

<sup>&</sup>lt;sup>27</sup> Chow, (2002), p 301

<sup>&</sup>lt;sup>28</sup> Kemp (1962), p. 804

<sup>&</sup>lt;sup>29</sup> Ibid



and intermediate products.<sup>30</sup> China on the other hand can now enjoy a wider variety and cheaper selection of technology intensive goods. Using this very simplistic interpretation of the neo-classical model of international trade, I will now analyze the benefits derived from China's reforms that eventually opened its economy to trade.

#### **Benefits realized from Trade**

The economic liberalization reforms endeavored to allow China's economy to realize sustained growth, greater participation in the global division of labor, and a transfer to a market-friendly policy regime. Throughout (and after) the reform years there was an increase in economic growth, dramatically improved living standards, and elimination of shortages which is a common symptom of all planned (and closed) economies. During this period (1978-1993), China's GDP grew at an average annual rate of about 9 percent and the living standard of ordinary Chinese people improved significantly. Indeed Chinese national income has been doubling every eight years since 1978.<sup>31</sup> Such an increase in output represents one of the most continuous and rapid economic transformations in today's modern international economy.

As depicted in figure one (as well as table 1 above) there is a correlation between increased international activity (exports and imports) and the level and increase in GDP depicted in figure two. With an increase in GDP, there is a subsequent increase in living standards. For example: an average Chinese consumer increased his/her consumption about three times for edible vegetable oil, pork, and eggs; the per person living space has doubled in urban areas and more than doubled in rural areas; and total household bank deposits, measured against the GDP, increased from less than 6 percent in 1978 to more than 40 percent in 1993.<sup>32</sup>

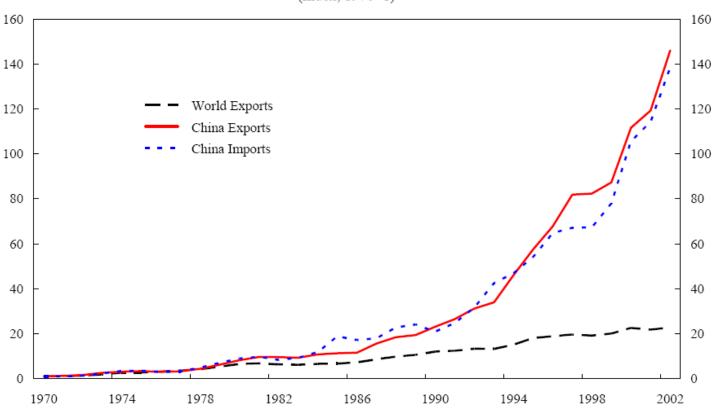
<sup>&</sup>lt;sup>30</sup> Fung (2002), p. 8

<sup>31</sup> Chow (2002), p. 34

<sup>32</sup> Qian (2000)



Figure 1. Growth in Trade, 1970-2002 (Index, 1970=1)

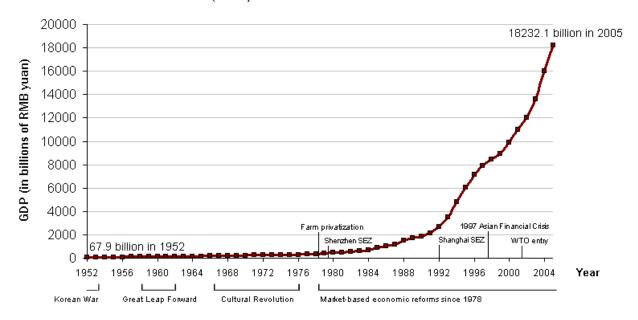


Sources: IMF, Direction of Trade Statistics.



Figure 2

# People's Republic of China's Nominal Gross Domestic Product (GDP) Between 1952 to 2005





Meanwhile, with the opening of China's economy the number of people living in absolute poverty was substantially reduced. According to China's national poverty line, rural poverty population has dropped from 250 million in 1978 to 28.2 million in 2002, decreasing by 88.7%.<sup>33</sup> Poverty population has on an average decreased by 9.24 million per year. According to the international poverty line (cost of living per capita per day is below \$1), the World Bank estimates that China's rural poverty population has dropped from 280 million in 1990 to 124 million in 1997, decreasing by 55.7%.<sup>34</sup>

Table 3 (below) demonstrates the fact that China has experienced an unprecedented decrease in poverty. Indeed China's poverty levels have decreased by the largest margin within the past two decades that the world has ever seen.<sup>35</sup> Even though statistics given by China's national statistics bureau are questionable (to say the least) there is a direct positive correlation between their statistics and the statistics given by (the more credible) World Bank. Both statistics show a tremendous drop in poverty that is correlational to the increasing involvement in international trade.

<sup>&</sup>lt;sup>33</sup> Angang "China's economic growth and poverty reduction (1978-2002)

<sup>34</sup> Ibid

<sup>35</sup> Ibid



Table 3

Year	Rual population (ten thousand person)	Official poverty population (ten thousand person)	Poverty population estimated by the World Bank (ten thousand person)	The rate of poverty (%) Official data	The rate of poverty (%) The World Bank data
1978	79014	25000		33.1	
1984	80340	12800		15.9	128
1985	80757	12500	<u>=</u> 8	15.5	134
1986	81141	13100		16.1	125
1987	81626	12200	<b>=</b> 8	14.9	-
1988	82365	9600	₹	11.7	188
1989	83164	10600	<b>=</b> 8	12.7	
1990	84142	8500	28000	10.1	33.3
1991	85280	9400	28700	11	33.6
1992	84799	8000	27400	9.4	32.3
1993	85166	8000	26600	9.3	31.2
1994	85549	7000	23700	8.2	27.7
1995	85947	6500	20000	7.6	23.3
1996	86439	6000	13800	6.9	16
1997	86637	5000	12400	5.8	14.3
1998	86868	4200	-	4.8	Ratii
1999	87012	3412	=6	3.7	
2000	80837	2200	₹	=	188
2001	79563	2713	<u>=</u> ;	8	34
2002	-	2820	-	-	03 <del>4</del> 8

Sources: a: <China Statistical Abstract>, 2002; b: "A Monitoring Report of China's Rural Poverty in 2000" by the research office of rural social economy of national statistics bureau, China's Statistical Press, 2000, pp. 7; c: "Statistical Communique of China's Economy and Society" by national statistical bureau, quoted from Economic Daily, March 1, 2003; d: World Bank, 1999.

Furthermore, the annual growth rate of rural population's consumption level (the majority of China's population) is 5.6%, the annual growth rate of per capita net income of farmers is 7.2%, corresponding to doubling their per capita income every 9.7 years. This is one of the major reasons that led to China's great poverty reduction in rural areas.<sup>36</sup> The increase in GDP of rural areas can be viewed as a direct consequence of the increased efficiency that was promoted through increased world trade.

<sup>&</sup>lt;sup>36</sup> Angang "China's economic growth and poverty reduction (1978-2002)

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Another direct positive impact of increased trade is the subsequent increase in total factor productivity of labor and capital. An increase in factor productivity reflects an increase in the technological base as well as technical efficiency, both of which are promoted through the competitiveness of the international sphere. During the time period of 1978-1998 the estimated non-agricultural total factor productivity growth rate was 1.4% per year.<sup>37</sup> This can be compared to the total factor productivity growth rate in the pre-reform (closed) era of 1970-1978 which was negative in twenty out of twenty-eight provinces.<sup>38</sup> The increase in labor productivity can in part be contributed to the substantial increase in FDI in laborintensive industries. China's structural characteristic of a large labor force concentrated in agriculture where productivity is low fundamentally changed with a greater emphasis on the movement of labor to industrial work, where productivity is much higher.<sup>39</sup> An inherent benefit of reform was the material incentives that were associated with the more productive sectors of the economy, allowed resources to be allocated freely to sectors which had been previously suppressed under the original system. With the increased focus on China's labor industries, there came the subsequent increase in labor productivity and efficiency which helped China's industrial structure move towards its current comparative advantage.

Another direct consequence of FDI and international trade was the increase in employment. The employment provided by FDI firms in China has increased significantly. In 1999 foreign firms employed 18.4 million workers (2.6% of China's total employment).<sup>40</sup> FDI also indirectly augmented employment by rising economic growth and demand for goods from other domestic firms within China.

# **Drawbacks of International Trade?**

In the aforementioned paragraphs we discussed the decrease in poverty rates as well as the overall increase in consumption and GDP. A major problem that is attributed to an increase in international trade is the increasing gap between the poor and the rich in China. China has experienced a rise in material living standards that is, by most measures, unprecedented in the history of human civilization.<sup>41</sup> However there are arguments that the benefits from trade are realized only by a few. As economic disparities between both coastal and interior areas as well as urban and rural areas have widened a question has emerged - Is International Trade truly beneficial for a country? Should trade be allowed if it hurts lower-income people? Paul Krugman answers this question by pointing out that income distribution effects are not specific to international trade. Every change in a nation's economy, including increases in technological production, shifting consumer

<sup>&</sup>lt;sup>37</sup> Ao (2003), p 3

<sup>38</sup> Ibid

<sup>&</sup>lt;sup>39</sup> Garnaut (2004), p 105

<sup>&</sup>lt;sup>40</sup> Ibid, p. 107

<sup>&</sup>lt;sup>41</sup> Moore (2002), p 1



preferences, expenditure of old resources and discovery of new ones, and so on, affects income distribution. If every change in the economy were allowed only after it had been examined for its distributional effects, economic progress could easily end up snarled in red tape and the lack of such progress would far outweigh any disadvantage.<sup>42</sup>

In China's case it is true that economic growth has been widely shared across China. Furthermore, it is always better to allow trade to occur and compensate those who are hurt by it, than to prohibit trade altogether. If there is a greater need for income support programs than more government redistribution is needed, not a reduction in trade.<sup>43</sup> The fundamental reason why trade potentially benefits a country is that it expands the economy's choices. This expansion of choice means that it is always possible to redistribute income in such a way that everyone gains from trade.<sup>44</sup>

#### **WTO Ascension**

On December 11, 2001 after nearly fifteen years of bidding for entry, China officially joined the World Trade Organization (WTO). China fervently pursued ascension to the WTO because one of the major benefits of the WTO is it promotes a secure trading environment, which could facilitate growth in various industries within China as well as provide confidence for global business and investment partners. Accession was followed by dramatic trade expansion. China was previously at the periphery of trade in the world, however in 2004 just three years following the accession China's exports doubled, and it became the third largest trading economy in the world.<sup>45</sup> Furthermore the long term benefit of China joining the WTO is the increased competitive pressure (from international companies) as an external impetus to domestic reforms. This should have a positive impact on China to include domestic efficiency gains which will directly benefit the Chinese consumers.<sup>46</sup>

The most immediate benefit from WTO membership accession for China is the increased market access abroad. China has been permanently granted most-favored-nation (now called Normal Trade Relations) treatment by other WTO members, a significant step toward normalizing its trade relations. The price of the most-favored-nation status was the requirement for China to lower tariff rates and reduce other non-tariff barriers. As such, China's weighted average tariffs were reduced from 40.6 percent in 1992 to 9.1 percent in 2001.<sup>47</sup> The lowering of import tariffs led to increased imports of both agricultural and

<sup>&</sup>lt;sup>42</sup> Krugman (2009), p 74

<sup>&</sup>lt;sup>43</sup> Krugman (2009), p 78

<sup>44</sup> Ibid

<sup>45</sup> Das (2008), p. 38

<sup>46</sup> Rumbaugh (2004), p. 12

<sup>&</sup>lt;sup>47</sup> Das (2008), p. 39

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industrial products for consumers. In the short run this hurt domestic firms that were not able to compete and ultimately forced the closure of less efficient firms. This directly benefited the Chinese consumer, forcing domestic producers to lower prices and improve the quality of their products.

Also, upon accession, several trading partners have eliminated many of their restrictions on imports from China. Easier access to foreign markets is likely to boost China's labor-intensive exports in a number of sectors, including electronics.<sup>48</sup> The increased involvement of China's communications and technologies sector has played a central role in China's growth and development. The revolution in information technology has allowed developing countries, including China, to benefit from 'leap-frogging' the developed countries by switching directly to digitized networks which directly benefit its population. Nonetheless, in China's case the greatest benefit of WTO accession is the removal of quotas against its textile and clothing exports which has the potential to significantly boost China's exports.

The long term benefits of China's WTO accession are vital for China's sustained growth prospects. China has agreed to open sectors that are crucial to its partners, such as the agricultural and services sectors. Continued improvements in China's business environment (e.g. its predictability and transparency) should remove key obstacles that have long weakened foreign investor confidence.<sup>49</sup> China's sustained growth will also be beneficial to most of its trading partners and entails an overall welfare gain for China as well as the rest of the world. For instance, China's energy and mineral imports are expected to increase rapidly providing benefits to resource-rich countries (these tend to be periphery countries). These developments have contributed to the strong growth in the Asian region.<sup>50</sup> This more open economy, fostered by the WTO and its rules and regulations will continue to integrate into and benefit the world economy.

# The Way Ahead

The decisions of Deng Xiaoping and his cabinet to nurture China's increased participation in world affairs, coupled with the extensive domestic reforms, have enabled the Chinese economy to garner the benefits of globalization and international trade, prompting unprecedented economic growth. China's gross national product has more than quadrupled in the past 25 years. Never in history has the economy of so many people grown as rapidly, as extensively, and for as sustained a time as has the economy of China.<sup>51</sup> Many economists believe that this rapid growth (maybe not with the same intensity) has the potential to continue into the foreseeable future as a result of the favorable underlying

<sup>&</sup>lt;sup>48</sup> Rumbaugh (2004), p. 9

<sup>49</sup> Ibid

<sup>&</sup>lt;sup>50</sup> Ibid

<sup>&</sup>lt;sup>51</sup> Oksenberg (1999), p. 6



fundamentals: a high rate of saving; entrepreneurial and increasingly well-educated populace; the dissemination of technology; and most importantly increasing international involvement.<sup>52</sup> Indeed there are forecasts that suggest that the size of China's economy will exceed that of the U.S., in purchasing power parity terms in less than ten years.<sup>53</sup> This remarkable feat is directly related to the increased participation of the Chinese economy in trade.

Even with China's substantial growth and prospects there are still many challenges facing their economy (both exogenous and endogenous). Environmental issues are an increasing substantial barrier to future growth not only for China but for any industrialized country. With the increased emphasis on protocols such as the Kyoto protocol, increased industrialization (and thus increased carbon emissions) could harbor a negative international image that can be damaging in both the political and economic arena. Furthermore, even with China's record growth in GDP, unemployment is still a significant problem that if left unaddressed has the potential to cause (among other things) substantial social unrest. A potential reason for this high level of unemployment is that many state owned enterprises continue to be extremely inefficient. The increase in privatization that began with the reforms is essential to correct this devastating problem. Over the past two decades China has made a great deal of progress with regards to state owned enterprises, nonetheless in this area (as well as other) there is still a long way to go.

Another inherent problem that is associated with a transitioning planned economy to a market economy is the presence of corruption. A failure to address this endemic of corruption is perhaps the most serious threat to not only the nation's economy but also its political stability. The Carnegie Endowment conducted a study and found that corruption in China is concentrated in sector with extensive state involvement, such as infrastructure projects, real estate, government procurement, and financial services. With more emphasis on privatization this flood of corruption could potential be stemmed. Nonetheless, if considerable effort is not made soon this type of situation could spark social outrage or deter western investors from further investment in China, both having an impact on China's future growth.

Finally the very politically charged subject of the undervaluation of the Chinese Yuan has the potential to be devastating for the Chinese economy. The undervaluation of their currency gives an artificial advantage to Chinese manufacturers, making their exports more desirable. This type of mercantilist policy (gather vast amounts of gold into the economy) also has a substantial inflationary effect on the Chinese economy. Increased productivity, increased exports, increased foreign direct investment all amplify the amount of currency in a country, thus appreciating the domestic currency. The current currency policy could fuel

<sup>52</sup> Ibid

<sup>&</sup>lt;sup>53</sup> Holz (2005), p. 19

<sup>&</sup>lt;sup>54</sup> Pei (2007) "Corruption Threatens China's Future"



inflation, overinvestment in various sectors, and expansion of nonperforming loans by banks – each of which could threaten future economic growth. 55 The appreciation of the Yuan is needed for long run currency stability, it would aid in the improving of the weak Chinese domestic sector which will subsequently reduce the reliance on exports. The currency issue has also created foreign political tensions which ultimately could affect the economic progress that China has made over the past few decades. China needs to start making a significant effort in addressing this issue, or at least start building the foundation for solving this problem because an economy cannot sustain growth with an unstable currency.

#### Conclusion

The Chinese economy has undergone one of the most significant and successful transformations in history. The numerous deregulatory reforms allowed the Chinese economy to reap the benefits of international trade and recognize unprecedented growth. This essays intent was to delve into the conceptual framework that demonstrates the inherent benefits of an open economy and international trade. Using the neo-classical model modified by Paul Samuelson, the correlational increase in exports and GDP, decrease in poverty, and increase in factor productivity are some of the few economic indicators that illustrates the direct benefits of trade. The political leadership of China has demonstrated its desire for further reforms and liberalization. Continual implementation of these commitments will supplement China's increasing international integration and foster sustained economic growth into the future.

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<sup>&</sup>lt;sup>55</sup> Morrison (2009), p. 5



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